Public Safety Facility Project

SCH # 2015062046

Draft
Environmental Impact Report

Volume II of II
Appendices E - K

Prepared for
El Dorado County

December 2015

Prepared by

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APPENDIX E

Wetland & Biological Resources Assessment

Of the

El Dorado County Sheriff's Headquarters

In

Diamond Springs (El Dorado County), California

Prepared For:

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On

December 10, 2015

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Appendix A. CNDDB Map and Table

Appendix B. NRCS Soils Report

1.0 Introduction

Barnett Environmental conducted a *Preliminary Wetlands and Biological Resources Assessment* (WBRA) of the 30.34-acre proposed Sheriff's Headquarters site (APNs 329-24-055 & 329-39-110) on behalf of the El Dorado County Facilities Division. The property is located north and south of Industrial Drive in Diamond Springs, California (Figure 1), though the 6.16-acre portion of this project site north of Industrial Drive would not be developed as part of the currently proposed project. The Study Area is within the southwestern quadrant of Section 24 (Township 10 North, Range 10 East) of the Placerville, California 7.5-minute USGS quadrangle (Figure 1). The center of the Study Area sits at approximately 38.6996784° North latitude and 120.8309131° West longitude, within the Indian, Deer, & Carson Creek watersheds of the Upper Cosumnes River (Hydrologic Unit Code 18040013).

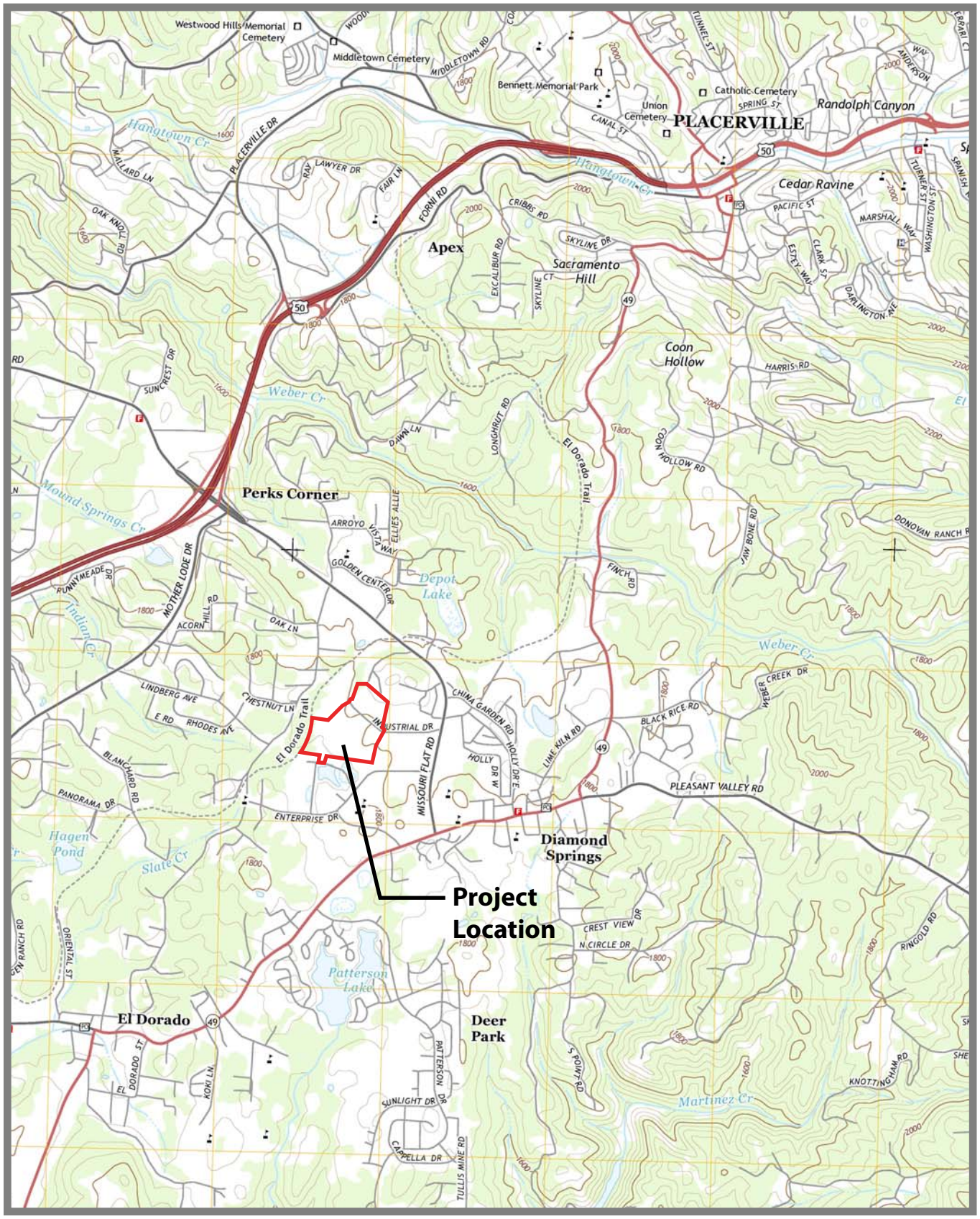
Beyond an informal evaluation of wetlands and "other waters of the U.S." within the Study Area, this report also:

- Identifies and describes predominant vegetation communities;
- Discusses plants and animals observed during field survey(s);
- Evaluates and identifies sensitive habitats and/or special status plant and/or animal species that may occur in the Study Area and could be affected by project activities; and
- Provides conclusions and recommendations for mitigating potential adverse impacts to identified resources.

2.0 Methodology

Before conducting the Wetlands & Biological Assessment, Barnett first queried the California Department of Fish & Wildlife's online Natural Diversity Database (NDDB; RareFind 5) for a list of special status plant and animal species known to occur within the vicinity of the Study Area, reviewed lists of special status species in El Dorado County maintained by the U.S. Fish and Wildlife Service (USFWS 2015), queried the California Native Plant Society's online Inventory of Rare & Endangered Plants in California (CNPS 2014, and examined both the U.S. Fish & Wildlife Service's *National Wetland Inventory* (NWI; Figure 2) and Ecoatlas.org's *California Aquatic Resources Inventory* (CARI; Figure 3) of the Study Area.

Barnett biologists conducted a field visits to and surveys of the Study Area on April 1, April 16, May 20, and December 15, 2015, during which the entire site was traversed on foot and observations were recorded of: (1) dominant vegetative communities present on the site; (2) plant and animal species (with emphasis on rare and endangered species) observed or their sign (nests, burrows, tracks, scat); and (3) the suitability of habitat types on site and on immediately adjoining areas to support special-status plant and animal species occurring in the surrounding region. Drainages and other potentially jurisdictional wetland features were walked and mapped using a Trimble GeoXH with sub-meter accuracy.



Source: USGS 7.5-Minute Series Topographic Map - Placerville Quadrangle

FIGURE 1: VICINITY MAP

Not to Specific Scale

N

EDC SHERIFF FACILITY • EL DORADO COUNTY, CALIFORNIA

Date: June 15, 2015

BARNETT ENVIRONMENTAL

U.S. Fish and Wildlife Service

National Wetlands Inventory

Dec 8, 2015

Wetlands

- Freshwater Emergent
- Freshwater Forested/Shrub
- Estuarine and Marine Deepwater
- Estuarine and Marine
- Freshwater Pond
- Lake
- Riverine
- Other
- Project Boundary

This map is for general reference only. The US Fish and Wildlife Service is not responsible for the accuracy or currentness of the base data shown on this map. All wetlands related data should be used in accordance with the layer metadata found on the Wetlands Mapper web site.

User Remarks:

FIGURE 2: NATIONAL WETLANDS INVENTORY MAP

Not to Specific Scale

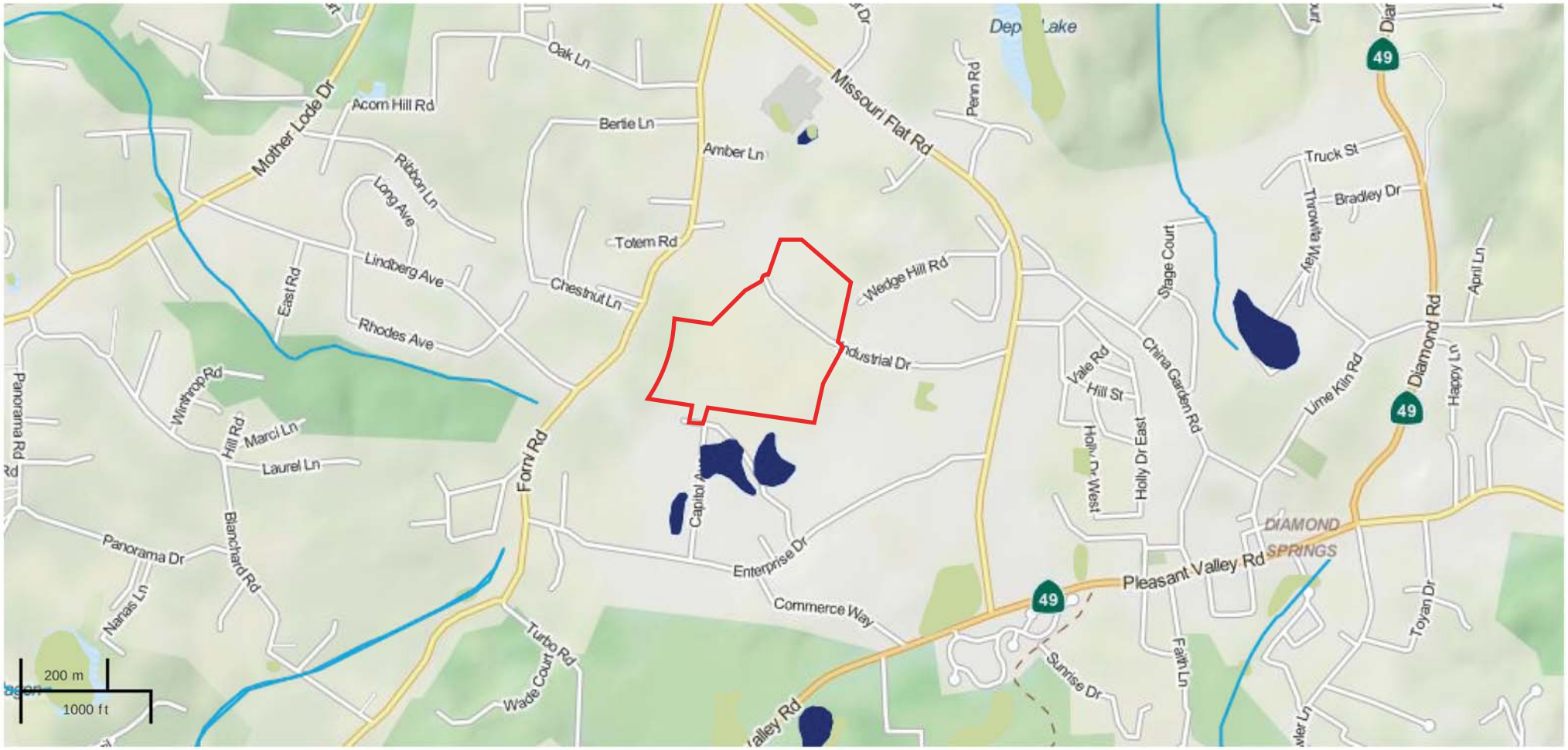
N

EDC SHERIFF FACILITY • EL DORADO COUNTY, CALIFORNIA

Date: June 15, 2015

BARNETT ENVIRONMENTAL

EcoAtlas



EDC Sheriff CARI

Notes

Basemap data provided by © OpenStreetMap

Legend

- Pond and Associated Vegetation
- Lake, Reservoir and Associated Vegetation
- Playa
- Project Boundary
- Fluvial Channel
- Slope and Seep Wetlands
- Vernal Pool

FIGURE 3: CALIFORNIA AQUATIC RESOURCES INVENTORY

Not to Specific Scale

N

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EDC SHERIFF FACILITY • EL DORADO COUNTY, CALIFORNIA

Date: June 15, 2015

3.0 Existing Conditions

The Study Area is located north and south of Industrial Drive in Diamond Springs (Placerville) and is zoned "Industrial" in the El Dorado General Plan. There are industrial and single-family residential properties to the north, an industrial park to the south, industrial/office development to the east, and the Southern Pacific Rail line and single-family residential to the west. The site itself was used as a lumber storage yard for the Old Caldor Lumber Company, a transformer storage area for Sacramento Municipal Utility District (SMUD), and as an emergency firefighting operations camp in 2013.

3.1 Topography and Soils

Topographically, the parcel comprises three successive plateaus, rising from an elevation of 1,753' above mean sea level (msl) at the proposed SW access to the project off Merchandise Way, to 1,813' in the NE corner of the site along Industrial Blvd. Placer diggings (2-15% slopes) underlie approximately 93% of the Study Area (Figure 4) and Diamond Springs very fine sandy loams (3-9% and 9-15% slopes), covering 7% of the site along its southern boundary. All are well-drained soils that have developed on bedrock with varying degrees of runoff rates and permeability. Diamond Springs loams have the potential for medium runoff with generally low to moderate permeability, where Placer diggings have low runoff potential and high to very high permeability. A full NRCS soils report is attached to this report as Appendix B.

3.2 Hydrology

The Study Area is within the Upper Cosumnes River watershed (HUC 18040013) and generally drains toward the river in a southwesterly direction through the Indian, Deer and Carson Creek drainages. The Study Area's highest elevation at its northeastern corner at Industrial Blvd (1813m) generally slopes and drains southwestward for a total relief of approximately 60 feet into drainages along the Study Area's western and southern boundaries. The western drainage along the east side of the (Pioneer Trail) railroad tracks empties into drainage pipes near the property's southwestern corner. This storm water then drains under the railroad tracks via an existing 42" culvert with a concrete headwall at the new animal shelter – approximately 300 feet south of the site's southwestern corner. After crossing the railroad tracks, it enters an unnamed, intermittent drainage that flows west and then northwest into Indian Creek. This western drainage runs for approximately 1,045 feet along the site's western boundary. There is another, approximately 750-foot long (0.17-ac) existing "v-ditch" along the adjacent lots to the south, which flows into an existing 24" culvert near the southwest corner of the property.

3.3 Wetlands and "Other Waters of the U.S."

There is a 1,045-foot long (0.10-acre) drainage along the Study Area's western boundary that satisfies the U.S. Army Corps of Engineers' (3-parameter) definition of wetlands and "other waters of the U.S.", along with a 102-foot long (0.010 acre) ditch in the site's SW corner and a 750-foot long (0.07-acre) ditch along the parcel's southern boundary (Figure 5).

El Dorado Area, California (CA624)			
Map Unit Symbol	**Map Unit Name**	**Acres in AOI**	**Percent of AOI**
BkD	Boomer very rocky loam, 3 to 30 percent slopes	0.0	0.0%
DfB	Diamond Springs very fine sandy loam, 3 to 9 percent slopes	0.2	0.7%
DfC	Diamond Springs very fine sandy loam, 9 to 15 percent slopes	1.9	6.1%
PrD	Placer diggings	29.6	93.1%
W	Water	0.0	0.1%
Totals for Area of Interest		**31.8**	**100.0%**

Map Scale: 1:3,810 if printed on A landscape (11" x 8.5") sheet.

N

Meters: 0 50 100 200 300

Feet: 0 150 300 600 900

Map projection: Web Mercator Corner coordinates: WGS84

FIGURE 4: Soils MAP

Not to Specific Scale

N

Date: December 8, 2015

EDC SHERIFF FACILITY • EL DORADO COUNTY, CALIFORNIA

3.4 Vegetation Communities & Wildlife Habitats

The majority of the site consists of highly-modified/disturbed interior live oak (*Quercus wislizenii*), valley oak (*Q. lobata*) & foothill pine (*Pinus sabiniana*) plant community. The portion of the site north of Industrial Blvd. also contains a significant mixed chaparral brushland component. The hardwood-conifer community south of Industrial Blvd. is typically diverse in structure both vertically and horizontally, with a mix of hardwoods, conifers, and shrubs, but has been severely degraded within the Study Area due to a recent history of disturbance (see above). Where oak and pine trees typically comprise the habitat's overstory – with oak usually making up most of the canopy at this relatively lower elevation – the understory primarily consists of annual grasses, forbs, and the occasional shrubs. The mixed chaparral community north of Industrial Blvd. contains several species of ceanothus (*Ceanothus* sp.) and manzanita (*Arctostaphylos* sp.), along with chamise (*Adenostoma fasciculatum*), toyon (*Heteromeles arbutifolia*), poison-oak (*Toxicodendron diversilobum*), California buckthorn (*Rhamnus californica*), hollyleaf cherry (*Prunus ilicifolia*), and California fremontia (*Fremontodendron californicum*).

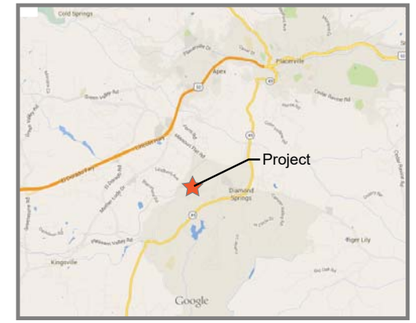
Overstory species within the Study Area are interior live oak (Quercus wislezinii) and valley oak (*Quercus lobata*), California black walnut (*Juglans californica*), and/or blue oak (*Q. douglasii).* Shrub species on or around the site include: whiteleaf manzanita (*Arctostaphylos viscida*), greenleaf manzanita (*A. patula*), toyon (*Heteromeles arbutifolia*), buckbrush (*Ceanothus cuneatus*), California coffeeberry (*Rhamnus californica*), coyotebrush (*Baccharis pilularis*), bitter cherry (*Prunus emarginata*) and Himalayan blackberry (*Rubus discolor*). Understory grasses and forbs include: narrowleaf plantain (*Plantago lanceolata*), yellow star thistle (*Centaurea solstitialis*), clover (*Trifolium* sp.), tall annual willowherb (*Epilobium brachycarpum*), California grape (*Vitis californica*), dogtail grass (*Cynosurus echinatus*), mugwort (*Artemesia douglasiana*), St. John's wort (*Hypericum perfoliatum*), prickly lettuce (*Lactuca serriola*), tall wheatgrass (*Elytrigia pontica*), Queen Anne's lace (*Daucus carota*), and hairypink (*Petrorhagia dubia*).

A narrow, rather degraded Valley foothill riparian corridor occurs along the western drainage and Pioneer trail, with an overstory of Fremont cottonwood (*Populus fremontii*), valley oak, foothill pine, and arroyo willow (*Salix lasiolepis*) and an understory of coyotebrush and Himalayan blackberry, with some sweetpea (*Lathyrus latifolius*), white sweetclover (*Melilotus alba*), St. John's wort, rabbitfoot grass (*Polypogon monspeliensis*), dogtail grass, soft chess (*Bromus hordeaceus*), and Queen Anne's lace.

3.5 Wildlife

We observed the following wildlife species (or sign) during our various field visits to the Study Area: western fence lizard (*Sceloporus occidentalis*), black-tailed jackrabbit (*Lepus californicus*), coyote (*Canis latrans*), vole (*Microtus* sp.), turkey vulture (*Cathartes aura*), mockingbird (*Mimus polyglottis*), scrub jay (*Aphelocoma coerulescens*), house finch (*Carpodacus mexicanus*), white-crowned sparrow (*Zonotrichia leucophrys*), American goldfinch (*Carduelis tristis*), dark-eyed junco (*Junco hyemalis*), chipping sparrow (*Spizella passerina*), spotted towhee (*Pipilo erythrophthalmus*), and mourning dove (*Zenaida macroura*).

Aerial Photography taken in May, 2014



Vicinity Map - Not to Scale

Wetlands and "Other Waters" of the U.S.			
Feature	Length (LF)	Width (LF)	Area (AC)
D-1	1,045	4	0.096
D-2	102	4	0.010
D-3	750	4	0.069
Total	1,897		0.175

Legend

- Drainage
- Project Boundary
- Parcel Boundary

FIGURE 5: WETLANDS AND "OTHER WATERS" OF THE U.S.

EDC SHERIFF HEADQUARTERS • DIAMOND SPRINGS, EL DORADO COUNTY, CALIFORNIA

Date: December 8, 2015

Plan Scale: 1" = 100' @ 36x24 Sheet Size

0' 50' 100' 200'

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We encountered some wildlife (rabbit and perhaps black-tailed deer) trails on the site, mostly near the western drainage. Only the western (Pioneer) trail and associated drainage appear to have much real wildlife utility, as the rest of the site is highly and continuously disturbed by human activity.

4.0 Special Status Species

Special status species are those that fall into one or more of the following categories:

- Listed as endangered or threatened under the federal Endangered Species Act (or formally proposed for listing),
- Listed as endangered or threatened under the California Endangered Species Act (or proposed for listing),
- Designated a Species of Concern by the Sacramento District of the U.S. Fish and Wildlife Service,
- Designated as rare, protected, or fully protected pursuant to California Fish and Game Code,
- Designated a Species of Concern by the California Department of Fish and Game,
- Defined as rare or endangered under the California Environmental Quality Act (CEQA), or
- Occurring on List 1 or 2 maintained by the California Native Plant Society.

Table 1 below and appendix C lists those special status plants and animals with even a remote possibility of occurring within the Study Area.

Table 1: Special Status Species with Potential to Occur in the Study Area

Species	Federal	State	CNPS	Habitat	Potential for Occurrence
Plants					
Brandegee's clarkia *Clarkia biloba* ssp. *brandegeeae*	-	-	1B	Chaparral, cismontane woodland. Often in road cuts. 295-885 meters in elevation.	**Low**. Blue oak-foothill pine habitat in the Study Area may be suitable habitat, but the species was not identified during protocol-level surveys and there is no recorded occurrence within five miles of the project site
Stebbins' morning-glory *Calystegia stebbinsii*	-	-	1B	Gabbroic or serpentine soils in Chaparral and cismontane woodland	**Likely Absent**. Requires red clay gabbroic soils. Majority of the project site consists of placer diggings soils.

Species	Federal	State	CNPS	Habitat	Potential for Occurrence
Plants					
Pine Hill Ceanothus *Ceanothus roderickii*	-	-	1B	Gabbroic or serpentine soils in chaparral and cismontane woodlands.	**Likely Absent**. Requires red clay gabbroic soils. Majority of the project site consists of placer diggings soils.
Pine Hill Flannelbush *Fremontodendron decumbens*	-	-	1B	Gabbroic or serpentine soils in Chaparral and cismontane woodland	**Likely Absent**. Requires red clay gabbroic soils with granite boulders. No recorded occurrences within the study area.
El Dorado Bedstraw *Galium californicum*	-	-	1B	Gabbroic or serpentine soils in Cismontane woodland, chaparral, and lower montane coniferous forest	**Likely Absent**. Lacks potential suitable habitat. Requires gabbroic soils within pine-oaks woodlands. No recorded occurrences within the study area.
Layne's ragwort *Packera layneae*	-	-	1B	Gabbroic or serpentine soils in Cismontane woodland, chaparral	**Likely Absent**. Lacks potential suitable habitat. Requires gabbroic or serpentine soils. No recorded occurrences within the study area.
Big-scale balsamroot *Balsamorhiza macrolepis var. macrolepis*	-	-	1B	Valley and foothill grassland, cismontane woodland. Sometimes on serpentine. 35-1000 meters in elevation.	**Low.** Blue oak-foothill pine habitat in the Study Area may be suitable habitat, but none identified during protocol-level surveys and no recorded occurrences within five miles of the project site (CNDDB 2015).
Insects					
Valley elderberry longhorn beetle *Desmocerus californicus dimorphus*	FT	-		Riparian and oak woodlands. Requires the presence of blue or Mexican elderberry shrubs.	**Likely Absent.** No host plant (elderberry) observed on or near the Study Area.
Invertebrates					
Vernal pool fairy shrimp *Branchinecta lynchi*	FE	-		Valley and foothill grasslands and vernal pools. Inhabit small, clear-water sandstone-depression pools and grassed swale, earth slump, or basalt-flow depression pools.	**Likely Absent:** Lacks potential suitable habitat. Requires vernal pool habitat or other ephemeral pools. No recorded occurrences within study area.

Species	Federal	State	CNPS	Habitat	Potential for Occurrence
Amphibians					
California red-legged frog *Rana draytonii*	FT	-		Prefers lowlands and foothills in or near permanent sources of deep water with dense shrubby or emergent vegetation.	**Likely Absent**: Project site lacks suitable habitat (i.e deep water). Requires 11-20 weeks of permanent water for larval development. No visible water was observed during field surveys.
Sierra Nevada Yellow-legged Frog *Rana sierrae*	FE	CT		Ephemeral stream with small pools within forest of yellow pine and incense cedar.	**Likely Absent**: Project site lacks suitable habitat (i.e deep water). Tadpoles may require 2-4 years to complete their aquatic development. No visible water was observed during field surveys.
Birds					
Sharp-shinned hawk *Accipiter striatus*	-	CSC		Winter resident throughout much of the state; permanent at higher elevations. Breeds in ponderosa pine, black oak, riparian deciduous, mixed conifer, and Jeffrey pine habitats. Prefers but is not restricted to riparian habitats.	**Low.** Blue oak-foothill pine habitat in the Study Area may be suitable habitat, but none identified during protocol-level surveys and no recorded occurrences within five miles of the project site (CNDDB 2015).
White-tailed Kite *Elanus leucuruc*		CFP		Rolling foothills and valley margins with scattered oaks and river bottomlands or marshes next to deciduous woodland. Open grasslands, meadows, or marshes for foraging close to isolated, dense-topped trees for nesting and perching.	**Moderate.** Blue oak-foothill pine habitat in the Study Area may be suitable habitat, but none identified during protocol-level surveys and no recorded occurrences within five miles of the project site (CNDDB 2015).
Willow Flycatcher *Empidonax traillii*	-	CE		Inhabits extensive thickets or low, dense willows on edge of wet meadows, ponds, or backwaters.	**Likely Absent**. No potential suitable habitat (i.e. wet meadows, ponds, or backwaters), no dense willow thickets for nesting/roosting. Project site consists of scattered oak and pine trees.

Species	Federal	State	CNPS	Habitat	Potential for Occurrence
Birds					
Bald Eagle *Haliaeetus leucocephalus*	-	CE		Ocean shore, lake margins, rivers, and lower montane coniferous forest.	**Likely Absent:** Bald eagles nest within one mile of water. No rivers or water bodies within one mile of project site. Prefers trees approximately 150 feet tall with a DBH of 72 inches within coniferous forest. Project site consists of scattered pine and oaks trees that are smaller in size.
Loggerhead Shrike *Haliaeetus leucocephalus*	-	CSC		Found in a variety of habitats with open areas, available perches, and dense shrubs for nesting.	**Moderate.** The project study area provides suitable nesting and foraging habitat for this species. There are no CNDDB-recorded accurrences of this species within five miles of the project study area (CNDDB 2015).
Bank Swallow *Riparia riparia*	-	CT		Riparian scrub and woodland. Requires vertical banks/cliffs with fine textured/sandy soils near streams, rivers, lakes, ocean to dig nesting holes.	**Likely Absent**. Requires open water and vertical banks/cliffs. Lacks suitable nesting substrate (i.e sandy soils) to dig nesting holes.
Great Gray Owl *Strix nebulosa*	-	CE		Resident of mixed conifer or red fir forest habitat, in or on else of meadows.	**Likely Absent**. Requires large diameter snags in a forest with high canopy closure, which provides a cool sub-canopy microclimate. The project site consists of scattered pine and oak trees, therefore no high canopy closure.

Species	Federal	State	CNPS	Habitat	Potential for Occurrence
Mammals					
Pallid Bat *Antrozous pallidus*		CSC		Broadly distributed in California from sea level to over 6,000 feet. Roosts in caves, buildings, rock crevices, and tree hollows. Overwinters in summer habitats at lower elevations.	**Moderate.** Riparian and blue oak-foothill pine habitats within the project study area may provide suitable maternity roosts for this species. There are no CNDDB-recorded occurrences of this species within five miles of the project study area (CNDDB 2015).
Ringtail *Bassariscus astutus*		FP		Widely distributed, common to uncommon permanent resident. Occurs in various riparian habitats and in brush stands of most forest and shrub habitats at low to middle elevations. Nests in rock recesses, hollow trees, logs, snags, abandoned burrows, or woodrat nests.	**Low.** The marginal riparian habitat along the western side of the project study area could be suitable for this species. There are no CNDDB-recorded occurrences of this species within five miles of the projectbstudy area (CNDDB 2015).
Sierra Nevada Red Fox *Vulpes vulpes nector*	-	CT		Inhabits in a variety of habitats such as alpine, alpine dwarf scrub, broadleaved upland forest, meadows, and seeps.	**Likely Absent**. Lacks potential suitable habitat. Prefers sense vegetation and rocky areas for cover and den sites. Additionally, they favor forest interspersed with meadows or alpine fell-fields. No species were observed during the biological assessment.
California Wolverine *Gulo gulo*	-	CT		Found in the north coast mountains and the Sierra Nevada. Inhibits in a wide variety of high elevation habitats such as alpine, alpine and montane dwarf scrub, meadows, and seeps.	**Likely Absent**. Lacks potential suitable habitat. Needs water source. Uses caves, logs, burrows for cover and den areas. No water or California wolverine species were observed during the biological assessment.

LEGAL STATUS

Federal: FE = Federal Endangered FT = Federal Threatened
State: CSC = California Species of Concern CE = California Endangered
CFP = California Fully Protected CT = California Threatened
CNPS: 1B = Plants that are rare throughout their range with the majority endemic to California

4.1 Special Status Plants

Seven plant species, including: Stebbins' morning-glory (*Calystegia stebbinsii*); Pine Hill Ceanothus (*Ceanothus roderickii*); Pine Hill Flannelbush (*Fremontodendron decumbens*); El Dorado Bedstraw (*Galium californicum*); Layne's ragwort (*Packera layneae*); Big-scale balsamroot (*Balsamorhiza macrolepis var. macrolepis*); and Brandegee's clarkia (*Clarkia biloba* ssp. *Brandegeeae*) could potentially occur within the project vicinity, though the Study area lacks serpentine and/or gabbroic soils and protocol-level surveys of the Study Area during the species' 2015 flowering periods failed to reveal any of these plants.

4.2 Special Status Wildlife

The Study area does not contain appropriate habitat to support the:

1. Two invertebrate species, including the Valley elderberry longhorn beetle (VELB; *Desmocerus californicus dimorphus*) or vernal pool fairy shrimp (*Branchinecta lynchii*);
2. Two amphibian species, including the California red-legged frog (*Rana draytonii*) or California foothill yellow-legged frog (*Rana sierrae*);
3. Seven bird species, including the sharp-shinned hawk (*Accipiter striatus*), white-tailed kite (*Elanus leucurus*), bald eagle (*Haliaeetus leucocephalus*), great gray owl (*Strix nebulosa*), Loggerhead shrike (*Lanius ludovicianus*), and willow flycatcher (*Empidonax traillii*), or riparian bank swallow (*Riparia riparia*);
4. Two bat species, including the pallid bat (*Antrozous pallidus*) and silver-haired bat (*Lasionycteris noctivagans*); or
5. Three other mammal species, including ringtail (*Bassariscus astutus*), Sierra Nevada red fox (*Vulpes vulpes nector*), or wolverine (*Gulo gulo*).

Though these species could potentially use the Study Area vicinity for some portion(s) of their life cycle, repeated field surveys found no indication of their use of the proposed project area itself. The historic and ongoing disturbance of the site likely precludes their presence in this area.

4.3 Critical Habitat for Special Status Species

The Federal Endangered Species Act (FESA) requires the federal government to designate critical habitat for any listed species. Critical habitat is defined as: (1) specific areas within the geographical area occupied by the species at the time of listing, if they contain physical or biological features essential to conservation, and those features may require special management considerations or protection; and (2) specific areas outside the geographical area occupied by the species if the agency determines that the area itself is essential for conservation. There is no designated critical habitat within the Study Area.

5.0 Effects of the Proposed Action

5.1 Effects of Proposed Action on Vegetation

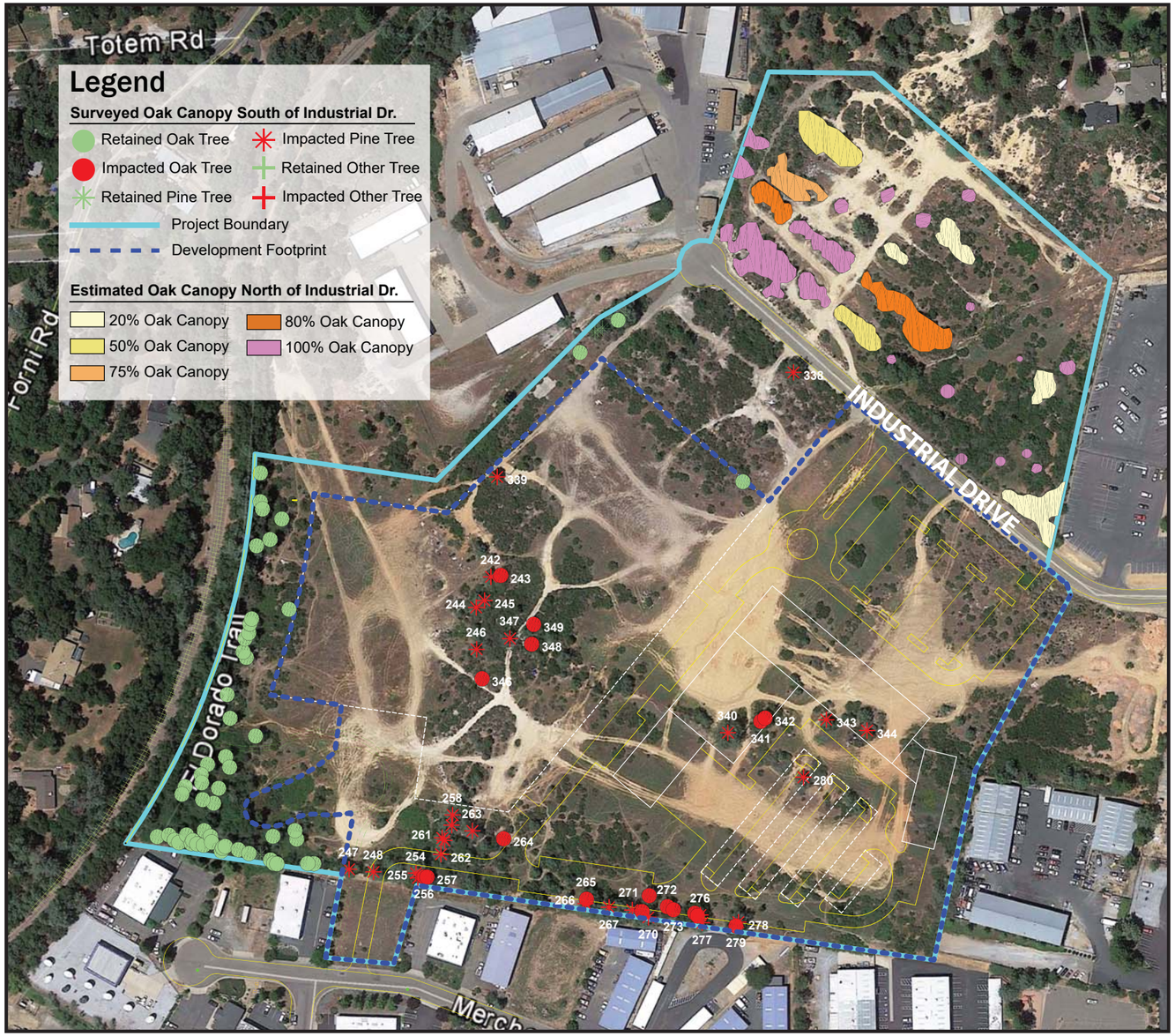
Based on the conceptual site plan for the project, development of the solar farm, secure parking lot, and Public Safety Facility would require removal of a total of 35 pine trees and 38 oak trees (Figure 6). Most of the pine and oak trees that would be removed as part of the proposed project occur in the eastern and southern portions of the site, while additional oaks and pines exist in the western and northern portions of the site. As previously mentioned, the 6.16-acre portion of the project site north of Industrial Drive is not being proposed for development as part of this project, therefore, no pine or oak trees will be adversely affected at this location. Because the County regulations are only concerned with the removal of native oak trees and oak woodland habitat, mitigation is not required for the removal of pine trees during project construction. The project site contains 0.98 acre of oak canopy (3.2% of 30.34-acre project area), which exceeds the County's threshold of 1% of total project area for projects greater than one acre under General Plan Policy 7.4.4.4. The proposed site plan for this project would adversely affect approximately 7.4% (0.07 acre) and therefore retain 92.6% (0.91 acre) of the existing oak canopy, which complies with the General Plan requirement of 90% canopy retention. Under General Plan Policy 7.4.2.8, the project would, however, mitigate onsite for the adversely affected canopy using the County's formula of 200 one-gallon oak trees per acre of impact. Consequently, 15 one-gallon oak trees shall be planted as part of the project's landscaping as mitigation for the loss of 0.07 (7.4%) acre of impacted oak canopy to comply with this General Plan requirement.

5.2 Effects of Proposed Action on "Other Waters of the U.S."

No wetlands occur within the Study Area beyond the 1,045-foot long (0.10-acre) drainage along the Study Area's western boundary, 102-foot long (0.009-acre) ditch in the site's SW corner, and 750-foot long (0.07-acre) "v-ditch" along the parcel's southern boundary. None of these "other waters of the U.S.", however, would be removed or permanently affected by the proposed project, so that no mitigation or involvement of federal or state resource agencies (e.g. CWA permitting) would be required.

5.3 Effects of Proposed Action on Wildlife and Habitat

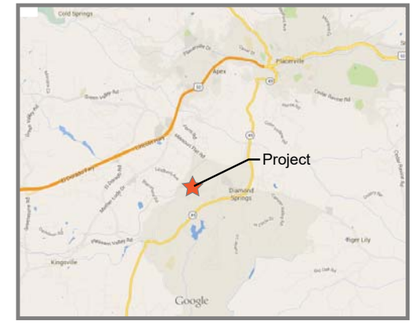
As native plant communities and wildlife habitat within the proposed project area have already been considerably degraded by historic use of the site, there is little remaining to be adversely affected by the proposed project. Consequently, no adverse impacts beyond those to native oak trees described above are anticipated. Though unlikely, it is possible that nesting birds and raptors could nest in the native oaks slated for removal and, consequently, a pre-construction bird nesting survey should be conducted no longer than 30 days prior to scheduled site clearing, if this occurs within the generally accepted nesting period in northern California (March 1 – August 15).



Aerial Photography taken in May, 2014

Impacted Oak Trees (>6" DBH)

Oak			
ID	Quantity	Size (DBH)	Total DBH
243	3	9	27
256	2	10	20
257	4	10	40
264	1	8	8
265	2	10	20
269	2	12	24
271	3	12	36
272	2	8	16
273	2	8	16
274	4	10	40
275	1	9	9
279	2	10	20
341	2	12	24
342	1	10	10
346	2	6	12
348	3	8	24
349	2	9	18
Total	38		364



Vicinity Map - Not to Scale

Oak Canopy Impacts and Retention

Oak Tree Canopy North of Industrial Drive	Canopy Area (SF)	Canopy Area (AC)	% Oak Canopy	% Project Area
Retained	33,138	0.76	77.4%	2.5%
Impacted	-	-	0.0%	0.0%
Subtotal	*33,138*	*0.76*	*77.4%*	2.5%

Oak Tree Canopy South of Industrial Drive	Canopy Area (SF)	Canopy Area (AC)	% Oak Canopy	% Project Area
Retained	6,520	0.15	15.2%	0.5%
Impacted	3,148	0.07	7.4%	0.2%
Subtotal	*14,616*	*0.22*	*22.6%*	*0.7%*
Pre-Project Total	**47,754**	**0.98**	**100.0%**	**3.2%**
Retained Total	**39,658**	**0.91**	**92.6%**	**3.0%**
Impacted Total	**3,148**	**0.07**	**7.4%**	**0.2%**

Required Oak Tree Mitigation		
Impacted Oak Canopy (AC)	0.07	
Mitigation Trees / Acre Impact	200	1 gallon oak trees
# Required Mitigation Trees	**15**	**1 gallon oak trees**

Notes:
1. Project area = 30.34 acres, as noted in EIR
2. Canopy area is derived from regression analysis of the relationship between DBH and canopy diameter in 15-year oaks as noted in Troxel, B., et al., Relationships between bole and crown size for young urban trees in the northeastern USA, Urban Forestry & Urban Greening (2013), http://dx.doi.org/10.1016/j.ufug.2013.02.006.
   - Quercus spp. @ 15 years: 28.864ft (Crown Diameter) / 10.480in (DBH) = 2.754ft (Crown Diameter) per 1in (DBH)
   - Canopy Area = Total DBH x 15-year Crown Diameter x pi

FIGURE 6: OAK TREE IMPACTS AND RETENTION

EDC SHERIFF HEADQUARTERS • DIAMOND SPRINGS, EL DORADO COUNTY, CALIFORNIA

Date: December 2, 2015

Plan Scale: 1" = 100' @ 36x24 Sheet Size

0' 50' 100' 200'

BARNETT ENVIRONMENTAL

6.0 Conclusion

The proposed project would be constructed on a parcel within an existing industrial park that has already been considerably degraded by human activity and use, such that it currently supports little in the way of natural vegetation, wetlands & "other waters of the U.S.", or wildlife habitat of significant value. Consequently, clearing of the site for construction of the new Sheriff's Headquarters would not significantly, adversely affect resources beyond those oak trees removed for facilities construction. Apart from pre-construction surveys to gauge the use of the site by nesting birds; and to comply with GP Policy 7.4.2.8 - 15 1-gal oaks trees shall be planted as part of the project's landscaping to mitigate the loss of 0.07 acre of impacted oak canopy. No additional mitigation for biological or wetland resources is recommended.

7.0 References

California Department of Fish and Wildlife. Rarefind 5. Website https://map.dfg.ca.gov/rarefind/view/RareFind.aspx. Accessed May 12, 2015.

CNPS, Rare Plant Program. 2015. Inventory of Rare and Endangered Plants (online edition, v8-02). California Native Plant Society, Sacramento, CA. Website http://www.rareplants.cnps.org Accessed May 12, 2015.

Hickman, J.C. (ed.) 1993. The Jepson Manual: Higher Plants of California. University of California Press.

USDA Natural Resource Conservation Service Soils. Web Soil Survey. http://websoilsurvey.nrcs.usda.gov/app/WebSoilSurvey.aspx. Accessed May 12, 2015.

ATTACHMENT A – CNDDB Records

Map of Project Area

- Plant (80m)
- Plant (specific)
- Plant (non-specific)
- Plant (circular)
- Animal (80m)
- Animal (specific)
- Animal (non-specific)
- Animal (circular)
- Terrestrial Comm. (80m)
- Terrestrial Comm. (specific)
- Terrestrial Comm. (non-specific)
- Terrestrial Comm. (circular)
- Aquatic Comm. (80m)
- Aquatic Comm. (specific)
- Aquatic Comm. (non-specific)
- Aquatic Comm. (circular)
- Multiple (80m)
- Multiple (specific)
- Multiple (non-specific)
- Multiple (circular)
- Sensitive EO's (Commercial only)

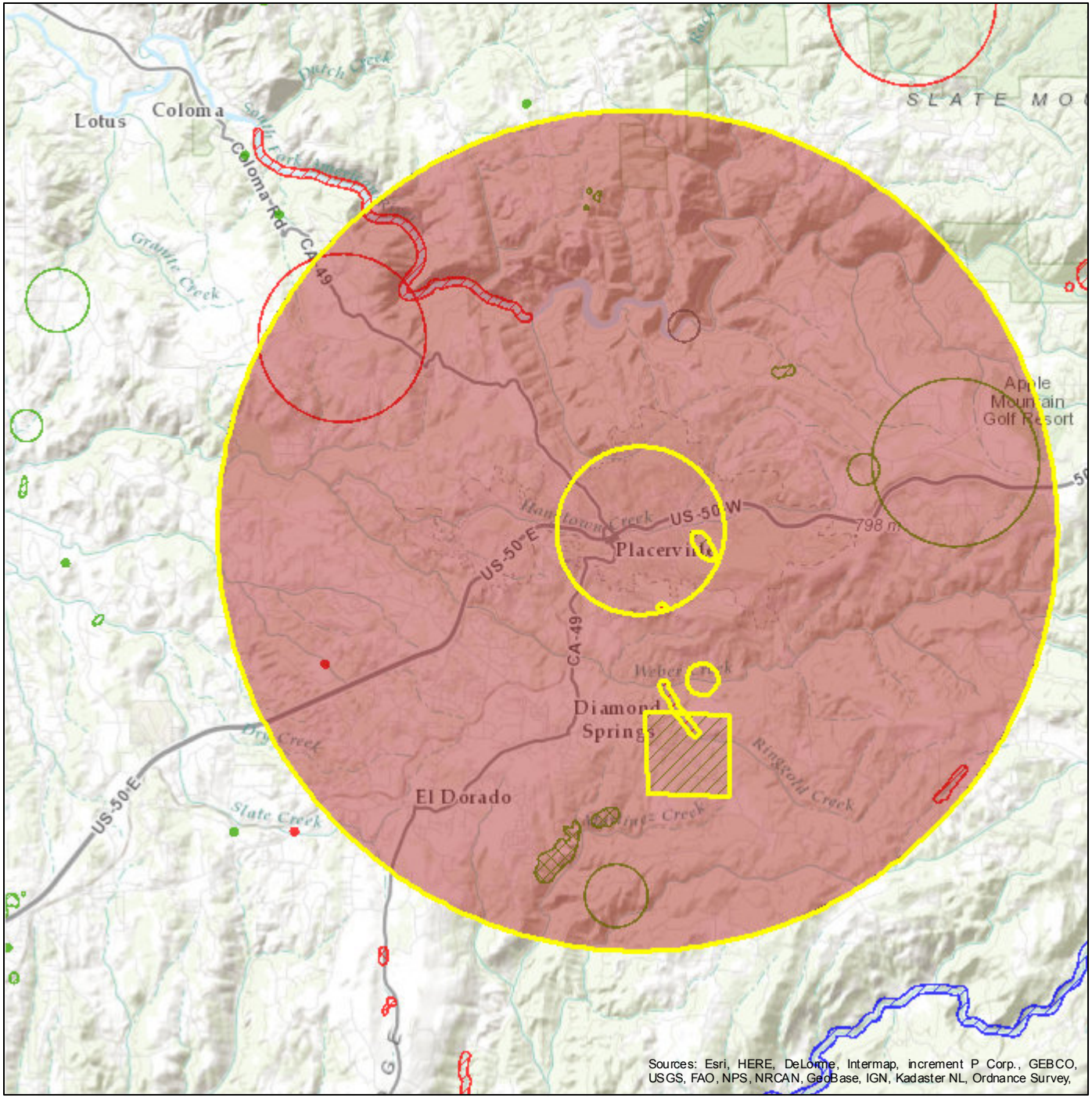
1:144,448

0 1.25 2.5 5 mi

0 2 4 8 km

N

September 4, 2015



Author: cnddb_com
Printed from http://bios.dfg.ca.gov

CALIFORNIA DEPARTMENT OF FISH and WILDLIFE RareFind

Query Summary:
Federal Listing Status IS (Endangered OR Threatened) OR State Listing Status IS (Endangered OR Threatened OR Rare)
AND County IS (El Dorado)

Print Close

CNDDB Element Query Results

Scientific Name	Common Name	Taxonomic Group	Element Code	Total Occs	Returned Occs	Federal Status	State Status	Global Rank	State Rank	CA Rare Plant Rank	Other Status	Habitats
Branchinecta lynchi	vernal pool fairy shrimp	Crustaceans	ICBRA03030	751	1	Threatened	None	G3	S2S3	null	IUCN_VU-Vulnerable	Valley & foothill grassland | Vernal pool | Wetland
Calystegia stebbinsii	Stebbins' morning-glory	Dicots	PDCON040H0	13	8	Endangered	Endangered	G1	S1	1B.1	SB_RSABG-Rancho Santa Ana Botanic Garden	Chaparral | Cismontane woodland | Ultramafic
Ceanothus roderickii	Pine Hill ceanothus	Dicots	PDRHA04190	8	8	Endangered	Rare	G1	S1	1B.2	SB_RSABG-Rancho Santa Ana Botanic Garden	Chaparral | Cismontane woodland | Ultramafic
Desmocerus californicus dimorphus	valley elderberry longhorn beetle	Insects	IICOL48011	271	2	Threatened	None	G3T2	S2	null	null	Riparian scrub
Empidonax traillii	willow flycatcher	Birds	ABPAE33040	87	5	None	Endangered	G5	S1S2	null	IUCN_LC-Least Concern | USFS_S-Sensitive | USFWS_BCC-Birds of Conservation Concern	Meadow & seep | Riparian scrub | Riparian woodland | Wetland
Fremontodendron decumbens	Pine Hill flannelbush	Dicots	PDSTE03030	10	7	Endangered	Rare	G1	S1	1B.2	SB_RSABG-Rancho Santa Ana Botanic Garden | SB_UCBBG-UC Berkeley Botanical Garden	Chaparral | Cismontane woodland | Ultramafic
Galium californicum ssp. sierrae	El Dorado bedstraw	Dicots	PDRUB0N0E7	16	16	Endangered	Rare	G5T1	S1	1B.2	SB_RSABG-Rancho Santa Ana Botanic Garden	Chaparral | Cismontane woodland | Lower montane coniferous forest | Ultramafic
Gulo gulo	California wolverine	Mammals	AMAJF03010	173	4	None	Threatened	G4	S1	null	CDFW_FP-Fully Protected | IUCN_NT-Near Threatened | USFS_S-Sensitive	Alpine | Alpine dwarf scrub | Meadow & seep | Montane dwarf scrub | North coast coniferous forest | Riparian forest | Subalpine coniferous forest | Upper montane coniferous forest | Wetland
Haliaeetus leucocephalus	bald eagle	Birds	ABNKC10010	318	6	Delisted	Endangered	G5	S2	null	BLM_S-Sensitive | CDF_S-Sensitive | CDFW_FP-Fully Protected | IUCN_LC-Least Concern | USFS_S-	Lower montane coniferous forest | Oldgrowth

											Sensitive | USFWS_BCC-Birds of Conservation Concern	
Oncorhynchus clarkii henshawi	Lahontan cutthroat trout	Fish	AFCHA02081	27	2	Threatened	None	G4T3	S2	null	AFS_TH-Threatened	Aquatic | Great Basin flowing waters
Oncorhynchus mykiss irideus	steelhead - Central Valley DPS	Fish	AFCHA0209K	31	1	Threatened	None	G5T2Q	S2	null	AFS_TH-Threatened	Aquatic | Sacramento/San Joaquin flowing waters
Packera layneae	Layne's ragwort	Dicots	PDAST8H1V0	48	34	Threatened	Rare	G2	S2	1B.2	SB_RSABG-Rancho Santa Ana Botanic Garden	Chaparral | Cismontane woodland | Ultramafic
Rana draytonii	California red-legged frog	Amphibians	AAABH01022	1374	6	Threatened	None	G2G3	S2S3	null	CDFW_SSC-Species of Special Concern | IUCN_VU-Vulnerable	Aquatic | Artificial flowing waters | Artificial standing waters | Freshwater marsh | Marsh & swamp | Riparian forest | Riparian scrub | Riparian woodland | Sacramento/San Joaquin flowing waters | Sacramento/San Joaquin standing waters | South coast flowing waters | South coast standing waters | Wetland
Rana sierrae	Sierra Nevada yellow-legged frog	Amphibians	AAABH01340	664	54	Endangered	Threatened	G1	S1	null	CDFW_SSC-Species of Special Concern | IUCN_EN-Endangered | USFS_S-Sensitive	Aquatic
Riparia riparia	bank swallow	Birds	ABPAU08010	296	2	None	Threatened	G5	S2	null	BLM_S-Sensitive | IUCN_LC-Least Concern	Riparian scrub | Riparian woodland
Rorippa subumbellata	Tahoe yellow cress	Dicots	PDBRA270M0	28	20	Candidate	Endangered	G1	S1	1B.1	SB_BerrySB-Berry Seed Bank | SB_RSABG-Rancho Santa Ana Botanic Garden | USFS_S-Sensitive	Freshwater marsh | Lower montane coniferous forest | Marsh & swamp | Meadow & seep | Wetland
Strix nebulosa	great gray owl	Birds	ABNSB12040	75	5	None	Endangered	G5	S1	null	CDF_S-Sensitive | IUCN_LC-Least Concern | USFS_S-Sensitive	Lower montane coniferous forest | Oldgrowth | Subalpine coniferous forest | Upper montane coniferous forest
Vulpes vulpes necator	Sierra Nevada red fox	Mammals	AMAJA03012	201	4	None	Threatened	G5T1T2	S1	null	USFS_S-Sensitive	Alpine | Alpine dwarf scrub | Broadleaved upland forest | Meadow & seep | Riparian scrub | Subalpine coniferous forest | Upper montane coniferous forest | Wetland

ATTACHMENT B – NRCS Soils Report

United States Department of Agriculture

NRCS

Natural Resources Conservation Service

A product of the National Cooperative Soil Survey, a joint effort of the United States Department of Agriculture and other Federal agencies, State agencies including the Agricultural Experiment Stations, and local participants

Custom Soil Resource Report for

El Dorado Area, California

EDC Sheriff's Facility

April 7, 2015

Preface

Soil surveys contain information that affects land use planning in survey areas. They highlight soil limitations that affect various land uses and provide information about the properties of the soils in the survey areas. Soil surveys are designed for many different users, including farmers, ranchers, foresters, agronomists, urban planners, community officials, engineers, developers, builders, and home buyers. Also, conservationists, teachers, students, and specialists in recreation, waste disposal, and pollution control can use the surveys to help them understand, protect, or enhance the environment.

Various land use regulations of Federal, State, and local governments may impose special restrictions on land use or land treatment. Soil surveys identify soil properties that are used in making various land use or land treatment decisions. The information is intended to help the land users identify and reduce the effects of soil limitations on various land uses. The landowner or user is responsible for identifying and complying with existing laws and regulations.

Although soil survey information can be used for general farm, local, and wider area planning, onsite investigation is needed to supplement this information in some cases. Examples include soil quality assessments (http://www.nrcs.usda.gov/wps/portal/nrcs/main/soils/health/) and certain conservation and engineering applications. For more detailed information, contact your local USDA Service Center (http://offices.sc.egov.usda.gov/locator/app?agency=nrcs) or your NRCS State Soil Scientist (http://www.nrcs.usda.gov/wps/portal/nrcs/detail/soils/contactus/?cid=nrcs142p2_053951).

Great differences in soil properties can occur within short distances. Some soils are seasonally wet or subject to flooding. Some are too unstable to be used as a foundation for buildings or roads. Clayey or wet soils are poorly suited to use as septic tank absorption fields. A high water table makes a soil poorly suited to basements or underground installations.

The National Cooperative Soil Survey is a joint effort of the United States Department of Agriculture and other Federal agencies, State agencies including the Agricultural Experiment Stations, and local agencies. The Natural Resources Conservation Service (NRCS) has leadership for the Federal part of the National Cooperative Soil Survey.

Information about soils is updated periodically. Updated information is available through the NRCS Web Soil Survey, the site for official soil survey information.

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Soil Map

The soil map section includes the soil map for the defined area of interest, a list of soil map units on the map and extent of each map unit, and cartographic symbols displayed on the map. Also presented are various metadata about data used to produce the map, and a description of each soil map unit.

Custom Soil Resource Report
Soil Map

MAP LEGEND

Area of Interest (AOI)

Area of Interest (AOI)

Soils

Soil Map Unit Polygons

Soil Map Unit Lines

Soil Map Unit Points

Special Point Features

Blowout

Borrow Pit

Clay Spot

Closed Depression

Gravel Pit

Gravelly Spot

Landfill

Lava Flow

Marsh or swamp

Mine or Quarry

Miscellaneous Water

Perennial Water

Rock Outcrop

Saline Spot

Sandy Spot

Severely Eroded Spot

Sinkhole

Slide or Slip

Sodic Spot

Spoil Area

Stony Spot

Very Stony Spot

Wet Spot

Other

Special Line Features

Water Features

Streams and Canals

Transportation

Rails

Interstate Highways

US Routes

Major Roads

Local Roads

Background

Aerial Photography

MAP INFORMATION

The soil surveys that comprise your AOI were mapped at 1:20,000.

Warning: Soil Map may not be valid at this scale.

Enlargement of maps beyond the scale of mapping can cause misunderstanding of the detail of mapping and accuracy of soil line placement. The maps do not show the small areas of contrasting soils that could have been shown at a more detailed scale.

Please rely on the bar scale on each map sheet for map measurements.

Source of Map: Natural Resources Conservation Service
Web Soil Survey URL: http://websoilsurvey.nrcs.usda.gov
Coordinate System: Web Mercator (EPSG:3857)

Maps from the Web Soil Survey are based on the Web Mercator projection, which preserves direction and shape but distorts distance and area. A projection that preserves area, such as the Albers equal-area conic projection, should be used if more accurate calculations of distance or area are required.

This product is generated from the USDA-NRCS certified data as of the version date(s) listed below.

Soil Survey Area: El Dorado Area, California
Survey Area Data: Version 7, Sep 15, 2014

Soil map units are labeled (as space allows) for map scales 1:50,000 or larger.

Date(s) aerial images were photographed: Aug 14, 2011—Oct 30, 2011

The orthophoto or other base map on which the soil lines were compiled and digitized probably differs from the background imagery displayed on these maps. As a result, some minor shifting of map unit boundaries may be evident.

Map Unit Legend

El Dorado Area, California (CA624)			
Map Unit Symbol	**Map Unit Name**	**Acres in AOI**	**Percent of AOI**
BkD	Boomer very rocky loam, 3 to 30 percent slopes	0.7	2.6%
DfB	Diamond Springs very fine sandy loam, 3 to 9 percent slopes	0.1	0.5%
DfC	Diamond Springs very fine sandy loam, 9 to 15 percent slopes	1.6	5.9%
PrD	Placer diggings	25.4	91.0%
W	Water	0.0	0.1%
Totals for Area of Interest		**27.9**	**100.0%**

Map Unit Descriptions

The map units delineated on the detailed soil maps in a soil survey represent the soils or miscellaneous areas in the survey area. The map unit descriptions, along with the maps, can be used to determine the composition and properties of a unit.

A map unit delineation on a soil map represents an area dominated by one or more major kinds of soil or miscellaneous areas. A map unit is identified and named according to the taxonomic classification of the dominant soils. Within a taxonomic class there are precisely defined limits for the properties of the soils. On the landscape, however, the soils are natural phenomena, and they have the characteristic variability of all natural phenomena. Thus, the range of some observed properties may extend beyond the limits defined for a taxonomic class. Areas of soils of a single taxonomic class rarely, if ever, can be mapped without including areas of other taxonomic classes. Consequently, every map unit is made up of the soils or miscellaneous areas for which it is named and some minor components that belong to taxonomic classes other than those of the major soils.

Most minor soils have properties similar to those of the dominant soil or soils in the map unit, and thus they do not affect use and management. These are called noncontrasting, or similar, components. They may or may not be mentioned in a particular map unit description. Other minor components, however, have properties and behavioral characteristics divergent enough to affect use or to require different management. These are called contrasting, or dissimilar, components. They generally are in small areas and could not be mapped separately because of the scale used. Some small areas of strongly contrasting soils or miscellaneous areas are identified by a special symbol on the maps. If included in the database for a given area, the contrasting minor components are identified in the map unit descriptions along with some characteristics of each. A few areas of minor components may not have been observed, and consequently they are not mentioned in the descriptions, especially where the pattern was so complex that it was impractical to make enough observations to identify all the soils and miscellaneous areas on the landscape.

The presence of minor components in a map unit in no way diminishes the usefulness or accuracy of the data. The objective of mapping is not to delineate pure taxonomic classes but rather to separate the landscape into landforms or landform segments that have similar use and management requirements. The delineation of such segments on the map provides sufficient information for the development of resource plans. If intensive use of small areas is planned, however, onsite investigation is needed to define and locate the soils and miscellaneous areas.

An identifying symbol precedes the map unit name in the map unit descriptions. Each description includes general facts about the unit and gives important soil properties and qualities.

Soils that have profiles that are almost alike make up a *soil series*. Except for differences in texture of the surface layer, all the soils of a series have major horizons that are similar in composition, thickness, and arrangement.

Soils of one series can differ in texture of the surface layer, slope, stoniness, salinity, degree of erosion, and other characteristics that affect their use. On the basis of such differences, a soil series is divided into *soil phases*. Most of the areas shown on the detailed soil maps are phases of soil series. The name of a soil phase commonly indicates a feature that affects use or management. For example, Alpha silt loam, 0 to 2 percent slopes, is a phase of the Alpha series.

Some map units are made up of two or more major soils or miscellaneous areas. These map units are complexes, associations, or undifferentiated groups.

A *complex* consists of two or more soils or miscellaneous areas in such an intricate pattern or in such small areas that they cannot be shown separately on the maps. The pattern and proportion of the soils or miscellaneous areas are somewhat similar in all areas. Alpha-Beta complex, 0 to 6 percent slopes, is an example.

An *association* is made up of two or more geographically associated soils or miscellaneous areas that are shown as one unit on the maps. Because of present or anticipated uses of the map units in the survey area, it was not considered practical or necessary to map the soils or miscellaneous areas separately. The pattern and relative proportion of the soils or miscellaneous areas are somewhat similar. Alpha-Beta association, 0 to 2 percent slopes, is an example.

An *undifferentiated group* is made up of two or more soils or miscellaneous areas that could be mapped individually but are mapped as one unit because similar interpretations can be made for use and management. The pattern and proportion of the soils or miscellaneous areas in a mapped area are not uniform. An area can be made up of only one of the major soils or miscellaneous areas, or it can be made up of all of them. Alpha and Beta soils, 0 to 2 percent slopes, is an example.

Some surveys include *miscellaneous areas*. Such areas have little or no soil material and support little or no vegetation. Rock outcrop is an example.

El Dorado Area, California

BkD—Boomer very rocky loam, 3 to 30 percent slopes

Map Unit Setting

National map unit symbol: hhyy
Elevation: 600 to 5,500 feet
Mean annual precipitation: 30 to 60 inches
Mean annual air temperature: 54 to 59 degrees F
Frost-free period: 120 to 260 days
Farmland classification: Not prime farmland

Map Unit Composition

Boomer and similar soils: 75 percent
Rock outcrop: 15 percent
Minor components: 10 percent
Estimates are based on observations, descriptions, and transects of the mapunit.

Description of Boomer

Setting

Landform: Mountains
Landform position (two-dimensional): Backslope
Landform position (three-dimensional): Mountainflank
Down-slope shape: Convex
Across-slope shape: Linear
Parent material: Residuum weathered from greenstone and/or residuum weathered from schist

Typical profile

H1 - 0 to 13 inches: gravelly loam
H2 - 13 to 52 inches: gravelly sandy clay loam
H3 - 52 to 56 inches: weathered bedrock

Properties and qualities

Slope: 3 to 30 percent
Depth to restrictive feature: 52 to 56 inches to paralithic bedrock
Natural drainage class: Well drained
Runoff class: Medium
Capacity of the most limiting layer to transmit water (Ksat): Low to moderately high (0.01 to 0.57 in/hr)
Depth to water table: More than 80 inches
Frequency of flooding: None
Frequency of ponding: None
Available water storage in profile: Moderate (about 7.1 inches)

Interpretive groups

Land capability classification (irrigated): 6e
Land capability classification (nonirrigated): 6e
Hydrologic Soil Group: C
Ecological site: Loamy (R022XC013CA)

Description of Rock Outcrop

Interpretive groups

Land capability classification (irrigated): None specified

Land capability classification (nonirrigated): 8

Minor Components

Auburn

Percent of map unit: 3 percent
Landform: Hills
Landform position (two-dimensional): Backslope
Landform position (three-dimensional): Side slope
Down-slope shape: Concave
Across-slope shape: Convex

Argonaut

Percent of map unit: 3 percent
Landform: Ridges
Landform position (two-dimensional): Shoulder
Landform position (three-dimensional): Interfluve
Down-slope shape: Linear
Across-slope shape: Linear

Sobrante

Percent of map unit: 2 percent
Landform: Hillslopes
Landform position (two-dimensional): Backslope
Landform position (three-dimensional): Side slope
Down-slope shape: Concave
Across-slope shape: Convex

Sites

Percent of map unit: 2 percent
Landform: Mountain slopes
Landform position (two-dimensional): Backslope
Landform position (three-dimensional): Mountainflank
Down-slope shape: Convex
Across-slope shape: Convex

DfB—Diamond Springs very fine sandy loam, 3 to 9 percent slopes

Map Unit Setting

National map unit symbol: hhzj
Elevation: 1,000 to 4,000 feet
Mean annual precipitation: 40 inches
Mean annual air temperature: 54 degrees F
Frost-free period: 140 to 240 days
Farmland classification: Farmland of statewide importance

Map Unit Composition

Diamond springs and similar soils: 85 percent
Minor components: 15 percent
Estimates are based on observations, descriptions, and transects of the mapunit.

Description of Diamond Springs

Setting

Landform: Mountain slopes
Landform position (two-dimensional): Backslope
Landform position (three-dimensional): Mountainflank
Down-slope shape: Linear
Across-slope shape: Linear
Parent material: Fine-grained, acidic residuum weathered from igneous rock

Typical profile

H1 - 0 to 9 inches: very fine sandy loam
H2 - 9 to 36 inches: clay loam
H3 - 36 to 40 inches: sandy clay loam
H4 - 40 to 44 inches: weathered bedrock

Properties and qualities

Slope: 3 to 9 percent
Depth to restrictive feature: 40 to 44 inches to paralithic bedrock
Natural drainage class: Well drained
Runoff class: Medium
Capacity of the most limiting layer to transmit water (Ksat): Very low to moderately low (0.00 to 0.06 in/hr)
Depth to water table: More than 80 inches
Frequency of flooding: None
Frequency of ponding: None
Available water storage in profile: Moderate (about 6.8 inches)

Interpretive groups

Land capability classification (irrigated): 3e
Land capability classification (nonirrigated): 3e
Hydrologic Soil Group: C

Minor Components

Auberry

Percent of map unit: 8 percent

Boomer

Percent of map unit: 7 percent
Landform: Mountain slopes, hillslopes
Landform position (two-dimensional): Backslope
Landform position (three-dimensional): Mountainflank, side slope
Down-slope shape: Concave
Across-slope shape: Convex

DfC—Diamond Springs very fine sandy loam, 9 to 15 percent slopes

Map Unit Setting

National map unit symbol: hhzk
Elevation: 1,000 to 4,000 feet

Mean annual precipitation: 40 inches
Mean annual air temperature: 54 degrees F
Frost-free period: 140 to 240 days
Farmland classification: Farmland of local importance

Map Unit Composition

Diamond springs and similar soils: 85 percent
Minor components: 15 percent
Estimates are based on observations, descriptions, and transects of the mapunit.

Description of Diamond Springs

Setting

Landform: Mountain slopes
Landform position (two-dimensional): Backslope
Landform position (three-dimensional): Mountainflank
Down-slope shape: Linear
Across-slope shape: Linear
Parent material: Fine-grained, acidic residuum weathered from igneous rock

Typical profile

H1 - 0 to 9 inches: very fine sandy loam
H2 - 9 to 36 inches: clay loam
H3 - 36 to 40 inches: sandy clay loam
H4 - 40 to 44 inches: weathered bedrock

Properties and qualities

Slope: 9 to 15 percent
Depth to restrictive feature: 40 to 44 inches to paralithic bedrock
Natural drainage class: Well drained
Runoff class: Medium
Capacity of the most limiting layer to transmit water (Ksat): Very low to moderately low (0.00 to 0.06 in/hr)
Depth to water table: More than 80 inches
Frequency of flooding: None
Frequency of ponding: None
Available water storage in profile: Moderate (about 6.8 inches)

Interpretive groups

Land capability classification (irrigated): 4e
Land capability classification (nonirrigated): 4e
Hydrologic Soil Group: C

Minor Components

Auberry

Percent of map unit: 8 percent

Boomer

Percent of map unit: 7 percent
Landform: Mountain slopes, hillslopes
Landform position (two-dimensional): Backslope
Landform position (three-dimensional): Mountainflank, side slope
Down-slope shape: Concave
Across-slope shape: Convex

PrD—Placer diggings

Map Unit Composition

Placer diggings: 90 percent
Unnamed: 10 percent
Estimates are based on observations, descriptions, and transects of the mapunit.

Description of Placer Diggings

Setting

Parent material: Alluvium derived from mixed sources

Typical profile

H1 - 0 to 60 inches: fine sandy loam, cobbles

Properties and qualities

Slope: 2 to 15 percent
Runoff class: Low
Capacity of the most limiting layer to transmit water (Ksat): High to very high (5.95 to 19.98 in/hr)
Frequency of flooding: Occasional
Available water storage in profile: Very low (about 1.2 inches)

Interpretive groups

Land capability classification (irrigated): None specified
Land capability classification (nonirrigated): 8
Ecological site: Placer diggings (R018XD084CA)

Description of Unnamed

Setting

Landform: Channels

Properties and qualities

Depth to restrictive feature: More than 80 inches
Depth to water table: More than 80 inches
Frequency of flooding: None
Frequency of ponding: None

W—Water

Map Unit Composition

Water: 100 percent
Estimates are based on observations, descriptions, and transects of the mapunit.

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APPENDIX F

GEOTECHNICAL ENGINEERING STUDY UPDATE
FOR
EL DORADO COUNTY SHERIFF HEADQUARTERS
Industrial Drive
Placerville, California

Project No. E13310.005
September 2014

YOUNGDAHL
CONSULTING GROUP, INC.

Building Innovative Solutions

YOUNGDAHL CONSULTING GROUP, INC.
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30 YEARS

County of El Dorado Facilities Division
3000 Fairlane Court, Suite One
Placerville, California 95667

Project No. E13310.005
29 September 2014

Attention: Mr. Brent Collins

Subject: **EL DORADO COUNTY SHERIFF HEADQUARTERS**
Industrial Drive, Placerville, California
GEOTECHNICAL ENGINEERING STUDY UPDATE

References:
1. Phase I Environmental Site Assessment for 200 Industrial Drive, prepared by Youngdahl Consulting Group, Inc., dated 28 November 2007 (Project No. E07442.000).
2. Geotechnical Engineering Study for Industrial Drive (200), prepared by Youngdahl Consulting Group, Inc., dated 7 March 2008 (Project No. E07442.001).
3. Phase I Environmental Site Assessment for 200 Industrial Drive, prepared by Youngdahl Consulting Group, Inc., dated 28 November 2007 (Project No. E13310.005).
4. Proposal, prepared by Youngdahl Consulting Group, Inc., executed 16 September 2014 (Agreement No. 316-S1410, CIP 140404).

Dear Mr. Collins:

In accordance with your authorization, Youngdahl Consulting Group, Inc. has performed a Geotechnical Engineering Study Update for the project site located along Industrial Drive in Placerville, California. Specifically, the Assessor Parcel Number (APN) associated with this project includes 329-240-55 and is approximately 30.36 acres. The purpose of this study was to perform a site reconnaissance to observe and document the existing site conditions, review the previous geotechnical engineering study for the project site (Reference 2), and provide updated geotechnical information and design criteria for the proposed project appropriate to the observed site conditions.

Based upon our site reconnaissance and previous subsurface exploration program, it is our opinion that the primary geotechnical issues to be addressed consist of overexcavation of loose surface soils, slope grading, excavations into bedrock, and drainage related to the shallow bedrock and other geologic features. Due to the non-uniform nature of soils, other geotechnical issues may become more apparent during grading operations which are not listed above. The descriptions, findings, conclusions, and recommendations provided in this report are formulated as a whole; specific conclusions or recommendations should not be derived or used out of context. Please review the limitations and uniformity of conditions section of this report.

This report has been prepared for the exclusive use of County of El Dorado Facilities Division and their consultants, for specific application to this project, in accordance with generally accepted geotechnical engineering practice. Should you have any questions or require additional information, please contact our office at your convenience.

Very truly yours,
Youngdahl Consulting Group, Inc.

REGISTERED PROFESSIONAL ENGINEER
MATTHEW J. GROSS
No. 77630
Exp. 06-30-15
CIVIL
STATE OF CALIFORNIA

Matthew J. Gross, P.E.
Project Engineer

Distribution: (4) to Client

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GEOTECHNICAL ENGINEERING STUDY UPDATE
FOR
EL DORADO COUNTY SHERIFF HEADQUARTERS

1.0 INTRODUCTION

This report presents the results of our Geotechnical Engineering Study Update performed for the proposed development planned to be constructed along Industrial Drive in Placerville, California. An annotated vicinity map is provided on Figure A-1 to identify the approximate project location.

Purpose and Scope

The purpose of this study was to explore and evaluate the surface and subsurface conditions at the site, to provide geotechnical information and design criteria, and to develop geotechnical recommendations for the proposed project. The scope of this study includes the following:

- A review of geotechnical and geologic data available to us at the time of our study;
- Engineering analysis of the data and information obtained from our previous field study, laboratory testing, and literature review;
- Development of geotechnical recommendations regarding earthwork construction including, site preparation and grading, excavation characteristics, soil moisture conditions, compaction equipment, engineered fill criteria, slope configuration and grading, underground improvements, and drainage;
- Development of geotechnical design criteria for seismic conditions, shallow foundations, differential support conditions, retaining walls, slabs on grade, and pavements;
- Preparation of this report summarizing our findings, conclusions, and recommendations regarding the above described information.

Project Understanding

We understand that the proposed development is anticipated to include the construction of 4 buildings for the new Sheriff Headquarters. The final configurations have not been selected; however, we understand that the configuration identified as “Option 2” on Figure A-3 is currently the option with the greatest interest and “Option 1” on Figure A-2 is being considered as an alternative.

Background

The property was formerly a lumber storage yard for the Old Caldor Lumber Company and a transformer storage area for Sacramento Municipal Utility District (SMUD). Adjacent property includes: residential property and industrial property at 180 Industrial Drive to the north; Southern Pacific Railroad line and residential property to the west; El Dorado Truss to the southeast; AT&T to the northeast; and an industrial business park to the south.

Our firm prepared a Phase 1 environmental site assessment (ESA Ph.1) in 2007 and a geotechnical engineering study (GES) in 2008 for a potential development at the project site. The GES included the excavation of 11 exploratory test pits across the site with 8 on the west side of the site and 3 on the east side of the site.

If studies or plans pertaining to the site exist and are not cited as a reference in this report, we should be afforded the opportunity to review and modify our conclusions and recommendations as necessary.

Potential Future Subsurface Exploration
We understand that the proposed buildings may be subject to the requirements of essential service facilities. This generally requires the excavation of additional test pits at the selected building locations. Our firm is prepared to perform an additional subsurface exploration program following the selection of the building locations and prepare an addendum to this report to include the new information and any changes that should be incorporated into the design and construction of the facility.

2.0 FINDINGS
The following section describes our findings regarding the site conditions that we observed during our recent site reconnaissance and previous subsurface exploration. In addition, this section also provides the results of our previous laboratory testing, geologic review, and engineering assessment related to the project site.

Surface Observations
The project site is located along Industrial Drive in Placerville, California and consists of an irregularly shaped 30 acre parcel. The majority of the terrain is covered by non-vegetated SAND or low seasonal grasses with some trees near the grade changes. The terrain is separated into three general elevations and areas. The area to the northwest has been graded to a nearly flat condition with large localized depressions (appears to be vehicle generated) in the surface of the pad. The north area is elevated above the south area by an existing cut slope ranging up to about 20 feet in height. The cut slope trends east/west, is oversteepened, and exhibits signs of surficial erosion and man generated damage as a result of off highway vehicle traffic. The area to the south is elevated above the area to the east by approximately 5 feet by an oversteepened cut slope trending north/south. Bedrock is exposed at some of the cut areas.

Subsurface Conditions
Our previous field study included a site reconnaissance by a representative of our firm followed by a subsurface exploration program conducted on 29 January 2008. The exploration program included the excavation of 11 exploratory test pits under the direction of our representative at the approximate locations shown on Figure A-2, Appendix A. A description of the field exploration program is provided in Appendix A.

Various fill materials were encountered in Test Pits TP-1, TP-2, TP-4, and TP-9. Test Pit TP-1 encountered fill materials consisting of SAND with gravel in a loose to medium dense and slightly moist to moist condition to a maximum depth of 7 feet below the current site grades. Test Pits TP-2 encountered fill materials consisting of silty SAND with gravel in a medium dense and slightly moist to moist condition to a maximum depth of 1½ feet below the current site grades. Test Pit TP-4 encountered fill materials consisting of silty SAND in a loose and moist to wet condition to a depth of 4 feet below the current site grade; underlain by a 2 foot layer of moist ORGANICS, and silty SAND with clay in a loose and moist condition. Test Pit TP-9 encountered fill materials consisting of SAND with gravel in a loose and moist condition to a depth of 1 foot below the current site grades. A 1 foot layer of sandy SILT in a soft and slightly moist condition situated between two, 1 foot layers of silty SAND in a medium dense and slightly moist condition were encountered to a depth of 4 feet below the current site grade. Below this, soft and wet ORGANICS/DEBRIS was encountered to a depth of 8 feet below the current site grades, underlain by silty SAND/clayey SAND (FILL) in a loose and wet condition to a depth of 13 feet.

Underlying the surface fills and native soils, weathered metavolcanic BEDROCK was encountered to the maximum depth explored in each pit. Effective refusal was encountered

with the equipment used for our study. A detailed seismic refraction study can provide more information regarding subsurface rock conditions and rippability. The bedrock generally graded highly weathered at the bottom of each pit.

A more detailed description of the subsurface conditions encountered during our subsurface exploration is presented graphically on the “Exploratory Test Pit Logs", Figures A-4 through A-14, Appendix A. These logs show a graphic interpretation of the subsurface profile, and the location and depths at which samples were collected.

Groundwater Conditions
Groundwater was encountered at a depth of 1½, 4, and 8 feet below the surface grades in Test Pits TP-3, TP-4, and TP-9, respectively. Generally, subsurface water conditions vary in the foothill regions because of many factors such as, the proximity to bedrock, fractures in the bedrock, topographic elevations, and proximity to surface water. Some evidence of past repeated exposure to subsurface water may include black staining on fractures, clay deposits, and surface markings indicating previous seepage. Based on our experience in the area, at varying times of the year water may be perched on less weathered rock and/or present in the fractures and seams of the weathered rock found beneath the site.

Geologic Conditions
The geologic portion of this report included a review of geologic data pertinent to the site and an interpretation of our observations of the surface exposures and our observations in our exploratory test pits excavated during the field study.

The project vicinity is located within the Sierra Nevada geomorphic province of California. According to the General Geologic Map of the Placerville 15-Minute Quadrangle (R.C. Loyd, and, D.L. Bane, 1982) this portion of the mountain range and project area are underlain by, and adjacent to, Mesozoic granitic rocks, Brower Creek Volcanics, and Mariposa Formation soils.

Seismicity
According to the Fault Activity Map of California and Adjacent Areas (Jennings, 2010) and the Peak Acceleration from Maximum Credible Earthquakes in California (CDMG, 2007), no active faults or Earthquake Fault Zones (Special Studies Zones) are located on the project site. Additionally, no evidence of recent or active faulting was observed during our field study. The nearest mapped potentially active and active faults pertinent to the site are summarized in the following table.

Table 1: Local Active and Potentially Active Faults

Activity	Fault Name	Distance, Direction
Historic	Cleveland Hill Fault	95 km NNW
Historic	Dog Valley Fault	95 km NE
Active	Polaris Fault	95 km NE
Active	Dunnigan Hills	90 km W
Active	North Tahoe Fault	80 km NE
Active	West Tahoe Fault	66 km E
Potentially Active	Bear Mountains Fault Zone – West	22 km W
Potentially Active	Bear Mountains Fault Zone - East	10 km W
Potentially Active	Maidu Fault	12 km W
Potentially Active	Melones - West	4 km E
Potentially Active	Melones - East	8 km E

Based on our literature review of shear-wave velocity characteristics of geologic units in California (Wills and Silva; August 1998: Earthquake Spectra, Volume 14, No. 3) and subsurface interpretations, we recommend that the project site be classified as Site Class C in accordance with Section 1613.3.2 of the 2013 CBC and Table 20.3-1 of ASCE 7-10.

Earthquake Induced Liquefaction, Surface Rupture Potential, and Settlement
Liquefaction is the sudden loss of soil shear strength and sudden increase in porewater pressure caused by shear strains, as could result from an earthquake. Research has shown that saturated, loose to medium-dense sands with a silt content less than about 25 percent and located within the top 40 feet are most susceptible to liquefaction and surface rupture/lateral spreading.

Due to the absence of permanently elevated groundwater table, the relatively low seismicity of the area and the relatively shallow depth to rock, the potential for seismically induced damage due to liquefaction, surface ruptures, and settlement is considered negligible. For the above-mentioned reasons mitigation for these potential hazards is not required for the development of this project.

Static and Earthquake Induced Slope Instability
The existing slopes on the project site were generally in an oversteepened condition with erosion and manmade surficial damage and are not in a condition suitable for construction. The slopes should be cut back and reconstructed in accordance with the recommendations in this report in order to develope stable conditions.

Previous Laboratory Testing
Laboratory testing of the collected samples was directed towards determining the physical and engineering properties of the soil underlying the site. A description of the tests performed for this project and the associated test results are presented in Appendix B. In summary, the following tests were performed for the preparation of this report:

Table 2: Laboratory Tests

Laboratory Test	Test Standard	Summary of Results	
Maximum Dry Density	ASTM D1557	Bulk 2:	DD = 120.5 pcf, MC = 14.0 %
Direct Shear	ASTM D3080	Bulk 2:	Φ = 29.4°, c = 355 psf
R-Value	Caltrans 301F	Bulk 1:	61
Corrosivity Suite	CA DOT Tests 417, 422 and 643	See Soil Corrosivity Section	

Soil Expansion Potential

The materials encountered in our explorations were generally non-plastic (rock, sand, and non-plastic silt). The non-plastic materials are generally considered to be non-expansive; therefore, we do not anticipate that special design considerations for expansive soils will be required for the design or construction of the proposed improvements. If necessary, recommendations can be made based on our observations at the time of construction should greater quantities of expansive soils be encountered at the project site which were not disclosed during our study.

Soil Corrosivity

A corrosivity testing suite consisting of soil pH, resistivity, sulfate, and chloride content tests were performed on a selected soil sample collected during our site exploration. We are not corrosion specialists and recommend that the results be evaluated by a qualified corrosion expert. The laboratory test results (provided by Sunlab, Inc.) are provided in Appendix B and are summarized in Table 3, below.

Table 3: Corrosivity Summary

Location	Depth (ft)	Soil pH	Minimum Resistivity ohm-cm (x1000)	Chloride (ppm)	Sulfate (ppm)	Caltrans Environment	ACI Environment
TP-1	0-3	6.34	2.95	12.0	6.7	Non Corrosive	Non Corrosive

According to Caltrans Corrosion Guidelines Version 1.0, September 2003, the test results appear to indicate a non-corrosive environment. According to the 2013 California Building Code Section 1904.1 and ACI 318-11 Table 4.2.1, the test results indicate the onsite soils have a negligible potential for sulfide attack of concrete. Accordingly, Type I/II Portland cement is appropriate for use in concrete construction. A certified corrosion engineer should be consulted to review the above test results and site conditions in order to develop specific mitigation recommendations if metallic pipes or structural elements are designed to be in contact with or buried in soil.

Naturally Occurring Asbestos

Asbestos is classified by the EPA as a known human carcinogen. Naturally occurring asbestos (NOA) has been identified as a potential health hazard. The California Geological Survey published a map in 2000 (Open File Report 2000-02) that qualitatively indicates the likelihood for NOA in western El Dorado County. The project site is identified as **not** being in a NOA review zone based on the published map.

3.0 DISCUSSION AND CONCLUSIONS

General

Based upon the results of our field explorations, findings, and analysis described above, it is our opinion that construction of the proposed improvements is feasible from a geotechnical standpoint, provided the recommendations contained in this report are incorporated into the design plans and implemented during construction. The native soils, rock, and fills, once overexcavated and recompacted as recommended below may be considered "engineered" and suitable for support of the planned improvements.

Because of the broad and preliminary nature of this study, additional site specific information may be required for developing the site in order to utilize the design recommendations included in this report. Additional site specific information may include additional subsurface explorations, literature studies, and/or other items which can be provided under a separate cover and contract.

Grading Operations

We anticipate that mass grading activities will be performed to alter the site from the existing condition to the final configuration for support of building pads and related structural improvements.

The surface of the project site has been disturbed by previous commercial and non-commercial operations and off-highway vehicle activity. The disturbed areas are not considered suitable for construction of the proposed improvements in their current condition. Recommendations are presented below for the overexcavation and recompaction of the existing fill and loose native materials on the site.

The cut slopes between the various site elevations are oversteepened and have erosion and man-made damages. These conditions should be addressed by removing the soil to the depth of disturbance and either sloping the slope back to a gradient of 2H:1V or flatter or placement of engineered fill using keyway and benches. Based on the current site plan options, we understand that some buildings may be constructed across the grade change and may incorporate retaining walls, raised floors, or placement of engineered fills.

Foundations

In our opinion, conventional shallow foundations such as isolated pad footings or continuous footings will provide adequate support for the proposed buildings if the site grades are properly prepared as described in the Site Grading and Improvement section. Recommendations regarding foundation design parameters, including allowable bearing capacity, lateral resistance, and foundation configuration are provided in Section 5.0 of this report.

Drainage

Proper application of drainage practices are considered to be of paramount concern for effective development of the project site. The site is generally cut to bedrock and has several grade changes that have been degraded as a result of erosion. The shallow bedrock conditions do not generally promote adequate drainage and may result in localized ponding or translation of water over long distances before resurfacing. Mitigation of these potential conditions may include the construction of subdrains and using underground utility trenches to collect and convey water to appropriate outlets with the use of plug and drains.

It has also been our experience that potential sources of groundwater may not be present or observed during the site grading procedures, but can appear later as more persistent seepage

as water becomes perched or flows through fractures of the shallow rock horizon. These conditions generally become more prevalent following up gradient development and the addition of moisture sources (i.e. landscape irrigation, run-off, etc.). Where this condition arises, drainage measures may be necessary on an as requested basis to mitigate seepage conditions that were not initially observed during the site grading activities or development.

4.0 SITE GRADING AND EARTHWORK IMPROVEMENTS

Site Preparation

Preparation of the project site should involve site drainage controls, dust control, clearing and stripping, overexcavation and recompaction of existing fills/loose native soils, and exposed grade compaction considerations. The following paragraphs state our geotechnical comments and recommendations concerning site preparation.

Site Drainage Controls: We recommend that initial site preparation involve intercepting and diverting any potential sources of surface or near-surface water within the construction zones. Because the selection of an appropriate drainage system will depend on the water quantity, season, weather conditions, construction sequence, and methods used by the contractor, final decisions regarding drainage systems are best made in the field at the time of construction. All drainage and/or water diversion performed for the site should be in accordance with the Clean Water Act and applicable Storm Water Pollution Prevention Plan.

Dust Control: Dust control provisions should be provided for as required by the local jurisdiction's grading ordinance (i.e. water truck or other adequate water supply during grading).

Clearing and Stripping: Clearing and stripping operations should include the removal of all organic laden materials including trees, bushes, root balls, root systems, and any soft or loose soil generated by the removal operations. Surface grass stripping operations are necessary based upon our observations during our site visit. Short or mowed dry grasses may be pulverized and lost within fill materials provided no concentrated pockets of organics result. It is the responsibility of the grading contractor to remove excess organics from the fill materials. **No more than 2 percent of organic material, by weight, should be allowed within the fill materials at any given location.**

General site clearing should also include removal of any loose or saturated materials within the proposed structural improvement and pavement areas. A representative of our firm should be present during site clearing operations to identify the location and depth of potential fills not disclosed by this report, to observe removal of deleterious materials, and to identify any existing site conditions which may require mitigation or further recommendations prior to site development. Preserved trees may require tree root protection which should be addressed on an individual basis by a qualified arborist.

Addressing Existing Fills: Following general site clearing, all existing fills and fill stockpiles should be over-excavated down to firm native materials. Reference should be made to the site description and test pit logs for anticipated fill locations. Any depressions extending below final grade resulting from the removal of fill materials or other deleterious materials should be properly prepared as discussed below and backfilled with engineered fill. Prior to placement of engineered fill, the exposed soil surfaces receiving fills should be scarified to a minimum depth of 12 inches, moisture conditioned as necessary, and compacted to at least 90 percent of the maximum dry density based on the ASTM D1557 test method. Additionally, test pits should be re-excavated and backfilled with engineered fill. Organic materials encountered in Test Pits

TP-4 and TP-9 should not be used as engineered fill and should be removed from the site or placed in a proposed landscape area.

Overexcavation and Recompaction of Loose/Soft Native Soils: Following general site clearing, all loose/soft soils should be overexcavated down to firm native materials. Reference should be made to the site description and exploratory test pit logs for anticipated locations of loose/soft soils. Any depressions extending below final grade resulting from the removal of loose/soft materials or other deleterious materials should be properly prepared as discussed below and backfilled with engineered fill.

Exposed Grade Compaction: Exposed soil grades following initial site preparation activities and overexcavation operations should be scarified to a minimum depth of 12 inches and compacted to the requirements for engineered fill. Prior to placing fill, the exposed subgrades should be in a firm and unyielding state. Any localized zones of soft or pumping soils observed within a subgrade should either be scarified and recompacted or be overexcavated and replaced with engineered fill as detailed in the engineered fill section below.

Excavation Characteristics

The previous exploratory test pits were excavated using a CASE Super K backhoe equipped with a 24 inch wide bucket. The degree of difficulty encountered in excavating our test pits is an indication of the effort that will be required for excavation during construction. Based on our exploratory test pits, we expect that grading operations at the project site may require the use of CAT D8H or D9R dozers equipped with single shank rippers to excavate through the bedrock materials. CAT D6 to D8 dozers could be used for moving soils or rocky materials already excavated from the site.

Utility trenches will likely encounter hard rock excavation conditions especially in deeper cut areas. Utility contractors should be prepared to use special rock trenching equipment such as large excavators (Komatsu PC400 or CAT 345 or equivalent). Blasting to achieve utility line grades, especially in planned cut areas, cannot be precluded. Water inflow into any excavation approaching the hard rock surface is likely to be experienced in all but the driest summer and fall months. Pre-ripping during mass grading may be beneficial and should be considered with the Geotechnical Engineer prior to, or during mass grading.

Where hard rock cuts in fractured rock are proposed, the orientation and direction of ripping will likely play a large role in the rippability of the material. When hard rock is encountered, we should be contacted to provide additional recommendations prior to performing an alternative such as blasting. Water inflow into any excavation approaching the hard rock surface is likely to be experienced in all but the driest summer and fall months.

Soil Moisture Considerations

The near-surface soils may become partially or completely saturated during the rainy season. Grading operations during this time period may be difficult since compaction efforts may be hampered by saturated materials. Therefore, we suggest that consideration be given to the seasonal limitations and costs of winter grading operations on the site. Special attention should be given regarding the drainage of the project site.

If the project is expected to work through the wet season, the contractor should install appropriate temporary drainage systems at the construction site and should minimize traffic over exposed subgrades due to the moisture-sensitive nature of the on-site soils. During wet

weather operations, the soil should be graded to drain and should be sealed by rubber tire rolling to minimize water infiltration.

Compaction Equipment

Rock or Method Specification: Due to the significant quantity of rock materials that will comprise a majority of the fills on the project site, a Caterpillar 825 steel-wheel compactor or approved equivalent should be employed as a minimum to facilitate breakdown of oversize bedrock materials and generation of soil fines during the fill placement process. If the quantity of rock fragments in the fills precludes traditional compaction testing, then the proposed fills should be compacted using method specifications as indicated in the Engineered Fill Criteria section below.

General Compaction: In areas to receive structural soil fill with rock quantities less than 30 percent by mass, we anticipate that a CAT 815 compactor or approved equivalent will be capable of achieving the compaction requirements for engineered fill provided the soil is placed and compacted within 0 to 3 percent of the optimum moisture content as determined by the ASTM D1557 test method and in lifts not greater than 12 inches in uncompacted thickness. The use of handheld equipment such as jumping jack or plate vibration compactors may require thinner lifts of 6 inches or less to achieve the desired relative compaction parameters.

Engineered Fill Criteria

All materials placed as fills on the site should be placed as “Engineered Fill" which is observed, tested, and compacted as described in the following paragraphs.

Suitability of Onsite Materials: We anticipate that a large amount of onsite soils will be generated during mass grading operations. We expect that soil generated from excavations on the site, excluding deleterious material, may be used as engineered fill provided the material does not exceed the maximum size specifications listed below.

Rock fragments or boulders exceeding 12 inches in maximum dimension should not be placed within the upper five feet of site grades or at any depth within utility corridors. Boulders over 12 inches in maximum dimension should be placed within the deeper portions of fill embankments below a depth of 5 feet and a minimum of 5 feet from the finish slope face. The individual boulders should be spaced such that compaction of finer rock and soil materials between the boulders can be achieved with the equipment being used for compaction. Materials placed between the boulders should consist of predominantly soil and rock less than 8 inches in maximum dimension. The soil/rock mixture should be thoroughly mixed and placed between the boulders so as to preclude nesting or the formation of voids. Should insufficient deep fill areas exist for oversize rock disposal, the contractor should either dispose of the excess materials to an offsite location or mechanically reduce the rocks to less than 12 inches.

Import Materials: If imported fill material is needed for this project, import material should be approved by our firm prior to transporting it to the project. It is preferable that import material meet the following requirements:

1. Plasticity index not to exceed 12;
2. "R"-value of equal to or greater than 40;
3. An angle of friction equal to or greater than 30;
4. Should not contain rocks larger than 6 inches in diameter;
5. Not more than 15 percent passing through the No. 200 sieve.

If these requirements are not met, additional testing and evaluation may be necessary to determine the appropriate design parameters for foundations, pavement, and other improvements.

Fill Placement and Compaction: Based on the shallow depth to bedrock and the conditions observed during our previous exploratory test pits, we anticipate that the engineered fills generated from the site soils may have rock quantities greater than 30 percent by mass. Where rock quantities exceed 30 percent by mass, conventional density testing procedures are not generally performed as the density of the rock fragments could erroneously increase the measurements of the density of the soil and the quantity of rock could create difficulties in obtaining a reasonable sample size. As a result of these conditions, we anticipate that the majority of the engineered fill will be placed in accordance with the method specification procedures provided below.

Fill soil compaction should be evaluated by means of in-place density tests performed during fill placement so that adequacy of soil compaction efforts may be determined as earthwork progresses, or by method specification if the quantity of rock fragments in the fills preclude traditional compaction testing. This will likely include the excavation of test pits within the fill materials to observe and document that a uniform over-optimum moisture condition and absence of large and/or concentrated voids has been achieved prior to additional fill placement.

Method Specification: Soils exceeding 30 percent rock by mass may be considered non-testable by conventional methods. The materials may be placed as engineered fill if placed in accordance with the following method specification during full time observation by a representative of our firm.

All areas proposed to receive fill should be scarified to a minimum depth of 12 inches, moisture conditioned as necessary, and compacted as engineered fill. Soils should be moisture conditioned to a minimum of 2 percent over the optimum moisture content and compacted in place by a minimum of four completely covering passes with a Caterpillar 825, or approved equivalent. The compactor's last two passes should be at 90 degrees to the initial passes. In areas where 95 percent relative compaction is designated, an additional two passes should be applied in each direction, with three completely covering passes made at 90 degrees to the initial three passes. Engineered fill should be constructed in lifts not exceeding 12 inches in uncompacted thickness, moisture conditioned and compacted in accordance with the above specification. Additional passes as deemed necessary during fill placement to achieve the desired condition based upon field conditions may be recommended.

Testable Engineered Fill: All areas proposed to receive fill should be scarified to a minimum depth of 8 inches, moisture conditioned as necessary, and compacted to at least 90 percent of the maximum dry density based on the ASTM D1557 test method. The soils should be moisture conditioned to within 3 percent of the optimum moisture content. The fill should be placed in thin horizontal lifts not to exceed 12 inches in uncompacted thickness. The fill should be moisture conditioned as necessary and compacted to a relative compaction of not less than 90 percent based on the ASTM D1557 test method. The upper 8 inches of fills placed under proposed pavement areas should be compacted to a relative compaction of not less than 95 percent based on the ASTM D1557 test method.

To mitigate the potential for deep fill settlement, all fills placed deeper than 10 feet from finished grade should be compacted to a minimum of 95 percent relative compaction. The fills should be placed between 0 and 3 percent over the optimum moisture content.

Slope Configuration and Grading
Generally a cut slope orientation of 2H:1V is considered stable with the material types encountered on the site. A fill slope constructed at the same orientation is considered stable if compacted to the engineered fill recommendations as stated in the recommendations section of this report. All slopes should have appropriate drainage and vegetation measures to minimize erosion of slope soils.

Surficial stability of steeper cut slopes may be achievable due to the geology of the cut materials. Steepening of slopes greater than 2H:1V will require design and observation during the proposed cut. Any slope excavations proposed to be greater than 10 feet in maximum height should be evaluated during and prior to completion of site grading.

Placement of Fills on Slopes: Placement of fill material on natural slopes should be stabilized by means of keyways and benches. Where the slope of the original ground equals or exceeds 5H:1V, a keyway should be constructed at the base of the fill. The keyway should consist of a trench excavated to a depth of at least two feet into firm, competent materials. The keyway trench should be at least 10 feet wide or as designated by our firm based on the conditions at the time of construction. Benches should be cut into the original slope as the filling operation proceeds. Each bench should consist of a level surface excavated at least six feet horizontally into firm soils or four feet horizontally into rock. The rise between successive benches should not exceed 36 inches. The need for subdrainage should be evaluated at the time of construction. Refer to Figure C-1 in Appendix C for typical keyway and bench construction.

Slope Face Compaction: All slope fills should be laterally overbuilt and cut back such that the required compaction is achieved at the proposed finish slope face. As a less preferable alternative, the slope face could be track walked or compacted with a wheel. If this second alternative is used, additional slope maintenance may be necessary.

Slope Drainage: Surface drainage should not be allowed to flow uncontrolled over any slope face. Adequate surface drainage control should be designed by the project civil engineer in accordance with the latest applicable edition of the CBC. All slopes should have appropriate drainage and vegetation measures to minimize erosion of slope soils.

Underground Improvements
Trench Excavation: Trenches or excavations in soil should be shored or sloped back in accordance with current OSHA regulations prior to persons entering them. Where clay rind in combination with moist conditions is encountered in fractured bedrock, the project engineering geologist should be consulted for appropriate mitigation measures. The potential use of a shield to protect workers cannot be precluded. Refer to the Excavation Characteristics section of Site Grading and Improvements of this report for anticipated excavation conditions.

Backfill Materials: Backfill materials for utilities should conform to the requirements of the local jurisdiction. It should be realized that permeable backfill materials will likely carry water at some time in the future.

When backfilling within structural footprints, compacted low permeability materials are recommended to be used a minimum of 5 feet beyond the structural footprint to minimize moisture intrusion. If the materials are too rocky, they may need to be screened prior to backfill in order to limit pipe damage. If a permeable material is used as backfill within this zone, subdrainage mitigation may be required. In addition, if the structure is oriented below the

roadway and associated utilities, grout cutoffs and/or plug and drains around all utility penetrations are useful to keep moisture out from underneath the structure.

A common problem occurs on sites graded with large equipment and rocky fill materials where the excavated spoils from the lot utilities are too rocky to place as engineered fill back in the trench with the common compaction practices employed by the subcontractors installing these utilities. We recommend that, where excavated soils are too rocky to place and compact to a tight condition with low void space, these materials be replaced with a proper import material for compaction.

Backfill Compaction: Backfill compaction should conform to the requirements of the local jurisdiction. Where backfill compaction is not specified by the local jurisdiction, the backfill should be compacted to a minimum of 90 percent relative compaction per the ASTM D1557 test method. Compaction should be accomplished using lifts which do not exceed 12 inches when compacting with a backhoe or larger equipment equipped with a compaction wheel. However, thickness of the lifts should be determined by the contractor. If the contractor can achieve the required compaction using thicker lifts, the method may be judged acceptable based on field a evaluation by a representative of our firm using standard density testing procedures. Lightweight compaction equipment may require thinner lifts to achieve the required densities.

Drainage Considerations: In developments with the potential for a perched groundwater condition (i.e. shallow bedrock), underground utilities can become collection points for subsurface water. Due to this condition, we recommend plug and drains within the utility trenches (Figure C-2, Appendix C) to collect and convey water to the storm drain system or other approved outlet. Temporary dewatering measures may be necessary and could include the installation of submersible pumps and/or point wells. Once plans are developed, the civil engineer should coordinate with us to discuss the locations of plug and drains.

5.0 DESIGN RECOMMENDATIONS

Seismic Criteria

Based on the 2013 California Building Code, Chapter 16, and our site investigation findings, the following seismic parameters are recommended from a geotechnical perspective for structural design. The final choice of design parameters, however, remains the purview of the project structural engineer.

Table 4: Seismic Design Parameters

2013 CBC	ASCE 7-10	Seismic Parameter	Recommended Value
	Table 20.3-1	Site Class	C
Figure 1613.3.1(1)		Short-Period MCE at 0.2s, S_S	0.461g
Figure 1613.3.1(2)		1.0s Period MCE, S_1	0.227g
Table 1613.3.3(1)		Site Coefficient, F_a	1.200
Table 1613.3.3(2)		Site Coefficient, F_v	1.573
Equation 16-37		Adjusted MCE Spectral Response Parameters, $S_{MS} = F_aS_s$	0.553g
Equation 16-38		Adjusted MCE Spectral Response Parameters, $S_{M1} = F_vS_1$	0.357g
Equation 16-39		Design Spectral Acceleration Parameters, $S_{DS} = ⅔S_{MS}$	0.368g
Equation 16-40		Design Spectral Acceleration Parameters, $S_{D1} = ⅔S_{M1}$	0.238g
Table 1613.3.5(1)		Seismic Design Category (Short Period), Occupancy I to III	C
Table 1613.3.5(1)		Seismic Design Category (Short Period), Occupancy IV	D
Table 1613.3.5(2)		Seismic Design Category (1-Second Period), Occupancy I to III	D
Table 1613.3.5(2)		Seismic Design Category (1-Second Period), Occupancy IV	D
	Figure 22-7	Maximum Considered Earthquake Geometric Mean (MCE_C) PGA	0.152g
	Table 11.8-1	Site Coefficient F_{PGA}	1.200
	Equation 11.8-1	$PGA_M = F_{PGA}$ PGA	0.182g

*Based on the online calculator available at http://earthquake.usgs.gov/designmaps/us/application.php

Conventional Foundations

We offer the following comments and recommendations for purposes of design and construction of shallow continuous and/or isolated pad foundations. The provided minimums do not constitute a structural design of foundations which should be performed by the structural engineer. Our firm should be afforded the opportunity to review the project grading and foundation plans to confirm the applicability of the recommendations provided below. Modifications to these recommendations may be made at the time of our review. In addition to the provided recommendations, foundation design and construction should conform to applicable sections of the 2013 California Building Code.

Foundation Bearing Capacity: An allowable dead plus live load bearing pressure of 2,000 psf may be used for design of conventional shallow foundations based on firm native soils or engineered fills and 4,000 psf for foundations based on weathered bedrock. The allowable pressures are for support of dead plus live loads and may be increased by 1/3 for short-term wind and seismic loads. The bearing capacities and bearing capacity equation were derived from the bearing capacity methods developed by Meyerhof (1963) and include a minimum factor of safety of 3 into the values provided. Alternative foundation capacities for square isolated pads and continuous may be calculated based on the following table:

Table 5: Alternative Bearing Capacities

Condition	Added Capacity per Foot of Width*	Added Capacity per Foot of Depth*	Maximum Bearing Capacity
Square Isolated Pad Foundation	200 psf	500 psf	4,500 psf
Continuous Foundation	120 psf	350 psf	4,500 psf

*Based on minimum widths and depths provided in the "Foundation Configuration" section below.

Foundation Lateral Capacity: Lateral forces on structures may be resisted by passive pressure acting against the sides of shallow footings and/or friction between the soil and the bottom of the footing. For resistance to lateral loads, a friction factor of 0.30 may be utilized for sliding resistance at the base of conventional shallow foundations in firm native materials or engineered fill and 0.45 pcf for weathered rock. A passive resistance of 300 pcf equivalent fluid weight may be used against the side of conventional shallow footings in firm native soil or engineered fill and 400 pcf for weathered bedrock conditions. If friction and passive pressures are combined, the lesser value should be reduced by 50 percent.

Foundation Settlement: A total settlement of less than 1 inch is anticipated; a differential settlement of ½ of the total is anticipated where foundations are bearing on like materials. This settlement is based upon the assumption that foundations will be sized and loaded in accordance with the recommendations in this report.

Foundation Configuration: Conventional shallow foundations should be a minimum of 12 inches wide and founded a minimum of 18 inches below the lowest adjacent soil grade for one and two-story slab-on-grade structures (one supported floor) or 18 inches for two supported floors. Isolated pad foundations should be a minimum of 24 inches in diameter.

Foundation reinforcement should be provided by the structural engineer. The reinforcement schedule should account for typical construction issues such as load consideration, concrete cracking, and the presence of isolated irregularities. At a minimum, we recommend that continuous footing foundations be reinforced with 4 No. 4 reinforcing bars, 2 located near the bottom of the footing and 2 near the top of the stem wall.

All footings should be founded below an imaginary 2H:1V plane projected up from the bottoms of adjacent footings and/or parallel utility trenches, or to a depth that achieves a minimum horizontal clearance of 6 feet from the outside toe of the footings to the slope face, whichever requires a deeper excavation.

Subgrade Conditions: Footings should never be cast atop soft, loose, organic, slough, debris, nor atop subgrades covered by ice or standing water. A representative of our firm should be retained to observe all subgrades during footing excavations and prior to concrete placement so that a determination as to the adequacy of subgrade preparation can be made.

Shallow Footing / Stemwall Backfill: All footing/stemwall backfill soil should be compacted to at least 90 percent of the maximum dry density (based on ASTM D1557).

Differential Support Conditions: Differential support conditions may be a concern where fills are placed and compacted for construction of a building pad and the proposed building will span from a native to deep fill condition (i.e. fills greater than 10 feet). In order to mitigate the potential for differential settlement, overexcavation of the cut portion of the building pad, deepening of the foundations or adjustment of compaction requirements may be recommended.

We should be afforded the opportunity to review the construction plans in order to develop site specific recommendations regarding differential conditions.

Retaining Walls

Our design recommendations and comments regarding retaining walls for the project site are discussed below.

Foundation Bearing Capacity: Retaining walls should be supported by continuous foundations. Bearing capacities provided in the "Conventional Foundations" section of this report may be used for design of the retaining wall foundations.

Foundation Lateral Capacity: Foundation Lateral capacities provided in the "Conventional Foundations" section of this report may be used for design of the retaining wall foundations.

Retaining Wall Lateral Pressures: Based on our observations and testing, the retaining walls should be designed to resist lateral pressure exerted from a soil media having an equivalent fluid weight provided in Table 6, below.

Table 6: Retaining Wall Pressures

Wall Type	Wall Slope Configuration	Equivalent Fluid Weight (pcf)	Surcharge Load (psf)*	Lateral Pressure Coefficient	Earthquake Loading (plf)***	
Free Cantilever	Flat	40	per structural	0.34	$7H^2$	Applied 0.6H above the base of the wall
	2H:1V	65	per structural	0.56		
Restrained**	Flat	60	per structural	0.51	$21H^2$	

* The surcharge loads should be applied as uniform loads over the full height of the walls as follows: Surcharge Load (psf) = (q) (K), where q = surcharge in psf, and K = coefficient of lateral pressure. Final design is the purview of the project structural engineer.

** Restrained conditions shall be defined as walls which are structurally connected to prevent flexible yielding, or rigid wall configurations (i.e. walls with numerous turning points) which prevent the yielding necessary to reduce the driving pressures from an at-rest state to an active state.

*** Section 1803.5.12 of the 2013 California Building Code states that a determination of lateral pressures on basement and retaining walls due to earthquake loading shall be provided for structures to be designed in Seismic Design Categories D, E or F (Load value derived from Wood (1973) and modified by Whitman (1991)).

Mechanically Stabilized Earth Walls: If keyed or interlocking non-mortared walls such as Keystone, Baselite, Allen Block, or rockery walls are utilized, the following soil parameters would be applicable for design within on-site, native materials:

Table 7: Modular Wall Design Parameters

Internal Angle of Friction	Cohesion	Optimum Dry Unit Weight
29°	50 psf	120 psf

Site Wall Drainage: The above criteria are based on fully drained conditions as detailed in the attached Figure C-3, Appendix C. For these conditions, we recommend that a blanket of filter material be placed behind all proposed walls. The blanket of filter material should be a minimum of 12 inches thick and should extend from the bottom of the wall to within 12 inches of the ground surface. The filter material should conform to Class One, Type B permeable material as specified in Section 68 of the California Department of Transportation Standard Specifications, current edition. A clean ¾ inch crushed rock is also acceptable, provided filter fabric is used to separate the open graded gravel/rock from the surrounding soils. The top 12 inches of wall backfill should consist of a compacted soil cap. A filter fabric should be placed on top of the gravel filter material to separate it from the soil cap. A 4 inch diameter drain pipe

should be installed near the bottom of the filter blanket with perforations facing down. The drainpipe should be underlain by at least 4 inches of filter-type material. An adequate gradient should be provided along the top of the foundation to discharge water that collects behind the retaining wall to a controlled discharge system.

The configuration of a long retaining wall generally does not allow for a positive drainage gradient within the perforated drain pipe behind the wall since the wall footing is generally flat with no gradient for drainage. Where this condition is present, to maintain a positive drainage behind the walls, we recommend that the wall drains be provided with a discharge to an appropriate non-erosive outlet a maximum of 50 feet on center. **In addition, if the wall drain outlets are temporarily stubbed out in front of the walls for future connection during site development, it is imperative that the outlets be routed into the tight pipe area drainage system and not buried and rendered ineffective.**

Basement Wall Drainage: Based on our experience in the project area, excavation into bedrock to create a daylight basement condition may have the potential for creating moisture related problems within the underlying slab on grade areas of the daylight basement (i.e. wet slab conditions associated with seepage through bedrock fractures, perched groundwater, etc.). The following recommendations have been provided to mitigate the potential for the abovementioned moisture related issues.

The configuration of a long retaining wall generally does not allow for a positive drainage gradient within the perforated drain pipe behind the wall since the wall footings are generally flat with no gradient for drainage. Where this condition is present, to maintain positive drainage behind the walls, we recommend that the length of the wall drain be broken up into segments of 20 foot lengths that will allow for drainage outlets within the central portion of the drain segment. To accomplish this, we recommend that the perforated pipe be installed in contact with the top of the footing and sleeved with a tight pipe through the footing as detailed on Figure C-4, Appendix C. The drain should be installed in a trench and directed to a non-erosive outlet. Once the drain enters the footing, the perforated drain pipe should transition to a non-perforated rigid wall pipe. A second perforated pipe should be installed within the trench as detailed on Figure C-4, Appendix C. The trench should be backfilled with crushed rock up to finished pad grade so that it contacts the crushed rock beneath the slab and functions as a slab underdrain system. The drain trenches should be excavated to a depth such that they are below any plumbing trenches, so that any water that may accumulate in those trenches can also be drained.

The final drainage configuration should be addressed prior to the completion of pad grading operations, so that a determination can be made, based on the geotechnical and/or geologic conditions observed, where installation of the wall drain outlets/slab underdrain system would be most beneficial. In addition, pre-excavation of the drainage trenches could be performed with the large grading equipment on the site. A representative from our firm should be present during these operations to provide additional consultation services as field conditions dictate.

Slab-on-Grade Construction

It is our opinion that soil-supported slab-on-grade floors could be used for the main floors of the structures, contingent on proper subgrade preparation. Often the geotechnical issues regarding the use of slab-on-grade floors include proper soil support and subgrade preparation, proper transfer of loads through the slab underlayment materials to the subgrade soils, and the anticipated presence or absence of moisture at or above the subgrade level. We offer the following comments and recommendations concerning support of slab-on-grade floors. The

slab design (concrete mix, reinforcement, joint spacing, moisture protection, and underlayment materials) is the purview of the project Structural Engineer.

Slab Subgrade Preparation: All subgrades proposed to support slab-on-grade floors should be prepared and compacted to the requirements of engineered fill as discussed in the Site Grading and Improvements section of this report.

Slab Underlayment: As a minimum for slab support conditions, the slab should be underlain by a minimum 4 inch crushed rock layer and covered by a minimum 10-mil thick moisture retarding plastic membrane. An optional 1 inch blotter sand layer above the plastic membrane is sometimes used to aid in curing of the concrete in commercial structures. The blotter layer can become a reservoir for excessive moisture if inclement weather occurs prior to pouring the slab, excessive water collects in it from the concrete pour, or an external source of water enters above or bypasses the membrane. The membrane may only be functional when it is above the vapor sources. The bottom of the crushed rock layer should be above the exterior grade to act as a capillary break and not a reservoir, unless it is provided with an underdrain system. The slab design and underlayment should be in accordance with ASTM E1643 and E1745.

If the blotter sand layer is omitted (as may be required if slab design and construction is to be performed according to the 2013 Green Building Code), special wet curing procedures will be necessary. In all cases, development of appropriate slab mix design and curing procedures remains the purview of the project structural engineer.

Slab Moisture Protection: Due to the potential for landscape to be present directly adjacent to the slab edge/foundation or for drainage to be altered following our involvement with the project, varying levels of moisture below, at, or above the pad subgrade level should be anticipated. The slab designer should include the potential for moisture vapor transmission when designing the slab. Our experience has shown that vapor transmission through concrete is controlled through slab thickness as well as proper concrete mix design.

It should be noted that placement of the recommended plastic membrane, proper mix design, and proper slab underlayment and detailing per ASTM E1643 and E1745 will not provide a waterproof condition. If a waterproof condition is desired, we recommend that a waterproofing expert be consulted for slab design.

Slab Thickness and Reinforcement: Geotechnical reports have historically provided minimums for slab thickness and reinforcement for general crack control. The concrete mix design and construction practices can additionally have a large impact on concrete crack control. All concrete should be anticipated to crack. As such, these minimums should not be considered to be stand alone items to address crack control, but are suggested to be considered in the slab design methodology.

In order to help control the growth of cracks in interior concrete from becoming significant, we suggest the following minimums. Interior concrete slabs-on-grade not subject to heavy loads should be a minimum of 4 inches thick. A 4 inch thick slab should be reinforced. A minimum of No. 3 deformed reinforcing bars placed at 24 inches on center both ways, at the center of the structural section is suggested. Joint spacing should be provided by the structural engineer. Troweled joints recovered with paste during finishing or “wet sawn” joints should be considered every 10 feet on center. Expansion joint felt should be provided to separate floating slabs from foundations and at least at every third joint. Cracks will tend to occur at recurrent corners,

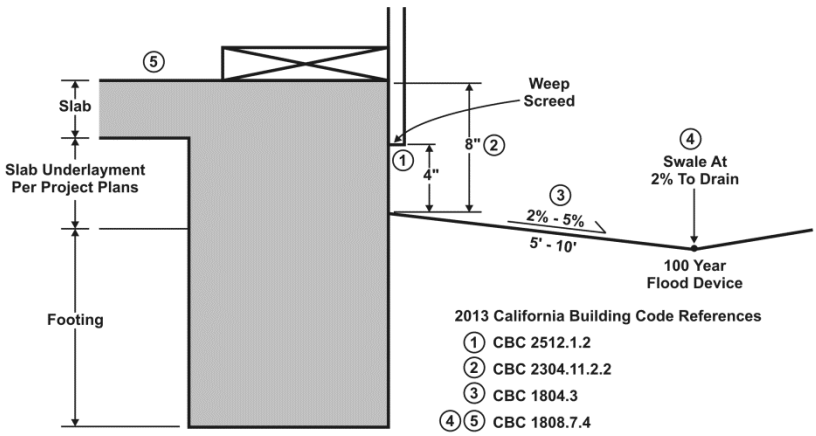
curved or triangular areas and at points of fixity. Trim bars can be utilized at right angle to the predicted crack extending 40 bar diameters past the predicted crack on each side.

Vertical Deflections: Soil-supported slab-on-grade floors can deflect downward when vertical loads are applied, due to elastic compression of the subgrade. For design of concrete floors, a modulus of subgrade reaction of k = 150 psi per inch would be applicable for native soils and engineered fills.

Exterior Flatwork: Exterior concrete flatwork need not be underlain by a rock cushion where non-expansive soils are encountered. However, some vertical movement of concrete should be anticipated when arranging outside concrete flatwork joints where rock is omitted. Where expansive soils are encountered, a 4 inch rock cushion under concrete flatwork and pre-saturation is recommended.

If exterior flatwork concrete is against the floor slab edge without a moisture separator it may transfer moisture to the floor slab. Expansion joint felt should be provided to separate exterior flatwork from foundations and at least at every third joint. Contraction / groove joints should be provided to a depth of at least 1/4 of the slab thickness and at a spacing of less than 30 times the slab thickness for unreinforced flatwork, dividing the slab into nearly square sections. Cracks will tend to occur at recurrent corners, curved or triangular areas and at points of fixity. Trim bars can be utilized at right angle to the predicted crack extending 40 bar diameters past the predicted crack on each side.

Drainage Adjacent to Slabs: All grades should provide rapid removal of surface water runoff; ponding water should not be allowed on building pads or adjacent to foundations or other structural improvements (during and following construction). All soils placed against foundations during finish grading should be compacted to minimize water infiltration. Finish and landscape grading should include positive drainage away from all foundations. Section 1808.7.4 of the 2013 California Building Code (CBC) states that for graded soil sites, the top of any exterior foundation shall extend above the elevation of the street gutter at the point of discharge or the inlet of an approved drainage device a minimum of 12 inches plus 2 percent. If overland flow is not achieved adjacent to buildings, the drainage device should be designed to accept flows from a 100 year event. Grades directly adjacent to foundations should be no closer than 8 inches from the top of the slab (CBC 2304.11.2.2), and weep screeds are to be placed a minimum of 4 inches clear of soil grades and 2 inches clear of concrete or other hard surfacing (CBC 2512.1.2). From this point, surface grades should slope a minimum of 2 percent away from all foundations for at least 5 feet but preferably 10 feet, and then 2 percent along a drainage swale to the outlet (CBC 1804.3). Downspouts should be tight piped via an area drain network and discharged to an appropriate non-erosive outlet away from all foundations.



Typical 2013 California Building Code Drainage Requirements

The above referenced elements pertaining to drainage of the proposed structures is provided as general acknowledgement of the California Building Code requirements, restated and graphically illustrated for ease of understanding. Surface drainage design is the purview of the Project Architect/Civil Engineer. Review of drainage design and implementation adjacent to the building envelopes is recommended as performance of these improvements is crucial to the performance of the foundation and construction of rigid improvements.

It should be noted that due to the Americans with Disabilities Act (ADA) requirements, design and construction of alternative site drainage configurations may be necessary, particularly for institutional facilities and commercial developments. In this case, design and construction of adequate drainage adjacent to foundations and slabs are essential to preserving foundation support and reducing the potential for wet slab related issues. A typical example of this condition occurs where the landscape grades are situated at the same elevation as the parking areas so as to not create a drop off between the grades. This condition subsequently results in flat grades between the building, landscape area, and parking lot which do not meet building code requirements.

Asphalt Concrete Pavement Design

We understand that asphalt pavements will be used for the associated roadways. The following comments and recommendations are given for pavement design and construction purposes. All pavement construction and materials used should conform to applicable sections of the latest edition of the California Department of Transportation Standard Specifications.

Subgrade Compaction: After installation of any underground facilities, the upper 8 inches of subgrade soils under pavements sections should be compacted to a minimum relative compaction of 95 percent based on the ASTM D1557 test method at a moisture content near or above optimum. Aggregate bases should also be compacted to a minimum relative compaction of 95 percent based on the aforementioned test method.

Subgrade Stability: All subgrades and aggregate base should be proof-rolled with a full water truck or equivalent immediately before paving, in order to evaluate their condition. If unstable subgrade conditions are observed, these areas should be overexcavated down to firm materials and the resulting excavation backfilled with suitable materials for compaction (i.e. drier native soils or aggregate base). Areas displaying significant instability may require geotextile stabilization fabric within the overexcavated area, followed by placement of aggregate base. Final determination of any required overexcavation depth and stabilization fabric should be based on the conditions observed during subgrade preparation.

Design Criteria: Critical features that govern the durability of a pavement section include the stability of the subgrade; the presence or absence of moisture, free water, and organics; the fines content of the subgrade soils; the traffic volume; and the frequency of use by heavy vehicles. Soil conditions can be defined by a soil resistance value, or “R-Value,” and traffic conditions can be defined by a Traffic Index (TI).

Design Values: The following table provides recommended pavement sections based on the R-Value test (CTM 301) performed on a bulk sample representative of the materials expected to be exposed at subgrade, as well as our experience with similar materials in the area. An R-value of 62 was determined for the sandy SILTS tested; however, due to the variability of onsite soils, the potential redistribution of material typically encountered during grading, and the amount of expansion generated during testing, we used an R-Value of 35 in our design.

Design values provided are based upon properly drained subgrade conditions. Although the R-Value design to some degree accounts for wet soil conditions, proper surface and landscape drainage design is integral in performance of adjacent street sections with respect to stability and degradation of the asphalt. If clay soils are encountered and cannot be sufficiently blended with non-expansive soils, we should review pavement subgrades to determine the appropriateness of the provided sections, and provide additional pavement design recommendations as field conditions dictate. Even minor clay constituents will greatly reduce the design R-Value.

The recommended design thicknesses presented in the following table were calculated in accordance with the methods presented in the Sixth Edition of the California Department of Transportation Highway Design Manual. A varying range of traffic indices are provided for use by the project Civil Engineer for roadway design.

Table 8: Asphalt Pavement Section Recommendations

Design Traffic Indices	Alternative Pavement Sections (Inches)	
	Asphalt Concrete *	Aggregate Base **
4.5	2.5 3.0	4.5 4.0
5.0	2.5 3.0	6.0 4.5
5.5	3.0 3.5	6.5 5.0
6.0	3.0 3.5	7.5 6.5
6.5	3.5 4.0	8.0 7.0
7.0	4.0 4.5	8.5 7.5

* Asphalt Concrete: must meet specifications for Caltrans Hot Mix Asphalt Concrete
** Aggregate Base: must meet specifications for Caltrans Class II Aggregate Base (R-Value = minimum 78)

Due to the redistribution of materials that occurs during mass grading operations, we should review pavement subgrades to determine the appropriateness of the provided sections.

Portland Cement Concrete Pavement Design

We understand that Portland cement concrete pavements may be considered for various aspects of exterior paving for the site. The American Concrete Institute (ACI) Concrete Pavement Design method (ACI 330R-08) was used for design of the exterior concrete (rigid) pavements at the site. The pavement thicknesses were evaluated based on the soil design parameters provided in the following table.

Table 9: Soil Parameters

Subgrade Soil Description	k, Modulus of Subgrade Reaction*	Base Course
Silty SAND	145 pci	6 inches

* Based on an R-Value of 35 as recommended above and correlated to a k-Value recommended by ACI 330R.

Based on the subgrade soil parameters shown in the above table, the recommended concrete thicknesses for various traffic descriptions are presented in the table below. The recommended thicknesses provided below assume the use of plain (non-reinforced) concrete pavements.

We recommend that the rigid pavement be placed on at least 6 inches of aggregate base compacted to at least 95 percent of the maximum dry density per the ASTM D 1557 test method. From a geotechnical perspective, contraction joints should be placed in accordance with the American Concrete Institute (ACI) recommendations which include providing a joint spacing about 30 times the slab thickness up to a maximum of 10 feet. The joint patterns should also divide the slab into nearly square panels. If increased joint spacing is desired, reinforcing steel should be installed within the pavement in accordance with ACI recommendations. Final determination of steel reinforcement configurations (if used within the pavements) remains the purview of the Project Structural Engineer.

Table 10: Concrete Pavement Section Recommendations

Category	ADTT*	Pavement Traffic Description	Thickness (inches)	
			3000 psi**	4000 psi**
A	1	Car parking areas and access lanes Autos, pickups, and panel trucks only	5.0	4.5
A	10		5.5	5.0
B	25	Shopping center entrance and service lanes Bus parking areas and interior lanes Single-unit truck parking areas and interior lanes	6.0	5.5
B	300		7.0	6.0
C	100	Roadway Entrances and Exterior Lanes	7.0	6.5
C	300		7.5	6.5
C	700		7.5	7.0

* Average Daily Truck Traffic
** 28-day concrete compressive strength

Drainage

In order to maintain the engineering strength characteristics of the soil presented for use in this Geotechnical Engineering Study Update, maintenance of the building pads will need to be performed. This maintenance generally includes, but is not limited to, proper drainage and control of surface and subsurface water which could affect structural support and fill integrity. A difficulty exists in determining which areas are prone to the negative impacts resulting from high moisture conditions due to the diverse nature of potential sources of water; some of which are outlined in the paragraph below. We suggest that measures be installed to minimize exposure to the adverse effects of moisture, but this will not guarantee that excessive moisture conditions will not affect the structure.

Some of the diverse sources of moisture could include water from landscape irrigation, annual rainfall, offsite construction activities, runoff from impermeable surfaces, collected and channeled water, and water perched in the subsurface soils on the bedrock horizon or present in fractures in the weathered bedrock. Some of these sources can be controlled through drainage features installed either by the owner or contractor. Others may not become evident until they, or the effects of the presence of excessive moisture, are visually observed on the property.

Some measures that can be employed to minimize the buildup of moisture include, but are not limited to proper backfill materials and compaction of utility trenches within the footprint of the proposed commercial structures; grout plugs at foundation penetrations; collection and channeling of drained water from impermeable surfaces (i.e. roofs, concrete or asphalt paved areas); installation of subdrain/cut-off drain provisions; utilization of low flow irrigation systems; education to the proposed homeowners of proper design and maintenance of landscaping and drainage facilities that they or their landscaper installs.

Building Pad Subdrain: It has been our experience that sites constructed within this area generally have an increased potential for moisture related issues related to water perched on the bedrock horizon and/or present in the fractures of the bedrock as well as moisture transmission through utility trenches. To mitigate for the potential of these issues, subdrains can be constructed in addition to the drainage provisions provided in the 2013 CBC. Typical subdrain construction would include a 3 feet deep trench (or depth required to intercept the bottom of utility trenches) constructed as detailed on Figure C-5. The water collected in the subdrain pipe would be directed to an appropriate non-erosive outlet. We recommend that a representative from our firm be present during the subdrain installation procedures to document that the drain is installed in accordance with the observed field conditions, as well as to provide additional consultation as the conditions dictate.

As noted in the previous discussions, the moisture conditions may not manifest until after the site is developed. As such, any recommendations for the subdrain orientation and location to mitigate the moisture conditions can be provided on an as requested basis as the conditions arise. We recommend that the developer notify future owners of this potential.

Landscaping Drainage Adjacent to Pavements: In developments built on relatively poor draining soils (i.e. shallow bedrock), prolonged water seepage into pavement sections can result in softening of subgrade soils and subsequent pavement distress. In addition, where shallow bedrock conditions are present, water can become perched on the relatively impermeable soil horizon and eventually inundate utility trench backfill. The variable support condition between native soils and compacted trench backfill materials, coupled with prolonged water exposure can lead to subsidence of trench backfill materials if bridging of trench backfill occurs during placement or natural jetting of soils into voids around pipes occurs. Joint utility trenches are generally more susceptible to the jetting issues due to the quantity of pipe placed in the trench.

It is anticipated that heavy landscape watering could enter and pond within the aggregate base section as it permeates through the aggregate base under the sidewalks and/or curbs. Prolonged seepage within the pavement section could cause distress to pavements in heavy traffic areas. Some measures that can be employed to minimize the saturation of the subgrade and aggregate base materials include, but are not limited to, construction of cut-off drains or moisture barriers alongside the roadway adjacent to the roadway interface, construction of subdrains within landscape medians and installation of plug and drain systems within utility trenches. Due to the elusive and discontinuous nature of drainage related issues, a risk based approach should be determined by the developer based on consultation and discussions with the design professionals and the amount of protection of facilities that the developer may want to provide against potential moisture related issues.

Post Construction: All drainage related issues may not become known until after construction and landscaping are complete. Therefore, some mitigation measures may be necessary following site development. Landscape watering is typically the largest source of water infiltration into the subgrade. Given the soil conditions on site, excessive or even normal landscape watering may contribute to groundwater levels rising, which could contribute to moisture related problems and/or cause distress to foundations and slabs, pavements, and underground utilities, as well as creating a nuisance where seepage occurs. In order to mitigate these conditions, additional subdrainage measures may be necessary. On foothill developments constructed with cut/fill pads on shallow bedrock conditions, seepage may not be apparent until post construction. In order to mitigate these conditions additional subdrainage measures may be necessary.

6.0 DESIGN REVIEW AND CONSTRUCTION MONITORING

The design plans and specifications should be reviewed and accepted by Youngdahl Consulting Group, Inc. prior to contract bidding. A review should be performed to determine whether the recommendations contained within this report are still applicable and/or are properly reflected and incorporated into the project plans and specifications.

Construction Monitoring

Construction monitoring is a continuation of the findings and recommendations provided in this report. It is essential that our representative be involved with all grading activities in order for us to provide supplemental recommendations as field conditions dictate. Youngdahl Consulting Group, Inc. should be notified at least two working days before site clearing or grading operations commence, and should observe the stripping of deleterious material, overexcavation of existing fills or loose/soft soils and provide consultation to the Grading Contractor in the field.

Low Impact Development Standards

Low Impact Development or LID standards have become a consideration for many projects in the region. LID standards are intended to address and mitigate urban storm water quality concerns. These methods include the use of Source Controls, Run-off Reduction and Treatment Controls. For the purpose of this report use of Run-off Reduction measures and some Treatment Controls may impact geotechnical recommendations for the project.

Youngdahl Consulting Group, Inc. did not perform any percolation or infiltration testing for the site as part of the Geotechnical Investigation. A review of soil survey and the data collected from test pits indicate that soils within the project are Hydrologic Soil Group D (low permeability). Based on this condition, use of infiltration type LID methods (infiltration trenches, dry wells, infiltration basins, permeable pavements, etc.) should not be considered without addressing applicable geotechnical considerations/implications. As such, use of any LID measure that would require infiltration of discharge water to surfaces adjacent to structures/pavement or include infiltration type measures should be reviewed by Youngdahl Consulting Group, Inc. during the design process.

Post Construction Monitoring

As described in Post Construction section of this report, all drainage related issues may not become known until after construction and landscaping are complete. Youngdahl Consulting Group, Inc. can provide consultation services upon request that relate to proper design and installation of drainage features during and following site development. In addition, if the development includes use of LID measures maintenance of those features in conformance with the standard of practice and documentation from the designer will be necessary. The impact from infiltration or run-off reduction measures to engineered structures and foundations may not become apparent until after construction. We recommend that all LID measures be inspected and maintained as documented by the designer and if adverse impacts are noted related to the structure or site that Youngdahl Consulting Group, Inc. be retained to review the LID measure and provide additional consulting and options.

7.0 LIMITATIONS AND UNIFORMITY OF CONDITIONS

1. This report has been prepared for the exclusive use of County of El Dorado Facilities Division and their consultants for specific application to the El Dorado County Sheriff Headquarters project. Youngdahl Consulting Group, Inc. has endeavored to comply with generally accepted geotechnical engineering practice common to the local area. Youngdahl Consulting Group, Inc. makes no other warranty, expressed or implied.

2. As of the present date, the findings of this report are valid for the property studied. With the passage of time, changes in the conditions of a property can occur whether they be due to natural processes or to the works of man on this or adjacent properties. Legislation or the broadening of knowledge may result in changes in applicable standards. Changes outside of our control may cause this report to be invalid, wholly or partially. Therefore, this report should not be relied upon after a period of three years without our review nor should it be used or is it applicable for any properties other than those studied.

3. Section [A] 107.3.4 of the 2013 California Building Code states that, in regard to the design professional in responsible charge, the building official shall be notified in writing by the owner if the registered design professional in responsible charge is changed or is unable to continue to perform the duties.

   WARNING: Do not apply any of this report's conclusions or recommendations if the nature, design, or location of the facilities is changed. If changes are contemplated, Youngdahl Consulting Group, Inc. must review them to assess their impact on this report's applicability. Also note that Youngdahl Consulting Group, Inc. is not responsible for any claims, damages, or liability associated with any other party's interpretation of this report's subsurface data or reuse of this report's subsurface data or engineering analyses without the express written authorization of Youngdahl Consulting Group, Inc.

4. The analyses and recommendations contained in this report are based on limited windows into the subsurface conditions and data obtained from subsurface exploration. The methods used indicate subsurface conditions only at the specific locations where samples were obtained, only at the time they were obtained, and only to the depths penetrated. Samples cannot be relied on to accurately reflect the strata variations that usually exist between sampling locations. Should any variations or undesirable conditions be encountered during the development of the site, Youngdahl Consulting Group, Inc. will provide supplemental recommendations as dictated by the field conditions.

5. The recommendations included in this report have been based in part on assumptions about strata variations that may be tested only during earthwork. Accordingly, these recommendations should not be applied in the field unless Youngdahl Consulting Group, Inc. is retained to perform construction observation and thereby provide a complete professional geotechnical engineering service through the observational method. Youngdahl Consulting Group, Inc. cannot assume responsibility or liability for the adequacy of its recommendations when they are used in the field without Youngdahl Consulting Group, Inc. being retained to observe construction. Unforeseen subsurface conditions containing soft native soils, loose or previously placed non-engineered fills should be a consideration while preparing for the grading of the property. It should be noted that it is the responsibility of the owner or his/her representative to notify Youngdahl Consulting Group, Inc., in writing, a minimum of 48 hours before any excavations commence at the site.

6. Our experience has shown that vapor transmission through concrete is controlled through proper concrete mix design. As such, proper control of moisture vapor transmission should be considered in the design of the slab as provided by the project architect, structural or civil engineer. It should be noted that placement of the recommended plastic membrane, proper mix design, and proper slab underlayment and detailing per ASTM E1643 and E1745 will not provide a waterproof condition. If a waterproof condition is desired, we recommend that a waterproofing expert be consulted for slab design.

7. Following site development, additional water sources (i.e. landscape watering, downspouts) are generally present. The presence of low permeability materials can prohibit rapid dispersion of surface and subsurface water drainage. Utility trenches typically provide a conduit for water distribution. Provisions may be necessary to mitigate adverse effects of perched water conditions. Mitigation measures may include the construction of cut-off systems and/or plug and drain systems. Close coordination between the design professionals regarding drainage and subdrainage conditions may be warranted.

   Seepage may be observed emanating from the cut slopes following their excavation during the following rainy season or following development of the areas above the cut. Generally this seepage is not enough flow to be a stability issue to the cut slope, but may be an issue for the owner of the lot at the base of the cut from a surface drainage and standing water (damp spot) standpoint. This amount of water is generally collected easily with landscaping drainage, surface drainage at the toe of the slope, or subsurface toe drains. Recommendations may be provided at the time of observed seepage; however, we recommend that the developer of the property disclose this possibility to future owners.

Table 11: Checklist of Recommended Services

	Item Description	Recommended	Not Anticipated
1	Provide foundation design parameters	Included	
2	Review grading plans and specifications	✓	
3	Review foundation plans and specifications	✓	
4	Observe and provide recommendations regarding demolition		✓
5	Observe and provide recommendations regarding site stripping	✓	
6	Observe and provide recommendations on moisture conditioning removal, and/or recompaction of unsuitable existing soils	✓	
7	Observe and provide recommendations on the installation of subdrain facilities	✓	
8	Observe and provide testing services on fill areas and/or imported fill materials	✓	
9	Review as-graded plans and provide additional foundation recommendations, if necessary	✓	
10	Observe and provide compaction tests on storm drains, water lines and utility trenches	✓	
11	Observe foundation excavations and provide supplemental recommendations, if necessary, prior to placing concrete	✓	
12	Observe and provide moisture conditioning recommendations for foundation areas and slab-on-grade areas prior to placing concrete		✓
13	Provide design parameters for retaining walls	Included	
14	Provide finish grading and drainage recommendations	Included	
15	Provide geologic observations and recommendations for keyway excavations and cut slopes during grading	✓	
16	Excavate and recompact all test pits within structural areas	✓	

APPENDIX A

Field Study

Vicinity Map
Site Plan
Logs of Exploratory Test Pits
Soil Classification Chart and Log Exploration

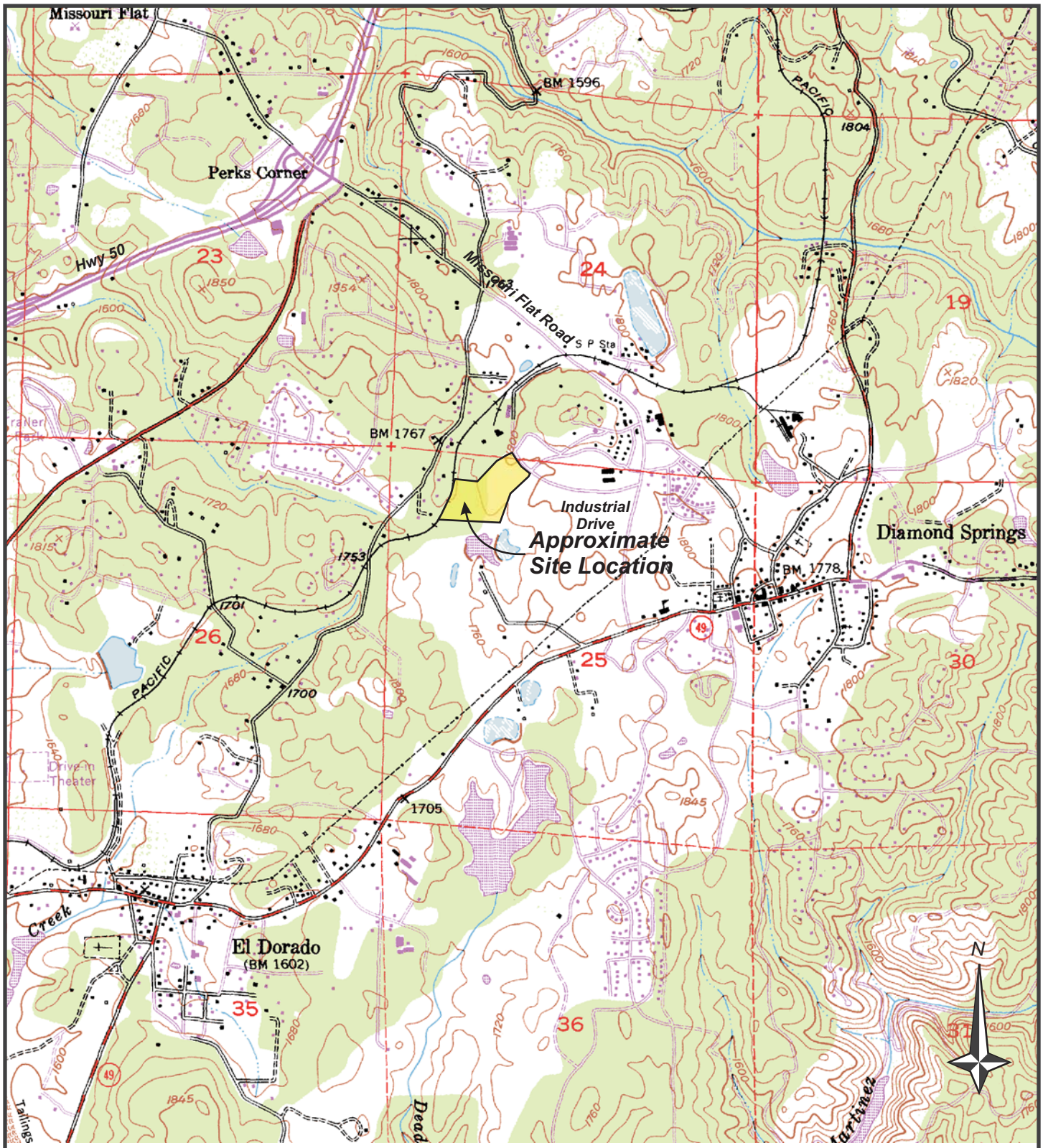
Introduction

The contents of this appendix shall be integrated with the Geotechnical Engineering Study Update of which it is a part. They shall not be used in whole or in part as a sole source for information or recommendations regarding the subject site.

Our previous field study included a site reconnaissance by a Youngdahl Consulting Group, Inc. representative followed by a subsurface exploration program conducted on 29 January 2008, which included the excavation of 11 test pits under her direction at the approximate locations shown on Figure A-3, this Appendix. Excavation of the test pits was accomplished with a CASE 580 Super K rubber tire-mounted backhoe equipped with a 24 inch wide bucket. The bulk and bag samples collected from the test pits returned to our laboratory for further examination and testing.

The Exploratory Test Pit Logs describe the vertical sequence of soils and materials encountered in each test pit, based primarily on our field classifications and supported by our subsequent laboratory examination and testing. Where a soil contact was observed to be gradual, our logs indicate the average contact depth. Our logs also graphically indicate the sample type, sample number, and approximate depth of each soil sample obtained from the test pits.

The soils encountered were logged during excavation and provide the basis for the "Logs of Test Pits", Figures A-4 through A-14, this Appendix. These logs show a graphic representation of the soil profile, the location, and depths at which samples were collected.



1 ½ 0 1 Mile

1000 0 1000 3000 4000 5000 6000 7000 Feet

Scale: 1:24,000

BASE MAP REFERENCE: U.S.G.S. 7.5 Minute Topographic Series, Placerville Quadrangle, Dated 1949 (Revised 1973)

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VICINITY MAP
El Droado County Sheriff Headquarters
Placerville, California

FIGURE
A-1

Primary Site Access (Public)

Morgue

Administration Building

Training

Controlled access

Service Building

Secondary Site Access (Private)

Option 1

Option 2
(See Figure 2)

Future

Entry Plaza

12k

64k (32k x 2)

24k

11k

143 Private Parking Spaces

Private Parking

Public Parking

Departmental Parking

Departmental Parking

338 Public Parking Spaces

TP-1

TP-2

TP-3

TP-4

TP-5

TP-6

TP-7

TP-8

TP-9

TP-10

TP-11

Totem Rd

Capitol Ave

Merchandise Way

N

0 100 200 400

Approximate Scale: 1" = 200'

TP-1 = *Approximate Test Pit Location*

REFERENCE: *Sheriff's Headquarters Project, Site 'C' Option 1 (13.5 Acres) Vanir Construction Management, Inc., Sheet c.3*

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SITE PLAN - OPTION 1

El Dorado County Sheriff Headquarters
Placerville, California

FIGURE
A-2

N

0 100 200 400

Approximate Scale: 1" = 200'

TP-1 = *Approximate Test Pit Location*

REFERENCE: *Sheriff's Headquarters Project, Site 'C' Option 2 (11 Acres) Vanir Construction Management, Inc., Sheet c.4*

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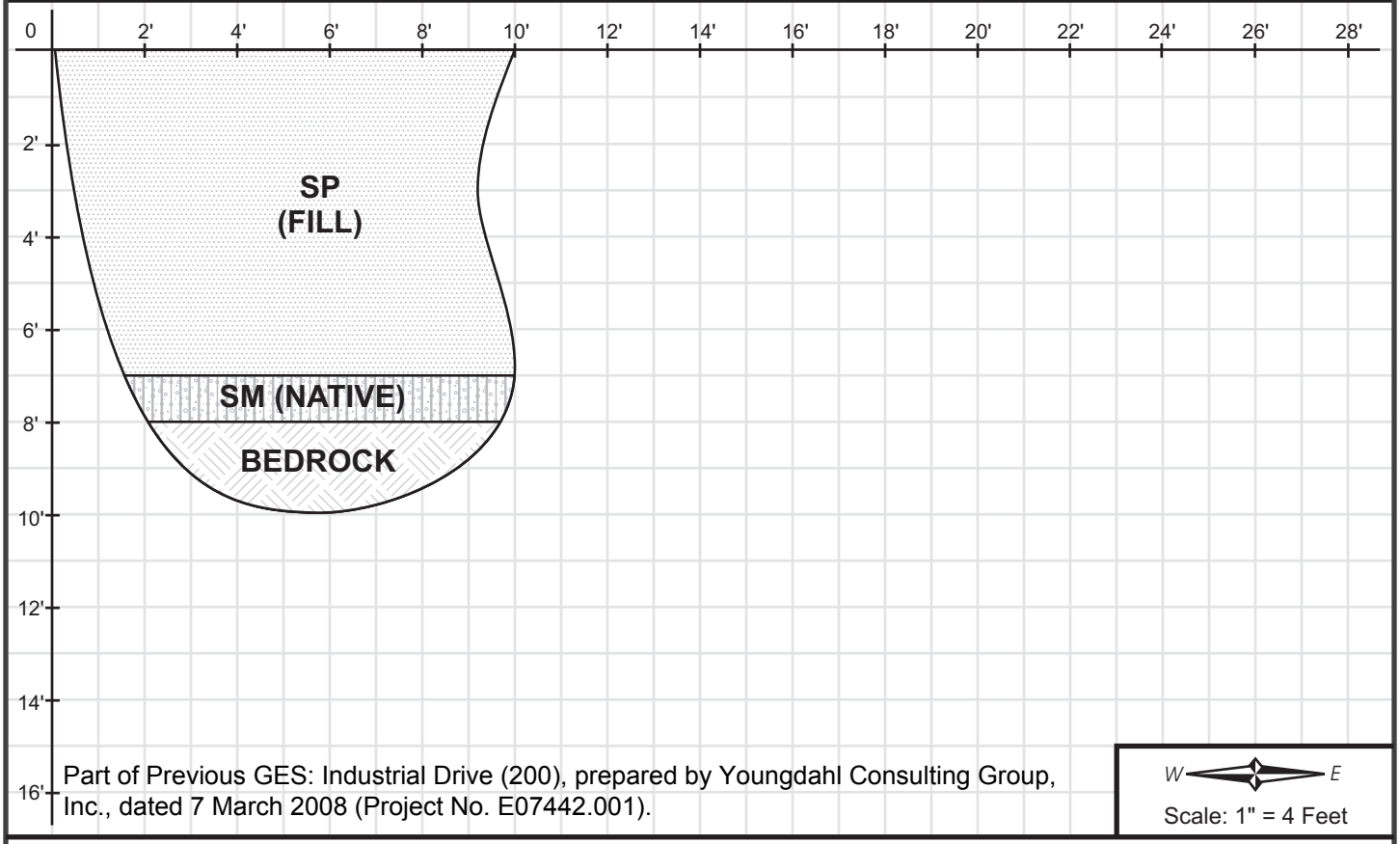
SITE PLAN - OPTION 2

El Dorado County Sheriff Headquarters
Placerville, California

FIGURE
A-3

Logged By: **MSS**	Date: **29 January 2008**	Elevation: **~ 1788'**	Pit No. **TP-1**
Equipment: **CASE Super K Backhoe with 24" Bucket**		Pit Orientation: **W - E**	

Depth (Feet)	Geotechnical Description & Unified Soil Classification	Sample	Tests & Comments
@ 0 - 3'	Light brown **SAND (SP)** with gravel, loose, moist (FILL)	**Bulk 1** @ 0 - 3'	*Debris On Surface*
@ 3' - 7'	*Grades to medium dense, slightly moist*		
@ 7' - 8'	Red brown silty **SAND (SM)**, medium dense, slightly moist (NATIVE)		
@ 8' - 10'	Light yellow brown **BEDROCK**, completely weathered, weakly indurated		
	Test pit terminated at 10' No free groundwater encountered No caving noted		



Part of Previous GES: Industrial Drive (200), prepared by Youngdahl Consulting Group, Inc., dated 7 March 2008 (Project No. E07442.001).

W E

Scale: 1" = 4 Feet

Note: The test pit log indicates subsurface conditions only at the specific location and time noted. Subsurface conditions, including groundwater levels, at other locations of the subject site may differ significantly from conditions which, in the opinion of Youngdahl Consulting Group, Inc., exist at the sampling locations, Note, too, that the passage of time may affect conditions at the sampling locations.

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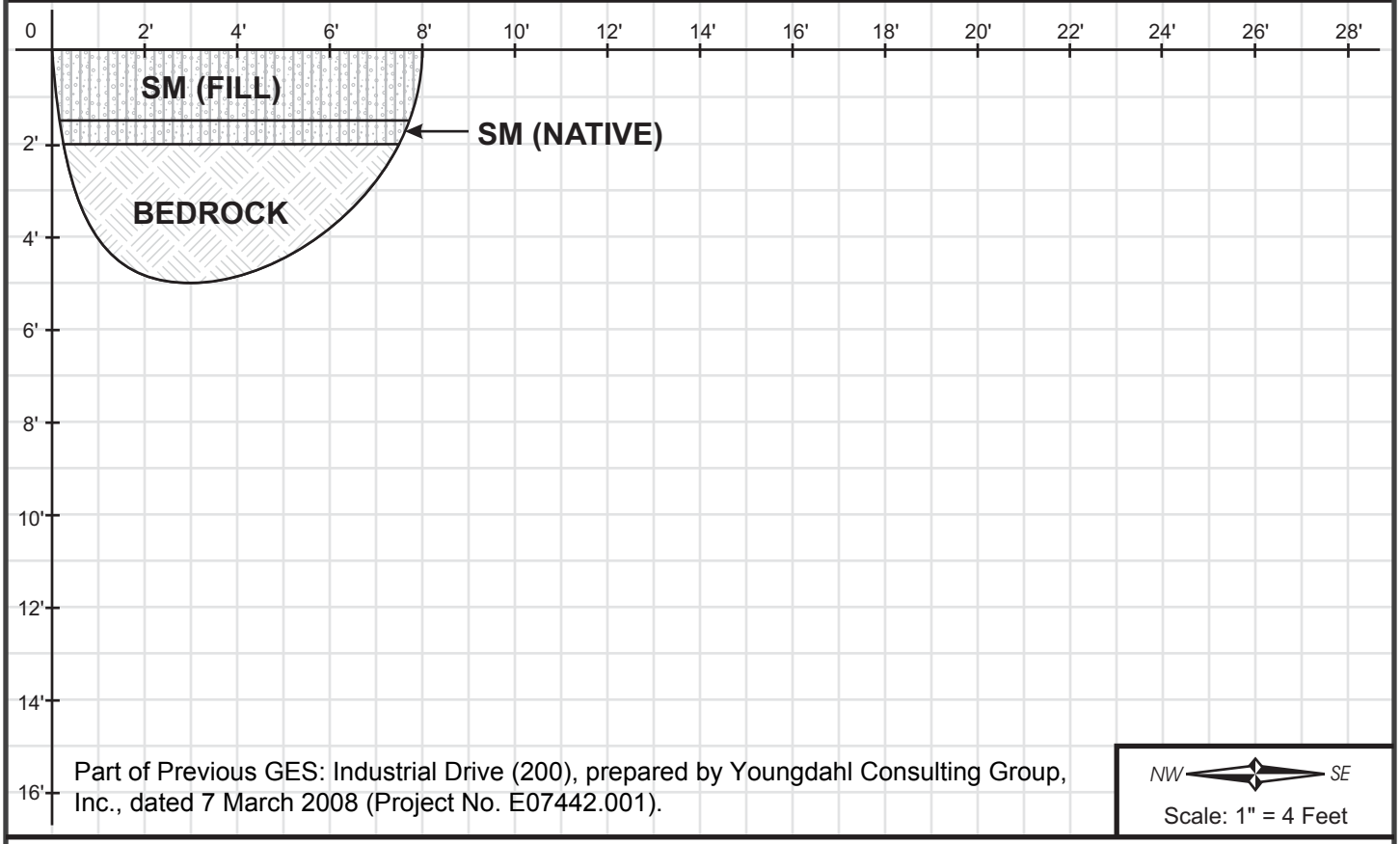
EXPLORATORY TEST PIT LOG
El Droado County Sheriff Headquarters
Placerville, California

FIGURE A-4

Logged By: **MSS**	Date: **29 January 2008**	Elevation: **~ 1781'**	Pit No. **TP-2**
Equipment: **CASE Super K Backhoe with 24" Bucket**		Pit Orientation: **NW - SE**	

Depth (Feet)	Geotechnical Description & Unified Soil Classification	Sample	Tests & Comments
@ 0 - 0.5'	Dark gray brown silty **SAND (SM)** with gravel, medium dense, moist (FILL)		*Gravel / Cobbles On Surface*
@ 0.5' - 1.5'	*Grades to light brown with trace cobbles, slightly moist*		
@ 1.5' - 2'	Red brown silty **SAND (SM)**, medium dense, slightly moist (NATIVE)		
@ 2' - 4'	Light yellow brown **BEDROCK**, completely weathered, weakly indurated		
@ 4' - 5'	*Grades highly weathered*		*Rust Stains*
	Test pit terminated at 5' No free groundwater encountered No caving noted		



Part of Previous GES: Industrial Drive (200), prepared by Youngdahl Consulting Group, Inc., dated 7 March 2008 (Project No. E07442.001).

NW SE

Scale: 1" = 4 Feet

Note: The test pit log indicates subsurface conditions only at the specific location and time noted. Subsurface conditions, including groundwater levels, at other locations of the subject site may differ significantly from conditions which, in the opinion of Youngdahl Consulting Group, Inc., exist at the sampling locations, Note, too, that the passage of time may affect conditions at the sampling locations.

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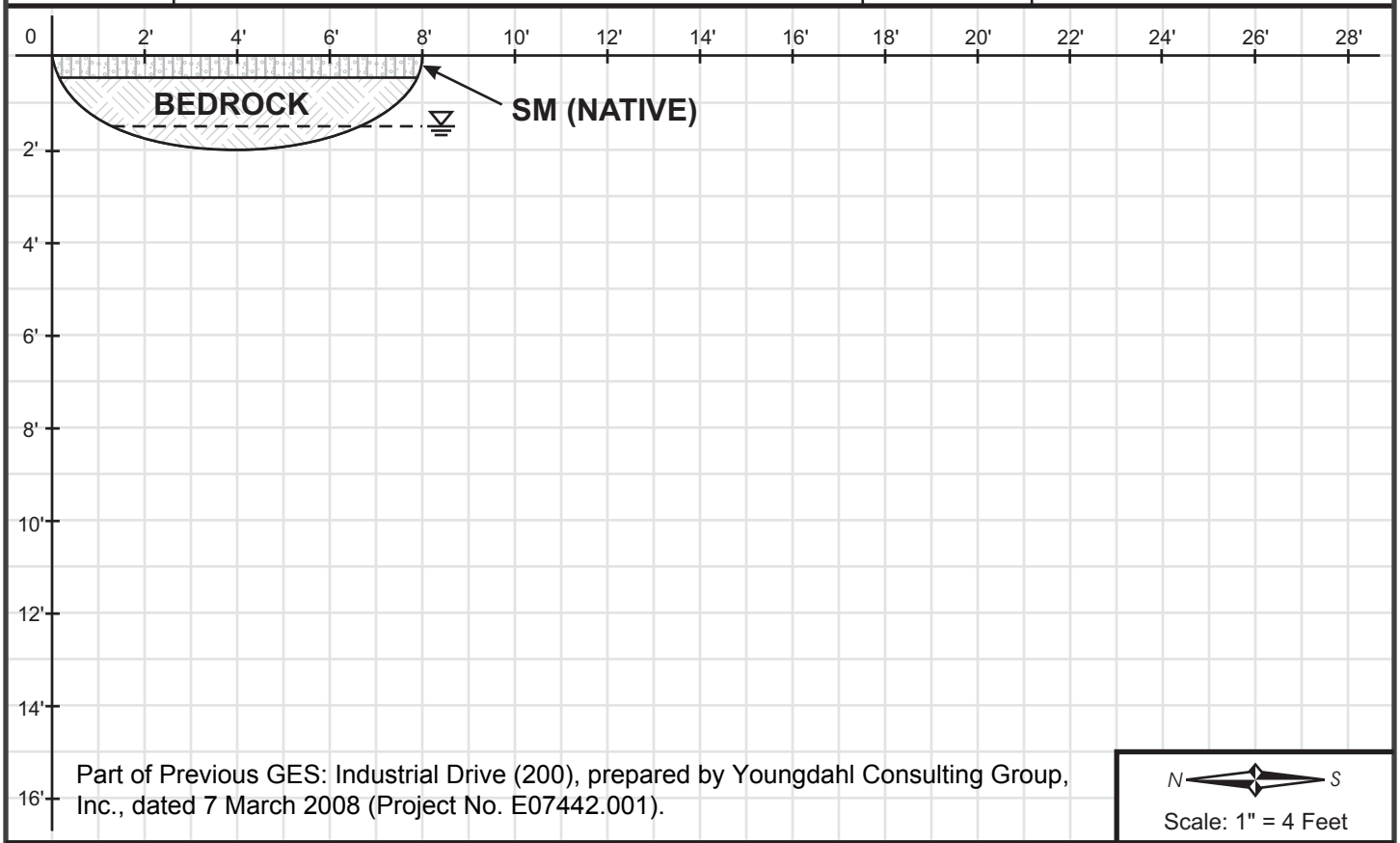
EXPLORATORY TEST PIT LOG

El Droado County Sheriff Headquarters
Placerville, California

FIGURE A-5

Logged By: **MSS**	Date: **29 January 2008**	Elevation: **~ 1753'**	Pit No. **TP-3**
Equipment: **CASE Super K Backhoe with 24" Bucket**		Pit Orientation: **N - S**	

Depth (Feet)	Geotechnical Description & Unified Soil Classification	Sample	Tests & Comments
@ 0 - 0.5'	Red brown silty **SAND (SM)**, medium dense, moist (NATIVE)		*Grass On Surface*
@ 0.5' - 2'	Light yellow brown **BEDROCK**, highly weathered, moderately indurated		
	Test pit terminated at 2' (practical refusal) Groundwater encountered at 1.5' No caving noted		



Part of Previous GES: Industrial Drive (200), prepared by Youngdahl Consulting Group, Inc., dated 7 March 2008 (Project No. E07442.001).

N S
Scale: 1" = 4 Feet

Note: The test pit log indicates subsurface conditions only at the specific location and time noted. Subsurface conditions, including groundwater levels, at other locations of the subject site may differ significantly from conditions which, in the opinion of Youngdahl Consulting Group, Inc., exist at the sampling locations, Note, too, that the passage of time may affect conditions at the sampling locations.

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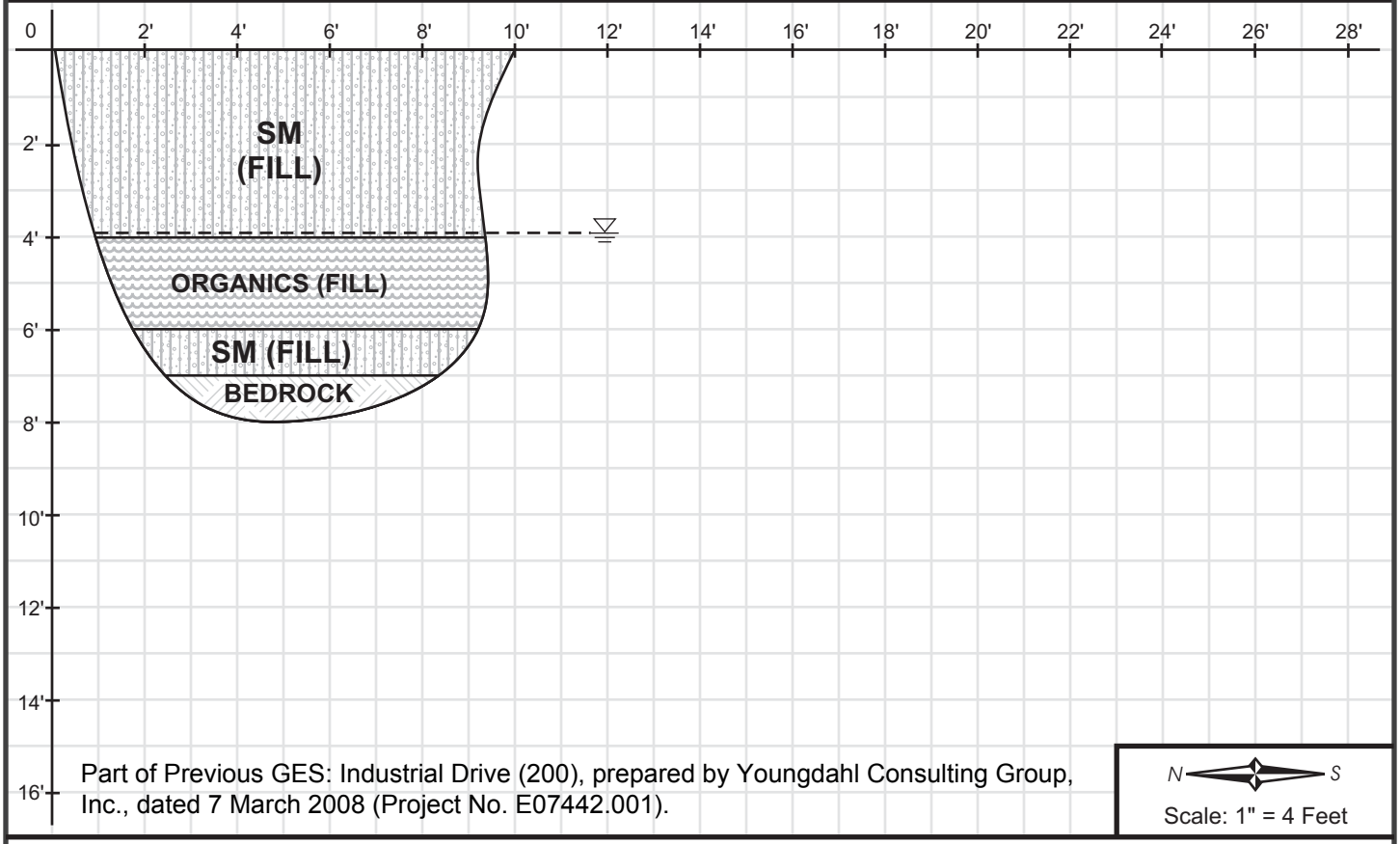
EXPLORATORY TEST PIT LOG
El Droado County Sheriff Headquarters
Placerville, California

FIGURE A-6

Logged By: **MSS**	Date: **29 January 2008**	Elevation: **~ 1749'**	Pit No. **TP-4**
Equipment: **CASE Super K Backhoe with 24" Bucket**		Pit Orientation: **N - S**	

Depth (Feet)	Geotechnical Description & Unified Soil Classification	Sample	Tests & Comments
@ 0 - 0.5'	Red brown silty **SAND (SM)**, loose, wet (FILL)		*Sand / Grass On Surface*
@ 0.5' - 4'	*Grades to moist (FILL)*		
@ 4' - 6'	Black **ORGANICS**, moist (FILL)		*Organic odor*
@ 6' - 7'	Gray silty **SAND (SM)** with clay, loose, moist (FILL)		
@ 7' - 8'	Light yellow brown **BEDROCK**, highly weathered, moderately indurated		
	Test pit terminated at 8' (practical refusal) Groundwater encountered at 4' No caving noted		



Part of Previous GES: Industrial Drive (200), prepared by Youngdahl Consulting Group, Inc., dated 7 March 2008 (Project No. E07442.001).

N S

Scale: 1" = 4 Feet

Note: The test pit log indicates subsurface conditions only at the specific location and time noted. Subsurface conditions, including groundwater levels, at other locations of the subject site may differ significantly from conditions which, in the opinion of Youngdahl Consulting Group, Inc., exist at the sampling locations, Note, too, that the passage of time may affect conditions at the sampling locations.

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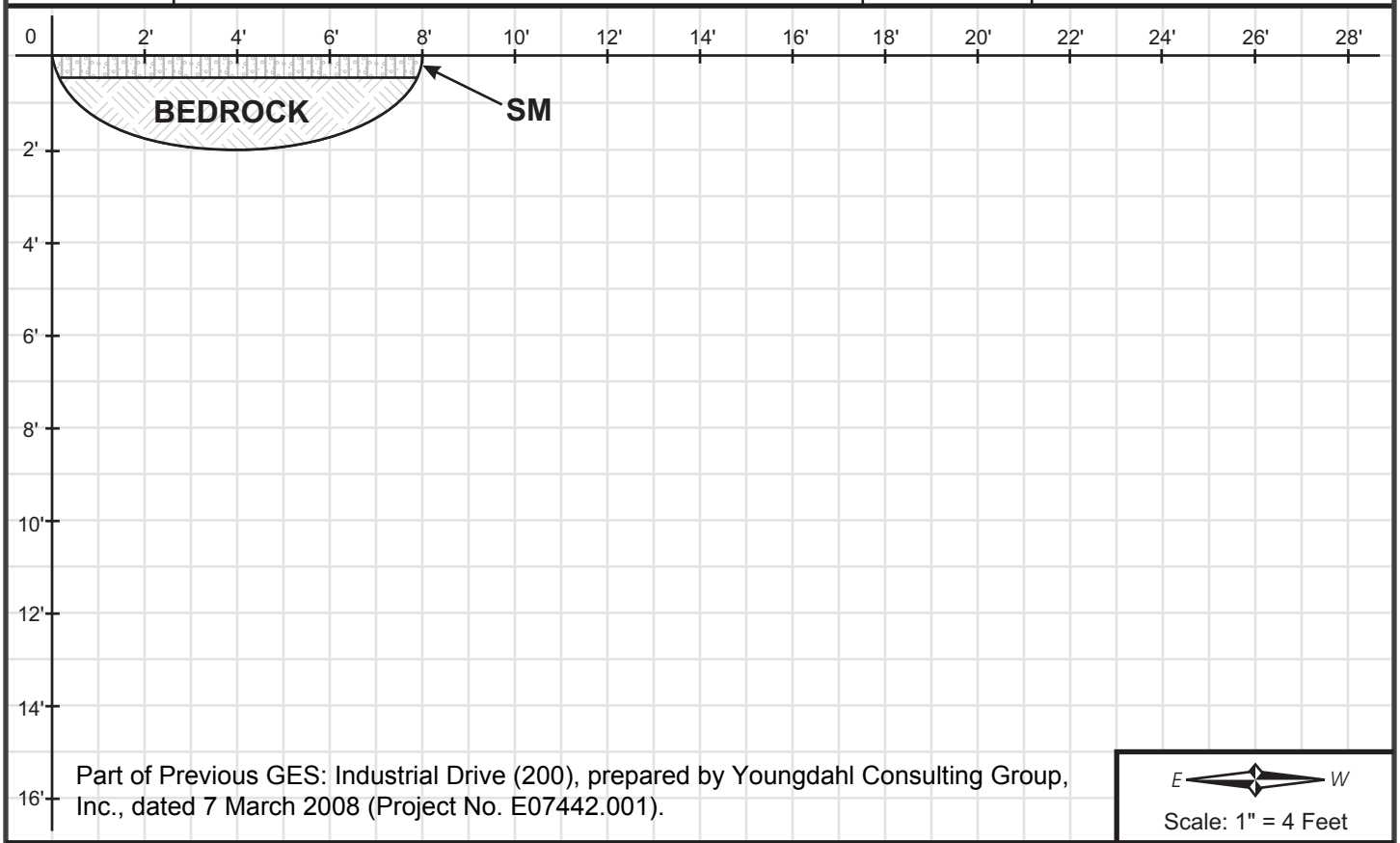
EXPLORATORY TEST PIT LOG

El Droado County Sheriff Headquarters
Placerville, California

FIGURE A-7

Logged By: **MSS**	Date: **29 January 2008**	Elevation: **~ 1758'**	Pit No. **TP-5**
Equipment: **CASE Super K Backhoe with 24" Bucket**		Pit Orientation: **E - W**	

Depth (Feet)	Geotechnical Description & Unified Soil Classification	Sample	Tests & Comments
@ 0 - 0.5'	Red brown silty **SAND (SM)**, medium dense, moist		*Sand / Gravel On Surface*
@ 0.5' - 2'	Yellow brown **BEDROCK**, highly weathered, moderately indurated		*Black / Rust Staining*
	Test pit terminated at 2' (practical refusal) No free groundwater encountered No caving noted		



Part of Previous GES: Industrial Drive (200), prepared by Youngdahl Consulting Group, Inc., dated 7 March 2008 (Project No. E07442.001).

E W

Scale: 1" = 4 Feet

Note: The test pit log indicates subsurface conditions only at the specific location and time noted. Subsurface conditions, including groundwater levels, at other locations of the subject site may differ significantly from conditions which, in the opinion of Youngdahl Consulting Group, Inc., exist at the sampling locations, Note, too, that the passage of time may affect conditions at the sampling locations.

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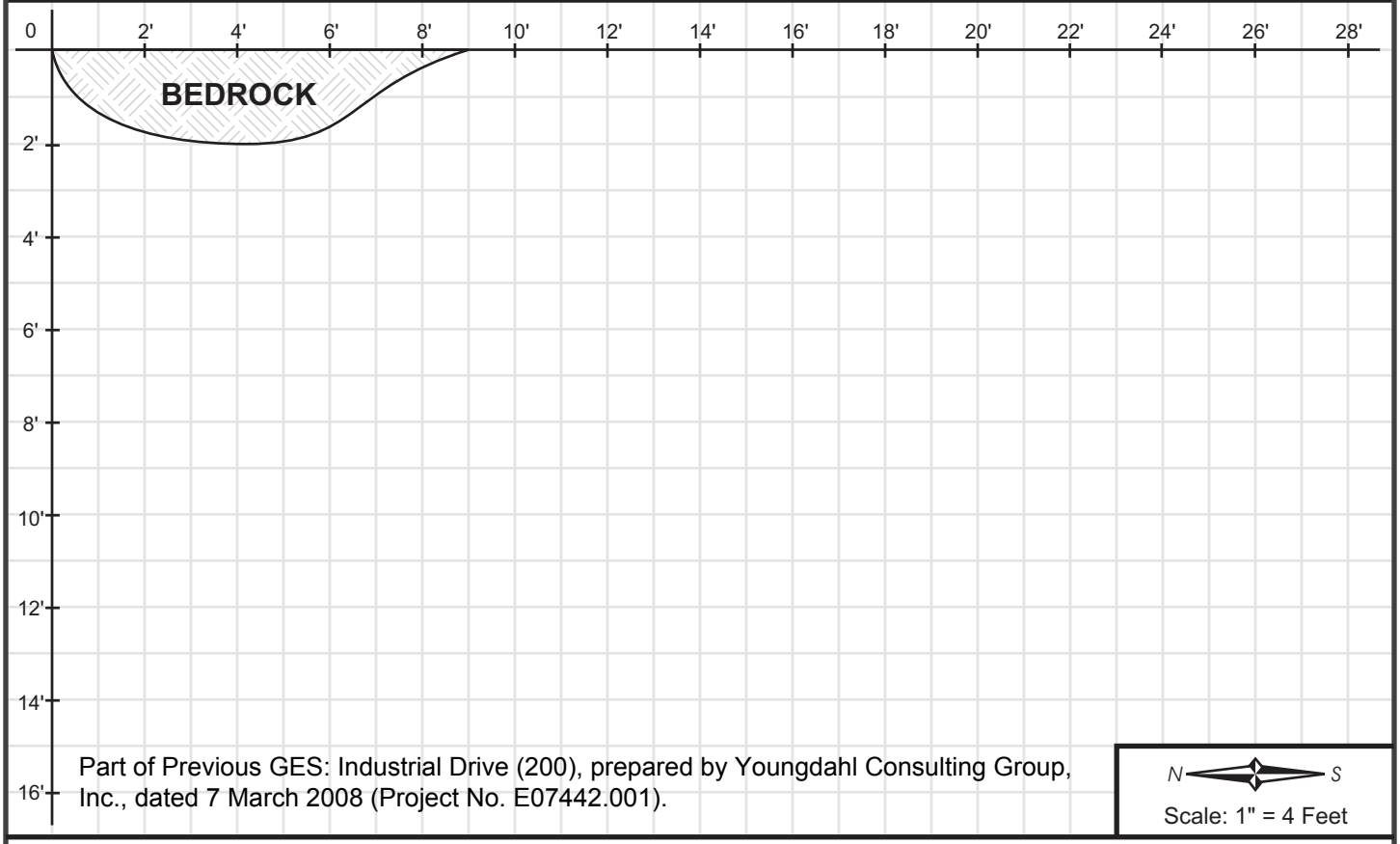
EXPLORATORY TEST PIT LOG

El Droado County Sheriff Headquarters
Placerville, California

FIGURE A-8

Logged By: **MSS**	Date: **29 January 2008**	Elevation: **~ 1762'**	Pit No. **TP-6**
Equipment: **CASE Super K Backhoe with 24" Bucket**		Pit Orientation: **N - S**	

Depth (Feet)	Geotechnical Description & Unified Soil Classification	Sample	Tests & Comments
@ 0' - 2'	Red brown **BEDROCK**, highly weathered, moderately indurated		*Rust Staining*
	Test pit terminated at 2' (practical refusal) No free groundwater encountered No caving noted		



Part of Previous GES: Industrial Drive (200), prepared by Youngdahl Consulting Group, Inc., dated 7 March 2008 (Project No. E07442.001).

N S

Scale: 1" = 4 Feet

Note: The test pit log indicates subsurface conditions only at the specific location and time noted. Subsurface conditions, including groundwater levels, at other locations of the subject site may differ significantly from conditions which, in the opinion of Youngdahl Consulting Group, Inc., exist at the sampling locations, Note, too, that the passage of time may affect conditions at the sampling locations.

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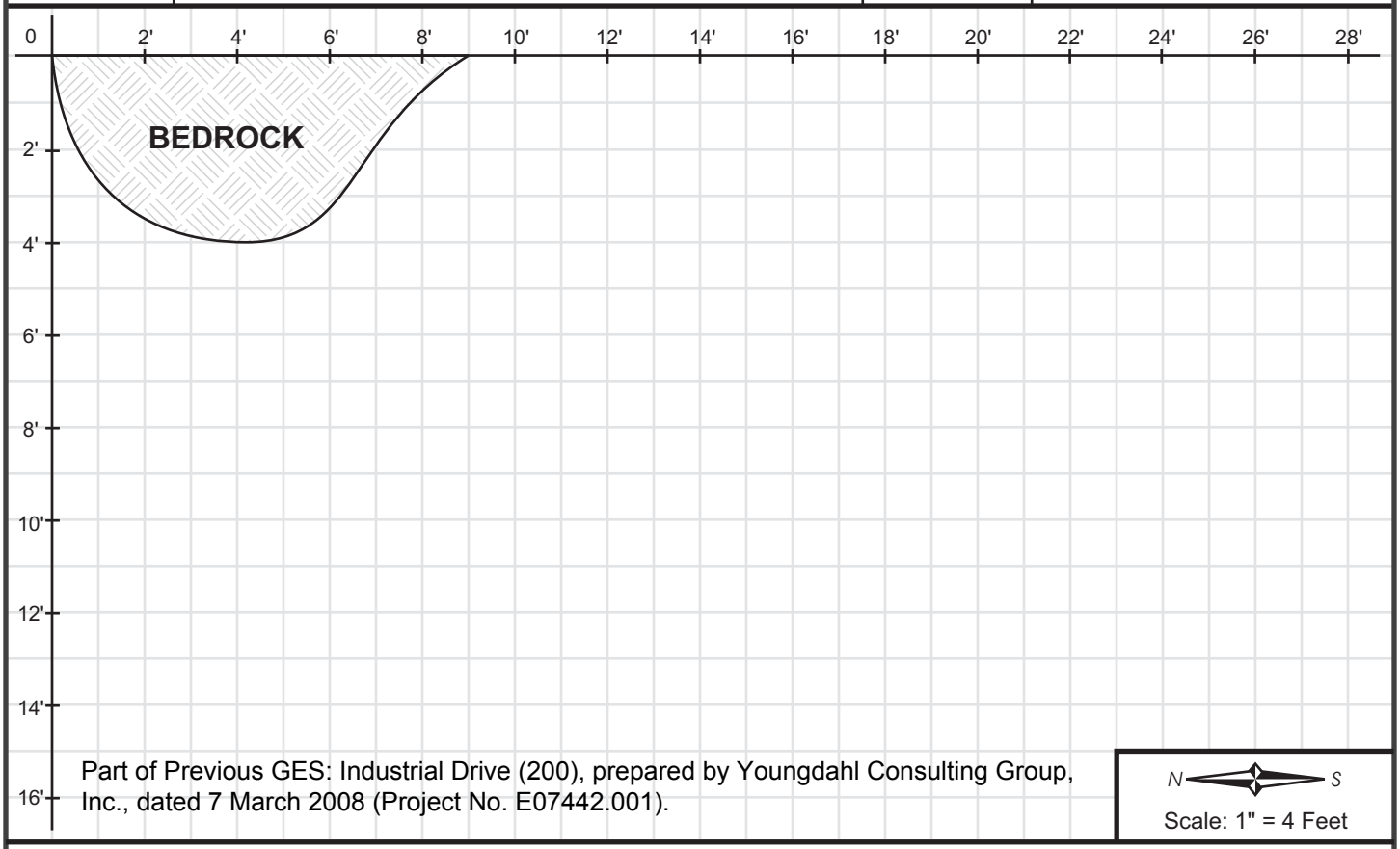
Placerville, California

FIGURE A-9

Logged By: **MSS**	Date: **29 January 2008**	Elevation: **~ 1765'**	Pit No. **TP-7**
Equipment: **CASE Super K Backhoe with 24" Bucket**		Pit Orientation: **N - S**	

Depth (Feet)	Geotechnical Description & Unified Soil Classification	Sample	Tests & Comments
@ 0' - 2'	Red brown **BEDROCK**, completely weathered, weakly indurated		
@ 2' - 4'	*Grades to highly weathered, moderately indurated*		*Rust Staining*
	Test pit terminated at 4' (practical refusal) No free groundwater encountered No caving noted		



Part of Previous GES: Industrial Drive (200), prepared by Youngdahl Consulting Group, Inc., dated 7 March 2008 (Project No. E07442.001).

N S

Scale: 1" = 4 Feet

Note: The test pit log indicates subsurface conditions only at the specific location and time noted. Subsurface conditions, including groundwater levels, at other locations of the subject site may differ significantly from conditions which, in the opinion of Youngdahl Consulting Group, Inc., exist at the sampling locations, Note, too, that the passage of time may affect conditions at the sampling locations.

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EXPLORATORY TEST PIT LOG

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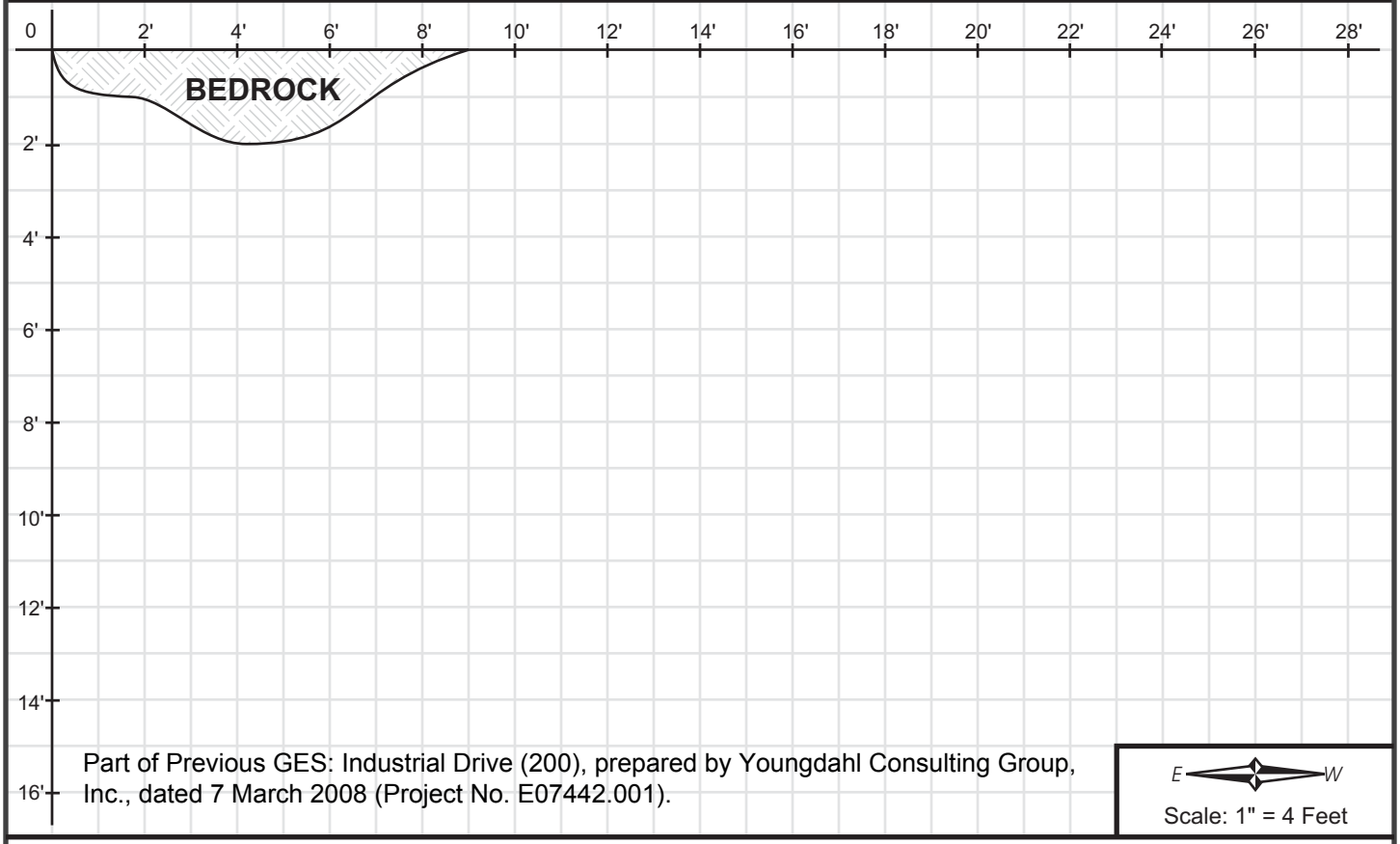
Placerville, California

FIGURE A-10

Logged By: **MSS**	Date: **29 January 2008**	Elevation: **~ 1768'**	Pit No. **TP-8**
Equipment: **CASE Super K Backhoe with 24" Bucket**		Pit Orientation: **E - W**	

Depth (Feet)	Geotechnical Description & Unified Soil Classification	Sample	Tests & Comments
@ 0' - 2'	Red brown **BEDROCK**, highly weathered, moderately indurated		
	Test pit terminated at 2' (practical refusal) No free groundwater encountered No caving noted		



Part of Previous GES: Industrial Drive (200), prepared by Youngdahl Consulting Group, Inc., dated 7 March 2008 (Project No. E07442.001).

E W

Scale: 1" = 4 Feet

Note: The test pit log indicates subsurface conditions only at the specific location and time noted. Subsurface conditions, including groundwater levels, at other locations of the subject site may differ significantly from conditions which, in the opinion of Youngdahl Consulting Group, Inc., exist at the sampling locations, Note, too, that the passage of time may affect conditions at the sampling locations.

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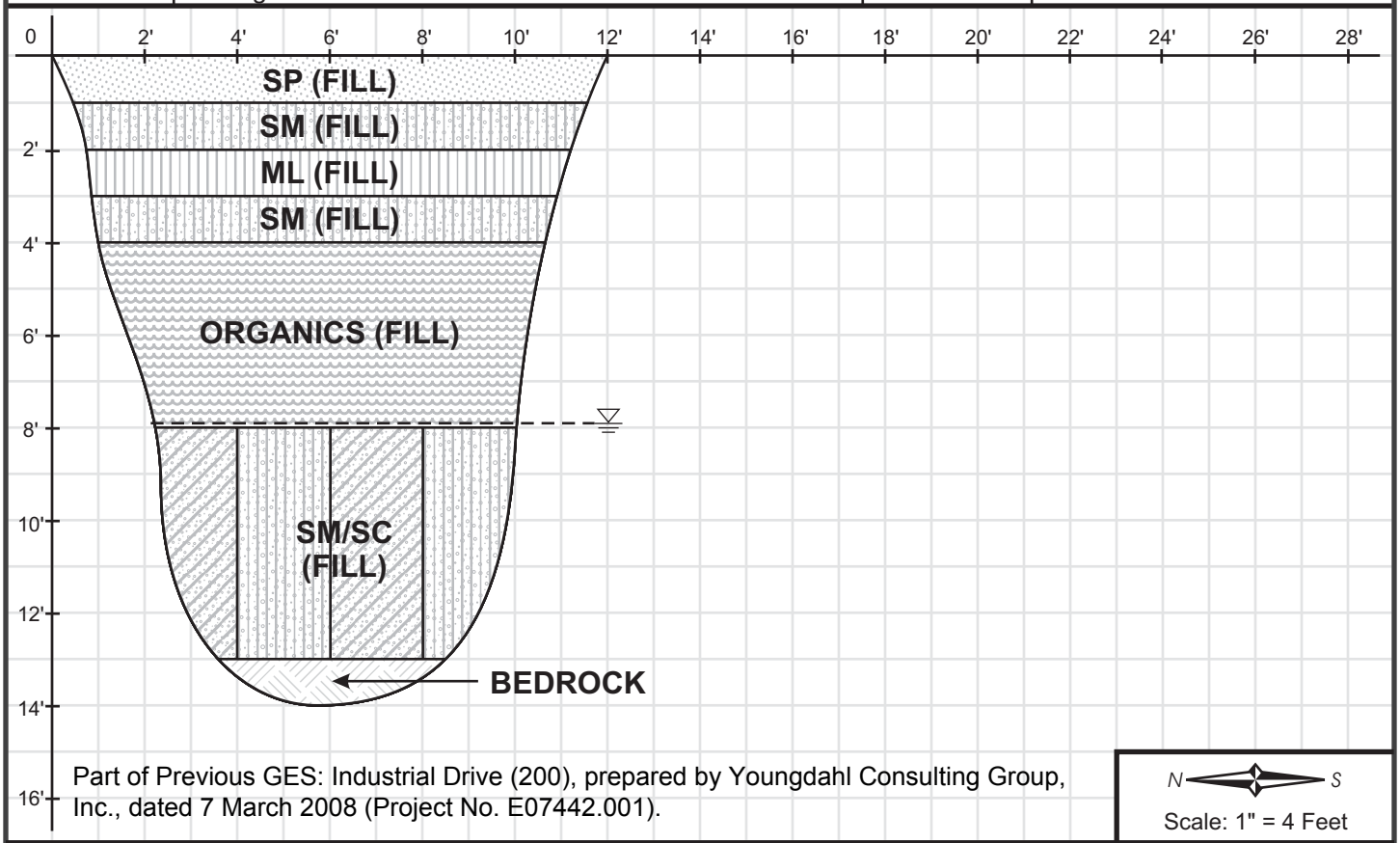
FIGURE A-11

Logged By: **MSS**	Date: **29 January 2008**	Elevation: **~ 1775'**	Pit No. **TP-9**
Equipment: **CASE Super K Backhoe with 24" Bucket**		Pit Orientation: **N - S**	

Depth (Feet)	Geotechnical Description & Unified Soil Classification	Sample	Tests & Comments
@ 0' - 1'	Light brown **SAND (SP)** with gravel, loose, moist (FILL)		
@ 1' - 2'	Red brown silty **SAND (SM)**, medium dense, slightly moist (FILL)		
@ 2' - 3'	Dark brown sandy **SILT (ML)**, soft, slightly moist (FILL)		*Topsoil*
@ 3' - 4'	Red brown silty **SAND (SM)**, medium dense, slightly moist (FILL)		
@ 4' - 8'	Black **ORGANICS/DEBRIS**, soft, wet (FILL)		*Strong organic odor*
@ 8' - 13'	Blue gray silty **SAND/** clayey **SAND (SM/SC)**, loose, wet (FILL)		
@ 13' - 14'	Blue gray **BEDROCK**, intensely weathered, friable		
	Test pit terminated at 14' (maximum reach) Groundwater encountered at 8' Caving noted at 8'		



Part of Previous GES: Industrial Drive (200), prepared by Youngdahl Consulting Group, Inc., dated 7 March 2008 (Project No. E07442.001).

N S

Scale: 1" = 4 Feet

Note: The test pit log indicates subsurface conditions only at the specific location and time noted. Subsurface conditions, including groundwater levels, at other locations of the subject site may differ significantly from conditions which, in the opinion of Youngdahl Consulting Group, Inc., exist at the sampling locations, Note, too, that the passage of time may affect conditions at the sampling locations.

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EXPLORATORY TEST PIT LOG

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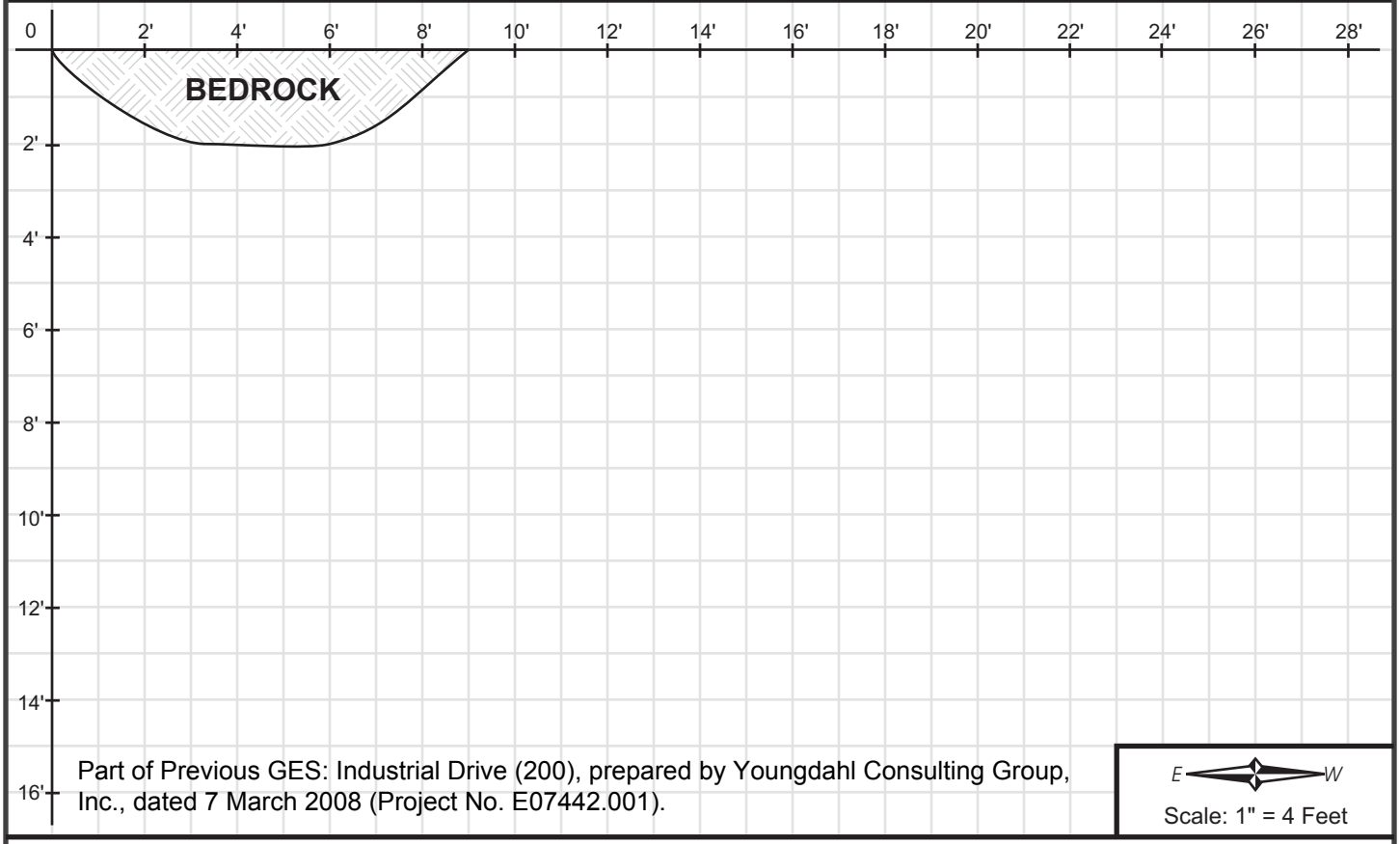
FIGURE A-12

Logged By: **MSS**	Date: **29 January 2008**	Elevation: **~ 1790'**	Pit No. **TP-10**
Equipment: **CASE Super K Backhoe with 24" Bucket**		Pit Orientation: **E - W**	

Depth (Feet)	Geotechnical Description & Unified Soil Classification	Sample	Tests & Comments
@ 0' - 2'	Yellow brown **BEDROCK**, completely weathered, weakly indurated		
	Test pit terminated at 2' (practical refusal) No free groundwater encountered No caving noted		



Part of Previous GES: Industrial Drive (200), prepared by Youngdahl Consulting Group, Inc., dated 7 March 2008 (Project No. E07442.001).

E W

Scale: 1" = 4 Feet

Note: The test pit log indicates subsurface conditions only at the specific location and time noted. Subsurface conditions, including groundwater levels, at other locations of the subject site may differ significantly from conditions which, in the opinion of Youngdahl Consulting Group, Inc., exist at the sampling locations, Note, too, that the passage of time may affect conditions at the sampling locations.

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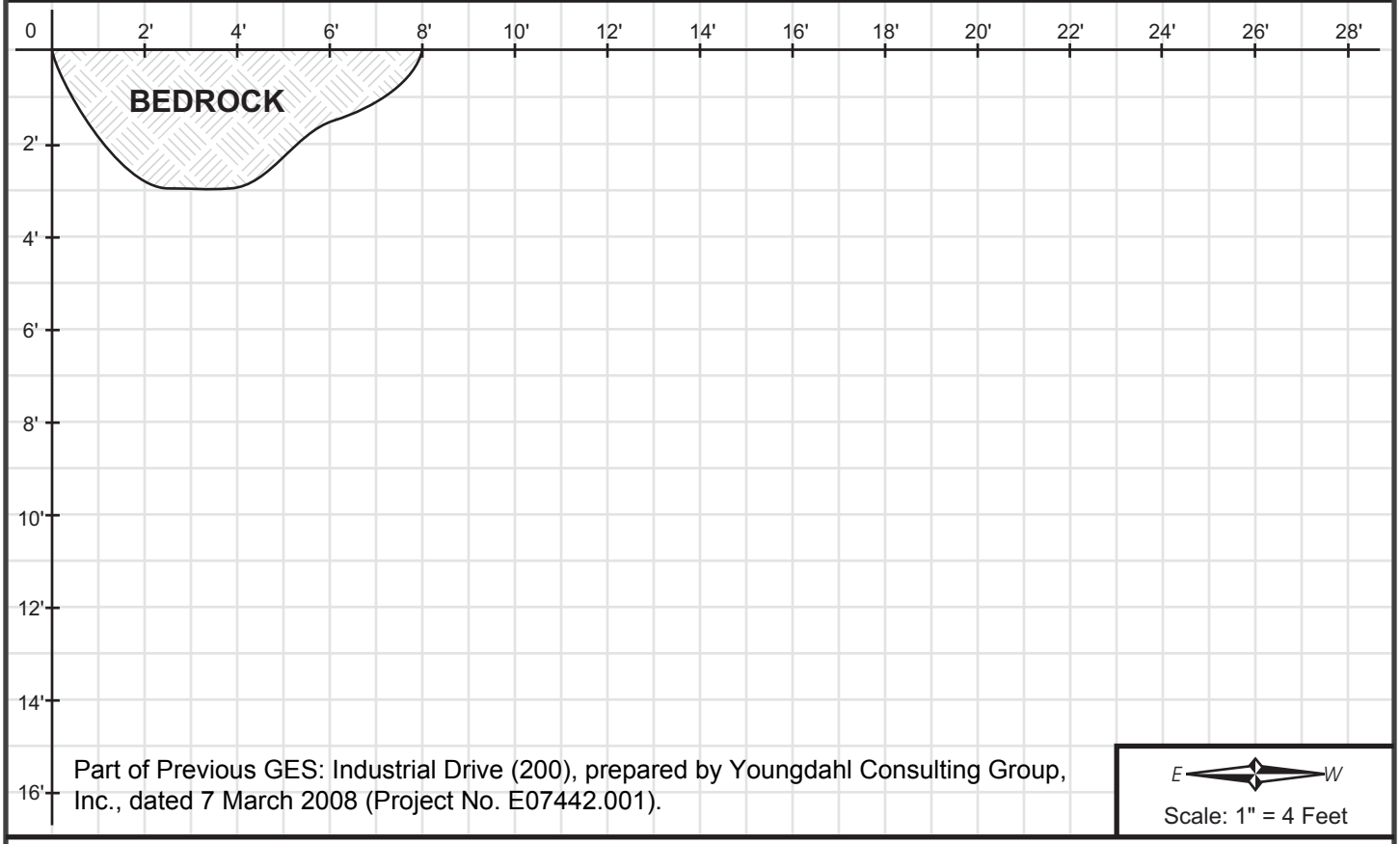
EXPLORATORY TEST PIT LOG

El Droado County Sheriff Headquarters
Placerville, California

FIGURE A-13

Logged By: **MSS**	Date: **29 January 2008**	Elevation: **~ 1780'**	Pit No. **TP-11**
Equipment: **CASE Super K Backhoe with 24" Bucket**		Pit Orientation: **E - W**	

Depth (Feet)	Geotechnical Description & Unified Soil Classification	Sample	Tests & Comments
@ 0' - 3'	Light yellow brown **BEDROCK**, completely weathered, weakly indurated		
	Test pit terminated at 3' (practical refusal) No free groundwater encountered No caving noted		



Part of Previous GES: Industrial Drive (200), prepared by Youngdahl Consulting Group, Inc., dated 7 March 2008 (Project No. E07442.001).

E W

Scale: 1" = 4 Feet

Note: The test pit log indicates subsurface conditions only at the specific location and time noted. Subsurface conditions, including groundwater levels, at other locations of the subject site may differ significantly from conditions which, in the opinion of Youngdahl Consulting Group, Inc., exist at the sampling locations, Note, too, that the passage of time may affect conditions at the sampling locations.

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EXPLORATORY TEST PIT LOG

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Placerville, California

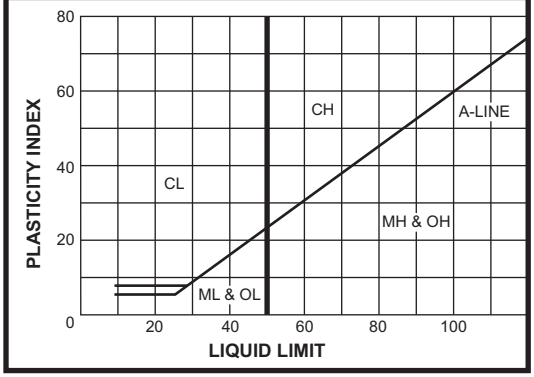
FIGURE A-14

UNIFIED SOIL CLASSIFICATION SYSTEMS

MAJOR DIVISION			SYMBOLS	TYPICAL NAMES
COARSE GRAINED SOILS Over 50% > #200 sieve	**GRAVELS** Over 50% > #4 sieve	Clean **GRAVELS** With Little Or No Fines	GW	Well graded **GRAVELS**, **GRAVEL-SAND** mixtures
			GP	Poorly graded **GRAVELS**, **GRAVEL-SAND** mixtures
		GRAVELS With Over 12% Fines	GM	Silty **GRAVELS**, poorly graded **GRAVEL-SAND-SILT** mixtures
			GC	Clayey **GRAVELS**, poorly graded **GRAVEL-SAND-CLAY** mixtures
	SANDS Over 50% < #4 sieve	Clean **SANDS** With Little Or No Fines	SW	Well graded **SANDS**, gravelly **SANDS**
			SP	Poorly graded **SANDS**, gravelly **SANDS**
		SANDS With Over 12% Fines	SM	Silty **SANDS**, poorly graded **SAND-SILT** mixtures
			SC	Clayey **SANDS**, poorly graded **SAND-CLAY** mixtures
FINE GRAINED SOILS Over 50% < #200 sieve	**SILTS & CLAYS** Liquid Limit < 50		ML	Inorganic **SILTS**, silty or clayey fine **SANDS**, or clayey **SILTS** with plasticity
			CL	Inorganic **CLAYS** of low to medium plasticity, gravelly, sandy, or silty **CLAYS**, lean **CLAYS**
			OL	Organic **CLAYS** and organic silty **CLAYS** of low plasticity
	SILTS & CLAYS Liquid Limit > 50		MH	Inorganic **SILTS**, micaceous or diamacious fine sandy or silty soils, elastic **SILTS**
			CH	Inorganic **CLAYS** of high plasticity, fat **CLAYS**
			OH	Organic **CLAYS** of medium to high plasticity, organic **SILTS**
HIGHLY ORGANIC CLAYS			PT	PEAT & other highly organic soils

PLASTICITY CHART

USED FOR CLASSIFICATION OF FINE GRAINED SOILS



SAMPLE DRIVING RECORD

BLOWS PER FOOT	DESCRIPTION
25	25 Blows drove sampler 12 inches, after initial 6 inches of seating
50/7"	50 Blows drove sampler 7 inches, after initial 6 inches of seating
50/3"	50 Blows drove sampler 3 inches during or after initial 6 inches of seating

Note: To avoid damage to sampling tools, driving is limited to 50 blows per 6 inches during or after seating interval.

SOIL GRAIN SIZE

U.S. STANDARD SIEVE	6"	3"	¾"	4	10	40	200	
	BOULDER	COBBLE	GRAVEL		SAND			SILT / CLAY
			COARSE	FINE	COARSE	MEDIUM	FINE	
SOIL GRAIN SIZE IN MILLIMETERS	150	75	19	4.75	2.0	.425	0.075	0.002

KEY TO PIT & BORING SYMBOLS

- Standard Penetration test
- 2.5" O.D. Modified California Sampler
- 3" O.D. Modified California Sampler
- Shelby Tube Sampler
- 2.5" Hand Driven Liner
- Bulk Sample
- Water Level At Time Of Drilling
- Water Level After Time Of Drilling
- P — Perched Water

KEY TO PIT & BORING SYMBOLS

- Joint
- Foliation
- Water Seepage
- NFWE — No Free Water Encountered
- FWE — Free Water Encountered
- REF — Sampling Refusal
- DD — Dry Density (pcf)
- MC — Moisture Content (%)
- LL — Liquid Limit
- PI — Plasticity Index
- PP — Pocket Penetrometer
- UCC — Unconfined Compression (ASTM D2166)
- TVS — Pocket Torvane Shear
- EI — Expansion Index (ASTM D4829)
- Su — Undrained Shear Strength

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Project No.: E13310.005

September 2014

SOIL CLASSIFICATION CHART AND LOG EXPLANATION
El Droado County Sheriff Headquarters
Placerville, California

FIGURE A-15

APPENDIX B

Laboratory Testing

Direct Shear Test
Modified Proctor Test
R-Value Test
Corrosivity Tests

Introduction

Our laboratory testing program for this evaluation included numerous visual classifications, direct shear, modified proctor, resistance value, and corrosivity tests. The following paragraphs describe our procedures associated with each type of test. Graphical results of certain laboratory tests are enclosed in this appendix. The contents of this appendix shall be integrated with the Geotechnical Engineering Study Update of which it is a part. They shall not be used in whole or in part as a sole source for information or recommendations regarding the subject site.

Laboratory Testing Procedures

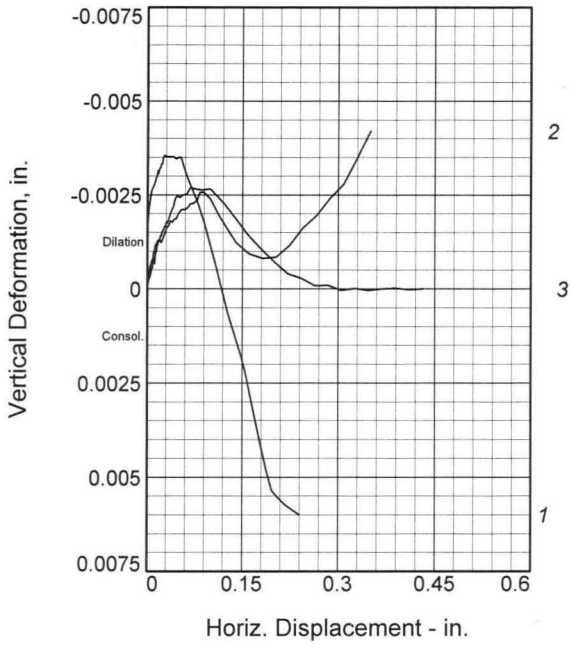
Visual Classification: Visual soil classifications were conducted on all samples in the field and on selected samples in our laboratory. All soils were classified in general accordance with the Unified Soil Classification System, which includes color, relative moisture content, primary soil type (based on grain size), and any accessory soil types. The resulting soil classifications are presented on the exploration logs in Appendix A.

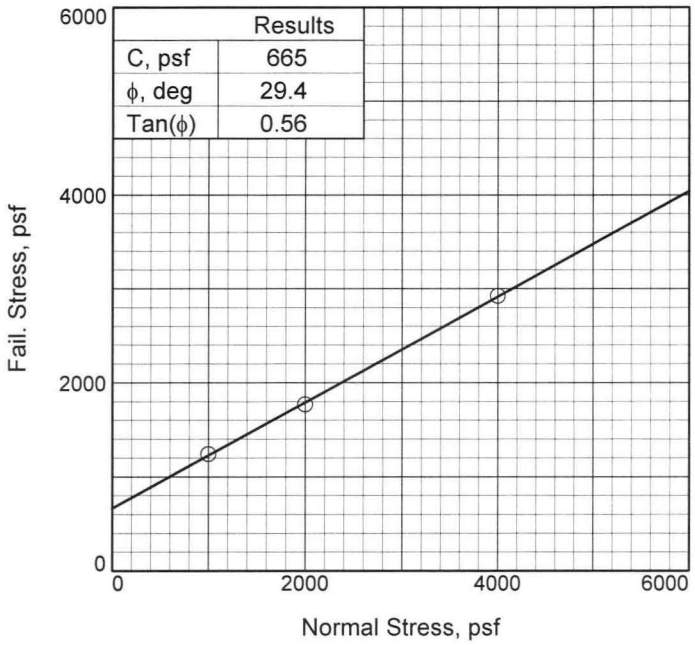
Soil Strength Determination: The strength parameters of the foundation soils were based on a direct shear test (ASTM D3080) performed on a representative remolded sample of the near-surface soils. The results of this test are presented on Figure B-1, this Appendix.

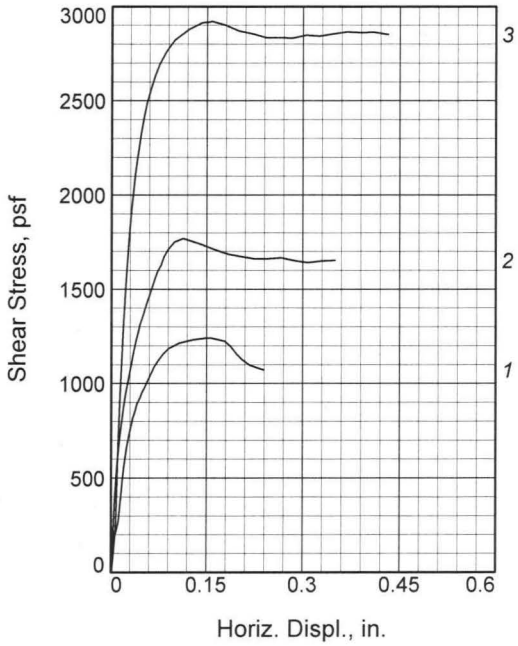
Maximum Dry Density Determination: A modified proctor test (ASTM D1557) was conducted to provide the optimum moisture and maximum dry density on the near surface material. The results of this test are presented on Figure B-2, this Appendix.

Resistance Value Determination: An R-Value test (California Test Method 301-F or ASTM D2844) was performed to obtain asphalt concrete pavement design parameters. The results of this test are presented on Figure B-3, this Appendix.

Corrosivity Tests: A corrosivity test typically comprises individual measurements of pH, electrical resistivity, sulfate content, and chloride content, which together indicate the corrosiveness of a soil. Corrosivity tests were performed on selected samples by an independent analytical laboratory working under subcontract to Youngdahl Consulting Group, Inc. The results of these tests are presented on the enclosed analytical certificates, this Appendix.







Sample No.		1	2	3
Initial	Water Content, %	14.0	14.0	14.0
	Dry Density, pcf	103.5	103.5	103.5
	Saturation, %	65.2	65.2	65.2
	Void Ratio	0.5505	0.5505	0.5505
	Diameter, in.	2.500	2.500	2.500
	Height, in.	1.000	1.000	1.000
At Test	Water Content, %	20.8	19.7	19.2
	Dry Density, pcf	104.6	106.4	107.5
	Saturation, %	99.9	99.8	99.9
	Void Ratio	0.5344	0.5082	0.4928
	Diameter, in.	2.500	2.500	2.500
	Height, in.	0.990	0.973	0.963
Normal Stress, psf		1000	2000	4000
Fail. Stress, psf		1241	1768	2921
Displacement, in.		0.158	0.113	0.158
Ult. Stress, psf				
Displacement, in.				
Strain rate, in./min.		0.003	0.003	0.003

Sample Type: Remolded
Description: Brown Silty SAND
w/ trace gravel

Specific Gravity= 2.57
Remarks: Remolded to 90%

Client:

Project: INDUSTRIAL DRIVE (200) GES

Source of Sample: NATIVE **Depth:** 0-3'
Sample Number: BK 1
Proj. No.: E07442.001 **Date:** 2/6/2008

DIRECT SHEAR TEST REPORT

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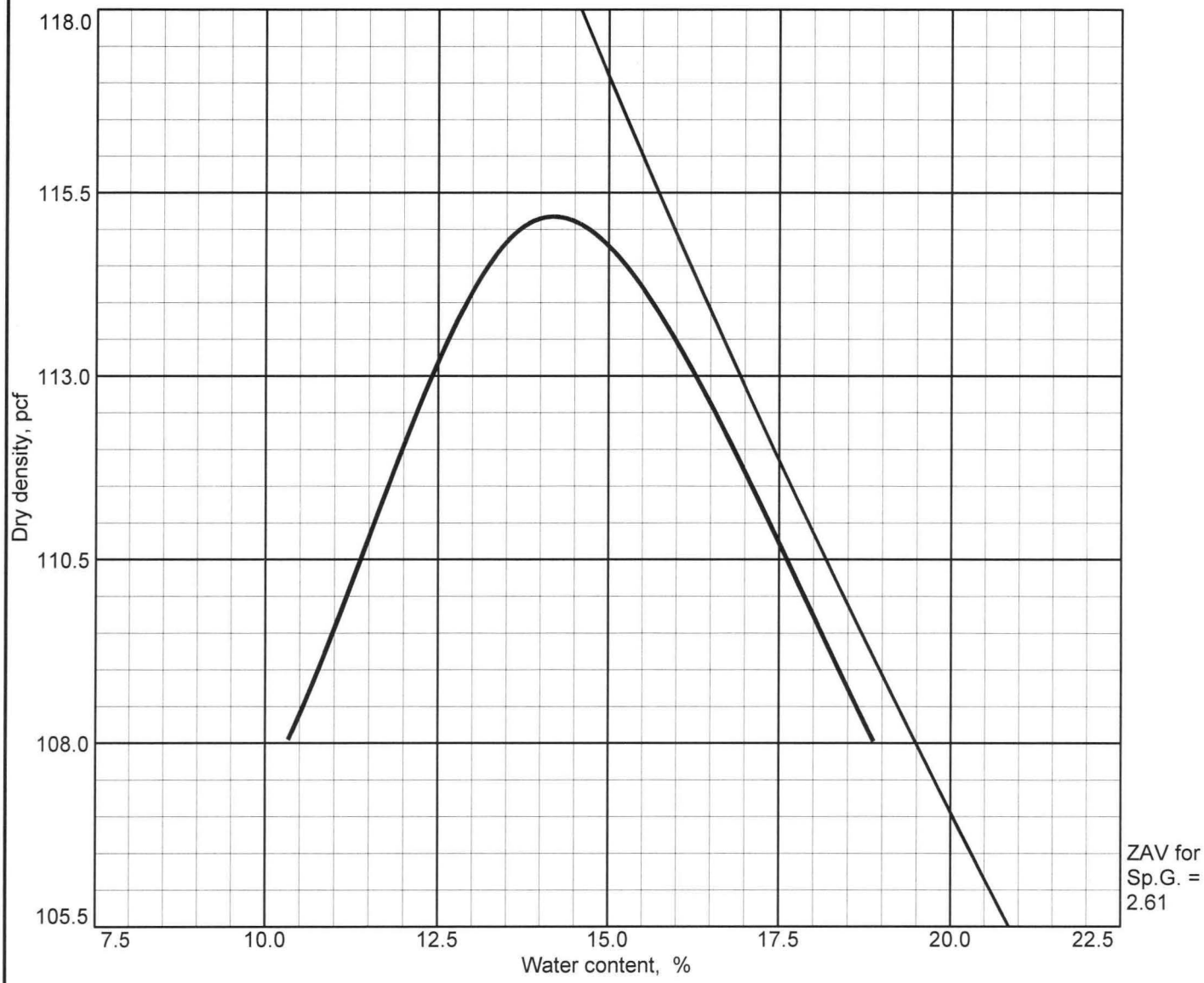
Figure B-1

Tested By: JSP **Checked By:** BLM

COMPACTION TEST REPORT



Test specification: ASTM D 1557-00 Method A Modified

Elev/ Depth	Classification		Nat. Moist.	Sp.G.	LL	PI	% > No.4	% < No.200
	USCS	AASHTO						
0-3'	SM			2.57				

TEST RESULTS	MATERIAL DESCRIPTION
Maximum dry density = 115.0 pcf Optimum moisture = 14.0 %	Brown Silty SAND w/ trace gravel

Project No. E07442.001 **Client:**

Project: INDUSTRIAL DRIVE (200) GES

● **Source:** NATIVE **Sample No.:** BK 1 **Elev./Depth:** 0-3'

Remarks:

YOUNGDAHL CONSULTING GROUP, INC.

El Dorado Hills, California

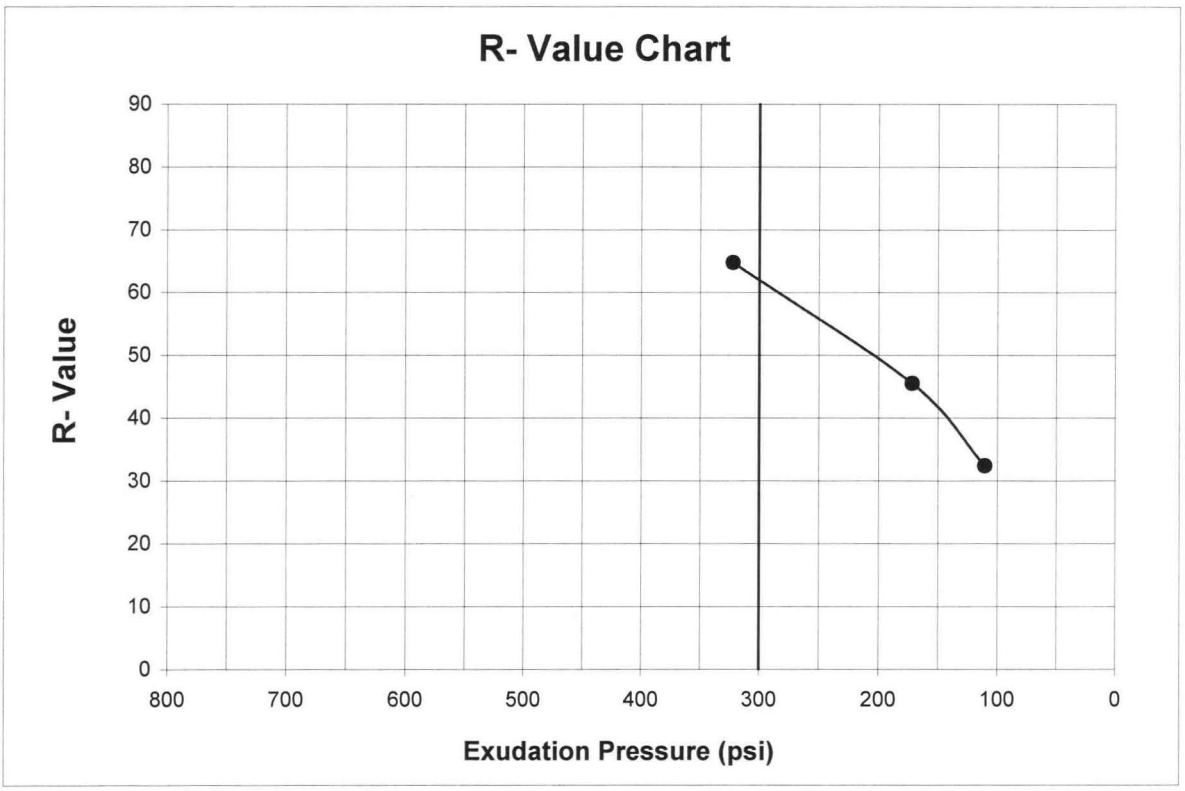
Figure B-2

RESISTANCE VALUE TEST (Cal Test 301, ASTM D2844)

Sample I.D.: BK 1 Depth: 0-3'

Description: Brown Silty SAND w/ trace gravel

Test Specimen	A	K	G
Moisture Content (%)	18.7	17.5	16.3
Dry Density (pcf)	108.1	111.2	110.4
Expansion Dial (0.0001")	16	25	66
Expansion Pressure (psf)	69.3	108.3	285.8
Exudation Pressure (psi)	110.6	171.9	322.3
Resistance Value "R"	32	46	65
R Value at 300 psi Exudation Pressure:			**62**



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INDUSTRIAL DRIVE (200)

PROJECT NO	DATE
E07442.001	March 2008

FIGURE NO
B-3

Sunland Analytical

11353 Pyrites Way, Suite 4
Rancho Cordova, CA 95670
(916) 852-8557

Date Reported 02/08/2008
Date Submitted 02/05/2008

To: Megan Sizelove
Youngdahl Consulting Group
1234 Glenhaven Ct.
El Dorado Hills,CA 95762

From: Gene Oliphant, Ph.D. \ Randy Horney
General Manager \ Lab Manager

The reported analysis was requested for the following location:
Location : E07442.001 INDUST.DR Site ID : BK1.
Thank you for your business.

* For future reference to this analysis please use SUN # 52518-105021.

EVALUATION FOR SOIL CORROSION

Soil pH	6.34		
Minimum Resistivity	2.95 ohm-cm (x1000)		
Chloride	12.0 ppm	00.00120	%
Sulfate	6.7 ppm	00.00067	%

METHODS
pH and Min.Resistivity CA DOT Test #643
Sulfate CA DOT Test #417, Chloride CA DOT Test #422

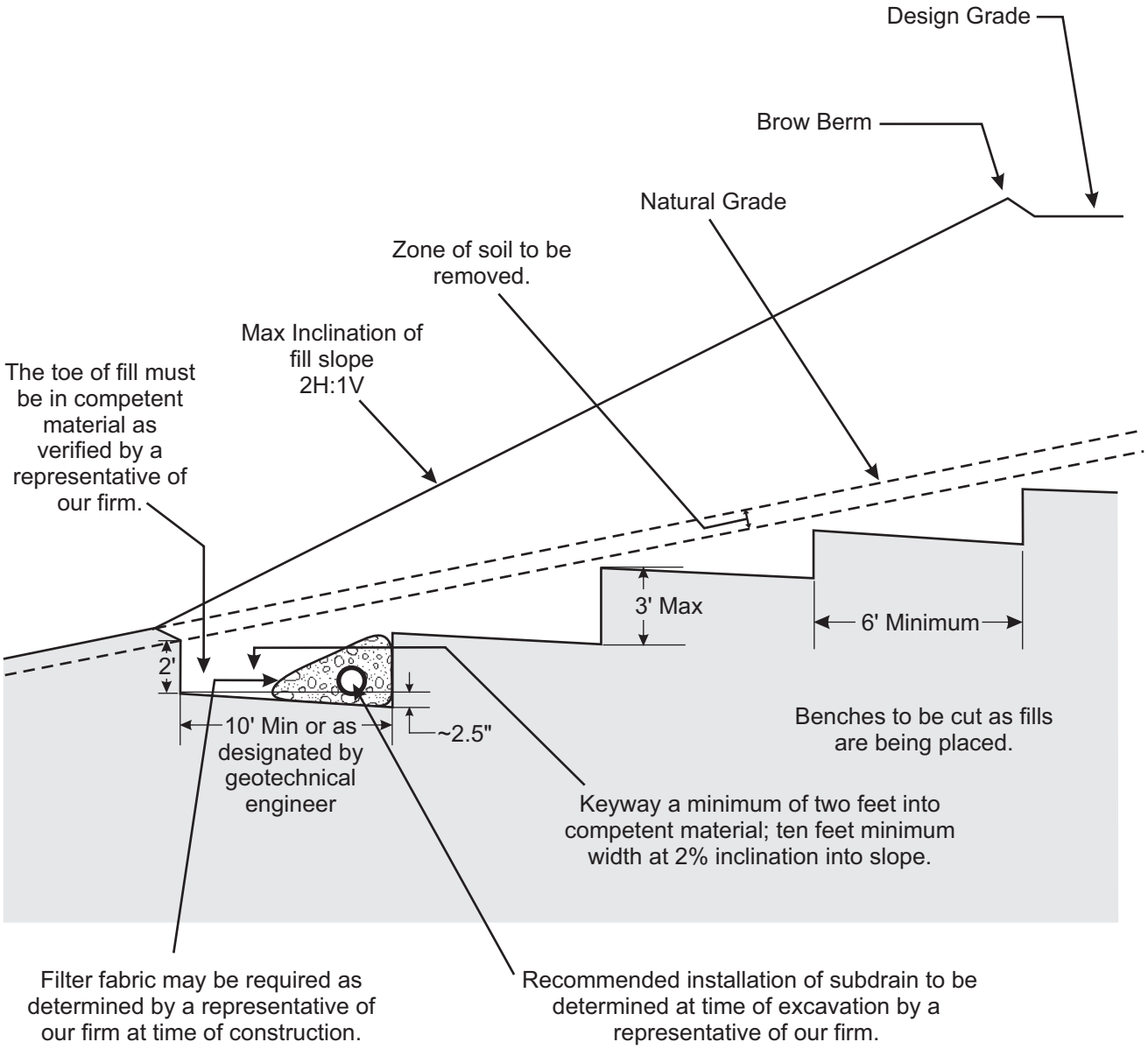
APPENDIX C

Details

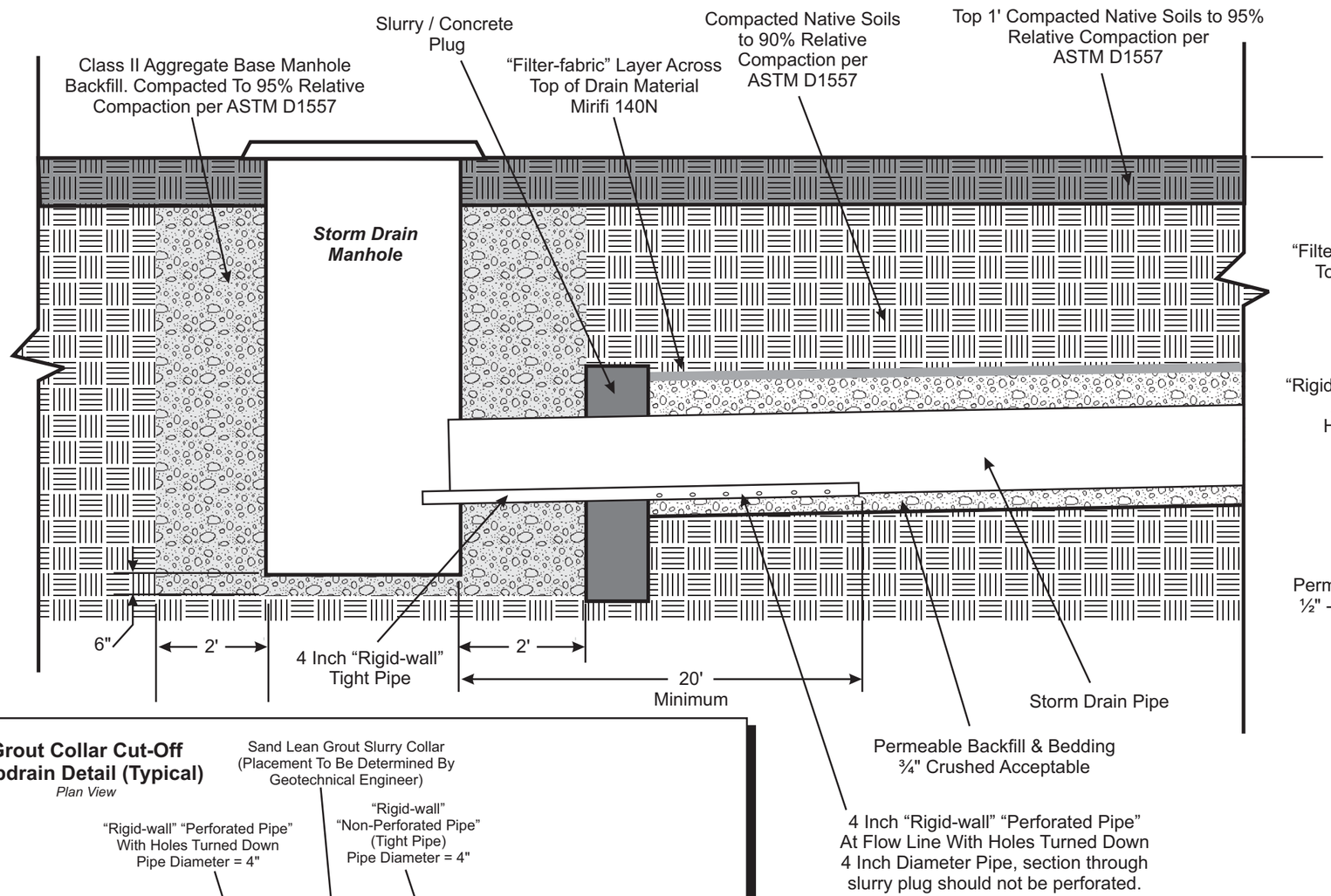
Keyway and Bench with Drain
Plug and Drain
Site Wall Drainage
Basement Wall Drainage
Subdrain

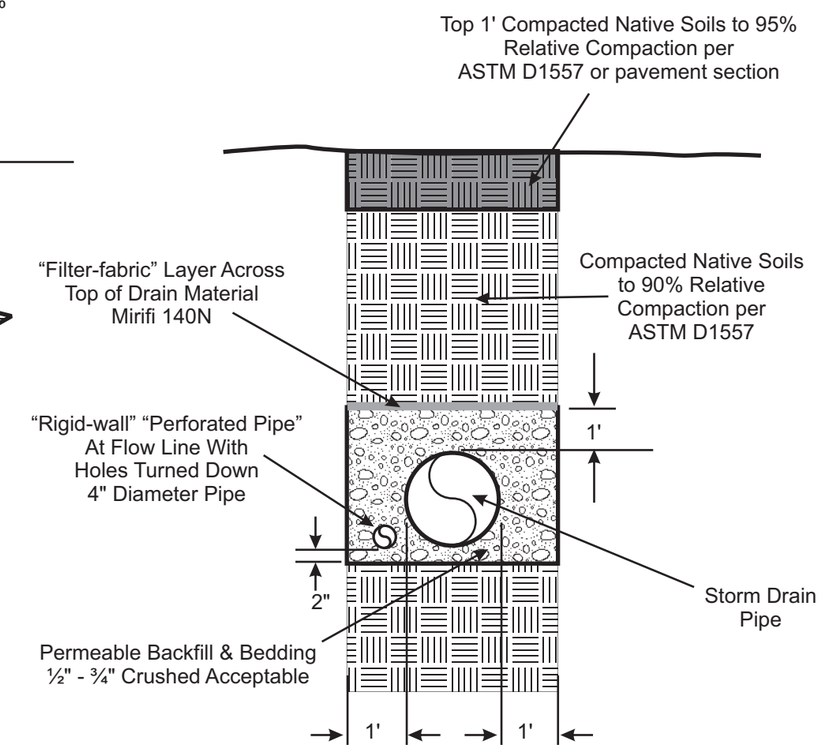
PLACEMENT OF FILL ON NATURAL SLOPE
(Typical)

All keyways should be observed and approved prior to placement of fill.
A keyway is required by CBC for fills on natural slopes of 5H:1V or steeper.



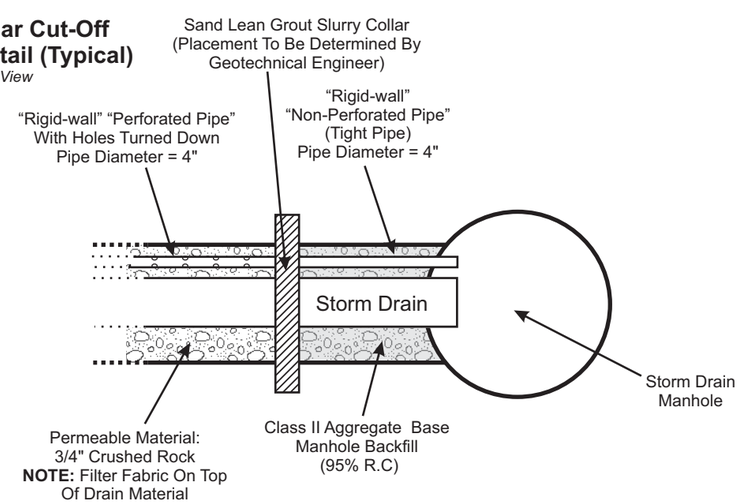
YOUNGDAHL CONSULTING GROUP, INC. GEOTECHNICAL ▪ ENVIRONMENTAL ▪ MATERIALS TESTING	Project No.: E13310.005	KEYWAY & BENCH WITH DRAIN	FIGURE
	Sept 2014	El Dorado County Sheriff Headquarters Placerville, California	C-1





Grout Collar Cut-Off Subdrain Detail (Typical)

Plan View



Notes: *Slope trench and "rigid-wall" pipes at least 1% gradient to drain.*

Notes: ***1. Slope trench and "rigid-wall" pipes at least 1% gradient to drain.***
2. Washed clean permeable material.
3. Slurry collar to extend into trench sidewalls and to top of pipe envelope.

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Project No.: E13310.005

Sept 2014

TYPICAL STORM DRAIN / SUB-DRAIN DETAIL

El Dorado County Sheriff Headquarters

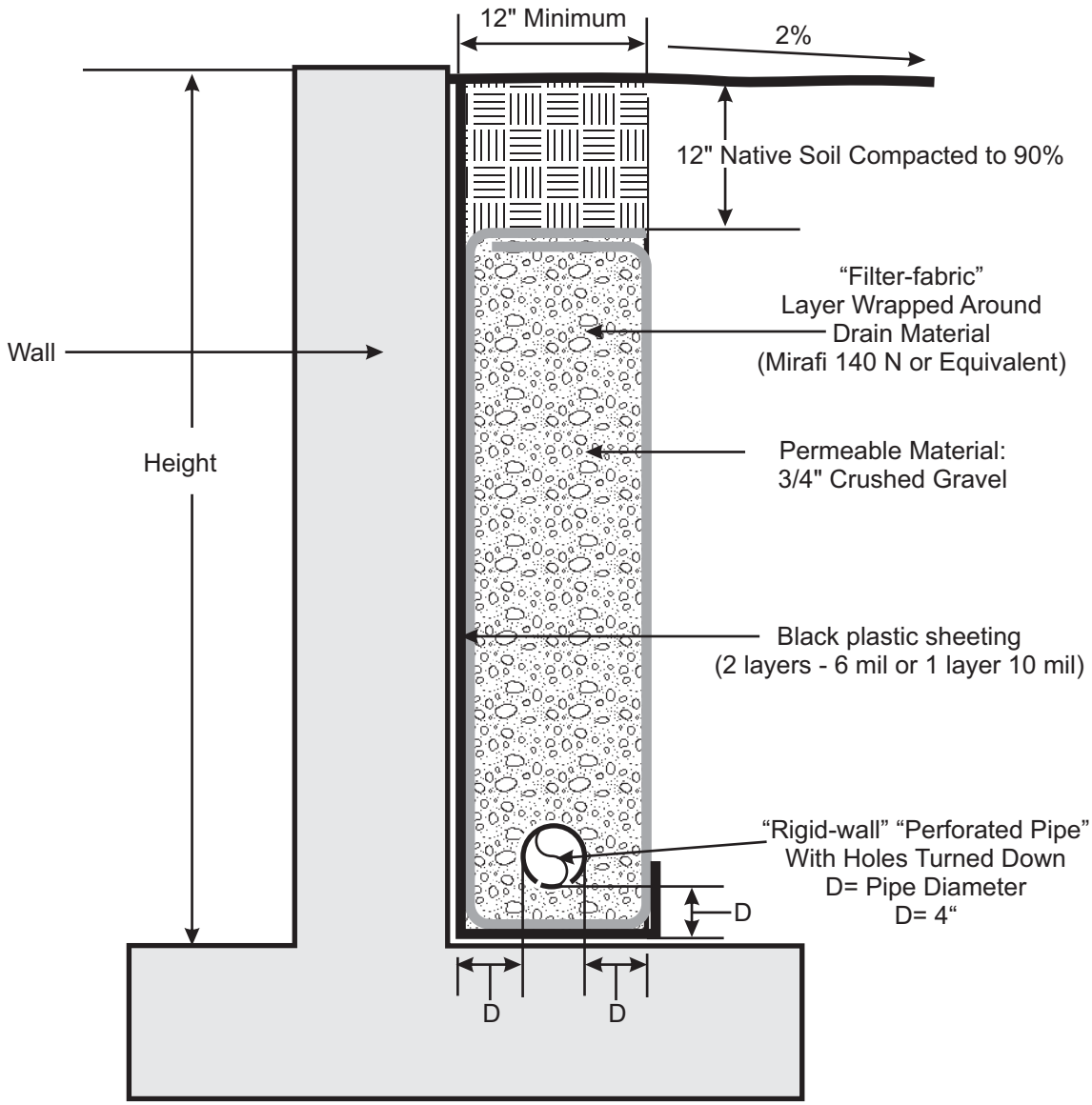
Placerville, California

FIGURE

C-2

Retaining Wall With "Perforated Pipe Sub-Drain"

(Typical Cross Section)

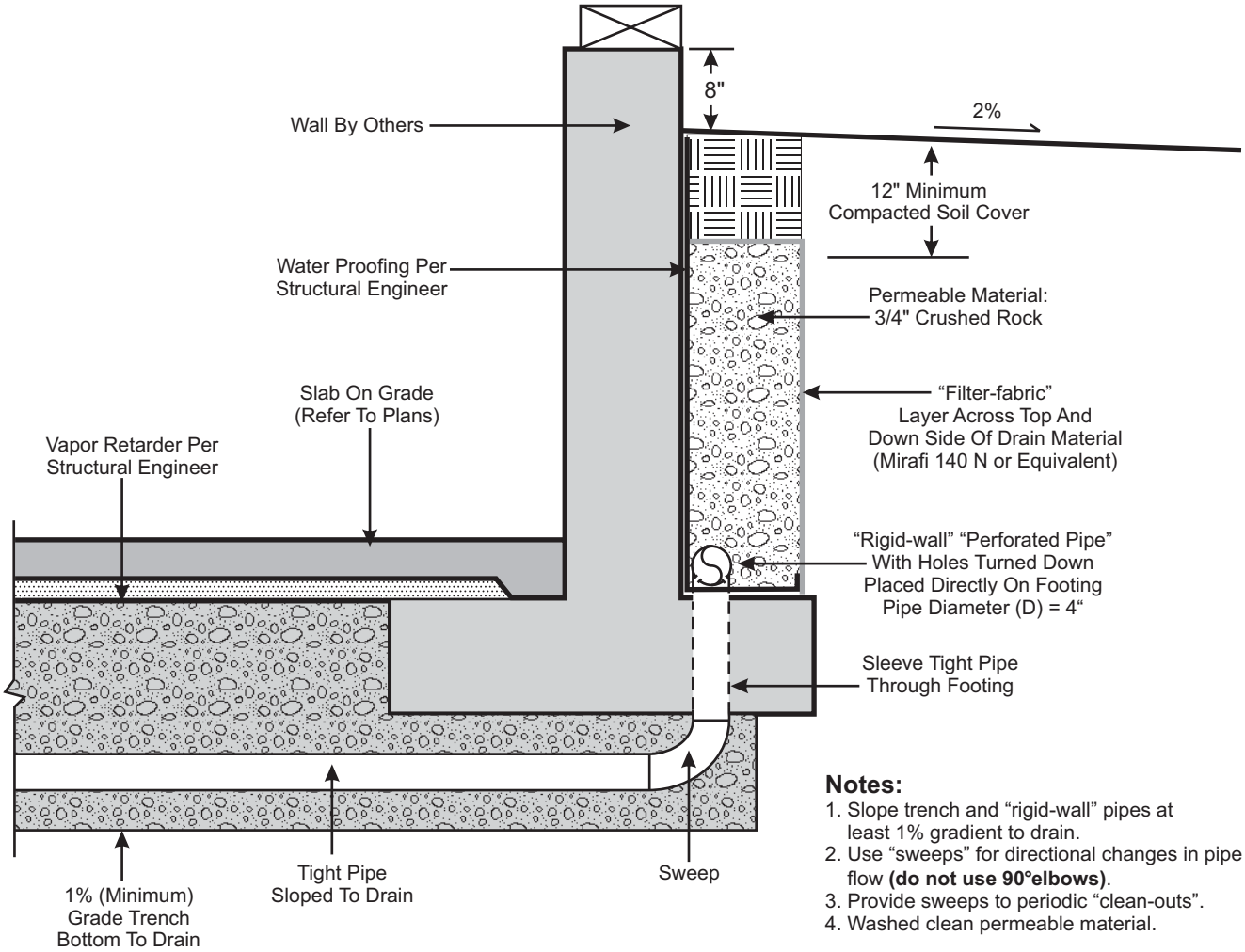


Notes:
1. Slope trench and "rigid-wall" pipes at least 1% gradient to drain to an appropriate outfall area away from residence.
2. Use "sweeps" for directional changes in pipe flow **(do not use 90°elbows)**.
3. Provide periodic "clean-outs".
4. Washed clean permeable material.

Not To Scale

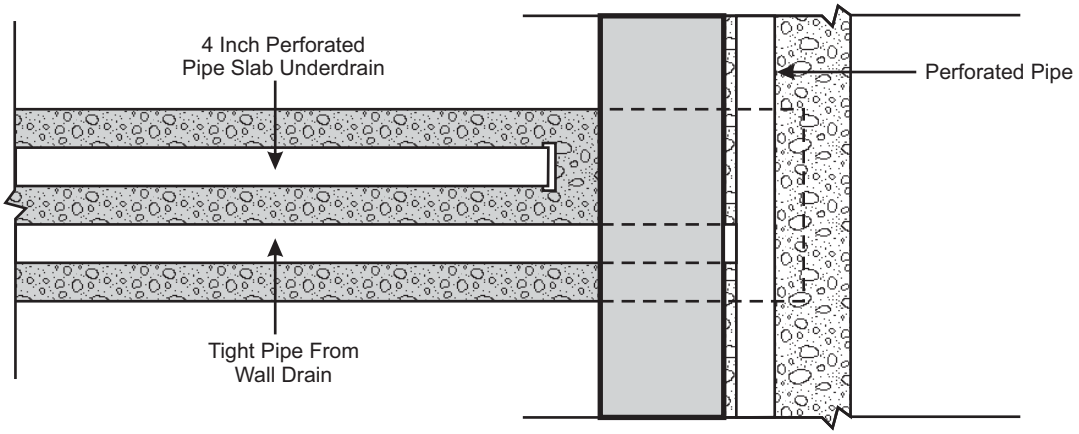
YOUNGDAHL CONSULTING GROUP, INC. GEOTECHNICAL ▪ ENVIRONMENTAL ▪ MATERIALS TESTING	Project No.: E13310.005	**RETAINING WALL DRAIN DETAIL**	**FIGURE**
	Sept 2014	**El Dorado County Sheriff Headquarters** Placerville, California	**C-3**

Profile View
(Typical)

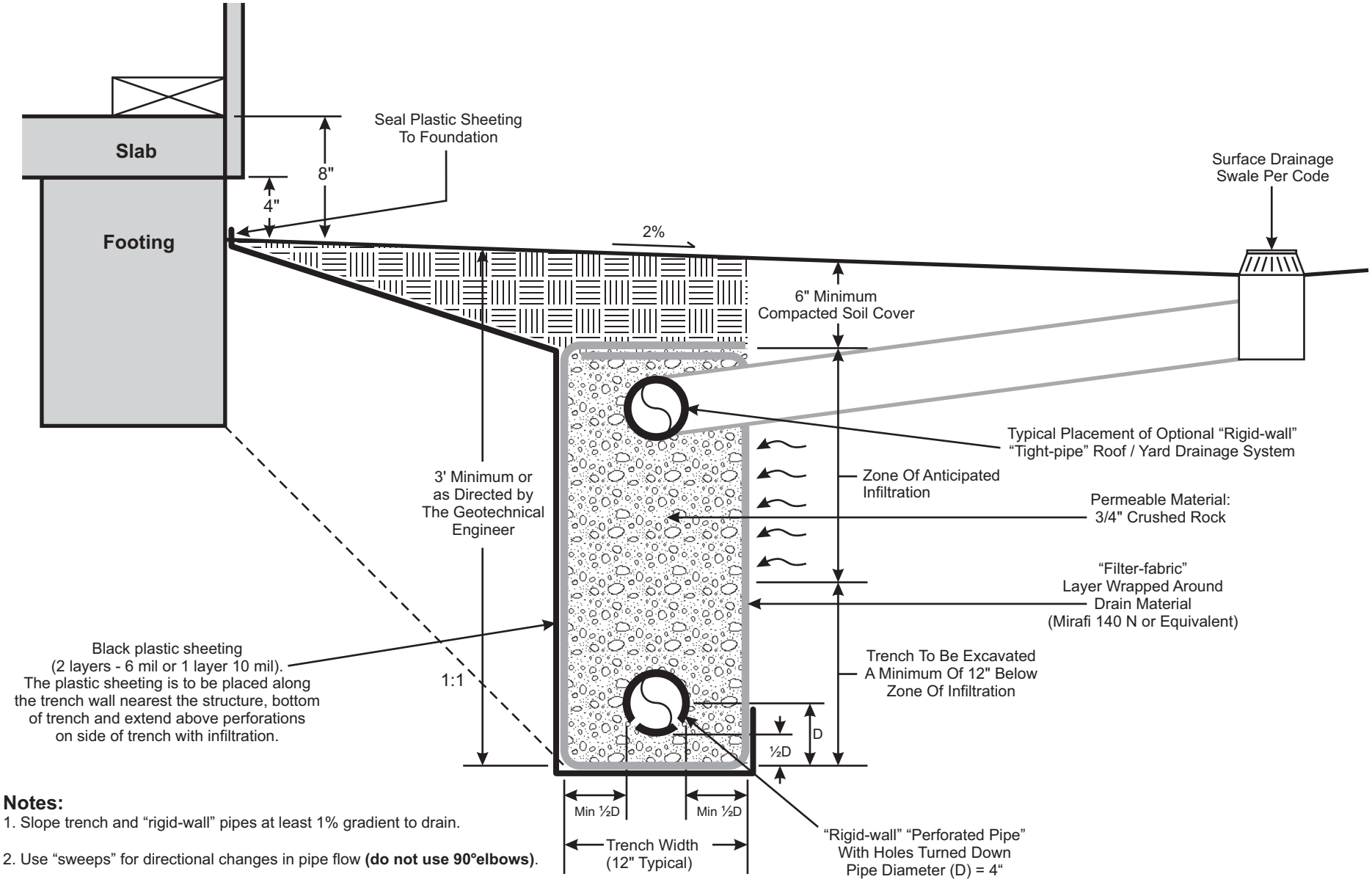


Notes:
1. Slope trench and "rigid-wall" pipes at least 1% gradient to drain.
2. Use "sweeps" for directional changes in pipe flow **(do not use 90°elbows)**.
3. Provide sweeps to periodic "clean-outs".
4. Washed clean permeable material.

Plan View
(Typical)



YOUNGDAHL CONSULTING GROUP, INC. GEOTECHNICAL ▪ ENVIRONMENTAL ▪ MATERIALS TESTING	Project No.: E13310.005	BASEMENT STEMWALL DRAIN	FIGURE
	Sept 2014	El Dorado County Sheriff Headquarters Placerville, California	C-4



Notes:

1. Slope trench and "rigid-wall" pipes at least 1% gradient to drain.
2. Use "sweeps" for directional changes in pipe flow **(do not use 90°elbows)**.
3. Provide sweeps to periodic "clean-outs".
4. Washed clean permeable material.

YOUNGDAHL CONSULTING GROUP, INC. GEOTECHNICAL ▪ ENVIRONMENTAL ▪ MATERIALS TESTING	Project No.: E13310.005	**SUB-DRAIN DETAIL**	**FIGURE**
	Sept 2014	**El Dorado County Sheriff Headquarters** Placerville, California	**C-5**

APPENDIX G

PHASE I ENVIRONMENTAL SITE ASSESSMENT
INDUSTRIAL DRIVE AND MERCHANDISE WAY
APN 329-240-55 (INDUSTRIAL DRIVE) AND
APN 329-391-10 (6625 MERCHANDISE WAY)
PLACERVILLE, EL DORADO COUNTY, CALIFORNIA 95667

Prepared For

El Dorado County Facility Services
3000 Fairlane Court, Suite 2
Placerville, California 95667

Prepared By

Youngdahl Consulting Group, Inc.
1234 Glenhaven Court
El Dorado Hills, California 95762

Project No. E13310.004
December 2014

YOUNGDAHL
CONSULTING GROUP, INC.

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30 YEARS

Project No. E13310.004
15 December 2014

El Dorado County Facility Services
Mr. Brent Collins
3000 Fairlane Court, Suite 2
Placerville, California 95667

Subject: **PHASE I ENVIRONMENTAL SITE ASSESSMENT**
INDUSTRIAL DRIVE AND MERCHANDISE WAY
APNS 329-240-55 (INDUSTRIAL DRIVE) AND 329-391-10 (6625 MERCHANDISE WAY), PLACERVILLE, EL DORADO COUNTY, CALIFORNIA 95667

Dear Mr. Collins:
As requested, Youngdahl Consulting Group, Inc. has performed a Phase I Environmental Site Assessment (ESA) for two El Dorado County APNs 329-240-55 on Industrial Drive and 329-391-10 at 6625 Merchandise Way in Placerville, California (subject property) in accordance with ASTM Practice E1527-13. Parcel 329-240-55 is comprised of 30.36 acres of formerly-used industrial property that is currently undeveloped and Parcel 329-391-10 is a 0.37-acre vacant lot (Figure 1 – Vicinity Map). Unauthorized dumping of garbage, old tires, automobile parts, furniture, appliances, clothing, batteries, mattresses, and vegetation and off-road-vehicle use was observed on the subject property. The property was formerly a lumber storage yard for the Old Caldor Lumber Company and a transformer storage area for Sacramento Municipal Utility District (SMUD). The subject property is owned in trust by Kimberly J. Wosnuk, Carol Jean Caldwell, and Susan M. Chavez.

It is the opinion of the Youngdahl Consulting Group Inc.'s environmental professional that this assessment has revealed no evidence of recognized environmental conditions (RECs) in connection with the subject property. This assessment did identify a HREC in regards to the Old Caldor Lumber formerly located on and adjacent to the subject property. Reportedly, approximately 8,000 gallons of possible polychlorinated biphenyls (PCBs)-containing oil from a damaged transformer was used for dust control on the yard and nearby roads. In December 1986, soil testing by California Department of Health Services revealed no evidence of PCBs or pesticide contamination. The U.S. Environmental Protection Agency (EPA) signed off on the site in February 1988 and indicated no further action was necessary under CERCLA. No controlled RECs (CRECs) were identified in connection with the property.

No additional investigation is recommended for the subject property at this time; however, due the property's historical industrial use, it is recommended that during construction activities, the site be observed for the potential indication of hazardous materials releases or disposal areas. If suspect recognized environmental conditions are identified during future construction activities, please notify Youngdahl Consulting Group, Inc. for further evaluation. We have developed and performed the all appropriate inquiries in conformance with the standards and practices set forth in 40 CFR Part 312.10.

Very truly yours,
Youngdahl Consulting Group, Inc.

Laurie B. Israel
Senior Environmental Scientist

Reviewed by:

David C. Sederquist, C.E.G., C.HG.
Senior Engineering Geologist/Hydrogeologist

CERTIFIED HYDROGEOLOGIST
DAVID C. SEDERQUIST
NO. 619
EXPIRATION DATE
9/30/2016
STATE OF CALIFORNIA

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	Appendix D	EDR Vapor Encroachment Screen

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PHASE I ENVIRONMENTAL SITE ASSESSMENT
INDUSTRIAL DRIVE AND MERCHANDISE WAY
APN 329-240-55 (INDUSTRIAL DRIVE) AND
APN 329-391-10 (6625 MERCHANDISE WAY)
PLACERVILLE, EL DORADO COUNTYCALIFORNIA 95667

EXECUTIVE SUMMARY

Site Information

The subject property is comprised of two parcels. El Dorado County APN 329-240-55 is 30.36 acres of formerly-used industrial land, north and south of Industrial Drive and 329-391-10 is 0.37 acres of undeveloped land at 6625 Merchandise Way in Placerville, California (subject property) (Figure 1- Vicinity Map). Parcel 329-240-55 was historically a part of the Caldor Lumber Company. Parcel 329-391-10 has remained undeveloped.

Adjacent property

North: Industrial Drive, industrial businesses, and residential property.
South: Industrial and commercial business park.
East: Various businesses including El Dorado Truss at 300 Industrial and Snowline Hospice at 180 Industrial Drive.
West: Southern Pacific Railroad right-of-way and residential property.

Site Assessor

Laurie B. Israel, Senior Environmental Scientist inspected the property on 18 September 2014
Youngdahl Consulting Group, Inc., (916) 933-0633, lbi@youngdahl.net

EP Certification

An environmental professional (EP) is defined as a person meeting the education, training, and experience requirements set forth in 40 CFR § 312.10(b). We declare that, to the best of our professional knowledge and belief, we meet the definition of EP as defined in 40 CFR § 312.10 and we have the specific qualifications based on education, training, and experience to assess a property of the nature, history, and setting of the subject property.

AAI Certification

This Phase I ESA was conducted according to the American Society for Testing and Materials (ASTM) Designation E1527-13 Standard Practice for Environmental Site Assessments: Phase I Environmental Site Assessment Process (ASTM Phase I Standards). The ASTM E1527-13 standard is consistent with the requirement of the All Appropriate Inquiry (AAI) rule in Title 40 of the Code of Federal Regulations (40 C.F.R. § 312.10).

Data Gaps

According to § 3.3.20 of ASTM Standard E 1527-13 a data gap is a lack of or inability to obtain information required by the ASTM Standard despite good faith efforts to gather same. Data gaps may result from incompleteness in any of the activities required by the ASTM Standard. The owner of the subject property was not interviewed and did not complete a Phase I Environmental questionnaire. A letter from the owner's attorney was provided with site information. It is our opinion that the lack of an owner interview and completed questionnaire did not limit our ability to evaluate if RECs are present on the subject property.

Summary and Opinion

Recognized environmental conditions (RECs) are defined in the ASTM Phase I Standards to mean "the presence or likely presence of any hazardous substances or petroleum products in, on, or at a property: (1) due to release to the environment; (2) under conditions indicative of a release to the environment; or (3) under conditions that post a material threat of a future release to the environment". No RECs in connection with the subject property were identified.

Historic recognized environmental conditions (HRECs) is a term used to state that the property only includes a resolved or closed out REC that has been completely resolved ("clean closure") with no restrictions. This assessment did identify a HREC in regards to the Old Caldor Lumber formerly located on and adjacent to the subject property. Reportedly, approximately 8,000 gallons of possible polychlorinated biphenyls (PCBs)-containing oil from a damaged transformer was used for dust control on the yard and nearby roads. In December 1986, soil testing by California Department of Health Services revealed no evidence of PCBs or pesticide contamination. The U.S. Environmental Protection Agency (EPA) signed off on the site in February 1988 and indicated no further action was necessary under CERCLA. The new term controlled REC (CREC) describes closed RECs that are managed under an activity and use limitation (AUL). No CRECs were identified.

Recommendations

No additional investigation is recommended for the subject property at this time; however, due the property's historical industrial use, it is recommended that during construction activities, the site be observed for the potential indication of hazardous materials releases or disposal areas. If suspect recognized environmental conditions are identified during future construction activities, please notify Youngdahl Consulting Group, Inc. for further evaluation.

1.0 INTRODUCTION

1.1 Purpose

This Phase I ESA was conducted according to the American Society for Testing and Materials (ASTM) Designation E1527-13 Standard Practice for Environmental Site Assessments: Phase I Environmental Site Assessment Process (ASTM Phase I Standards). The ASTM E1527-13 standards are consistent with the requirement of the All Appropriate Inquiry (AAI) rule in Title 40 of the Code of Federal Regulations (40 C.F.R. § 312.10).

The significant changes included in ASTM 1527-13 (approved December 2013) are as follows:

a) The definition of a recognized environmental condition (REC) has been narrowed to exclude a release inside a building from a source inside a building;
b) The term historic recognized environmental condition (HREC) has been clarified to state that it only includes a resolved or closed out REC that has been completely resolved ("clean closure") with no restrictions;
c) The new term controlled REC (CREC) for closed RECs that are managed under an activity and use limitation (AUL) has been added;
d) If the target property or any of the adjoining properties is identified on one or more of the standard environmental record sources, pertinent regulatory files and/or records associated with the listing should be reviewed. Language has been added to Section 8.2.2 Regulatory File Reviews with the intent of having the environmental professional explain in greater detail their rational for when a regulatory file review is not warranted rather than simply stating that it is not a concern. "…the environmental professional must explain within the report the justification for not conducting a regulatory file review."
e) Language has been added to include soil vapor as one of the pathways of contamination to the subject property, along with ground water and soil. The soil vapor contaminant pathway needs to be considered in evaluation of RECs or other environmental concerns.

The ASTM practice is intended to permit a user to satisfy one of the requirements to qualify for the innocent landowner, contiguous property owner, or bona fide prospective purchaser limitations on CERCLA liability. The purpose of this Phase I ESA was to identify recognized environmental conditions which may affect the property. Recognized environmental conditions are defined in the ASTM Phase I Standards to mean "the presence or likely presence of any

hazardous substances or petroleum products in, on, or at a property: (1) due to release to the environment; (2) under conditions indicative of a release to the environment; or (3) under conditions that post a material threat of a future release to the environment". The term "recognized environmental condition" is not intended to include de minimis conditions that generally do not present a material risk of harm to public health or the environment and that generally would not be the subject of an enforcement action if brought to the attention of appropriate governmental agencies. De minimis conditions are not recognized environmental conditions.

Controlled substances (i.e. illegal drugs) are not included within the scope of this standard. Petroleum products are included within the scope of this practice because they are of concern with respect to many parcels of commercial real estate and current custom and usage is to include an inquiry into the presence of petroleum products when doing an ESA of commercial real estate. This practice does not address requirements of any state or local laws or of any federal laws other than the appropriate inquiry provisions of the Comprehensive Environmental Response, Compensation and Liability Act (CERCLA)'s landowner liability protection. Users are cautioned that federal, state, and local laws may impose environmental assessment obligations that are beyond the scope of this practice. Users should also be aware that there are likely to be other legal obligations with regard to hazardous substances or petroleum products discovered on the property that are not addressed in this practice and that may pose risks of civil and/or criminal sanctions for non-compliance. The scope of this practice includes research and reporting requirements that support the user's ability to qualify for landowner liability protection. As such, sufficient documentation of all sources, records, and resources utilized in conducting the inquiry required by this practice must be provided in the written report.

1.2 Detailed Scope of Services

This scope of services is site specific in that it relates to assessment of environmental conditions on a specific parcel of commercial real estate. The Phase I ESA will be performed by an environmental professional. An environmental professional (EP) is defined as a person meeting the education, training, and experience requirements set forth in 40 CFR § 312.10(b). The scope of services for this Phase I ESA is as follows:

Government Records Review: Standard environmental record sources, including Federal, Tribal, and State lists as well as local sources of environmental records were reviewed. We authorized Environmental Data Resources (EDR) to conduct a search of specified government databases and produce a map-based radius search report which would identify sites within the approximate minimum distances pursuant to the ASTM E1527-13 Standard.

Review of Historical Sources: Historical records that may have been reviewed include, but are not limited to, aerial photographs, fire insurance (Sanborn®) maps, building department records, chain-of-title documents, city directory abstracts, land use records, and USGS Topographic Maps. The AAI rule requires that historical documents be reviewed as far back in time as the property contained structures or the property was used for agricultural, residential, commercial, industrial, or governmental purposes. Under the AAI rule, historical sources of information must be reviewed as far back as 1940. The AAI rule does not specify a research interval for reviewing historical records.

Site Reconnaissance: A site reconnaissance visit was conducted on 18 September 2014 by Ms. Laurie B. Israel with Youngdahl Consulting Group, Inc.

Interviews: Prior to the site visit, the Client was asked to identify a person with good knowledge of the property (the key site manager). A Phase I ESA Questionnaire completed by the Owner's representative to facilitate the collection of information is provided in Appendix A. The AAI rule requires interviews be conducted with the current owner(s) and occupant(s) of the subject property. The AAI rule also requires that additional interviews be conducted with current and past facility managers, past owners, operators or occupants of the property, and past employees, as necessary to meet the objectives of the AAI rule. The AAI rule allows the environmental professional to determine whether such interviews are necessary.

Identify Data Gaps: If data failure is encountered, the report shall document the failure and, if any of the standard historical sources were excluded, the environmental professional will give the reasons for their exclusion. If data failure represents a significant data gap, the report shall comment on the impact of the data gap on the ability of the environmental professional to identify recognized environmental conditions. If the data gaps are found, the environmental professional can and does not warrant nor guarantee that no significant events, releases, or conditions arose during the periods of such data gaps.

Evaluation and Report Preparation: The findings, opinions, and conclusions in the Phase I ESA report are supported by documentation. The report: (1) describes all services performed; (2) has a findings section which summarizes known or suspect environmental conditions associated with the property, and which may include recognized environmental conditions, historical recognized environmental conditions, and de minimis conditions; (3) includes Youngdahl Consulting Group Inc.'s opinion(s) of the impact on the property of the known or suspect environmental conditions identified in the findings section as well as the logic and reasoning used in evaluating information collected during the course of the investigation; and (4) includes a conclusions and recommendations section that summarizes the recognized environmental conditions connected with the property and presents recommendations to address those conditions. The report will include an analysis of the relationship of the purchase price of the subject property to the fair market value of the property, if it were not contaminated.

Report Shelf Life: Under the AAI rule, a prospective property owner may use a Phase I ESA Report without having to update any information collected as part of the inquiry: (1) if the all appropriate inquiries investigation was completed less than 180 days prior to the date of acquisition of the property or (2) if the Phase I ESA report was prepared as part of a previous all appropriate inquiries investigation and was completed less than 180 days prior to the date of acquisition of the property. A prospective property owner may use a previously conducted Phase I ESA Report: (1) if the Phase I ESA report was prepared as part of a previous all appropriate inquiries investigation for the same property; and (2) if the information was collected or updated within one year prior to the date of acquisition of the property; and (3) certain aspects of the previously conducted report are conducted or updated within 180 days prior to the date of acquisition of the property. These aspects include the interviews, on-site visual inspection, the historical records review, the search for environmental liens, and the declaration by the environmental professional responsible for the assessment or update.

1.3 Significant Assumptions, Limitations, and Exceptions

This report and review of the subject property is limited in scope. All appropriate inquiry does not mean an exhaustive assessment of a clean property. There is a point at which the cost of information obtained or the time required to gather it outweighs the usefulness of the information and, in fact, may be a material detriment to the orderly completion of transactions. One of the purposes of the ASTM 1527-13 practice is to identify a balance between the competing goals of limiting the costs and time demands inherent in performing an ESA and the reduction of

uncertainty about unknown conditions resulting from additional information. The appropriate level of inquiry will be guided by the type of property subject to assessment, the expertise and risk tolerance of the user, and the information developed in the course of the inquiry. This type of investigation is undertaken with the risk that the presence, full nature, and extent of contamination would not be revealed by visual observation and review of available data alone. The findings presented in this report were based on field observations and review of available data. Therefore, the data obtained is clear and accurate only to the degree implied by the sources and methods used. The information presented herewith was based on professional interpretation and on the data obtained. A review of regional radon values was performed as part of this study. A general discussion of the potential for asbestos-containing building material or lead-based paint to be present on the subject property is also included as part of this study.

1.4 Special Terms and Conditions and/or Additional Services

A Phase I ESA meeting or exceeding the ASTM 1527-13 practice and completed less than 180 days prior to the date of acquisition (the date on which a person acquires title to the subject property) or the date of the intended transaction is presumed to be valid. If within this period the assessment will be used by a different user than the user for whom the assessment was originally prepared, the subsequent user must also satisfy the User's Responsibilities set forth in Section 1.5. Users and environmental professionals may use information in prior environmental site assessments provided such information was generated as a result of procedures that meet or exceed the requirements of ASTM 1527-13.

1.5 User Responsibilities

The user should provide reasonably ascertainable land title records and judicial records for review for the existence of environmental liens or activity and use limitations (AUL), if any, that are currently recorded against the property. AULs are an explicit recognition by a federal, tribal, state, or local regulatory agency that residual levels of hazardous substances or petroleum products may be present on a property, and that unrestricted use of the property may not be acceptable. If the user is aware of any specialized knowledge or experience that is material to recognized environmental conditions in connection with the property, it is the user's responsibility to communicate any information based on such specialized knowledge or experience to the environmental professional, and before the site reconnaissance is conducted. In a transaction involving the purchase of a parcel of commercial real estate, the user shall consider the relationship of the purchase price of the property to the fair market value of the property if the property was not affected by hazardous substances or petroleum products. The user should try to identify an explanation for a lower price which does not reasonably reflect fair market value if the property were not contaminated, and make a written record of such explanation. If the user is aware of any commonly known or reasonable ascertainable information within the local community about the property that is material to recognized environmental conditions in connection with the property, it is the user's responsibility to communicate such information to the environmental professional before the site reconnaissance is conducted.

1.6 Reliance

This Phase I ESA has been prepared for El Dorado County Facility Services and is intended for the use of El Dorado County Facility Services. This report is valid as of the date stated on the document; the report should not be relied upon for information concerning changes in the condition of the property after the report was prepared.

2.0 SITE INFORMATION

2.1 Site Description

This report presents the results of the Phase I Environmental Site Assessment (ESA) performed for two El Dorado County APNs 329-240-55 on Industrial Drive and 329-391-10 at 6625 Merchandise Way in Placerville, California (subject property). Parcel 329-240-55 is comprised of 30.36 acres of formerly-used industrial property that is currently undeveloped and Parcel 329-391-10 is a 0.37-acre vacant lot. The subject property is situated in Section 25, Township 10 North, Range 10 East, Mount Diablo Base and Meridian (M.D.B.& M.) (Figure 1 – Vicinity Map).

Adjacent property
North: Industrial Drive, industrial businesses, and residential property.
South: Industrial and commercial business park.
East: Various businesses including El Dorado Truss at 300 Industrial Drive and Snowline Hospice at 180 Industrial Drive.
West: Southern Pacific Railroad right-of-way and residential property.

2.2 Environmental Liens or Activity and Use Limitations

The owner, Ms. Carol Caldwell, did not indicate any knowledge of environmental liens or activity and use limitations on the completed questionnaire (Appendix A).

2.3 Specialized Knowledge and Commonly Known or Reasonably Ascertainable Information

The owner, Ms. Carol Caldwell, did not indicate any specialized knowledge on the completed questionnaire (Appendix A).

2.4 Valuation Reduction for Environmental Issues

The owner, Ms. Carol Caldwell marked “No” to the question regarding valuation reduction on the environmental questionnaire.

2.5 Reasons for Performing the Phase I ESA

The user, El Dorado County Facility Services, requested the completion of the Phase I ESA per ASTM E1527-13.

3.0 INTERVIEWS

3.1 Interviews with Past and Present Owners, Key Site Manager, and/or Occupants

In the completed questionnaire from the property owner, Ms. Carol Caldwell, trustee, identified a molding plant and truss plant as adjoining property and the subject property was identified as a pole plant. Ms. Caldwell noted that there was a bathroom facility at the pole plant and floor drains or sumps may have been present in connection to the bathroom. Ms. Caldwell also indicated that tires have been dumped on the property.

4.0 PHYSICAL AND GEOLOGICAL DESCRIPTION

4.1 Physical Setting Source(s)

Geologic maps and a current U.S.G.S. 7.5 Minute Topographic Map of the Placerville, California quadrangle, as well as observations made during our site reconnaissance were used to make interpretations regarding the physical setting of the subject property and the surrounding area. The site is located on the western slope of the Sierra Nevada geomorphic province of Northern California at elevations ranging from approximately 1,750 to 1,840 feet above mean sea level. The topography of the subject property has been altered by the creation of earthen benches throughout the parcel and by heavy off-road vehicle use.

4.2 Regional Geology and Soil

The project vicinity is located within the Sierra Nevada geomorphic province of California. Based upon a review of published geologic data the vicinity is mapped as Mesozoic-age granitic rocks (Mzg) (Loyd, 1984). The USDA Soil Survey of the El Dorado Area (1974) notes the subject property to consist of the soil type Placer diggings (PrD). The Placer diggings soil is prone to seasonal flooding and is primarily used for grazing and supplying watering areas for livestock. Groundwater depths vary from near surface (springs) to several hundreds of feet below ground surface.

4.3 Regional Radon Values

Elevated radon gas levels in indoor air are a result of radon moving into buildings from the soil, either by diffusion or flow due to air pressure differences. The ultimate source of radon gas in buildings is the uranium naturally present in rock, water, and soil. Some rock types are known to contain more uranium than others. In California, most uranium deposits are relatively small in aerial extent and are located in rural areas. Consequently, the chance of severe radon levels (>200 pCi/L) occurring in buildings in California should be very low. The following rock units in California contain uranium in concentrations above the crustal average: the Monterey Formation, asphaltic rocks, marine phosphatic rocks, granitic rocks, felsic volcanic rocks, and certain metamorphic rocks. According to EPA publication 402-R-93-025, entitled EPA's Map of Radon Zones, California, dated September 1993, El Dorado County is shown to be in Zone 2. Zone 2 has a predicted average radon screening level of greater than 2 Pico Curies per Liter (pCi/l) but less than 4 pCi/l, this is considered to be a moderate or variable value of geologic radon potential. This is considered to be a moderate value of geologic radon potential.

The California Department of Health Services, California Indoor Radon Levels Sorted by Zip Code was last updated on 4 May 2010. The number of tests does not necessarily represent the number of houses tested. A single house may have had several tests conducted. The table contains both long-term and short-term indoor radon measurements. The California Department of Health Services recommends that you take action to reduce radon levels in your house if they are 4pCi/L or greater. Of the 11 tests conducted for Zip Code 95619, 10 tests were greater than 4pCi/L.

4.4 Asbestos Containing Building Materials

Based on our review, structures have not been present on the subject property. Asbestos-containing building materials (ACBM) are not likely to be present.

4.5 Lead-based Paint

Based on our review, structures have not been present on the subject property. Lead-based paint is not likely to be present.

5.0 HISTORICAL SOURCES REVIEW

All obvious uses of the property shall be identified from the present, back to the property's first developed use, or back to 1940, whichever is earlier. The term "developed use" includes agricultural uses and placement of fill dirt. Standard historical sources shall be reviewed at approximately five year intervals. In an effort to fulfill due diligence requirements, Youngdahl Consulting Group, Inc. employed the services of Environmental Data Resources, Inc. (EDR) to provide the following standard historical sources: aerial photographs, USGS topographic maps, local city directories, and fire insurance maps (Sanborn Maps). Standard historical sources may also include: property tax files, recorded land title records, building department records, and zoning/land use records. There are no Sanborn Maps that cover the subject property.

5.1 Aerial Photographic Review

Aerial photographs for the years Aerial photographs for the years 1935, 1946, 1952, 1962, 1973, 1984, 1993, 1998, 2005, 2006, 2009, 2010, and 2012 were provided in the EDR Aerial Photo Decade Package (Appendix B). Interpretations were made in an effort to evaluate former uses of the subject property and adjacent areas, and to determine if any significant topographic or cultural changes have occurred. All photographs were provided at a scale of 1" = 500'. A summary of the photographs reviewed is provided below.

Date	Source	Comments
1935	Wallace	No structures are present on the property. The Southern Pacific Railroad is located to the west of the property. Lumber yard structures and a pond filled with timbers are located to the east of the property. Rural residential property and orchards are to the south.
1946	USGS	No structures are present on the property. The northern-central portion of the subject property is developed with horizontal earthen benches that may be lumber-related storage areas for the Old Caldor Lumber Company. There appears to be a pond at the approximate location of Merchandise Way in the vicinity of the subject property. The Old Caldor Lumber Company is present to the east.
1952	Robinson	No structures are present on the property. The northern-central portion of the subject property is developed with horizontal earthen benches. The southern portion of the benched area appears to be flooded. The southwestern portion of the property, adjacent to the railroad tracks, appears to be undeveloped and covered with native vegetation. A pond with water and possibly an earthen dam is located at the approximate location of Merchandise Way. The Southern Pacific Railroad is located to the west of the property. Lumber yard structures and a pond filled with timbers are located to the east. A railroad spur and large industrial structures are shown adjacent to the northwest of the property on Industrial Drive.
1962	Cartwright	No significant changes to the subject or adjacent properties were observed.
1973	NASA	No structures are present on the property. The earthen benches in the northern portion do not appear to be in use. The southwest portion is undeveloped. The Old Caldor Lumber Company buildings are no longer present to the east. The buildings to the west are also no longer present. To the north there are residences. To the south is a small pond. According to file reviews, in 1966 a fire broke out at the former mill facility, which was being used as a storage area for Sacramento Utility District (SMUD) equipment.
1984	USGS	The subject property appears to be rough graded, possibly for construction purposes. No structures are present on the property. Adjacent property includes a large building to the northeast. Industrial buildings are located to the east at 180 Industrial Drive.
1993	EDR	Subject property appears to be vacant. Buildings are present to the south on Merchandise Way. Parcel 329-391-10 at 6625 Merchandise Way is undeveloped.
1998	USGS	No significant changes to the subject or adjacent properties were observed.

Date	Source	Comments
2005	USGS	The subject property is crisscrossed with unpaved paths and bare areas. The southwestern portion is densely vegetated. Parcel 329-391-10 at 6625 Merchandise Way is undeveloped. Industrial buildings are adjacent to the northwest, east, northeast, and south. Adjacent property to the north is undeveloped.
2006 -2012	EDR	No significant changes to the subject or adjacent properties were observed.

5.2 Review of Historical and Current USGS Topographic Maps

A topographic map is a color coded line-and-symbol representation of natural and selected artificial features plotted to a scale. Topographic maps show the shape, elevation, and development of the terrain in precise detail by using contour lines and color coded symbols. The EDR Historical Topographic Map Report (Appendix B) provided maps dated 1893 to 1973. Interpretations were made in an effort to evaluate former uses of the subject property and adjacent areas, and determine if any significant topographic or cultural changes have occurred. Photo-revision dates are provided in parentheses. The subject property is located in Sections 24 and 25, Township 10 North, Range 10 East, M.D.B.& M.

Date	Map Name	Series	Comments
1893	Placerville, CA	30 Minute	No specific details are noted for the subject and adjacent properties. The nearest features are the Sacramento and Placerville Railroad line to the west, Highway 49 to the east, and Diamond Springs to the southeast.
1949	Placerville, CA	15 Minute	The subject property and adjacent properties appear to be predominantly undeveloped land. A pond is shown to the south. The Old Caldor Lumber Company facility is shown to the east with several structures, railroad spurs, and a large pond. The railroad line is identified as the Southern Pacific Railroad. The surrounding properties are a mix of residential to the north and west and industrial to the south and east.
1950	Placerville, CA	7.5 Minute	No significant changes to subject property were observed, it appears to be undeveloped land. The Old Caldor Lumber Company facility is shown to the east.
1973 (1949)	Placerville, CA	7.5 Minute	No significant changes to subject property were observed and it appears to be undeveloped land. Industrial Drive traverses through the property. The Old Caldor Lumber Company facility is no longer shown to the east. Two large structures are identified to the east. A railroad spur and three structures are located adjacent to the northwest. Three ponds are shown to the south. The surrounding properties are a mix of residential to the north and west and industrial to the south and east

5.3 Historical City Directory Abstract Review

EDR provided the EDR-City Directory Image Report for review and a copy is provided in Appendix B. Building directories including city, cross reference and telephone directories were reviewed, if available, at approximately five year intervals for the years spanning 1970 through 2013. A summary of the city directory listings is provided below. There were no listings for the two subject property addresses, 6611 and 6625 Merchandise Way.

Date	Address	Directory Listing
1989-1994	180 Industrial Drive	Pacific Southeast Forest Products
1999	180 Industrial Drive	Diamond Feed & Supply, Hangtown Tow Service, Missouri Flat Storage, Pacific Southeast Forest Products
1999-2003	180 Industrial Drive	GMC Forest Products
2008	180 Industrial Drive	Habitat for Humanity, Norcal Express Blower, Western States Distributing Inc, Woodworks Unlimited
2013	180 Industrial Drive	Snowline Hospice
1989-2008	281 Industrial Drive	SBC
2003	295 Industrial Drive	Baker Art Foundry & Pewter Works
1985-2013	300 Industrial Drive	El Dorado Truss Co Inc
1999-2008	327 Industrial Drive	Applied Control Electronics, Fancy Line Screen Door Co
2003-2013	327 Industrial Drive	The Gingerbread Man, Doug Ward, FTM Inc
2003	329 Industrial Drive	Bob Roggy, West Coast Carriage
2013	329 Industrial Drive	Baker Art Foundry & Pewter Works
1985-2003	331 Industrial Drive	Best of Times Printing, D&D Precision Sheet Metal
2008-2013	331 Industrial Drive	Arrow Springs, Hangtown Fire Control Inc, Webster & Assoc Mnftg
1985	333 Industrial Drive	El Dorado Komfort
1994	333 Industrial Drive	Faith Construction
1999	333 Industrial Drive	Eagle Press, Reliant Industries Retail Outlet
1999-2003	333 Industrial Drive	Sierra Electric Motor & Pump
2003-2008	333 Industrial Drive	Dreams of Wood, Gathman Painting
2008-2013	333 Industrial Drive	Prime Mechanical, Tentel Test Equpt. & Training Co
1999-2003	335 Industrial Drive	Jiffy Cut
1999	337 Industrial Drive	Contract Marketing Resources, Ohara Metal Products Co.
2003-2008	337 Industrial Drive	Calpipe, Timbercraft
2013	337 Industrial Drive	Apex Sheet Metal

Date	Address	Directory Listing
2003	339 Industrial Drive	A Oday
1989	460 Industrial Drive	Mini Stor It
1999	6601 Merchandise Way	Carbon Copy Copiers, Gestetner Copier Service, Monroe Copier Service, Royal Copier Sales Service
2008	6601 Merchandise Way	Morning Glory Fermentation Supply, Sonora J S West & Co Inc
1994-2013	6601 Merchandise Way	Litco Lumber Inc, Mott Gordon Roofing Co Inc, Piland Electric Inc
2008	6606 Merchandise Way	Headend Georgetown
2008-2013	6610 Merchandise Way	Patterson Development
1994-2003	6617 Merchandise Way	Matrix Molding Inc
2008-2013	6617 Merchandise Way	Graduate NC Machining/Graduate Precision
1994-1999	6626 Merchandise Way	JEK Inc, Sierra Distributing
1994-2013	6635 Merchandise Way	Cooralite Dental Mnftg
1994-2003	6641 Merchandise Way	Lane Mfg
2013	6641 Merchandise Way	All Points Welding
2003	6642 Merchandise Way	Autotrend, Eagle Lifts & Mobility, JEK Inc, Sheron Righetti
2008	6642 Merchandise Way	Allen British Cars, Autotrend, Big Iggy OV LLC, Bloombright LLC, Hangtown Hydrogardens
2013	6642 Merchandise Way	Summit Packaging Solutions
1994-1999	6650 Merchandise Way	Sierra Distributing
2008	6650 Merchandise Way	Ace Stripping Inc, Bloomwright Horticultural Products, Celebrity Inc
2008-2013	6650 Merchandise Way	Carol Russell's Bookkeeping & Payroll, Celebrity Inc, Jim Davies & Assoc., Harvest Hydroponics
2003	6655 Merchandise Way	Food Bank of El Dorado County
2008	6657 Merchandise Way	Edwards Installation Inc
1999-2013	6665 Merchandise Way	Daniel Warganich
2003-2013	6670 Merchandise Way	J & J Glass
2003-2013	6671 Merchandise Way	El Dorado Restoration

Date	Address	Directory Listing
1999-2008	6675 Merchandise Way	Richard Cowell Co, Robert Nickel
2013	6675 Merchandise Way	All Coast Builders co
1994-2013	6686 Merchandise Way	Sinclair Equipment Co
1994	6692 Merchandise Way	I M Marketing Service, Living Trust America
2003-2008	6692 Merchandise Way	Sierra Boys Ranch Inc
2013	6692 Merchandise Way	Arm & Hand Rehab
1999	6693 Merchandise Way	49er Alignment Center, Nesbitt Automotive Diagnostic Inc
2003-2008	6693 Merchandise Way	Hinds Custom Machine Entps
2013	6693 Merchandise Way	Duramax Store

5.4 Certified Sanborn Map Report
No Sanborn Map coverage was identified for the subject property.

5.5 Previously Conducted Environmental Studies
In November 2007, Youngdahl Consulting Group, Inc., performed a Phase I Environmental Site Assessment for 200 Industrial Drive, one parcel located north and south of Industrial Drive (APN 329-240-49-100) in Placerville, El Dorado County, California. The property was described as approximately 32 acres of undeveloped land with unauthorized dumping of garbage, old tires, automobile parts, furniture, appliances, clothing, batteries, waste oil (in sealed containers), mattresses, and vegetation, along with off-road-vehicle use. The property was formerly a lumber storage yard for the Old Caldor Lumber Company and a transformer storage area for Sacramento Municipal Utility District (SMUD). Adjacent property included residential property and industrial property at 180 Industrial Drive to the north, Southern Pacific Railroad line and residential property to the west, El Dorado Truss to the southeast, AT&T to the northeast, and an industrial business park to the south. The assessment concluded that no evidence of recognized environmental conditions in connection with the subject property was identified.

6.0 REGULATORY RECORDS REVIEW
The records review consisted of a review of reasonably ascertainable environmental record sources, physical setting sources, and historical use information that will help identify recognized environmental conditions in connection with the property. Reasonably ascertainable record information must be publicly available, obtainable from its source within reasonable time and cost constraints, and be practically reviewable.

6.1 Commercial Database Search Review
A commercial database search of Federal, Tribal, State, and Local regulatory lists was conducted in order to assess whether documented environmental conditions exist on or near the property. In an effort to fulfill due diligence requirements, Youngdahl Consulting Group, Inc. employed the services of Environmental Data Resources, Inc. (EDR) to identify sites listed on regulatory agency databases within approximate minimum search distances from the subject property with potential of existing environmental problems. The term “approximate minimum

search distances" means the distances within the area which government records must be reviewed pursuant to ASTM Phase I Standards. The term "minimum search distance" is used in lieu of radius as to include irregularly shaped properties.

An EDR Radius Map with GeoCheck® (EDR Report) was provided by EDR on 28 April 2014 (Appendix C). Included in the report are the dates the original government sources were updated and the dates the sources were last updated by EDR, as well as a list of acronyms used by EDR. According to the EDR Report, the subject property is not designated as a wetland, per the National Wetlands Inventory (1994). The subject property's address, 6625 Merchandise Way, was not identified on any of the databases researched according to the EDR Report.

Due to poor or inadequate information, EDR is unable to map certain sites. These sites are referred to by EDR as Orphans. None of the other Orphan sites appear to be within the minimum search distances from the subject property. A summary table of the sites listed on the databases searched is provided below. Standard Search Distance radii were extended by 0.25 miles to account for the irregular shape of the three parcels combined.

Database	Target property	Search Distance (Miles)	<1/8	1/8 - 1/4	1/4 - 1/2	1/2 -1	>1	Total Plotted
CRC-NFRAP		0.625			1			1
RCRA-SQG		0.375	2	4	1			7
ENVIROSTOR		1.125	1	2	1	1		5
LUST (Case Closed)		0.625	1		2	1		4
UST		0.375			3			3
AST		0.375	1					1
CA FID UST		0.375	1		2			3
HIST UST		0.375	2		2			4
SWEEPS UST		0.375	2		4			6
CHMIRS		0.125	1					1
RCRA NonGen/NLR		0.125	2	1	1			4
FINDS		0.125	4					4
HIST CORTESE		0.5	1		2			3
CUPA El Dorado Co.		0.375	29	35	10			74
HAZNET		0.125	28					28
EMI		0.125	3					3
EDR US Hist Auto Stat		0.375	10	14	2			26
EDR US Hist Cleaners		0.375		2				2

6.2 Review of State and/or Local Government Records

The El Dorado County Environmental Management Department (EDCEMD) was contacted for information. The EDCEMD file for the Old Caldor Lumber Company stated that the facility started as a lumber mill and box factory in early 1900. In 1904, the Diamond-Caldor railway was completed to provide transport of the timber from Caldor to Diamond Springs. Fire destroyed the Caldor mill in 1923. A new sawmill was constructed in Diamond Springs and included oil storage, engine house, machine shop, and service areas for the locomotives. The mill operated at full scale from 1935 until it was shut down in 1952. In 1974, Pacific Southeast Forest Products bought much of the Caldor site and constructed new buildings on the old foundations. In 1966, a fire broke out at the mill facility, which was being used as a storage area for Sacramento Utility District (SMUD) equipment at the time. Reportedly, approximately

8,000 gallons of possible polychlorinated biphenyls (PCBs)-containing oil from a damaged transformer was used for dust control on the yard and nearby roads. In December 1986, soil testing by California Department of Health Services revealed no evidence of PCBs or pesticide contamination. The U.S. Environmental Protection Agency (EPA) signed off on the site in February 1988 and indicated no further action was necessary under CERCLA.

The State of California Department of Conservation, Division of Oil, Gas, and Geothermal Resources web site was reviewed for information regarding mineral exploration on or in the vicinity of the subject property and no wells were identified on or adjacent to the subject property.

The State of California Water Resources Control Board database, GeoTracker, was researched to identify if sites with groundwater contamination exist within the minimum search distances to the subject property (www.geotracker.swrcb.ca.gov). The subject property was not identified on the GeoTracker database. The file for the SBC (Pacific Bell) facility, located at 281 Industrial Drive, northeast and up-gradient of the subject property, was reviewed. In 1986 a 1,000-gallon waste oil UST was removed after failing a tightness test. Petroleum hydrocarbons were detected at a concentration of 2,900 parts per million (ppm) beneath the tank. Since the discovery of the contamination in 1986, 15 monitoring wells have been installed at the facility. Remediation attempts have included the use of oxygen releasing compounds to enhance natural biodegradation. Groundwater elevation studies of the site show the groundwater to be traveling in a southwesterly direction, towards the subject property. Sparge wells were installed in 2006. A soil vapor extraction system was installed in 2007. Four quarters of groundwater monitoring were performed after the air sparging system was turned off in November 2009. Only low concentrations of volatile hydrocarbons remained in the site groundwater and residual diesel is not expected to pose a threat for vapor migration/intrusion. The Regional Water Quality Control Board (RWQCB) issued case closure and a no further action letter in 2011.

6.5 Vapor Encroachment Screening

Vapor intrusion is the term used to describe the migration of volatile organic compounds (VOCs) via soil vapor from the sub-surface soil and/or groundwater upward into buildings, potentially causing unacceptable chemical exposure for building occupants. The vapor intrusion pathway is evaluated using the Conceptual Site Model (CSM) and vapor intrusion pathway screening.

Volatilization of petroleum products in the subsurface occurs via the volatilization of constituents that are in the dissolved phase (in pore water or groundwater), volatilization from light nonaqueous phase liquid (LNAPL) (either mobile or residual) directly, and volatilization from impacted soil. Once the individual constituents are in the vapor phase, they can continue to migrate in the vadose zone (soil zone between first groundwater and ground surface). Transport will occur through diffusion caused by concentration gradients. The greatest movement will take place in the most permeable materials. If the soil-moisture content in the vadose zone is high, then relatively soluble compounds such as ethanol and MTBE will tend not to stay in the vapor phase, but rather will stay in the soil moisture.

Soil vapor is one of the pathways of contamination to the subject property, along with ground water and soil. ASTM E1527-13 requires that vapor migration be treated no differently than contaminated groundwater. The soil vapor contaminant pathway needs to be considered in evaluation of RECs or other environmental concerns. The ASTM Standard Guide for Vapor Encroachment Screening (VES) on Property Involved in Real Estate Transactions (ASTM E2600-10) is the industry-accepted guidance for using Phase I ESA information to determine if a vapor encroachment condition (VEC) exists at the subject property. EDR's Vapor

Encroachment Worksheet was designed to assist parties seeking to meet the search requirements of the ASTM E 2600-10.

During completion of the EDR Vapor Encroachment Screen (VES), three businesses were identified that did not have sufficient information to make a determination on EDR's VES. Additional research at EDCEMD identified that the three sites, Allied Auto Repair Club, Inc. at 329 Industrial Drive, Quicksand Motorsports at 6642 Merchandise Way, and Sierra Auto Center at 4508 Missouri Flat Road, are no longer in business. Once the additional review of each site's specific characteristics was conducted, the sites were identified to not have the potential to create a vapor encroachment condition (VEC) at the subject property (Appendix D).

7.0 SITE RECONNAISSANCE

7.1 Purpose

A reconnaissance of the subject property and a windshield survey of the surrounding area were conducted by Youngdahl Consulting Group, Inc. on 18 September 2014. Views of the subject property at the time of the reconnaissance visit are presented as Figures 3 - 7.

7.2 Subject Property

The site reconnaissance consisted of visual and physical observations of the periphery of the subject property and traverses throughout the property on foot. Parcel 329-240-55 is comprised of 30.36 acres of formerly-used industrial property that is currently undeveloped and Parcel 329-391-10 is a 0.37-acre vacant commercial lot. The western portion of the subject property is undeveloped land with sparse vegetation (Photo 1). The Southern Pacific Railroad easement is located in the dense brush adjacent to the west. Household trash and automobile tires were observed in the southwestern portion of the subject property (Photos 2 and 3) and southeastern portion of the subject property (Photos 4 and 5). The central (Photo 6) and northeastern portions (Photo 7) of the subject property are undeveloped. Residences and industrial property are to the north across Industrial Drive. The northern portion of the subject property is undeveloped land with unpaved paths throughout (Photo 8). Industrial businesses are adjacent to the south on Merchandise Way. Parcel 329-391-10, the 0.37-acre portion of the subject property at 6625 Merchandise Way, is undeveloped (Photo 9). The portion of the subject property located north of Industrial Drive (northern part of parcel 329-240-55) is comprised of earthen benches that have been used for off-road vehicle use and for household trash disposal (Photos 10 and 11). The northeastern portion of parcel 329-240-55 is covered with native vegetation. Industrial properties are adjacent to the east and west of the subject property on Merchandise Way.

Reconnaissance Item	Observed	Reconnaissance Observations (18 September 2014)
Structures	No	None observed.
Liquid Storage Systems (UST/AST)	No	None observed.
Drums	No	None observed.
Other Containers	No	None observed.
PCBs	No	None observed.

Reconnaissance Item	Observed	Reconnaissance Observations (18 September 2014)
Pits/Ponds/Ditches/Caves/Streams/ Lagoons	No	None observed.
Stained Soil/Pavement	No	None observed.
Stressed Vegetation	No	None observed.
Solid Waste (Mounds or depressions)	No	No mounds or depressions were observed. Household trash was observed on parcel 329-240-55.
Waste Water (Discharge into drain/ditch/injection system/stream/adjacent property)	No	None observed.
Wells (Dry/irrigation/injection/abandoned)	No	None observed.
Other underground systems	No	None observed.
Septic Systems	No	None observed. Property owner indicated that a septic system may be present on the property.

7.3 Adjacent Properties

Adjacent property

North: Industrial Drive, industrial businesses, undeveloped land, and residential property.
South: Industrial and commercial business park.
East: Various businesses including El Dorado Truss at 300 Industrial Drive and Snowline Hospice at 180 Industrial Drive.
West: Southern Pacific Railroad right-of-way and residential property.

8.0 CONCLUSIONS, OPINION, AND RECOMMENDATIONS

The results of this Phase I Environmental Site Assessment (ESA) performed for two El Dorado County APNs 329-240-55 on Industrial Drive and 329-391-10 at 6625 Merchandise Way in Placerville, California. This Phase I ESA was conducted for El Dorado County Facility Services. Our study consisted of a review of environmental record sources, physical setting sources, review of site related documents, historical use information, and a site reconnaissance. We have performed a Phase I Environmental Site Assessment in conformance with the scope and limitation of ASTM Standard Practice E 1527-13. Any exceptions to, or deletions from, this practice are described in Section 1.0 of this report.

8.1 Summary of Historical Subject Property Use Information

Date	Source	Subject Property Observations
1893	Topographic Map	At this scale only the Sacramento and Placerville RR line was identified adjacent to the west.
1900-1952	El Dorado County EMD	Property is a part of the Caldor Lumber Company, a lumber mill and box factory

Date	Source	Subject Property Observations
1949-1973	Topographic Maps	The subject property is undeveloped land.
1935	Aerial Photograph	The subject property is undeveloped land adjacent to the southwest of the Caldor Lumber mill.
1946-1973	Aerial Photographs	The northern portion of the subject property is developed with horizontal earthen benches.
1984-2012	Aerial Photographs	The subject property is not in use.

8.2 Recognized environmental conditions (RECs)

Recognized environmental conditions (RECs) are defined in the ASTM Phase I Standards to mean "the presence or likely presence of any hazardous substances or petroleum products in, on, or at a property: (1) due to release to the environment; (2) under conditions indicative of a release to the environment; or (3) under conditions that post a material threat of a future release to the environment". No RECs in connection with the subject property were identified.

8.3 Historic Recognized environmental conditions (HRECs)

Historic recognized environmental conditions (HRECs) is a term used to state that the property only includes a resolved or closed out REC that has been completely resolved ("clean closure") with no restrictions. This assessment did identify a HREC in regards to the Old Caldor Lumber formerly located on and adjacent to the subject property. Reportedly, approximately 8,000 gallons of possible polychlorinated biphenyls (PCBs)-containing oil from a damaged transformer was used for dust control on the yard and nearby roads. In December 1986, soil testing by California Department of Health Services revealed no evidence of PCBs or pesticide contamination. The U.S. Environmental Protection Agency (EPA) signed off on the site in February 1988 and indicated no further action was necessary under CERCLA.

8.4 Controlled Recognized environmental conditions (CRECs)

The new term controlled REC (CREC) describes closed RECs that are managed under an activity and use limitation (AUL). This assessment did not identify any sites with CRECs.

8.5 Recommendations

No additional investigation is recommended for the subject property at this time; however, due the property's historical industrial use, it is recommended that during construction activities, the site be observed for the potential indication of hazardous materials releases or disposal areas. If suspect recognized environmental conditions are identified during future construction activities, please notify Youngdahl Consulting Group, Inc. for further evaluation.

8.6 Data Gaps

According to § 3.3.20 of ASTM Standard E 1527-13 a data gap is a lack of or inability to obtain information required by the ASTM Standard despite good faith efforts to gather same. No data gaps were identified that may result from incompleteness in any of the activities required by the ASTM Standard.

9.0 SELECTED REFERENCES

1. California Department of Water Resources (DWR) – Water Data Library, Groundwater Level Data (1953-2004): http//wdl.water.ca.gov/gw

2. Churchill, Ronald, Geologic Controls on the Distribution of Radon in California for the Department of Health Services, 25 January 1991, revised December 2003.

3. Loyd, R.C., et al., General Geology of the Placerville 15' Quadrangle, California Department of Conservation, Division of Mines and Geology, OFR 83-29, 1984.

4. U.S.D.A. Soil Conservation Service, Soil Survey of El Dorado Area, California, April 1974.

5. U.S. Geological Survey, Placerville, CA, 7.5 Minute Topographic Series, 1973 (1949).

6. Youngdahl Consulting Group, Inc., Phase I Environmental Site Assessment for 200 Industrial Drive, (APN 329-240-49-100), Placerville, El Dorado County, California, 28 November 2007 (E07442.000).

10.0 QUALIFICATIONS OF ENVIRONMENTAL PROFESSIONALS

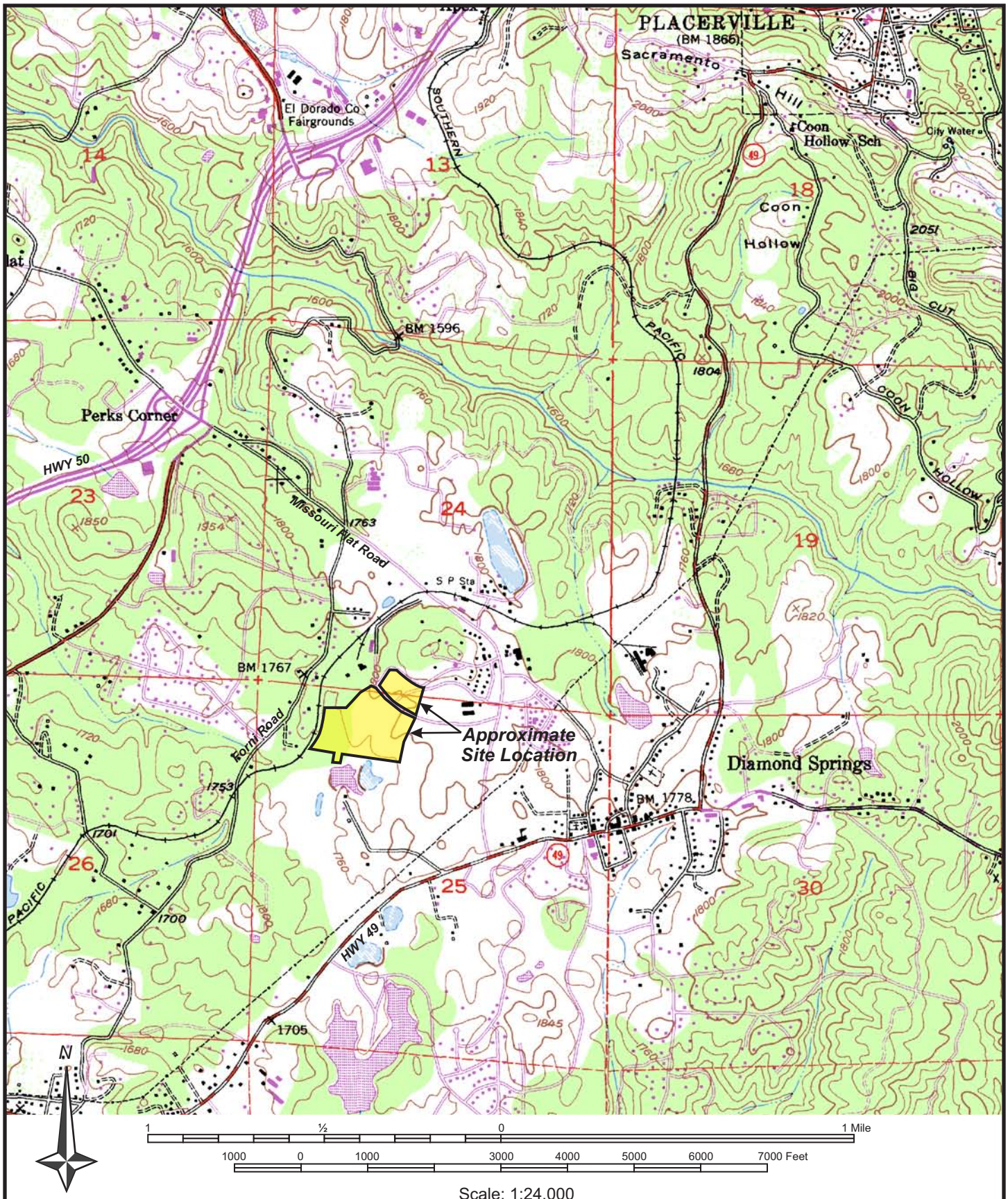
David C. Sederquist, C.E.G., C. HG.
Professional Geologist - California No. 4715
Certified Engineering Geologist, California No. 2133
Certified Hydrogeologist; California No. 619
Bachelor of Arts in Geology; California State University, Napa, 1980

Mr. Sederquist has performed Phase I and Phase II Environmental Site Assessments for commercial, residential, public utility and school projects since 1990. He has assessed, monitored, and closed soil and groundwater contamination sites. He is experienced in working closely with both regulatory officials and property owners/purchasers.

Laurie B. Israel
Bachelor of Science in Environmental Policy Analysis and Planning, UC - Davis, 1988

Ms. Israel has worked in the environmental field since 1988. She has been involved in all aspects of Phase I Environmental Site Assessments. Ms. Israel became a Registered Environmental Assessor with the State of California in 1994. Ms. Israel has also performed Phase II investigations.

FIGURES



Scale: 1:24,000

BASE MAP REFERENCE: *U.S.G.S. 7.5 Minute Topographic Series, Placerville Quadrangle, Dated 1949, Revised 1973*

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Project No.: E13310.004

December 2014

VICINITY MAP

Industrial Drive & Merchandise Way
Phase I ESA
Placerville, California

FIGURE
1

BASE MAP REFERENCE: *Google Earth, Aerial Data Dated 5-26-2014*

0 150 300 600

Approximate Scale: 1" = 300'

YOUNGDAHL CONSULTING GROUP, INC.

GEOTECHNICAL ▪ ENVIRONMENTAL ▪ MATERIALS TESTING

Project No.: E13310.004

December 2014

SITE PLAN

Industrial Drive & Merchandise Way

Phase I ESA

Placerville, California

FIGURE

2

Photo 1: Western portion of the subject property looking southwest. The Southern Pacific Railroad easement is located in the dense brush adjacent to the west.

Photos 2 and 3: Household trash and automobile tires are located in the southwestern portion of the subject property.

YOUNGDAHL CONSULTING GROUP, INC.
GEOTECHNICAL ▪ ENVIRONMENTAL ▪ MATERIALS TESTING

Project No.: E13310.004

December 2014

SITE PHOTOGRAPHS
Industrial Drive & Merchandise Way
Phase I ESA
Placerville, California

FIGURE
3

Photo 4: Southeastern portion of subject property looking west.

Photos 5 and 6: Household trash and an old camper shell are located in the southeastern portion of the subject property.

YOUNGDAHL CONSULTING GROUP, INC. GEOTECHNICAL ▪ ENVIRONMENTAL ▪ MATERIALS TESTING	Project No.: E13310.004	**SITE PHOTOGRAPHS** **Industrial Drive & Merchandise Way** **Phase I ESA** Placerville, California	**FIGURE** **4**
	December 2014		

Photo 7: Central portion of the subject property looking west.

Photo 8: Northeast portion of the subject property looking northeast. Residences and industrial property are to the north across Industrial Drive.

YOUNGDAHL CONSULTING GROUP, INC. GEOTECHNICAL ▪ ENVIRONMENTAL ▪ MATERIALS TESTING	Project No.: E13310.004	**SITE PHOTOGRAPHS** **Industrial Drive & Merchandise Way** **Phase I ESA** Placerville, California	**FIGURE** **5**
	December 2014		

Photo 9: Northern portion of the subject property looking south. Industrial businesses are adjacent to the south on Merchandise Way.

Photo 10: Undeveloped portion of the subject property at 6625 Merchandise Way. View to the northeast from Merchandise Way. Industrial properties are adjacent to the east and west.

YOUNGDAHL CONSULTING GROUP, INC. GEOTECHNICAL ▪ ENVIRONMENTAL ▪ MATERIALS TESTING	Project No.: E13310.004	**SITE PHOTOGRAPHS** **Industrial Drive & Merchandise Way** **Phase I ESA** Placerville, California	**FIGURE** **6**
	December 2014		

Photos 11 and 12: The portion of the subject property north of Industrial Drive has been used for off-road vehicle use and for household trash disposal.

Photo 13: The northeastern portion of Parcel 039-240-055 is covered with native vegetation. View to the southwest.

YOUNGDAHL CONSULTING GROUP, INC. GEOTECHNICAL ▪ ENVIRONMENTAL ▪ MATERIALS TESTING	Project No.: E13310.004 December 2014	**SITE PHOTOGRAPHS** **Industrial Drive & Merchandise Way** **Phase I ESA** Placerville, California	**FIGURE** **7**

APPENDICES

APPENDIX A

Phase I ESA Questionnaire

YOUNGDAHL CONSULTING GROUP, INC.
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ph 916.933.0633 fx 916.933.6482
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30 YEARS

Site Name: Industrial Drive and 6625 Merchandise Way
Location: APNs 329-240-55 and 329-391-10
Placerville, El Dorado County

The ASTM Standards require that you, or your representative who is knowledgeable regarding the use and condition of the property, answer the questions found on the following site assessment questionnaire.

Please answer these questions in good faith and to the extent of your actual knowledge. Circle the appropriate answer. For yes answers please provide additional explanation. We would appreciate it if you would FAX the completed questionnaire as soon as possible to Youngdahl Consulting Group, Inc. FAX: 916-933-6482 or email it to Laurie Israel at lbi@youngdahl.net

1. Currently is, or in the past has, the *property* or any *adjoining* property been used for an industrial use? **Yes** No Unknown
   Adjoining property: Moulding plant, truss plant
   This property: Pole plant

2. Currently is, or in the past has, the *property* or any *adjoining* property been used as a gasoline station, motor repair facility, commercial printing facility, dry cleaners, photo developing laboratory, junkyard or landfill, or as a waste treatment, storage, disposal, processing, or recycling facility? Yes No **Unknown**

3. Are there currently, or have there been previously, any damaged or discarded automotive or industrial batteries, or pesticides, paints, or other chemicals in individual containers of greater than 5 gal (19 L) in volume or 50 gal (208 L) in the aggregate, stored on or used at the *property*? Yes No **Unknown**

4. Are there currently, or have there been previously, any industrial *drums* (typically 55 gal (208 L)) or sacks of chemicals located on the property? Yes No **Unknown**

5. Has *fill dirt* been brought on to the property that originated from a contaminated site or that is of an unknown origin? Yes No **Unknown**

Sep 19 14 01:54p p.1

6.	Are there currently, or have there been previously, any *pits, ponds, or lagoons* located on the *property* in connection with waste treatment or waste disposal?	Yes	No	Unknown
7.	Is there currently, or has there been previously, any stained soil on the *property*?	Yes	No	Unknown
8.	Are there currently, or have there been previously, any registered or unregistered storage tanks (above or underground) located on the *property*?	Yes	No	Unknown
9.	Are there currently, or have there been previously, any vent pipes, fill pipes, or access ways indicating a fill pipe protruding from the ground on the *property*?	Yes	No	Unknown
10.	Are there currently, or have there been previously, any flooring, drains, or walls located within the facility that are stained by substances other than water or are emitting unusual odors?	Yes	No	Unknown
11.	If the *property* is served by a private well or non-public water system, have contaminants been identified in the well or system that exceed guidelines applicable to the water system or has the well been designated as contaminated by any government environmental/health agency?	Yes	No	Unknown
12.	Are you aware of any floor drains or sumps on the property? There was a Bathroom facility in pole plant	Yes	No	Unknown
13.	Have any *hazardous substances* or *petroleum products,* unidentified waste materials, tires, automotive or industrial batteries or any other waste materials been dumped above grade, buried and/or burned on the *property*? tires	Yes	No	Unknown
14.	Are there any transformers, capacitors, or hydraulic equipment on the property which may contain PCBs?	Yes	No	Unknown
15.	Do you have any knowledge of *environmental liens* with respect to the *property*?	Yes	No	Unknown

16.	Have you been informed of the past or current existence of environmental violations with respect to the *property*?	Yes	No	Unknown
17.	Do you have any knowledge of any *environmental site assessments* of the *property*?	Yes	No	Unknown
18.	Do you know of any past, threatened, or pending lawsuits or administrative proceedings concerning a release or threatened release of any *hazardous substance* or *petroleum products* involving the *property*?	Yes	No	Unknown
19.	Is the purchase price or appraised value of the property significantly less than comparable properties in the vicinity?	Yes	No	Unknown

To the best of the undersigned knowledge, the above statements and facts are true and correct and to the best of the undersigned's actual knowledge no material facts have been suppressed or misstated.

This questionnaire was completed by:

NAME (PRINT): Carol J. Caldwell	**(SIGNATURE):** Carol J. Caldwell
TITLE: Trustee, Owner	**ADDRESS:** 2410 NW Pacific St, Newport, OR
FIRM:	**DATE:** 9/19/2014
PHONE NUMBER: (541) 265-4788	**FAX NUMBER:** (Same)
RELATIONSHIP TO SITE: Owner X	**or Owner=s Representative** _____

APPENDIX B

EDR Aerial Photo Decade Package
EDR Historical Topographic Map Report
EDR–City Directory Abstract
Certified Sanborn® Map Report (No Coverage)

Industrial Drive and Merchandise Way

Industrial Drive

Diamond Springs, CA 95619

Inquiry Number: 3925295.9

April 30, 2014

The EDR Aerial Photo Decade Package

6 Armstrong Road, 4th Floor
Shelton, Connecticut 06484
Toll Free: 800.352.0050
www.edrnet.com

EDR Aerial Photo Decade Package

Environmental Data Resources, Inc. (EDR) Aerial Photo Decade Package is a screening tool designed to assist environmental professionals in evaluating potential liability on a target property resulting from past activities. EDR's professional researchers provide digitally reproduced historical aerial photographs, and when available, provide one photo per decade.

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Date EDR Searched Historical Sources:

Aerial Photography April 30, 2014

Target Property:

Industrial Drive

Diamond Springs, CA 95619

Year	***Scale***	***Details***	***Source***
1935	Aerial Photograph. Scale: 1"=500'	Flight Year: 1935	Wallace
1946	Aerial Photograph. Scale: 1"=500'	Flight Year: 1946	USGS
1952	Aerial Photograph. Scale: 1"=500'	Flight Year: 1952	Robinson
1962	Aerial Photograph. Scale: 1"=500'	Flight Year: 1962	Cartwright
1973	Aerial Photograph. Scale: 1"=500'	Flight Year: 1973	NASA
1984	Aerial Photograph. Scale: 1"=500'	Flight Year: 1984	USGS
1993	Aerial Photograph. Scale: 1"=500'	/DOQQ - acquisition dates: 1993	EDR
1998	Aerial Photograph. Scale: 1"=500'	Flight Year: 1998	USGS
2005	Aerial Photograph. Scale: 1"=500'	Flight Year: 2005	EDR
2006	Aerial Photograph. Scale: 1"=500'	Flight Year: 2006	EDR
2009	Aerial Photograph. Scale: 1"=500'	Flight Year: 2009	EDR
2010	Aerial Photograph. Scale: 1"=500'	Flight Year: 2010	EDR
2012	Aerial Photograph. Scale: 1"=500'	Flight Year: 2012	EDR

INQUIRY #: 3925295.9
YEAR: 1935
= 500'
N
EDR

INQUIRY #: 3925295.9
YEAR: 1946
= 500'
N
EDR

INQUIRY #: 3925295.9
YEAR: 1952
= 500'
N
EDR

INQUIRY #: 3925295.9
YEAR: 1962
= 500'
N
EDR

INQUIRY #: 3925295.9
YEAR: 1973
= 500'
N
EDR

INQUIRY #: 3925295.9
YEAR: 1984
= 500'
N
EDR

INQUIRY #: 3925295.9
YEAR: 1993
= 500'
N
EDR

INQUIRY #: 3925295.9
YEAR: 1998
= 500'
N
EDR

INQUIRY #: 3925295.9
YEAR: 2005
= 500'
N
EDR

INQUIRY #: 3925295.9
YEAR: 2006
= 500'
N
EDR

INQUIRY #: 3925295.9
YEAR: 2009
= 500'
N
EDR

INQUIRY #: 3925295.9
YEAR: 2010
= 500'
N
EDR

INQUIRY #: 3925295.9
YEAR: 2012
= 500'
N
EDR

Industrial Drive and Merchandise Way
Industrial Drive
Diamond Springs, CA 95619

Inquiry Number: 3925295.4
April 28, 2014

EDR Historical Topographic Map Report

6 Armstrong Road, 4th Floor
Shelton, Connecticut 06484
Toll Free: 800.352.0050
www.edrnet.com

EDR Historical Topographic Map Report

Environmental Data Resources, Inc.s (EDR) Historical Topographic Map Report is designed to assist professionals in evaluating potential liability on a target property resulting from past activities. EDRs Historical Topographic Map Report includes a search of a collection of public and private color historical topographic maps, dating back to the early 1900s.

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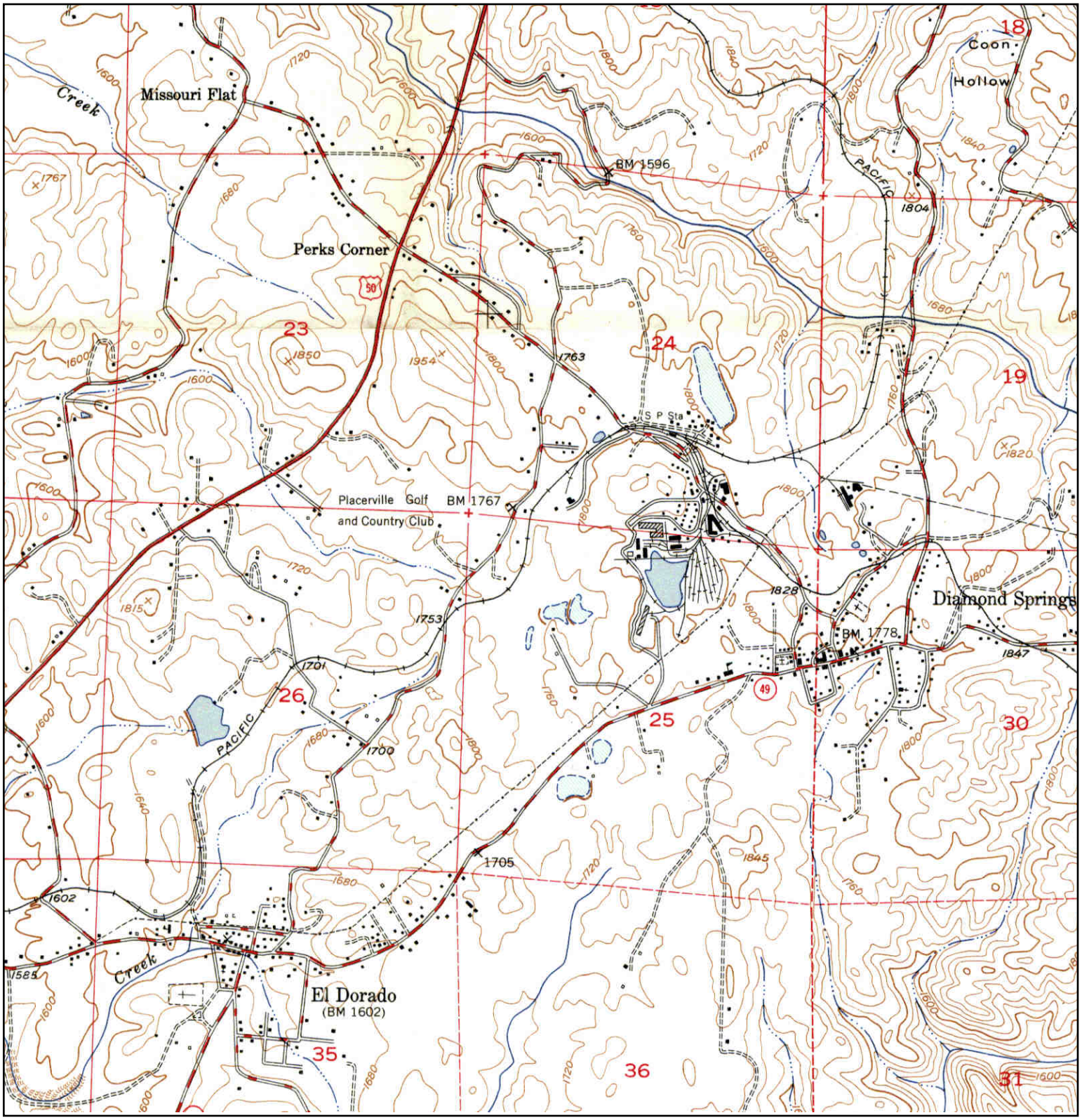
Historical Topographic Map

N	TARGET QUAD NAME: PLACERVILLE MAP YEAR: 1893 SERIES: 30 SCALE: 1:125000	SITE NAME: Industrial Drive and Merchandise Way ADDRESS: Industrial Drive Diamond Springs, CA 95619 LAT/LONG: 38.6982 / -120.83	CLIENT: Youngdahl Consulting Group CONTACT: Laurie Israel INQUIRY#: 3925295.4 RESEARCH DATE: 04/28/2014

Historical Topographic Map

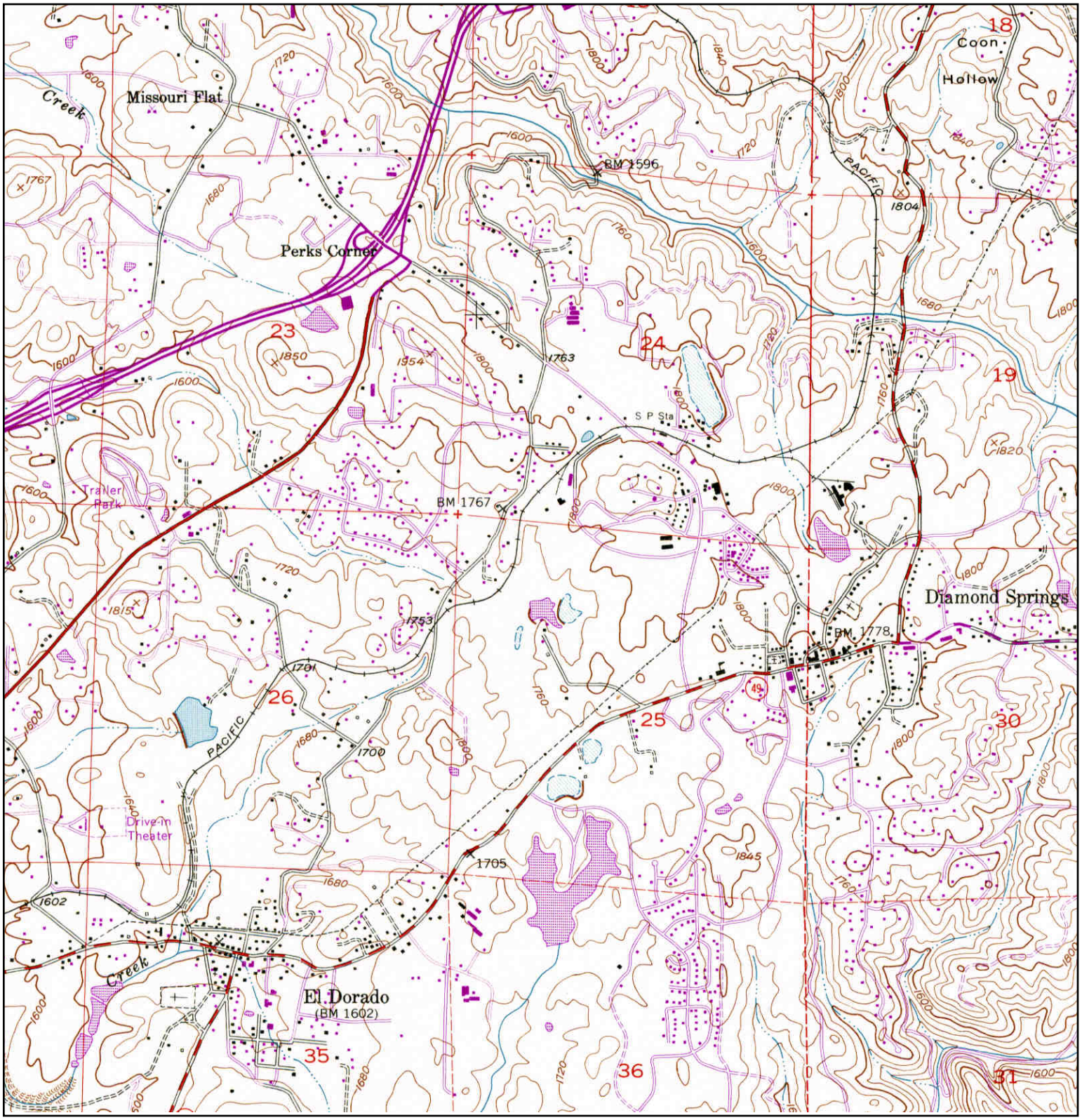
N	TARGET QUAD NAME: PLACERVILLE MAP YEAR: 1949 SERIES: 15 SCALE: 1:62500	SITE NAME: Industrial Drive and Merchandise Way ADDRESS: Industrial Drive Diamond Springs, CA 95619 LAT/LONG: 38.6982 / -120.83	CLIENT: Youngdahl Consulting Group CONTACT: Laurie Israel INQUIRY#: 3925295.4 RESEARCH DATE: 04/28/2014

Historical Topographic Map



N	TARGET QUAD NAME: PLACERVILLE MAP YEAR: 1950 SERIES: 7.5 SCALE: 1:24000	SITE NAME: Industrial Drive and Merchandise Way ADDRESS: Industrial Drive Diamond Springs, CA 95619 LAT/LONG: 38.6982 / -120.83	CLIENT: Youngdahl Consulting Group CONTACT: Laurie Israel INQUIRY#: 3925295.4 RESEARCH DATE: 04/28/2014

Historical Topographic Map



N	TARGET QUAD NAME: PLACERVILLE MAP YEAR: 1973 PHOTOREVISED FROM :1949 SERIES: 7.5 SCALE: 1:24000	SITE NAME: Industrial Drive and Merchandise Way ADDRESS: Industrial Drive Diamond Springs, CA 95619 LAT/LONG: 38.6982 / -120.83	CLIENT: Youngdahl Consulting Group CONTACT: Laurie Israel INQUIRY#: 3925295.4 RESEARCH DATE: 04/28/2014

Industrial Drive and Merchandise Way
Industrial Drive
Diamond Springs, CA 95619

Inquiry Number: 3925295.5
May 02, 2014

The EDR-City Directory Image Report

Environmental Data Resources Inc

6 Armstrong Road
Shelton, CT 06484
800.352.0050
www.edrnet.com

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EXECUTIVE SUMMARY

DESCRIPTION

Environmental Data Resources, Inc.'s (EDR) City Directory Report is a screening tool designed to assist environmental professionals in evaluating potential liability on a target property resulting from past activities. EDR's City Directory Report includes a search of available city directory data at 5 year intervals.

RESEARCH SUMMARY

The following research sources were consulted in the preparation of this report. A check mark indicates where information was identified in the source and provided in this report.

Year	*Target Street*	*Cross Street*	*Source*
2013	☑	☑	Cole Information Services
2008	☑	☑	Cole Information Services
2003	☑	☑	Cole Information Services
1999	☑	☑	Cole Information Services
1994	☑	☑	Haines Criss-Cross Directory
1989	☑	☐	Haines Criss-Cross Directory
1985	☑	☐	Haines Criss-Cross Directory
1980	☐	☐	Haines Criss-Cross Directory
1974	☐	☐	Haines Criss-Cross Directory
1970	☐	☐	Haines Criss-Cross Directory

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FINDINGS

TARGET PROPERTY STREET

Industrial Drive
Diamond Springs, CA 95619

Year	CD Image	Source	
INDUSTRIAL DR			
2013	pg A1	Cole Information Services	
2008	pg A3	Cole Information Services	
2003	pg A5	Cole Information Services	
1999	pg A7	Cole Information Services	
1994	pg A9	Haines Criss-Cross Directory	
1989	pg A11	Haines Criss-Cross Directory	
1989	pg A12	Haines Criss-Cross Directory	
1985	pg A13	Haines Criss-Cross Directory	
1980	-	Haines Criss-Cross Directory	Street not listed in Source
1974	-	Haines Criss-Cross Directory	Street not listed in Source
1970	-	Haines Criss-Cross Directory	Street not listed in Source

FINDINGS

CROSS STREETS

Year	*CD Image*	*Source*	

MERCHANDISE WAY

2013	pg. A2	Cole Information Services	
2008	pg. A4	Cole Information Services	
2003	pg. A6	Cole Information Services	
1999	pg. A8	Cole Information Services	
1994	pg. A10	Haines Criss-Cross Directory	
1989	-	Haines Criss-Cross Directory	Street not listed in Source
1985	-	Haines Criss-Cross Directory	Street not listed in Source
1980	-	Haines Criss-Cross Directory	Street not listed in Source
1974	-	Haines Criss-Cross Directory	Street not listed in Source
1970	-	Haines Criss-Cross Directory	Street not listed in Source

City Directory Images

Target Street	Cross Street	Source
✓	-	Cole Information Services

INDUSTRIAL DR 2013

180	SNOWLINE HOSPICE
300	EL DORADO TRUSS CO INC
327	DOUG WARD
	F T M INC
	GINGERBREAD MAN THE
329	BAKER ART FOUNDRY & PEWTER WORKS I
331	ARROW SPRINGS
	HANGTOWN FIRE CONTROL INCORPORATED
	WEBSTER & ASSOCIATES MANUFACTURING
333	PRIME MECHANICAL
	TENTEL
337	APEX SHEETMETAL

Target Street	Cross Street	Source
-	✓	Cole Information Services

MERCHANDISE WAY 2013

6601	LITCO LUMBER INC
	MOTT GORDON ROOFING CO INC
	PILAND ELECTRIC INC
6610	PATTERSON DEVELOPMENT
6617	GRADUATE NC MACHINING
6635	COORALITE DENTAL MANUFACTURING CO
6641	ALL POINTS WELDING
6642	S I E II LLC
	SUMMIT PACKAGING SOLUTIONS
6650	CAROL RUSSELLS BOOKKEEPING & PAYROL
	CELEBRITY INC
	DAVIES JIM & ASSOCIATES
	HARVEST HYDROPONICS
6665	DANIEL WARGANICH
6670	J & J GLASS
6671	EL DORADO RESTORATION
6675	ALL COAST BUILDERS INC
6686	SINCLAIR EQUIPMENT CO
6692	ARM & HAND REHAB
6693	DURAMAX STORE

Target Street	Cross Street	Source
✓	-	Cole Information Services

INDUSTRIAL DR 2008

180	HABITAT FOR HUMANITY
	NORCAL EXPRESS BLOWER
	WESTERN STATES DISTRIBUTING INC
	WOODWORKS UNLIMITED
281	SBC
327	APPLIED CONTROL ELECTRONICS
	FANCILINE SCREEN DOOR CO
	GINGERBREAD MAN
	THE GINGER BREAD MAN
331	HANGTOWN FIRE CONTROL
	WEBSTER & ASSOCIATES
333	DREAMS OF WOOD
	GATHMAN PAINTING
	TENTEL TEST EQUIPMENT & TRAINING CO
337	CALPIPE
	TIMBERCRAFT

Target Street	Cross Street	Source
-	✓	Cole Information Services

MERCHANDISE WAY 2008

6601	GORDON MOTT ROOFING INC
	MORNING GLORY FERMENTATION SUPPLY
	MOTT GORDON ROOFING CO INC
	PILAND ELECTRIC INC
	SONORA J S WEST & CO INC THE
6606	HEADEND GEORGETOWN
6610	PATTERSON DEVELOPMENT
6617	GRADUATE PRECISION LLC
6635	CO ORAL ITE DENTAL MFG CO INC
6641	JEFF SMITH
6642	ALLEN BRITISH CARS
	AUTOTREND
	BIG IGGY OV LLC
	BLOOMBRIGHT LLC
	HANGTOWN HYDROGARDENS
6650	ACE STRIPPING INC
	BLOOMWRIGHT HORTICULTURE PRODUCTS CE
	CELEBRITY INC
	HARVEST MOON HYDRO WEST
6657	EDWARDS INSTALLATION INC
6665	DANIEL WARGANICH
6670	J & J GLASS DARRAH INVESTORS INC
6671	EL DORADO SERVICE TEAM OF PROFESSION
6675	RICHARD COWELL CO
	ROBERT NICKEL
6686	SINCLAIR EQUIPMENT CO
6692	SIERRA BOYS RANCH INC
6693	HINDS CUSTOM MACHINE ENTPS

Target Street	Cross Street	Source
✓	-	Cole Information Services

INDUSTRIAL DR 2003

180	GMC FOREST PRODUCTS
281	OCCUPANT UNKNOWN
295	BAKER ART FOUNDRY & PEWTER WOR
300	EL DORADO TRUSS CO
	KIT KARSTENS
327	FANCY LINE SCREEN DOOR CO
	GINGERBREAD MAN
	TRACY REGO
329	BOB ROGGY
	WEST COAST CARRIAGE
331	BEST OF TIMES PRINTING
	D & D PRECISION SHEET METAL
333	GATHMAN PAINTING
	MIKE GATHMAN
	SIERRA ELECTRIC MOTOR & PUMP
335	JIFFY CUT
337	TIMBERCRAFT
339	A ODAY

Target Street	Cross Street	Source
-	✓	Cole Information Services

MERCHANDISE WAY 2003

6601	ANTENNA CONCEPTS INC
	GORDON MOTT ROOFING CO
	PILAND ELECTRIC
6617	MATRIX MOLDING
	MATRIX MOLDING INC
6626	OCCUPANT UNKNOWN
6635	BETTY MEYER
	CO ORAL ITE DENTAL MFG CO
6641	LANE MFG
6642	AUTOTREND
	EAGLE LIFTS & MOBILITY
	JEK INC
	SHERON RIGHETTI
6655	FOOD BANK OF EL DORADO COUNTY
6670	J & J GLASS
	PENNY DEMARKO
6671	EL DORADO SRVC TEAM OF PRFSNL
6675	NICKEL ROBERT B INC
6686	FRANK SINCLAIR
	SINCLAIR EQUIPMENT CO
6692	SIERRA BOYS RANCH
6693	HINDS AUTOMOTIVE MACHINE SHOP
	OCCUPANT UNKNOWN

Target Street	Cross Street	Source
✓	-	Cole Information Services

INDUSTRIAL DR 1999

180	DIAMOND FEED & SUPPLY
	GMC FOREST PRODUCTS
	HANGTOWN TOW SERVICE
	MISSOURI FLAT STORAGE
	PACIFIC SOUTHEAST FOREST PRODUCTS
	PACIFIC SOUTHEAST FOREST PRODUCTS POLYWOOD PRODUCTS
300	EL DORADO TRUSS COMPANY INCORPORATED
327	APPLIED CONTROL ELECTRONICS INCORPORATED
	WOLFE PETER ARCHT
331	D & D PRECISION SHEET METAL
	FLEXOGRAPHIC EQUIPMENT COMPANY
	HANGTOWN FIRE CONTROL
333	EAGLE PRESS
	RELIANT INDUSTRIES RETAIL OUTLET
	SIERRA ELECTRIC MOTOR & PUMP
335	JIFFY CUT
337	CONTRACT MARKETING RESOURCES
	OHARA METAL PRODUCTS COMPANY

Target Street	Cross Street	Source
-	✓	Cole Information Services

MERCHANDISE WAY 1999

6601	ANTENNA CONCEPTS FAX
	MOTT GORDON ROOFING COMPANY INCORPORATED
	PILAND ELECTRIC
6617	MATRIX MOLDING INCORPORATED
6626	JEK INCORPORATED
	SIERRA DISTRIBUTING
6635	CO ORAL ITE DENTAL MANUFACTURING COMPANY
6641	LANE MANUFACTURING COMPANY
6650	SIERRA DISTRIBUTING
6665	DANIEL WARGANICH
6675	NICKEL ROBERT B INCORPORATED
	ROBERT NICKEL
6686	SINCLAIR EQUIPMENT COMPANY
6693	49ER ALIGNMENT CENTER
	NESBITT AUTOMOTIVE DIAGNOSTIC INCORPORATED

Target Street	Cross Street	Source
✓	-	Haines Criss-Cross Directory

INDUSTRIAL DR 1994

INDUSTRIAL DR 95619
DIAMOND SPGS

180	*PAC SOUTHEAST FORST	626-6712	7
	*PAC SOUTHEAST FORST	622-0926	7
*	2 BUS	0 RES	0 NEW

Target Street	Cross Street	Source
-	✓	Haines Criss-Cross Directory

MERCHANDISE WAY 1994

MERCHANDISE WAY (91)
95619 DIAMOND SPGS

6601	★CARBON COPY COPIERS	626-3166	2
	★GESTETNER COPIER SV	626-3166	2
	★MONROE COPIER SERV	626-3166	2
	★MOTT GORDON RFNG CO	622-1199	2
	★PILAND ELECTRIC	622-7780	2
	★ROYAL COPIER SLS SV	626-3166	+4
6617	★MATRIX MOLDING INC	621-1413	2
6626	★J E K INC	642-9350	+4
6635	★CO ORAL ITE DNTL CO	621-4913	3
6641	★LANE MFG CO	622-4663	3
6650	★SIERRA DISTRIBUTING	626-9241	3
6686	★SINCLAIR EQUIPMENT	626-9386	+4
	★WATER TEC SYSTEMS	626-8778	+4
6692	★I M MARKETING SERVS	626-7996	2
	★LIVING TRUST AMER	626-7996	2

★ 15 BUS 0 RES 4 NEW

Target Street	Cross Street	Source
✓	-	Haines Criss-Cross Directory

INDUSTRIAL DR 1989

INDUSTRIAL DR (81)
95619 DIAMOND SPGS

180	*PAC SOUTHEAST FORST	626-6712	7
	*PAC SOUTHEAST FORST	622-0926	7
281	*PAC BELL BLDG IND	626-4082	6
300	*ELDRDO TRUSS CO INC	626-3442	1
331	*D&D PRECSN SHT MTL	626-4118	3
	*EVANGER DAVID A	626-4118	3
	*LESKER KURT J CO	622-7816	5

NOT BE KEYPUNCHED, ENTERED INTO A COMPUT

Target Street	Cross Street	Source
✓	-	Haines Criss-Cross Directory

INDUSTRIAL DR 1989

..INDUSTRIAL DR 95619 CONT..

333	*FAITH CONSTRUCTION	622-4457	7
460	*MINI STOR IT	745-4222	6

* 9 BUS 0 RES 0 NEW

Target Street	Cross Street	Source
✓	-	Haines Criss-Cross Directory

INDUSTRIAL DR 1985

INDUSTRIAL DR 95619
DIAMOND SPGS

180	XXXX	00	
281	XXXX	00	
300	EL DORADO TRUSS CO	626-3442	1
331	D&D PRECSN SHT MTL	626-4118	3
	EVANGER DAVID A	626-4118	3
	FUSION ENTERPRISES	626-1763	+5
	LAROCK MACHINE CO	622-1160	4
	LESKER KURT J CO	622-7816	+5
	MILLS ED	626-4118	3
333	EL DORADO KOMFORT	626-5500	+5

★ 8 BUS 2 RES 3 NEW

Industrial Drive and Merchandise Way
Industrial Drive
Diamond Springs, CA 95619

Inquiry Number: 3925295.3
April 28, 2014

Certified Sanborn® Map Report

6 Armstrong Road, 4th Floor
Shelton, Connecticut 06484
Toll Free: 800.352.0050
www.edrnet.com

Certified Sanborn® Map Report

4/28/14

Site Name:
Industrial Drive and
Industrial Drive
Diamond Springs, CA 95619

Client Name:
Youngdahl Consulting Group
1234 Glenhaven Court
El Dorado Hills, CA 95762

EDR Inquiry # 3925295.3

Contact: Laurie Israel

The Sanborn Library has been searched by EDR and maps covering the target property location as provided by Youngdahl Consulting Group were identified for the years listed below. The Sanborn Library is the largest, most complete collection of fire insurance maps. The collection includes maps from Sanborn, Bromley, Perris & Browne, Hopkins, Barlow, and others. Only Environmental Data Resources Inc. (EDR) is authorized to grant rights for commercial reproduction of maps by the Sanborn Library LLC, the copyright holder for the collection. Results can be authenticated by visiting www.edrnet.com/sanborn.

The Sanborn Library is continually enhanced with newly identified map archives. This report accesses all maps in the collection as of the day this report was generated.

Certified Sanborn Results:

Site Name: Industrial Drive and Merchandise Way
Address: Industrial Drive
City, State, Zip: Diamond Springs, CA 95619
Cross Street:
P.O. # NA
Project: E13236.006
Certification # 016B-44AE-8D1D

UNMAPPED PROPERTY

This report certifies that the complete holdings of the Sanborn Library, LLC collection have been searched based on client supplied target property information, and fire insurance maps covering the target property were not found.

Sanborn® Library search results
Certification # 016B-44AE-8D1D

The Sanborn Library includes more than 1.2 million fire insurance maps from Sanborn, Bromley, Perris & Browne, Hopkins, Barlow and others which track historical property usage in approximately 12,000 American cities and towns. Collections searched:

- ✔ Library of Congress
- ✔ University Publications of America
- ✔ EDR Private Collection

The Sanborn Library LLC Since 1866™

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APPENDIX C

EDR Radius Map Report with GeoCheck®

Industrial Drive and Merchandise Way
Industrial Drive
Diamond Springs, CA 95619

Inquiry Number: 3925295.2s
April 28, 2014

The EDR Radius Map™ Report with GeoCheck®

EDR® Environmental Data Resources Inc

6 Armstrong Road, 4th floor
Shelton, CT 06484
Toll Free: 800.352.0050
www.edrnet.com

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GEOCHECK ADDENDUM

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Thank you for your business.
Please contact EDR at 1-800-352-0050
with any questions or comments.

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EXECUTIVE SUMMARY

A search of available environmental records was conducted by Environmental Data Resources, Inc (EDR). The report was designed to assist parties seeking to meet the search requirements of EPA's Standards and Practices for All Appropriate Inquiries (40 CFR Part 312), the ASTM Standard Practice for Environmental Site Assessments (E 1527-13) or custom requirements developed for the evaluation of environmental risk associated with a parcel of real estate.

TARGET PROPERTY INFORMATION

ADDRESS

INDUSTRIAL DRIVE
DIAMOND SPRINGS, CA 95619

COORDINATES

Latitude (North):	38.6982000 - 38˚ 41' 53.52''
Longitude (West):	120.8300000 - 120˚ 49' 48.00''
Universal Tranverse Mercator:	Zone 10
UTM X (Meters):	688714.5
UTM Y (Meters):	4285314.0
Elevation:	1772 ft. above sea level

USGS TOPOGRAPHIC MAP ASSOCIATED WITH TARGET PROPERTY

Target Property Map:	38120-F7 PLACERVILLE, CA
Most Recent Revision:	1973

AERIAL PHOTOGRAPHY IN THIS REPORT

Photo Year:	2012
Source:	USDA

TARGET PROPERTY SEARCH RESULTS

The target property was not listed in any of the databases searched by EDR.

DATABASES WITH NO MAPPED SITES

No mapped sites were found in EDR's search of available ("reasonably ascertainable ") government records either on the target property or within the search radius around the target property for the following databases:

STANDARD ENVIRONMENTAL RECORDS

Federal NPL site list

NPL..... National Priority List

EXECUTIVE SUMMARY

Proposed NPL ..... Proposed National Priority List Sites
NPL LIENS ..... Federal Superfund Liens

Federal Delisted NPL site list

Delisted NPL ..... National Priority List Deletions

Federal CERCLIS list

CERCLIS ..... Comprehensive Environmental Response, Compensation, and Liability Information System
FEDERAL FACILITY ..... Federal Facility Site Information listing

Federal RCRA CORRACTS facilities list

CORRACTS ..... Corrective Action Report

Federal RCRA non-CORRACTS TSD facilities list

RCRA-TSDF ..... RCRA - Treatment, Storage and Disposal

Federal RCRA generators list

RCRA-LQG ..... RCRA - Large Quantity Generators
RCRA-CESQG ..... RCRA - Conditionally Exempt Small Quantity Generator

Federal institutional controls / engineering controls registries

US ENG CONTROLS ..... Engineering Controls Sites List
US INST CONTROL ..... Sites with Institutional Controls
LUCIS ..... Land Use Control Information System

Federal ERNS list

ERNS ..... Emergency Response Notification System

State- and tribal - equivalent NPL

RESPONSE ..... State Response Sites

State and tribal landfill and/or solid waste disposal site lists

SWF/LF ..... Solid Waste Information System

State and tribal leaking storage tank lists

SLIC ..... Statewide SLIC Cases
INDIAN LUST ..... Leaking Underground Storage Tanks on Indian Land

State and tribal registered storage tank lists

INDIAN UST ..... Underground Storage Tanks on Indian Land
FEMA UST ..... Underground Storage Tank Listing

State and tribal voluntary cleanup sites

VCP ..... Voluntary Cleanup Program Properties

EXECUTIVE SUMMARY

INDIAN VCP..... Voluntary Cleanup Priority Listing

ADDITIONAL ENVIRONMENTAL RECORDS

Local Brownfield lists

US BROWNFIELDS..... A Listing of Brownfields Sites

Local Lists of Landfill / Solid Waste Disposal Sites

ODI..... Open Dump Inventory
DEBRIS REGION 9..... Torres Martinez Reservation Illegal Dump Site Locations
WMUDS/SWAT..... Waste Management Unit Database
SWRCY..... Recycler Database
HAULERS..... Registered Waste Tire Haulers Listing
INDIAN ODI..... Report on the Status of Open Dumps on Indian Lands

Local Lists of Hazardous waste / Contaminated Sites

US CDL..... Clandestine Drug Labs
HIST Cal-Sites..... Historical Calsites Database
SCH..... School Property Evaluation Program
Toxic Pits..... Toxic Pits Cleanup Act Sites
CDL..... Clandestine Drug Labs
US HIST CDL..... National Clandestine Laboratory Register

Local Land Records

LIENS 2..... CERCLA Lien Information
LIENS..... Environmental Liens Listing
DEED..... Deed Restriction Listing

Records of Emergency Release Reports

HMIRS..... Hazardous Materials Information Reporting System
LDS..... Land Disposal Sites Listing
MCS..... Military Cleanup Sites Listing
SPILLS 90..... SPILLS 90 data from FirstSearch

Other Ascertainable Records

DOT OPS..... Incident and Accident Data
DOD..... Department of Defense Sites
FUDS..... Formerly Used Defense Sites
CONSENT..... Superfund (CERCLA) Consent Decrees
ROD..... Records Of Decision
UMTRA..... Uranium Mill Tailings Sites
US MINES..... Mines Master Index File
TRIS..... Toxic Chemical Release Inventory System
TSCA..... Toxic Substances Control Act
FTTS..... FIFRA/ TSCA Tracking System - FIFRA (Federal Insecticide, Fungicide, & Rodenticide Act)/TSCA (Toxic Substances Control Act)
HIST FTTS..... FIFRA/TSCA Tracking System Administrative Case Listing
SSTS..... Section 7 Tracking Systems

EXECUTIVE SUMMARY

ICIS	Integrated Compliance Information System
PADS	PCB Activity Database System
MLTS	Material Licensing Tracking System
RADINFO	Radiation Information Database
RAATS	RCRA Administrative Action Tracking System
RMP	Risk Management Plans
CA BOND EXP. PLAN	Bond Expenditure Plan
NPDES	NPDES Permits Listing
UIC	UIC Listing
Cortese	"Cortese" Hazardous Waste & Substances Sites List
Notify 65	Proposition 65 Records
DRYCLEANERS	Cleaner Facilities
WIP	Well Investigation Program Case List
ENF	Enforcement Action Listing
INDIAN RESERV	Indian Reservations
SCRD DRYCLEANERS	State Coalition for Remediation of Drycleaners Listing
2020 COR ACTION	2020 Corrective Action Program List
LEAD SMELTERS	Lead Smelter Sites
US AIRS	Aerometric Information Retrieval System Facility Subsystem
WDS	Waste Discharge System
PRP	Potentially Responsible Parties
MWMP	Medical Waste Management Program Listing
COAL ASH DOE	Steam-Electric Plant Operation Data
HWT	Registered Hazardous Waste Transporter Database
HWP	EnviroStor Permitted Facilities Listing
US FIN ASSUR	Financial Assurance Information
Financial Assurance	Financial Assurance Information Listing
COAL ASH EPA	Coal Combustion Residues Surface Impoundments List
PCB TRANSFORMER	PCB Transformer Registration Database
PROC	Certified Processors Database
EPA WATCH LIST	EPA WATCH LIST

EDR HIGH RISK HISTORICAL RECORDS

EDR Exclusive Records

EDR MGP	EDR Proprietary Manufactured Gas Plants

EDR RECOVERED GOVERNMENT ARCHIVES

Exclusive Recovered Govt. Archives

RGA LF	Recovered Government Archive Solid Waste Facilities List
RGA LUST	Recovered Government Archive Leaking Underground Storage Tank

SURROUNDING SITES: SEARCH RESULTS

Surrounding sites were identified in the following databases.

Elevations have been determined from the USGS Digital Elevation Model and should be evaluated on a relative (not an absolute) basis. Relative elevation information between sites of close proximity should be field verified. Sites with an elevation equal to or higher than the target property have been differentiated below from sites with an elevation lower than the target property.
Page numbers and map identification numbers refer to the EDR Radius Map report where detailed data on individual sites can be reviewed.

Sites listed in ***bold italics*** are in multiple databases.

Unmappable (orphan) sites are not considered in the foregoing analysis.

EXECUTIVE SUMMARY

STANDARD ENVIRONMENTAL RECORDS

Federal CERCLIS NFRAP site List

CERC-NFRAP: Archived sites are sites that have been removed and archived from the inventory of CERCLIS sites. Archived status indicates that, to the best of EPA's knowledge, assessment at a site has been completed and that EPA has determined no further steps will be taken to list this site on the National Priorities List (NPL), unless information indicates this decision was not appropriate or other considerations require a recommendation for listing at a later time. This decision does not necessarily mean that there is no hazard associated with a given site; it only means that, based upon available information, the location is not judged to be a potential NPL site.

A review of the CERC-NFRAP list, as provided by EDR, and dated 10/25/2013 has revealed that there is 1 CERC-NFRAP site within approximately 0.625 miles of the target property.

Equal/Higher Elevation	Address	Direction / Distance	Map ID	Page
OXYGEN SERVICE & SUPPLY CO	13 CHINA GARDEN RD	E 1/4 - 1/2 (0.446 mi.)	156	130

Federal RCRA generators list

RCRA-SQG: RCRAInfo is EPA's comprehensive information system, providing access to data supporting the Resource Conservation and Recovery Act (RCRA) of 1976 and the Hazardous and Solid Waste Amendments (HSWA) of 1984. The database includes selective information on sites which generate, transport, store, treat and/or dispose of hazardous waste as defined by the Resource Conservation and Recovery Act (RCRA). Small quantity generators (SQGs) generate between 100 kg and 1,000 kg of hazardous waste per month.

A review of the RCRA-SQG list, as provided by EDR, and dated 03/11/2014 has revealed that there are 7 RCRA-SQG sites within approximately 0.375 miles of the target property.

Equal/Higher Elevation	Address	Direction / Distance	Map ID	Page
PACIFIC BELL C/O ALLEN TB72R	***281 INDUSTRIAL DR***	***E 0 - 1/8 (0.070 mi.)***	***A21***	***23***
SIERRA ELECTRIC MOTOR & PUMP C	***333-1 INDUSTRIAL DR***	***E 1/8 - 1/4 (0.144 mi.)***	***D83***	***76***
COMCAST OF CALIFORNIA XV LLC	6517 COMMERCE WAY	S 1/8 - 1/4 (0.189 mi.)	F91	81
FOOTHILL AUTO REPAIR	***6566 COMMERCE WY UNIT C***	***S 1/8 - 1/4 (0.233 mi.)***	***K113***	***92***
CELEBRITY INCORPORATED	***4512 MISSOURI FLAT ROAD***	***E 1/8 - 1/4 (0.243 mi.)***	***J122***	***99***
EL DORADO SERVICE CENTER	4636 MISSOUR FLAT ROAD	ESE 1/4 - 1/2 (0.256 mi.)	L144	118

Lower Elevation	Address	Direction / Distance	Map ID	Page
COOK CABINETS INC	***6428 CAPITOL AVE***	***SSW 0 - 1/8 (0.078 mi.)***	***B25***	***37***

State- and tribal - equivalent CERCLIS

ENVIROSTOR: The Department of Toxic Substances Control's (DTSC's) Site Mitigation and Brownfields Reuse Program's (SMBRP's) EnviroStor database identifes sites that have known contamination or sites for which there may be reasons to investigate further. The database includes the following site types: Federal Superfund sites (National Priorities List (NPL)); State Response, including Military Facilities and State Superfund; Voluntary Cleanup; and School sites. EnviroStor provides similar information to the information

that was available in CalSites, and provides additional site information, including, but not limited to, identification of formerly-contaminated properties that have been released for reuse, properties where environmental deed restrictions have been recorded to prevent inappropriate land uses, and risk characterization information that is used to assess potential impacts to public health and the environment at contaminated sites.

A review of the ENVIROSTOR list, as provided by EDR, and dated 03/12/2014 has revealed that there are 5 ENVIROSTOR sites within approximately 1.125 miles of the target property.

Equal/Higher Elevation	Address	Direction / Distance	Map ID	Page
PACIFIC SOUTHEAST FOREST PROD. Status: No Further Action	***180 INDUSTRIAL DR***	***ENE 0 - 1/8 (0.006 mi.)***	***A3***	***9***
FOOTHILL AUTO REPAIR Status: Refer: RWQCB	6566-C COMMERCE WAY	S 1/8 - 1/4 (0.233 mi.)	K111	91
CELEBRITY PLATING Status: No Further Action	***4502 MISSOURI FLAT ROAD***	***E 1/8 - 1/4 (0.246 mi.)***	***J129***	***103***
TETERS AUTO WRECKERS Status: Refer: Other Agency	4487 MISSOURI FLAT ROAD	ENE 1/4 - 1/2 (0.292 mi.)	148	122

Lower Elevation	Address	Direction / Distance	Map ID	Page
BOB S SALVAGE SCRAP METAL Status: Refer: Other Agency	***4468 FORNI RD***	***SW 1/2 - 1 (0.817 mi.)***	***159***	***142***

State and tribal leaking storage tank lists

LUST: The Leaking Underground Storage Tank Incident Reports contain an inventory of reported leaking underground storage tank incidents. The data come from the State Water Resources Control Board Leaking Underground Storage Tank Information System.

A review of the LUST list, as provided by EDR, and dated 03/17/2014 has revealed that there are 4 LUST sites within approximately 0.625 miles of the target property.

Equal/Higher Elevation	Address	Direction / Distance	Map ID	Page
PACIFIC BELL C/O ALLEN TB72R Status: Completed - Case Closed	***281 INDUSTRIAL DR***	***E 0 - 1/8 (0.070 mi.)***	***A21***	***23***
SIERRA DOOR Status: Completed - Case Closed	***4415 MISSOURI FLAT RD***	***NE 1/4 - 1/2 (0.312 mi.)***	***N150***	***123***
FORMER SS Status: Completed - Case Closed	***493 MAIN***	***ESE 1/2 - 1 (0.583 mi.)***	***158***	***140***

Lower Elevation	Address	Direction / Distance	Map ID	Page
STEVE'S CHEAPER Status: Completed - Case Closed	***130 PLEASANT VALLEY***	***S 1/4 - 1/2 (0.491 mi.)***	***157***	***130***

EXECUTIVE SUMMARY

State and tribal registered storage tank lists

UST: The Underground Storage Tank database contains registered USTs. USTs are regulated under Subtitle I of the Resource Conservation and Recovery Act (RCRA). The data come from the State Water Resources Control Board's Hazardous Substance Storage Container Database.

A review of the UST list, as provided by EDR, and dated 03/17/2014 has revealed that there are 3 UST sites within approximately 0.375 miles of the target property.

Equal/Higher Elevation	Address	Direction / Distance	Map ID	Page
MISSOURI STATION	4535 MISSOURI FLAT RD	ENE 1/4 - 1/2 (0.252 mi.)	J141	115
EDUHSD TRANSPORTATION	4675 MISSOURI FLAT RD	ESE 1/4 - 1/2 (0.263 mi.)	L145	121

Lower Elevation	Address	Direction / Distance	Map ID	Page
DAWSON OIL CARDLOCK	321 PLEASANT VALLEY RD	SE 1/4 - 1/2 (0.351 mi.)	O153	128

AST: A listing of aboveground storage tank petroleum storage tank locations.

A review of the AST list, as provided by EDR, and dated 08/01/2009 has revealed that there is 1 AST site within approximately 0.375 miles of the target property.

Lower Elevation	Address	Direction / Distance	Map ID	Page
WESTERN SIGN CO., INC.	6221-A ENTERPRISE	SSE 0 - 1/8 (0.080 mi.)	C33	45

ADDITIONAL ENVIRONMENTAL RECORDS

Local Lists of Registered Storage Tanks

CA FID UST: The Facility Inventory Database contains active and inactive underground storage tank locations. The source is the State Water Resource Control Board.

A review of the CA FID UST list, as provided by EDR, and dated 10/31/1994 has revealed that there are 3 CA FID UST sites within approximately 0.375 miles of the target property.

Equal/Higher Elevation	Address	Direction / Distance	Map ID	Page
PACIFIC BELL C/O ALLEN TB72R	***281 INDUSTRIAL DR***	***E 0 - 1/8 (0.070 mi.)***	***A21***	***23***
PG&E EL DORADO SERVICE CENTER	4636 MISSOURI FLATE RD	ESE 1/4 - 1/2 (0.256 mi.)	L142	115
SIERRA DOOR	***4415 MISSOURI FLAT RD***	***NE 1/4 - 1/2 (0.312 mi.)***	***N150***	***123***

HIST UST: Historical UST Registered Database.

A review of the HIST UST list, as provided by EDR, and dated 10/15/1990 has revealed that there are 4 HIST UST sites within approximately 0.375 miles of the target property.

Equal/Higher Elevation	Address	Direction / Distance	Map ID	Page
PACIFIC BELL	281 INDUSTRIAL DR	E 0 - 1/8 (0.070 mi.)	A19	21
NOR-CAL BEVERAGE CO., INC.	6230 ENTERPRISE DRIVE	SE 0 - 1/8 (0.098 mi.)	C47	55
EL DORADO UNION HIGH SCHOOL DI	4675 MISSOURI FLAT ROAD	ESE 1/4 - 1/2 (0.252 mi.)	L137	109

EXECUTIVE SUMMARY

Equal/Higher Elevation	Address	Direction / Distance	Map ID	Page
PG&E EL DORADO SERVICE CENTER	***4636 MISSOURI FLAT RD***	***ESE 1/4 - 1/2 (0.256 mi.)***	***L143***	***115***

SWEEPS UST: Statewide Environmental Evaluation and Planning System. This underground storage tank listing was updated and maintained by a company contacted by the SWRCB in the early 1990's. The listing is no longer updated or maintained. The local agency is the contact for more information on a site on the SWEEPS list.

A review of the SWEEPS UST list, as provided by EDR, and dated 06/01/1994 has revealed that there are 6 SWEEPS UST sites within approximately 0.375 miles of the target property.

Equal/Higher Elevation	Address	Direction / Distance	Map ID	Page
PACIFIC BELL C/O ALLEN TB72R	***281 INDUSTRIAL DR***	***E 0 - 1/8 (0.070 mi.)***	***A21***	***23***
NOR-CAL BEVERAGE CO., INC.	***6230 ENTERPRISE DR***	***SE 0 - 1/8 (0.098 mi.)***	***C48***	***55***
MISSOURI STATION	4535 MISSOURI FLAT RD	ENE 1/4 - 1/2 (0.251 mi.)	J136	108
EDUHSD: DISTRICT OFFICE/TRANSP	***4675 MISSOURI FLAT RD***	***ESE 1/4 - 1/2 (0.252 mi.)***	***L138***	***110***
PG&E EL DORADO SERVICE CENTER	***4636 MISSOURI FLAT RD***	***ESE 1/4 - 1/2 (0.256 mi.)***	***L143***	***115***
SIERRA DOOR	***4415 MISSOURI FLAT RD***	***NE 1/4 - 1/2 (0.312 mi.)***	***N150***	***123***

Records of Emergency Release Reports

CHMIRS: The California Hazardous Material Incident Report System contains information on reported hazardous material incidents, i.e., accidental releases or spills. The source is the California Office of Emergency Services.

A review of the CHMIRS list, as provided by EDR, and dated 10/14/2013 has revealed that there is 1 CHMIRS site within approximately 0.125 miles of the target property.

Equal/Higher Elevation	Address	Direction / Distance	Map ID	Page
Not reported	281 INDUSTRIAL AVE	E 0 - 1/8 (0.070 mi.)	A20	22

Other Ascertainable Records

RCRA NonGen / NLR: RCRAInfo is EPA's comprehensive information system, providing access to data supporting the Resource Conservation and Recovery Act (RCRA) of 1976 and the Hazardous and Solid Waste Amendments (HSWA) of 1984. The database includes selective information on sites which generate, transport, store, treat and/or dispose of hazardous waste as defined by the Resource Conservation and Recovery Act (RCRA). Non-Generators do not presently generate hazardous waste.

A review of the RCRA NonGen / NLR list, as provided by EDR, and dated 03/11/2014 has revealed that there are 4 RCRA NonGen / NLR sites within approximately 0.375 miles of the target property.

Equal/Higher Elevation	Address	Direction / Distance	Map ID	Page
TRUE CYCLE INC	180 INDUSTRIAL DR	ENE 0 - 1/8 (0.006 mi.)	A6	12
PACIFIC BELL	***3251 PIERROZ ROAD***	***E 0 - 1/8 (0.120 mi.)***	***D72***	***71***
RUSSELL J GRIBBLE	***3550 CHINA GARDEN RD NO***	***ENE 1/4 - 1/2 (0.355 mi.)***	***155***	***129***

Lower Elevation	Address	Direction / Distance	Map ID	Page
COOK CABINETS INC	***6048 ENTERPRISE DR***	***SW 1/8 - 1/4 (0.234 mi.)***	***I116***	***95***

EXECUTIVE SUMMARY

FINDS: The Facility Index System contains both facility information and "pointers" to other sources of information that contain more detail. These include: RCRIS; Permit Compliance System (PCS); Aerometric Information Retrieval System (AIRS); FATES (FIFRA [Federal Insecticide Fungicide Rodenticide Act] and TSCA Enforcement System, FTTS [FIFRA/TSCA Tracking System]; CERCLIS; DOCKET (Enforcement Docket used to manage and track information on civil judicial enforcement cases for all environmental statutes); Federal Underground Injection Control (FURS); Federal Reporting Data System (FRDS); Surface Impoundments (SIA); TSCA Chemicals in Commerce Information System (CICS); PADS; RCRA-J (medical waste transporters/disposers); TRIS; and TSCA. The source of this database is the U.S. EPA/NTIS.

A review of the FINDS list, as provided by EDR, and dated 11/18/2013 has revealed that there are 4 FINDS sites within approximately 0.125 miles of the target property.

Equal/Higher Elevation	Address	Direction / Distance	Map ID	Page
SNOWLINE HOSPICE REUSE AND PRO	180 INDUSTRIAL DR	ENE 0 - 1/8 (0.006 mi.)	A2	8
PACIFIC BELL C/O ALLEN TB72R	***281 INDUSTRIAL DR***	***E 0 - 1/8 (0.070 mi.)***	***A21***	***23***
PACIFIC BELL	***3251 PIERROZ ROAD***	***E 0 - 1/8 (0.120 mi.)***	***D72***	***71***

Lower Elevation	Address	Direction / Distance	Map ID	Page
COOK CABINETS INC	***6428 CAPITOL AVE***	***SSW 0 - 1/8 (0.078 mi.)***	***B25***	***37***

HIST CORTESE: The sites for the list are designated by the State Water Resource Control Board [LUST], the Integrated Waste Board [SWF/LS], and the Department of Toxic Substances Control [CALSITES]. This listing is no longer updated by the state agency.

A review of the HIST CORTESE list, as provided by EDR, and dated 04/01/2001 has revealed that there are 3 HIST CORTESE sites within approximately 0.5 miles of the target property.

Equal/Higher Elevation	Address	Direction / Distance	Map ID	Page
PACIFIC BELL C/O ALLEN TB72R	***281 INDUSTRIAL DR***	***E 0 - 1/8 (0.070 mi.)***	***A21***	***23***
SIERRA DOOR	***4415 MISSOURI FLAT RD***	***NE 1/4 - 1/2 (0.312 mi.)***	***N150***	***123***

Lower Elevation	Address	Direction / Distance	Map ID	Page
STEVE'S CHEAPER	***130 PLEASANT VALLEY***	***S 1/4 - 1/2 (0.491 mi.)***	***157***	***130***

CUPA Listings: A listing of sites included in the county's Certified Unified Program Agency database. California's Secretary for Environmental Protection established the unified hazardous materials and hazardous waste regulatory program as required by chapter 6.11 of the California Health and Safety Code. The Unified Program consolidates the administration, permits, inspections, and enforcement activities.

A review of the CUPA Listings list, as provided by EDR, has revealed that there are 74 CUPA Listings sites within approximately 0.375 miles of the target property.

Equal/Higher Elevation	Address	Direction / Distance	Map ID	Page
PACIFIC SOUTHEAST FOREST PROD.	***180 INDUSTRIAL DR***	***ENE 0 - 1/8 (0.006 mi.)***	***A3***	***9***
ALEXANDER CUSTOM AIRBRUSH - HM	180 INDUSTRIAL DR BLD C	ENE 0 - 1/8 (0.006 mi.)	A4	11
PACIFIC BELL C/O ALLEN TB72R	***281 INDUSTRIAL DR***	***E 0 - 1/8 (0.070 mi.)***	***A21***	***23***
NOR-CAL BEVERAGE CO., INC.	***6230 ENTERPRISE DR***	***SE 0 - 1/8 (0.098 mi.)***	***C48***	***55***
EL DORADO TRUSS	300 INDUSTRIAL DR	E 0 - 1/8 (0.125 mi.)	D76	73
APPLIED CONTROL ELECTRONICS	327 - 1 INDUSTRIAL DR	E 1/8 - 1/4 (0.137 mi.)	D80	75
BAKER ART FOUNDRY	329 INDUSTRIAL DR STE 4	E 1/8 - 1/4 (0.139 mi.)	D81	75
VAROZZA 4X4 OUTFITTERS	6166 D ENTERPRISE DR	SSE 1/8 - 1/4 (0.154 mi.)	C85	78
PLACERVILLE COCA COLA	6516 COMMERCE WAY	S 1/8 - 1/4 (0.190 mi.)	F92	82

EXECUTIVE SUMMARY

Equal/Higher Elevation	Address	Direction / Distance	Map ID	Page
SUB SEA SYSTEMS	6524 COMMERCE WAY	S 1/8 - 1/4 (0.198 mi.)	F97	84
AT&T MOBILITY HWY 49	3457 WEDGE HILL RD	ENE 1/8 - 1/4 (0.210 mi.)	H101	86
EDUHSD MAINTENANCE & OPS	6540 COMMERCE WAY	S 1/8 - 1/4 (0.215 mi.)	F102	86
ROBINSON'S AUTOMOTIVE	6120 C ENTERPRISE DR	S 1/8 - 1/4 (0.224 mi.)	G105	88
ED SHAIDEL ENTERPRISES	4568 MISSOURI FLAT RD #	E 1/8 - 1/4 (0.226 mi.)	J106	88
JOE'S GARAGE	6560 COMMERCE WAY STE A	S 1/8 - 1/4 (0.230 mi.)	F107	88
EL DORADO TRANSIT	***6565 COMMERCE WAY***	***S 1/8 - 1/4 (0.230 mi.)***	***F108***	***89***
PLACERVILLE FRUIT GROWERS	4590 MISSOURI FLAT RD	ESE 1/8 - 1/4 (0.231 mi.)	J109	90
TRUE VALUE HARDWARE	4571 MISSOURI FLAT RD	E 1/8 - 1/4 (0.232 mi.)	J110	91
CALIFORNIA AUTO SALES	6566 COMMERCE WAY C	S 1/8 - 1/4 (0.233 mi.)	K112	92
BOB CURTISS AUTOMOTIVE BODY	4600 MISSOURI FLAT RD U	ESE 1/8 - 1/4 (0.242 mi.)	L120	98
AUTOMOTIVE EXCELLENCE	4600 MISSOURI FLAT RD U	ESE 1/8 - 1/4 (0.242 mi.)	L121	98
IDLE WHEELS R.V. CENTER	4625 MISSOURI FLAT RD	ESE 1/8 - 1/4 (0.243 mi.)	L123	100
SIERRA AUTO BODY	4510 MISSOURI FLAT RD	E 1/8 - 1/4 (0.244 mi.)	J125	101
RIVER ROCK MOTORS	4508 MISSOURI FLAT RD	E 1/8 - 1/4 (0.244 mi.)	J126	102
CASPER'S MUFFLER & HITCH	4500 MISSOURI FLAT RD	E 1/8 - 1/4 (0.246 mi.)	J131	106
ADVANCED GASES & EQUIPMENT	4639 MISSOURI FLAT RD	ESE 1/8 - 1/4 (0.247 mi.)	L132	106
WES CUT CORP.	4496 MISSOURI FLAT RD	ENE 1/4 - 1/2 (0.250 mi.)	J135	108
EDUHSD: DISTRICT OFFICE/TRANSP	***4675 MISSOURI FLAT RD***	***ESE 1/4 - 1/2 (0.252 mi.)***	***L138***	***110***
ABOUT FACE SKIN CARE	4535 MISSOURI FLAT RD	ENE 1/4 - 1/2 (0.252 mi.)	J139	114
MISSOURI GAS STATION	4535 MISSOURI FLAT RD S	ENE 1/4 - 1/2 (0.252 mi.)	J140	114
PG&E EL DORADO SERVICE CENTER	***4636 MISSOURI FLAT RD***	***ESE 1/4 - 1/2 (0.256 mi.)***	***L143***	***115***
EDUHSD TRANSPORTATION	4675 MISSOURI FLAT RD	ESE 1/4 - 1/2 (0.263 mi.)	L146	121
THE ROCK SPOT	4465 MISSOURI FLAT RD	ENE 1/4 - 1/2 (0.309 mi.)	H149	123
SIERRA DOOR	***4415 MISSOURI FLAT RD***	***NE 1/4 - 1/2 (0.312 mi.)***	***N150***	***123***
COLLINS SANDBLASTING & PAINT	4451 MISSOURI FLAT RD	NE 1/4 - 1/2 (0.317 mi.)	N151	127

Lower Elevation	Address	Direction / Distance	Map ID	Page
SIERRA DISTRIBUTING	6650 MERCHANDISE WAY	S 0 - 1/8 (0.008 mi.)	B8	15
ANTENNA CONCEPTS, INC. - HM	6626 MERCHANDISE WAY	SW 0 - 1/8 (0.009 mi.)	B9	16
AUTOTREND - HM	6642 MERCHANDISE DR UNI	SSW 0 - 1/8 (0.009 mi.)	B11	16
ALLEN BRITISH CARS	6642 MERCHANDISE WAY ST	SSW 0 - 1/8 (0.009 mi.)	B12	16
COMCAST CABLE P'VILLE HEADEND	6606 MERCHANDISE WAY	SW 0 - 1/8 (0.010 mi.)	B13	17
GRADUATE PRECISION	6617 MERCHANDISE WAY	SW 0 - 1/8 (0.012 mi.)	B14	17
CO-ORAL-ITE DENTAL MFG	6635 MERCHANDISE WAY	SSW 0 - 1/8 (0.016 mi.)	B16	19
DAVID'S ALE WORKS	6675 MERCHANDISE WAY B	S 0 - 1/8 (0.051 mi.)	B17	20
COOK CUSTOM CABINETRY	6428 CAPITOL AVE	SSW 0 - 1/8 (0.078 mi.)	B24	36
AIRPOINT PRECISION INC	6221 ENTERPRISE DR STE	SSE 0 - 1/8 (0.078 mi.)	C28	41
TNT AUTOMOTIVE - HM	6221 ENTERPRISE DR K	SSE 0 - 1/8 (0.078 mi.)	C31	43
END WAVE	6425 CAPITOL AVE	SSW 0 - 1/8 (0.084 mi.)	B40	50
SIERRA TOOL & CUTTER	6417 CAPITOL AVE	SSW 0 - 1/8 (0.089 mi.)	B41	51
NESBITT AUTOMOTIVE DIAGNOSTICS	6693 MERCHANDISE WAY D	SSE 0 - 1/8 (0.090 mi.)	B43	53
CALIF TRUCKIN CONCEPTS	6407 CAPITOL AVE	SSW 0 - 1/8 (0.099 mi.)	E51	59
EL DORADO METAL FINISHING - CU	6192 ENTERPRISE DR K	SSE 0 - 1/8 (0.099 mi.)	C54	61
CALIFORNIA MOTORCARS, L.P. -	6192 ENTERPRISE DR G	SSE 0 - 1/8 (0.099 mi.)	C55	62
SNYDER'S AUTOMOTIVE	4603 ENTERPRISE CT	S 0 - 1/8 (0.104 mi.)	B56	62
DON'S AUTO SPECIALTIES	4607 ENTERPRISE CT	S 0 - 1/8 (0.105 mi.)	B61	64
AVIAN HEALTH SERVICES	6201 ENTERPRISE DR STE	SSE 0 - 1/8 (0.106 mi.)	C62	64
PERFECTO LABEL	4610 ENTERPRISE CT	S 0 - 1/8 (0.108 mi.)	B65	67
NCP MOTORS INC	6401 CAPITOL AVE	SSW 0 - 1/8 (0.108 mi.)	E67	67
BROTHERS AUTOMOTIVE - HM	6391 CAPITOL AVE	SSW 0 - 1/8 (0.118 mi.)	E71	70
BORDGES TIMBER	6166 ENTERPRISE DR	S 0 - 1/8 (0.122 mi.)	C73	72
TC WELDING & FABRICATION	6160 ENTERPRISE DR UNIT	S 1/8 - 1/4 (0.128 mi.)	F77	74
GUTS	6165 ENTERPRISE DR	S 1/8 - 1/4 (0.130 mi.)	F78	74
ADC MITCHELL AUTO REPAIR	6180 ENTERPRISE DR #A	SSE 1/8 - 1/4 (0.135 mi.)	C79	74

EXECUTIVE SUMMARY

Lower Elevation	Address	Direction / Distance	Map ID	Page
EURO TECH	6125 ENTERPRISE DR 11	S 1/8 - 1/4 (0.180 mi.)	F86	78
PLASTIC WELDING TECHNOLOGIES	6125 ENTERPRISE DR STE	S 1/8 - 1/4 (0.180 mi.)	F87	79
BROWN, THOMAS OLLIVER - HM	6120 ENTERPRISE DR	SSW 1/8 - 1/4 (0.188 mi.)	G90	80
READ'S POWER SPORTS	6115 ENTERPRISE DR STE	SSW 1/8 - 1/4 (0.190 mi.)	G94	83
MAVERICK INSULATION - HM	6110 ENTERPRISE DR	SSW 1/8 - 1/4 (0.196 mi.)	G96	84
BURLESON ANTIQUES	6090 ENTERPRISE DR STE	SSW 1/8 - 1/4 (0.204 mi.)	G98	85
SIERRA PERFORMANCE	6100 ENTERPRISE DR G	SSW 1/8 - 1/4 (0.205 mi.)	G99	85
OR TOOLWORKS	6070 ENTERPRISE DR UNIT	SW 1/8 - 1/4 (0.215 mi.)	I103	87
PERFORMANCE CYCLE	6070 ENTERPRISE DR STE	SW 1/8 - 1/4 (0.215 mi.)	I104	87
RUBICON RENTALS	6069 ENTERPRISE DR STE	SW 1/8 - 1/4 (0.234 mi.)	I115	94
RUXCO ENGINEERING	6051 ENTERPRISE DR STE	SW 1/8 - 1/4 (0.249 mi.)	M134	107
DAWSON OIL	321 PLEASANT VALLEY RD	SE 1/4 - 1/2 (0.351 mi.)	O154	128

HAZNET: The data is extracted from the copies of hazardous waste manifests received each year by the DTSC. The annual volume of manifests is typically 700,000-1,000,000 annually, representing approximately 350,000-500,000 shipments. Data from non-California manifests & continuation sheets are not included at the present time. Data are from the manifests submitted without correction, and therefore many contain some invalid values for data elements such as generator ID, TSD ID, waste category, & disposal method. The source is the Department of Toxic Substance Control is the agency

A review of the HAZNET list, as provided by EDR, and dated 12/31/2012 has revealed that there are 28 HAZNET sites within approximately 0.125 miles of the target property.

Equal/Higher Elevation	Address	Direction / Distance	Map ID	Page
TRUECYCLE	180 INDUSTRIAL DR STE F	ENE 0 - 1/8 (0.006 mi.)	A1	8
TRUE CYCLE INC	180 INDUSTRIAL DR BLDG	ENE 0 - 1/8 (0.006 mi.)	A5	12
PACIFIC BELL	281 INDUSTRIAL DR	E 0 - 1/8 (0.082 mi.)	D39	49

Lower Elevation	Address	Direction / Distance	Map ID	Page
CELEBRITY INC	6650 MERCHANDISE WAY	S 0 - 1/8 (0.008 mi.)	B7	14
MATRIX MOLDING INC	6617 MERCHANDISE WAY	SW 0 - 1/8 (0.012 mi.)	B15	18
NORCAL BEVERAGE CO INC	6230 ENTERPRISE DR	SE 0 - 1/8 (0.052 mi.)	C18	20
COOK CUSTOM CABINETRY LLC	6428 CAPITOL AVE	SSW 0 - 1/8 (0.078 mi.)	B22	35
US SMALL BUSINESS ADMINISTRATI	6428 CAPITOL AVE	SSW 0 - 1/8 (0.078 mi.)	B23	35
COOK CABINETS INC	***6428 CAPITOL AVE***	***SSW 0 - 1/8 (0.078 mi.)***	***B25***	***37***
WESTERN SIGN COMPANY INC	6221 ENTERPRISE DR STE	SSE 0 - 1/8 (0.078 mi.)	C27	41
AIRPOINT PRECISION INC	6221 ENTERPRISE DR STE	SSE 0 - 1/8 (0.078 mi.)	C30	42
ENDWAVE CORP	6425 CAPITOL AVE	SSW 0 - 1/8 (0.082 mi.)	B34	45
ENDWAVE CORP	6425 CAPITOL AVE	SSW 0 - 1/8 (0.082 mi.)	B35	45
ENDWAVE	6425 CAPITOL AVE	SSW 0 - 1/8 (0.082 mi.)	B36	46
MAZDAS ONLY	6425 CAPITOL AVENUE	SSW 0 - 1/8 (0.082 mi.)	B37	47
TRW MILLIWAVE	6425 CAPITOL AVE	SSW 0 - 1/8 (0.082 mi.)	B38	48
SIERRA TOOL & CUTTER	6417 CAPITAL AVE	SSW 0 - 1/8 (0.089 mi.)	B42	51
HINDS CUSTOMER MACHINE ENTERPR	6693 MERCHANDISE WAY	SSE 0 - 1/8 (0.090 mi.)	B44	54
MATTESON MACHINE INC	6411 CAPITOL AVE	SSW 0 - 1/8 (0.095 mi.)	E46	54
PERSONAL TOUCH AUTO BODY	6407 CAPITOL AVE	SSW 0 - 1/8 (0.099 mi.)	E49	57
PERSONAL TOUCH AUTOBODY	6407 CAPITOL AVE	SSW 0 - 1/8 (0.099 mi.)	E50	58
ELDORADO METAL FINISHING	6192 ENTERPRISE DR STE	SSE 0 - 1/8 (0.099 mi.)	C53	60
SNYDER'S AUTOMOTIVE	4603 ENTERPRISE CT	S 0 - 1/8 (0.104 mi.)	B58	63
ALL CITY ELECTRIC	6201 ENTERPRISE DR	SSE 0 - 1/8 (0.106 mi.)	C63	65
PERFECTO LABEL COMPANY INC	4610 ENTERPRISE CT	S 0 - 1/8 (0.108 mi.)	B64	65
NCP MOTORS INC	6401 CAPITOL CT	SSW 0 - 1/8 (0.108 mi.)	E68	68
MCDANIEL MANUFACTURING INC	6180 ENTERPRISE DR	SSE 0 - 1/8 (0.113 mi.)	C69	69

EXECUTIVE SUMMARY

Lower Elevation	Address	Direction / Distance	Map ID	Page
DIAMOND DESIGNS	6166 ENTERPRISE DR	S 0 - 1/8 (0.122 mi.)	C74	72

EMI: Toxics and criteria pollutant emissions data collected by the ARB and local air pollution agencies

A review of the EMI list, as provided by EDR, and dated 12/31/2010 has revealed that there are 3 EMI sites within approximately 0.125 miles of the target property.

Equal/Higher Elevation	Address	Direction / Distance	Map ID	Page
PACIFIC SOUTHEAST FOREST PROD.	***180 INDUSTRIAL DR***	***ENE 0 - 1/8 (0.006 mi.)***	***A3***	***9***

Lower Elevation	Address	Direction / Distance	Map ID	Page
STONY CREEK CASEGOODS CO.	6428 CAPITOL CT.	SSW 0 - 1/8 (0.078 mi.)	B26	40
STONEY CREEK CASEGOODS CO.	6428 CAPITOL CT.	SSW 0 - 1/8 (0.079 mi.)	B32	44

EDR HIGH RISK HISTORICAL RECORDS

EDR Exclusive Records

EDR US Hist Auto Stat: EDR has searched selected national collections of business directories and has collected listings of potential gas station/filling station/service station sites that were available to EDR researchers. EDR's review was limited to those categories of sources that might, in EDR's opinion, include gas station/filling station/service station establishments. The categories reviewed included, but were not limited to gas, gas station, gasoline station, filling station, auto, automobile repair, auto service station, service station, etc. This database falls within a category of information EDR classifies as "High Risk Historical Records", or HRHR. EDR's HRHR effort presents unique and sometimes proprietary data about past sites and operations that typically create environmental concerns, but may not show up in current government records searches.

A review of the EDR US Hist Auto Stat list, as provided by EDR, has revealed that there are 26 EDR US Hist Auto Stat sites within approximately 0.375 miles of the target property.

Equal/Higher Elevation	Address	Direction / Distance	Map ID	Page
Not reported	329 INDUSTRIAL DR	E 1/8 - 1/4 (0.139 mi.)	D82	76
Not reported	337 INDUSTRIAL DR	E 1/8 - 1/4 (0.149 mi.)	D84	77
Not reported	6518 COMMERCE WAY	S 1/8 - 1/4 (0.192 mi.)	F95	84
Not reported	4600 MISSOURI FLAT RD	ESE 1/8 - 1/4 (0.242 mi.)	L119	97
Not reported	4510 MISSOURI FLAT RD	E 1/8 - 1/4 (0.244 mi.)	J124	101
Not reported	4508 MISSOURI FLAT RD	E 1/8 - 1/4 (0.244 mi.)	J127	102
Not reported	4506 MISSOURI FLAT RD	E 1/8 - 1/4 (0.245 mi.)	J128	103
Not reported	4500 MISSOURI FLAT RD	E 1/8 - 1/4 (0.246 mi.)	J130	106
Not reported	4675 MISSOURI FLAT RD	ESE 1/4 - 1/2 (0.263 mi.)	L147	121
Not reported	4451 MISSOURI FLAT RD	NE 1/4 - 1/2 (0.317 mi.)	N152	127

Lower Elevation	Address	Direction / Distance	Map ID	Page
Not reported	6642 MERCHANDISE WAY	SSW 0 - 1/8 (0.009 mi.)	B10	16
Not reported	6221 ENTERPRISE DR	SSE 0 - 1/8 (0.078 mi.)	C29	42
Not reported	6693 MERCHANDISE WAY	SSE 0 - 1/8 (0.090 mi.)	B45	54

EXECUTIVE SUMMARY

Lower Elevation	Address	Direction / Distance	Map ID	Page
Not reported	6407 CAPITOL AVE	SSW 0 - 1/8 (0.099 mi.)	E52	59
Not reported	4603 ENTERPRISE CT	S 0 - 1/8 (0.104 mi.)	B57	62
Not reported	6401 CAPITOL CT	SSW 0 - 1/8 (0.105 mi.)	E59	64
Not reported	4607 ENTERPRISE CT	S 0 - 1/8 (0.105 mi.)	B60	64
Not reported	6401 CAPITOL AVE	SSW 0 - 1/8 (0.108 mi.)	E66	67
Not reported	6180 ENTERPRISE DR	SSE 0 - 1/8 (0.113 mi.)	C70	70
Not reported	6166 ENTERPRISE DR	S 0 - 1/8 (0.122 mi.)	C75	73
Not reported	6120 ENTERPRISE DR	SSW 1/8 - 1/4 (0.187 mi.)	G88	79
Not reported	6120 ENTERPRISE DR	SSW 1/8 - 1/4 (0.188 mi.)	G89	79
Not reported	6115 ENTERPRISE DR	SSW 1/8 - 1/4 (0.190 mi.)	G93	83
Not reported	6069 ENTERPRISE DR	SW 1/8 - 1/4 (0.234 mi.)	I114	94
Not reported	6048 ENTERPRISE DR	SW 1/8 - 1/4 (0.234 mi.)	I117	97
Not reported	6051 ENTERPRISE DR	SW 1/8 - 1/4 (0.249 mi.)	M133	106

EDR US Hist Cleaners: EDR has searched selected national collections of business directories and has collected listings of potential dry cleaner sites that were available to EDR researchers. EDR's review was limited to those categories of sources that might, in EDR's opinion, include dry cleaning establishments. The categories reviewed included, but were not limited to dry cleaners, cleaners, laundry, laundromat, cleaning/laundry, wash & dry etc. This database falls within a category of information EDR classifies as "High Risk Historical Records", or HRHR. EDR's HRHR effort presents unique and sometimes proprietary data about past sites and operations that typically create environmental concerns, but may not show up in current government records searches.

A review of the EDR US Hist Cleaners list, as provided by EDR, has revealed that there are 2 EDR US Hist Cleaners sites within approximately 0.375 miles of the target property.

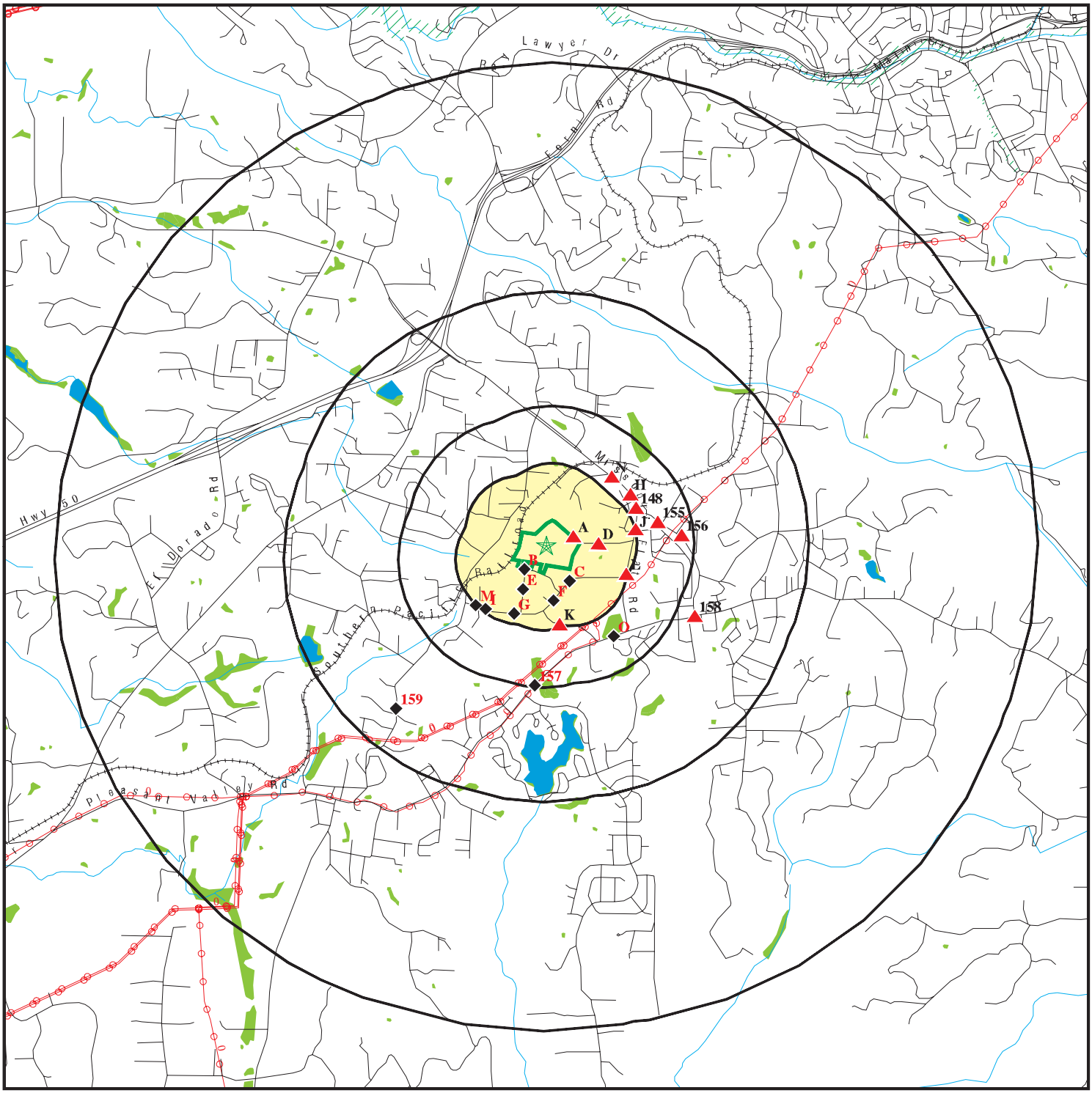
Lower Elevation	Address	Direction / Distance	Map ID	Page
Not reported	6100 ENTERPRISE DR	SSW 1/8 - 1/4 (0.205 mi.)	G100	86
Not reported	6048 ENTERPRISE DR	SW 1/8 - 1/4 (0.234 mi.)	I118	97

EXECUTIVE SUMMARY

Due to poor or inadequate address information, the following sites were not mapped. Count: 39 records.

Site Name	Database(s)
SIERRA PACIFIC INDUSTRIES - HAZEL	SPILLS 90
GEORGES PIT STOP	HIST CORTESE, LUST
US50 MO FLAT RD I C RECONSTRUCTION	NPDES
FORNI RETAIL PLAZA	NPDES
POINT VIEW DRIVE EXTENSION	NPDES
HAPA LN APN 0892 022 34 100	NPDES
SIERRA PACIFIC INDUSTRIES - HAZEL	LDS
DIAMOND INDUSTRIAL PARK	SWEEPS UST
EL DORADO EXXON	SWEEPS UST
JOHN FORNI INC.	SWEEPS UST
QUIK STOP MARKET #161	CUPA Listings
RESCO PRINTING	CUPA Listings
ADVANCED MOBILE AUTO SVCS	CUPA Listings
EID HERBERT GREEN LIFT STATION	CUPA Listings
CELEBRITY, INC. - HM	CUPA Listings
PG&E MISSOURI FLAT SUBSTATION	CUPA Listings
J & S PAVING	CUPA Listings
EQUIPMENT SALES	CUPA Listings
EL DORADO COUNTY D.O.T.	CUPA Listings
OLSON'S GARAGE	CUPA Listings
HOPKINS TERMITE CONTROL	CUPA Listings
ALL POINTS WELDING	CUPA Listings
ALBERTSONS NO 7256	RCRA NonGen / NLR, FINDS, CUPA Listings
OLD CALDOR LUMBER CO YD	CERC-NFRAP
ELDORADO DISPOSAL SERVICE INC	CERC-NFRAP, RCRA NonGen / NLR
EL DORADO DISPOSAL SERVICE	AST
JENSEN PRECAST	AST
EURO TECH	HAZNET
EAGLE PRESS	HAZNET
KEVINS BODYWORKS	HAZNET
R. ROBT. WATSON	HAZNET
PG & E CHILI BAR POWERHOUSE	HAZNET
PLACERVILLE INDUSTRIES	HAZNET
CALTRANS DIST 3/CONSTR/EA03-3C4904	HAZNET
US FOREST SERVICE/EL DORADO NAT'L	HAZNET
J & M LAND RESTORATION INC	HAZNET
PG&E CAMP 5 HYDRO SVC CTR	HAZNET
PG & E CHILI BAR POWERHOUSE	RCRA-SQG
KIRKWOOD MEADOWS WWTF	WDS

OVERVIEW MAP - 3925295.2s



Target Property

Sites at elevations higher than or equal to the target property

Sites at elevations lower than the target property

Manufactured Gas Plants

National Priority List Sites

Dept. Defense Sites

0 1/2 1 2 Miles

Indian Reservations BIA

Power transmission lines

Oil & Gas pipelines from USGS

100-year flood zone

500-year flood zone

National Wetland Inventory

Areas of Concern

N

This report includes Interactive Map Layers to display and/or hide map information. The legend includes only those icons for the default map view.

SITE NAME:	Industrial Drive and Merchandise Way	CLIENT:	Youngdahl Consulting Group
ADDRESS:	Industrial Drive Diamond Springs CA 95619	CONTACT:	Laurie Israel
		INQUIRY #:	3925295.2s
LAT/LONG:	38.6982 / 120.83	DATE:	April 28, 2014 4:53 pm

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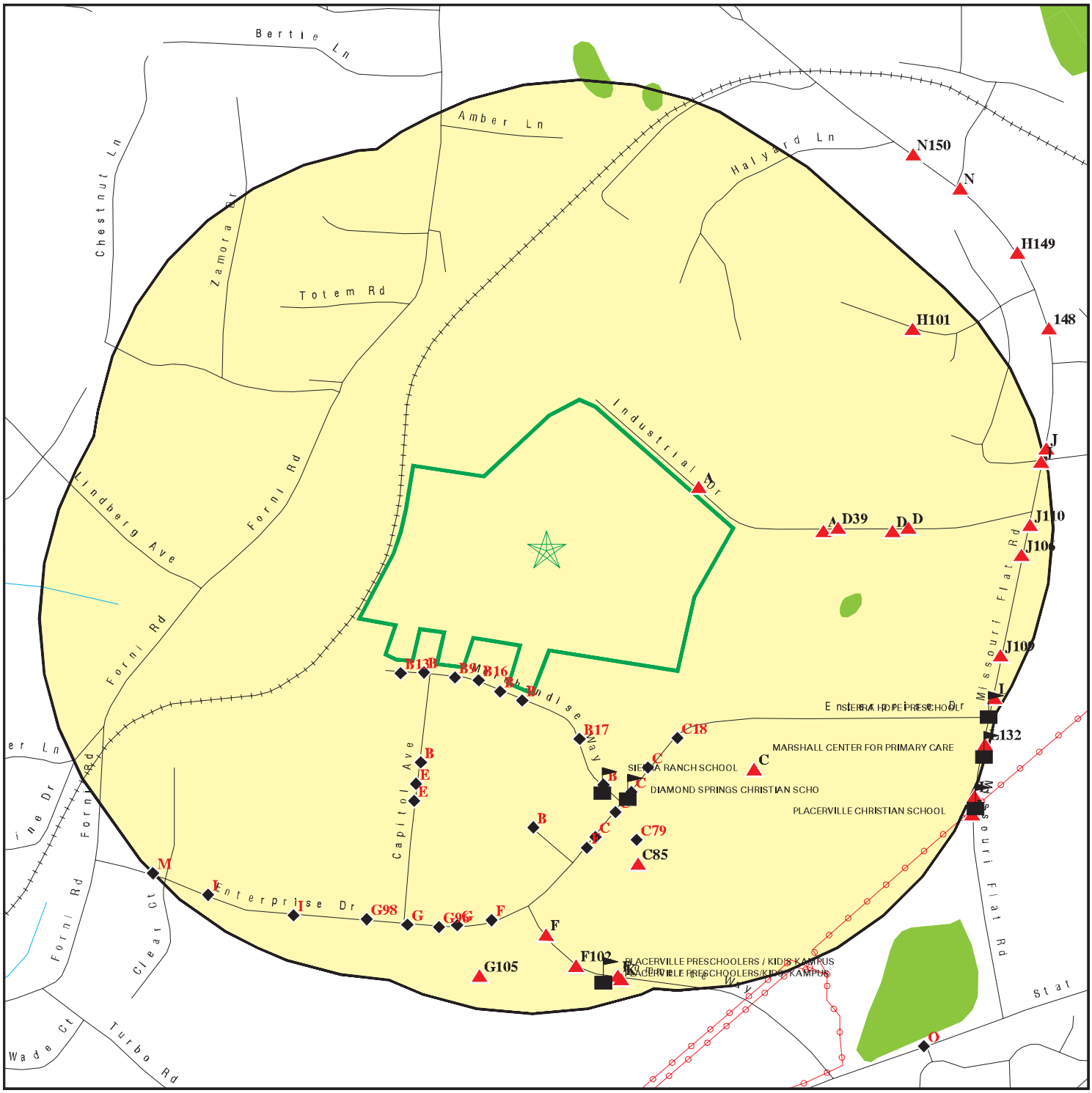
DETAIL MAP - 3925295.2s



Target Property

Sites at elevations higher than or equal to the target property

Sites at elevations lower than the target property

Manufactured Gas Plants

Sensitive Receptors

National Priority List Sites

Dept. Defense Sites

Indian Reservations BIA

Power transmission lines

Oil & Gas pipelines from USGS

100-year flood zone

500-year flood zone

National Wetland Inventory

Areas of Concern

This report includes Interactive Map Layers to display and/or hide map information. The legend includes only those icons for the default map view.

SITE NAME:	Industrial Drive and Merchandise Way	CLIENT:	Youngdahl Consulting Group
ADDRESS:	Industrial Drive Diamond Springs CA 95619	CONTACT:	Laurie Israel
		INQUIRY #:	3925295.2s
LAT/LONG:	38.6982 / 120.83	DATE:	April 28, 2014 4:55 pm

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MAP FINDINGS SUMMARY

Database	Search Distance (Miles)	Target Property	< 1/8	1/8 - 1/4	1/4 - 1/2	1/2 - 1	> 1	Total Plotted
STANDARD ENVIRONMENTAL RECORDS								
Federal NPL site list								
NPL	1.125		0	0	0	0	0	0
Proposed NPL	1.125		0	0	0	0	0	0
NPL LIENS	0.125		0	NR	NR	NR	NR	0
Federal Delisted NPL site list								
Delisted NPL	1.125		0	0	0	0	0	0
Federal CERCLIS list								
CERCLIS	0.625		0	0	0	0	NR	0
FEDERAL FACILITY	0.625		0	0	0	0	NR	0
Federal CERCLIS NFRAP site List								
CERC-NFRAP	0.625		0	0	1	0	NR	1
Federal RCRA CORRACTS facilities list								
CORRACTS	1.125		0	0	0	0	0	0
Federal RCRA non-CORRACTS TSD facilities list								
RCRA-TSDF	0.625		0	0	0	0	NR	0
Federal RCRA generators list								
RCRA-LQG	0.375		0	0	0	NR	NR	0
RCRA-SQG	0.375		2	4	1	NR	NR	7
RCRA-CESQG	0.375		0	0	0	NR	NR	0
Federal institutional controls / engineering controls registries								
US ENG CONTROLS	0.625		0	0	0	0	NR	0
US INST CONTROL	0.625		0	0	0	0	NR	0
LUCIS	0.625		0	0	0	0	NR	0
Federal ERNS list								
ERNS	0.125		0	NR	NR	NR	NR	0
State- and tribal - equivalent NPL								
RESPONSE	1.125		0	0	0	0	0	0
State- and tribal - equivalent CERCLIS								
ENVIROSTOR	1.125		1	2	1	1	0	5
State and tribal landfill and/or solid waste disposal site lists								
SWF/LF	0.625		0	0	0	0	NR	0
State and tribal leaking storage tank lists								
LUST	0.625		1	0	2	1	NR	4

MAP FINDINGS SUMMARY

Database	Search Distance (Miles)	Target Property	< 1/8	1/8 - 1/4	1/4 - 1/2	1/2 - 1	> 1	Total Plotted
SLIC	0.625		0	0	0	0	NR	0
INDIAN LUST	0.625		0	0	0	0	NR	0
State and tribal registered storage tank lists								
UST	0.375		0	0	3	NR	NR	3
AST	0.375		1	0	0	NR	NR	1
INDIAN UST	0.375		0	0	0	NR	NR	0
FEMA UST	0.375		0	0	0	NR	NR	0
State and tribal voluntary cleanup sites								
VCP	0.625		0	0	0	0	NR	0
INDIAN VCP	0.625		0	0	0	0	NR	0
ADDITIONAL ENVIRONMENTAL RECORDS								
Local Brownfield lists								
US BROWNFIELDS	0.625		0	0	0	0	NR	0
Local Lists of Landfill / Solid Waste Disposal Sites								
ODI	0.625		0	0	0	0	NR	0
DEBRIS REGION 9	0.625		0	0	0	0	NR	0
WMUDS/SWAT	0.625		0	0	0	0	NR	0
SWRCY	0.625		0	0	0	0	NR	0
HAULERS	0.125		0	NR	NR	NR	NR	0
INDIAN ODI	0.625		0	0	0	0	NR	0
Local Lists of Hazardous waste / Contaminated Sites								
US CDL	0.125		0	NR	NR	NR	NR	0
HIST Cal-Sites	1.125		0	0	0	0	0	0
SCH	0.375		0	0	0	NR	NR	0
Toxic Pits	1.125		0	0	0	0	0	0
CDL	0.125		0	NR	NR	NR	NR	0
US HIST CDL	0.125		0	NR	NR	NR	NR	0
Local Lists of Registered Storage Tanks								
CA FID UST	0.375		1	0	2	NR	NR	3
HIST UST	0.375		2	0	2	NR	NR	4
SWEEPS UST	0.375		2	0	4	NR	NR	6
Local Land Records								
LIENS 2	0.125		0	NR	NR	NR	NR	0
LIENS	0.125		0	NR	NR	NR	NR	0
DEED	0.625		0	0	0	0	NR	0
Records of Emergency Release Reports								
HMIRS	0.125		0	NR	NR	NR	NR	0
CHMIRS	0.125		1	NR	NR	NR	NR	1
LDS	0.125		0	NR	NR	NR	NR	0

MAP FINDINGS SUMMARY

Database	Search Distance (Miles)	Target Property	< 1/8	1/8 - 1/4	1/4 - 1/2	1/2 - 1	> 1	Total Plotted
MCS	0.125		0	NR	NR	NR	NR	0
SPILLS 90	0.125		0	NR	NR	NR	NR	0
Other Ascertainable Records								
RCRA NonGen / NLR	0.375		2	1	1	NR	NR	4
DOT OPS	0.125		0	NR	NR	NR	NR	0
DOD	1.125		0	0	0	0	0	0
FUDS	1.125		0	0	0	0	0	0
CONSENT	1.125		0	0	0	0	0	0
ROD	1.125		0	0	0	0	0	0
UMTRA	0.625		0	0	0	0	NR	0
US MINES	0.375		0	0	0	NR	NR	0
TRIS	0.125		0	NR	NR	NR	NR	0
TSCA	0.125		0	NR	NR	NR	NR	0
FTTS	0.125		0	NR	NR	NR	NR	0
HIST FTTS	0.125		0	NR	NR	NR	NR	0
SSTS	0.125		0	NR	NR	NR	NR	0
ICIS	0.125		0	NR	NR	NR	NR	0
PADS	0.125		0	NR	NR	NR	NR	0
MLTS	0.125		0	NR	NR	NR	NR	0
RADINFO	0.125		0	NR	NR	NR	NR	0
FINDS	0.125		4	NR	NR	NR	NR	4
RAATS	0.125		0	NR	NR	NR	NR	0
RMP	0.125		0	NR	NR	NR	NR	0
CA BOND EXP. PLAN	1.125		0	0	0	0	0	0
NPDES	0.125		0	NR	NR	NR	NR	0
UIC	0.125		0	NR	NR	NR	NR	0
Cortese	0.625		0	0	0	0	NR	0
HIST CORTESE	0.500		1	0	2	NR	NR	3
CUPA Listings	0.375		29	35	10	NR	NR	74
Notify 65	1.125		0	0	0	0	0	0
DRYCLEANERS	0.375		0	0	0	NR	NR	0
WIP	0.375		0	0	0	NR	NR	0
ENF	0.125		0	NR	NR	NR	NR	0
HAZNET	0.125		28	NR	NR	NR	NR	28
EMI	0.125		3	NR	NR	NR	NR	3
INDIAN RESERV	1.125		0	0	0	0	0	0
SCRD DRYCLEANERS	0.625		0	0	0	0	NR	0
2020 COR ACTION	0.375		0	0	0	NR	NR	0
LEAD SMELTERS	0.125		0	NR	NR	NR	NR	0
US AIRS	0.125		0	NR	NR	NR	NR	0
WDS	0.125		0	NR	NR	NR	NR	0
PRP	0.125		0	NR	NR	NR	NR	0
MWMP	0.375		0	0	0	NR	NR	0
COAL ASH DOE	0.125		0	NR	NR	NR	NR	0
HWT	0.375		0	0	0	NR	NR	0
HWP	1.125		0	0	0	0	0	0
US FIN ASSUR	0.125		0	NR	NR	NR	NR	0
Financial Assurance	0.125		0	NR	NR	NR	NR	0
COAL ASH EPA	0.625		0	0	0	0	NR	0
PCB TRANSFORMER	0.125		0	NR	NR	NR	NR	0

MAP FINDINGS SUMMARY

Database	Search Distance (Miles)	Target Property	< 1/8	1/8 - 1/4	1/4 - 1/2	1/2 - 1	> 1	Total Plotted
PROC	0.625		0	0	0	0	NR	0
EPA WATCH LIST	0.125		0	NR	NR	NR	NR	0
EDR HIGH RISK HISTORICAL RECORDS								
EDR Exclusive Records								
EDR MGP	1.125		0	0	0	0	0	0
EDR US Hist Auto Stat	0.375		10	14	2	NR	NR	26
EDR US Hist Cleaners	0.375		0	2	0	NR	NR	2
EDR RECOVERED GOVERNMENT ARCHIVES								
Exclusive Recovered Govt. Archives								
RGA LF	0.125		0	NR	NR	NR	NR	0
RGA LUST	0.125		0	NR	NR	NR	NR	0

NOTES:

TP = Target Property

NR = Not Requested at this Search Distance

Sites may be listed in more than one database

A1
ENE
< 1/8
0.006 mi.
34 ft.

TRUECYCLE
180 INDUSTRIAL DR STE F
PLACERVILLE, CA 95667

HAZNET **S112951716**
N/A

Site 1 of 9 in cluster A

Relative:
Higher

Actual:
1801 ft.

HAZNET:

Year:	2006
Gepaid:	CAC002600827
Contact:	DAVE RUSSO
Telephone:	5306760440
Mailing Name:	Not reported
Mailing Address:	180 INDUSTRIAL DR STE F
Mailing City,St,Zip:	PLACERVILLE, CA 956676829
Gen County:	Not reported
TSD EPA ID:	WAD991281767
TSD County:	Not reported
Waste Category:	Polychlorinated biphenyls and material containing PCBs
Disposal Method:	Not reported
Tons:	0.02
Facility County:	El Dorado

Year:	2006
Gepaid:	CAC002600827
Contact:	DAVE RUSSO
Telephone:	5306760440
Mailing Name:	Not reported
Mailing Address:	180 INDUSTRIAL DR STE F
Mailing City,St,Zip:	PLACERVILLE, CA 956676829
Gen County:	Not reported
TSD EPA ID:	WAD991281767
TSD County:	Not reported
Waste Category:	Other inorganic solid waste
Disposal Method:	Not reported
Tons:	0.6
Facility County:	El Dorado

A2
ENE
< 1/8
0.006 mi.
34 ft.

SNOWLINE HOSPICE REUSE AND PROCESSING CENTER
180 INDUSTRIAL DR
PLACERVILLE, CA

FINDS **1009329904**
N/A

Site 2 of 9 in cluster A

Relative:
Higher

Actual:
1801 ft.

FINDS:

Registry ID: 110032746795

Environmental Interest/Information System
RCRAInfo is a national information system that supports the Resource Conservation and Recovery Act (RCRA) program through the tracking of events and activities related to facilities that generate, transport, and treat, store, or dispose of hazardous waste. RCRAInfo allows RCRA program staff to track the notification, permit, compliance, and corrective action activities required under RCRA.

A3 ENE < 1/8 0.006 mi. 34 ft. | **PACIFIC SOUTHEAST FOREST PROD.**
180 INDUSTRIAL DR
DIAMOND SPRINGS, CA 95619

CUPA Listings **S105939003**
EMI **N/A**
ENVIROSTOR

Site 3 of 9 in cluster A

Relative: Higher

Actual: 1801 ft.

CUPA EL DORADO:

PE:	BUSINESS PLANS/SMALL BUSINESS
Status:	Inactive, non-billable
Latitude:	Not reported
Longitude:	Not reported

PE:	SITE ASSESS-SOLID WASTE/GEOTECH/SEISMIC
Status:	Inactive, non-billable
Latitude:	Not reported
Longitude:	Not reported

PE:	BUSINESS PLANS/SMALL BUSINESS
Status:	Active, billable
Latitude:	39
Longitude:	-121

PE:	HAZARDOUS MATERIALS - STATE SURCHARGE
Status:	Active, billable
Latitude:	39
Longitude:	-121

EMI:

Year:	1990
County Code:	9
Air Basin:	MC
Facility ID:	22
Air District Name:	ED
SIC Code:	2421
Air District Name:	EL DORADO COUNTY APCD
Community Health Air Pollution Info System:	Not reported
Consolidated Emission Reporting Rule:	Not reported
Total Organic Hydrocarbon Gases Tons/Yr:	0
Reactive Organic Gases Tons/Yr:	0
Carbon Monoxide Emissions Tons/Yr:	0
NOX - Oxides of Nitrogen Tons/Yr:	0
SOX - Oxides of Sulphur Tons/Yr:	0
Particulate Matter Tons/Yr:	9
Part. Matter 10 Micrometers & Smllr Tons/Yr:	4

Year:	1995
County Code:	9
Air Basin:	MC
Facility ID:	22
Air District Name:	ED
SIC Code:	2421
Air District Name:	EL DORADO COUNTY APCD
Community Health Air Pollution Info System:	Not reported
Consolidated Emission Reporting Rule:	Not reported
Total Organic Hydrocarbon Gases Tons/Yr:	0
Reactive Organic Gases Tons/Yr:	0
Carbon Monoxide Emissions Tons/Yr:	0
NOX - Oxides of Nitrogen Tons/Yr:	0
SOX - Oxides of Sulphur Tons/Yr:	0

PACIFIC SOUTHEAST FOREST PROD. (Continued) **S105939003**

Particulate Matter Tons/Yr:	9
Part. Matter 10 Micrometers & Smllr Tons/Yr:	4

Year:	1996
County Code:	9
Air Basin:	MC
Facility ID:	22
Air District Name:	ED
SIC Code:	2421
Air District Name:	EL DORADO COUNTY APCD
Community Health Air Pollution Info System:	Not reported
Consolidated Emission Reporting Rule:	Not reported
Total Organic Hydrocarbon Gases Tons/Yr:	0
Reactive Organic Gases Tons/Yr:	0
Carbon Monoxide Emissions Tons/Yr:	0
NOX - Oxides of Nitrogen Tons/Yr:	0
SOX - Oxides of Sulphur Tons/Yr:	0
Particulate Matter Tons/Yr:	9
Part. Matter 10 Micrometers & Smllr Tons/Yr:	4

Year:	1997
County Code:	9
Air Basin:	MC
Facility ID:	22
Air District Name:	ED
SIC Code:	2421
Air District Name:	EL DORADO COUNTY APCD
Community Health Air Pollution Info System:	Not reported
Consolidated Emission Reporting Rule:	Not reported
Total Organic Hydrocarbon Gases Tons/Yr:	0
Reactive Organic Gases Tons/Yr:	0
Carbon Monoxide Emissions Tons/Yr:	0
NOX - Oxides of Nitrogen Tons/Yr:	0
SOX - Oxides of Sulphur Tons/Yr:	0
Particulate Matter Tons/Yr:	9
Part. Matter 10 Micrometers & Smllr Tons/Yr:	4

Year:	1998
County Code:	9
Air Basin:	MC
Facility ID:	22
Air District Name:	ED
SIC Code:	2421
Air District Name:	EL DORADO COUNTY APCD
Community Health Air Pollution Info System:	Not reported
Consolidated Emission Reporting Rule:	Not reported
Total Organic Hydrocarbon Gases Tons/Yr:	0
Reactive Organic Gases Tons/Yr:	0
Carbon Monoxide Emissions Tons/Yr:	0
NOX - Oxides of Nitrogen Tons/Yr:	0
SOX - Oxides of Sulphur Tons/Yr:	0
Particulate Matter Tons/Yr:	9
Part. Matter 10 Micrometers & Smllr Tons/Yr:	4

ENVIROSTOR:

Facility ID:	9730001
Status:	No Further Action

PACIFIC SOUTHEAST FOREST PROD. (Continued) **S105939003**

Status Date:	02/27/1989
Site Code:	Not reported
Site Type:	Historical
Site Type Detailed:	* Historical
Acres:	1
NPL:	NO
Regulatory Agencies:	NONE SPECIFIED
Lead Agency:	NONE SPECIFIED
Program Manager:	Not reported
Supervisor:	Steven Becker
Division Branch:	Cleanup Sacramento
Assembly:	5
Senate:	1
Special Program:	Not reported
Restricted Use:	NO
Site Mgmt Req:	NONE SPECIFIED
Funding:	Not reported
Latitude:	38.69855
Longitude:	-120.8284
APN:	32924051
Past Use:	MANUFACTURING - LUMBER/WOOD PRODUCTS
Potential COC:	Polychlorinated biphenyls (PCBs
Confirmed COC:	Polychlorinated biphenyls (PCBs
Potential Description:	SOIL
Alias Name:	Not reported
Alias Type:	Not reported

Completed Info:

Completed Area Name:	Not reported
Completed Sub Area Name:	Not reported
Completed Document Type:	Not reported
Completed Date:	Not reported
Comments:	Not reported
Future Area Name:	Not reported
Future Sub Area Name:	Not reported
Future Document Type:	Not reported
Future Due Date:	Not reported
Schedule Area Name:	Not reported
Schedule Sub Area Name:	Not reported
Schedule Document Type:	Not reported
Schedule Due Date:	Not reported
Schedule Revised Date:	Not reported

A4 **ALEXANDER CUSTOM AIRBRUSH - HM** **CUPA Listings** **S110983473**
ENE **180 INDUSTRIAL DR BLD C** **N/A**
< 1/8 **PLACERVILLE, CA 95667**
0.006 mi.
34 ft. **Site 4 of 9 in cluster A**

Relative:
Higher

Actual:
1801 ft.

CUPA EL DORADO:

PE:	CUPA HW GENERATOR <55 GAL MATERIAL STORED
Status:	Inactive, non-billable
Latitude:	Not reported
Longitude:	Not reported
PE:	HAZARDOUS MATERIALS - STATE SURCHARGE
Status:	Inactive, non-billable

ALEXANDER CUSTOM AIRBRUSH - HM (Continued) **S110983473**

Latitude: Not reported
Longitude: Not reported

A5 **TRUE CYCLE INC** **HAZNET** **S113178096**
ENE **180 INDUSTRIAL DR BLDG F** **N/A**
< 1/8 **PLACERVILLE, CA 95667**
0.006 mi.
34 ft. **Site 5 of 9 in cluster A**

Relative:
Higher

Actual:
1801 ft.

HAZNET:

Year:	2007
Gepaid:	CAR000172288
Contact:	LINDA CAPITAN
Telephone:	5602958161
Mailing Name:	Not reported
Mailing Address:	180 INDUSTRIAL DR BLDG F
Mailing City,St,Zip:	PLACERVILLE, CA 956670000
Gen County:	Not reported
TSD EPA ID:	CAD980884183
TSD County:	Not reported
Waste Category:	Aqueous solution with total organic residues 10 percent or more
Disposal Method:	Storage, Bulking, And/Or Transfer Off Site--No Treatment/Reovery (H010-H129) Or (H131-H135)
Tons:	0.83
Facility County:	El Dorado

Year:	2007
Gepaid:	CAR000172288
Contact:	LINDA CAPITAN
Telephone:	5602958161
Mailing Name:	Not reported
Mailing Address:	180 INDUSTRIAL DR BLDG F
Mailing City,St,Zip:	PLACERVILLE, CA 956670000
Gen County:	Not reported
TSD EPA ID:	CAD980884183
TSD County:	Not reported
Waste Category:	Unspecified oil-containing waste
Disposal Method:	Storage, Bulking, And/Or Transfer Off Site--No Treatment/Reovery (H010-H129) Or (H131-H135)
Tons:	0.2
Facility County:	El Dorado

A6 **TRUE CYCLE INC** **RCRA NonGen / NLR** **1009398242**
ENE **180 INDUSTRIAL DR** **CAR000172288**
< 1/8 **PLACERVILLE, CA 95667**
0.006 mi.
34 ft. **Site 6 of 9 in cluster A**

Relative:
Higher

Actual:
1801 ft.

RCRA NonGen / NLR:

Date form received by agency:	03/22/2006
Facility name:	TRUE CYCLE INC
Facility address:	180 INDUSTRIAL DR BLDG F PLACERVILLE, CA 95667
EPA ID:	CAR000172288
Contact:	LINDA CAPITAN

TRUE CYCLE INC (Continued) **1009398242**

Contact address: 180 INDUSTRIAL DR BLDG F
PLACERVILLE, CA 95667
Contact country: US
Contact telephone: 560-295-8161
Contact email: LINDAC@TRUECYCLE.COM
EPA Region: 09
Classification: Non-Generator
Description: Handler: Non-Generators do not presently generate hazardous waste

Owner/Operator Summary:
Owner/operator name: TRUE CYCLE INC
Owner/operator address: Not reported
Not reported
Owner/operator country: US
Owner/operator telephone: Not reported
Legal status: Private
Owner/Operator Type: Operator
Owner/Op start date: 03/06/2006
Owner/Op end date: Not reported

Owner/operator name: DIAMOND SPRINGS HOLDING LLC
Owner/operator address: PO BOX 1006
SHINGLE SPRINGS, CA 95682
Owner/operator country: US
Owner/operator telephone: Not reported
Legal status: Private
Owner/Operator Type: Owner
Owner/Op start date: 05/31/2005
Owner/Op end date: Not reported

Handler Activities Summary:
U.S. importer of hazardous waste: No
Mixed waste (haz. and radioactive): No
Recycler of hazardous waste: No
Transporter of hazardous waste: No
Treater, storer or disposer of HW: No
Underground injection activity: No
On-site burner exemption: No
Furnace exemption: No
Used oil fuel burner: No
Used oil processor: No
User oil refiner: No
Used oil fuel marketer to burner: No
Used oil Specification marketer: No
Used oil transfer facility: No
Used oil transporter: No

Universal Waste Summary:
Waste type: Batteries
Accumulated waste on-site: Yes
Generated waste on-site: No

Waste type: Lamps
Accumulated waste on-site: Yes
Generated waste on-site: No

TRUE CYCLE INC (Continued) **1009398242**

Waste type: Thermostats
Accumulated waste on-site: Yes
Generated waste on-site: No

Violation Status: No violations found

B7
South
< 1/8
0.008 mi.
41 ft.

CELEBRITY INC **HAZNET** **S113104358**
6650 MERCHANDISE WAY **N/A**
DIAMOND SPRINGS, CA 95619

Site 1 of 35 in cluster B

Relative:
Lower

Actual:
1755 ft.

HAZNET:

Year: 2005
Gepaid: CAL000205348
Contact: SUE BYERS - PRESIDENT
Telephone: 5306229387
Mailing Name: Not reported
Mailing Address: 2591 COLD SPRINGS RD
Mailing City,St,Zip: PLACERVILLE, CA 956670000
Gen County: Not reported
TSD EPA ID: WAD991281767
TSD County: Not reported
Waste Category: Off-specification, aged or surplus inorganics
Disposal Method: Recycler
Tons: 0.25
Facility County: El Dorado

Year: 2005
Gepaid: CAL000205348
Contact: SUE BYERS - PRESIDENT
Telephone: 5306229387
Mailing Name: Not reported
Mailing Address: 2591 COLD SPRINGS RD
Mailing City,St,Zip: PLACERVILLE, CA 956670000
Gen County: Not reported
TSD EPA ID: NVD980895338
TSD County: Not reported
Waste Category: Metal sludge (Alkaline solution (pH >= 12.5) with metals)
Disposal Method: Treatment, Tank
Tons: 0.2
Facility County: El Dorado

Year: 2005
Gepaid: CAL000205348
Contact: SUE BYERS - PRESIDENT
Telephone: 5306229387
Mailing Name: Not reported
Mailing Address: 2591 COLD SPRINGS RD
Mailing City,St,Zip: PLACERVILLE, CA 956670000
Gen County: Not reported
TSD EPA ID: NVD980895338
TSD County: Not reported
Waste Category: Liquids with pH <= 2
Disposal Method: Treatment, Tank
Tons: 0.04
Facility County: El Dorado

Year: 2005

CELEBRITY INC (Continued) **S113104358**

Gepaid:	CAL000205348
Contact:	SUE BYERS - PRESIDENT
Telephone:	5306229387
Mailing Name:	Not reported
Mailing Address:	2591 COLD SPRINGS RD
Mailing City,St,Zip:	PLACERVILLE, CA 956670000
Gen County:	Not reported
TSD EPA ID:	NVD980895338
TSD County:	Not reported
Waste Category:	Liquids with cyanides >= 1,000 Mg./L
Disposal Method:	Treatment, Tank
Tons:	1.66
Facility County:	El Dorado

Year:	2005
Gepaid:	CAL000205348
Contact:	SUE BYERS - PRESIDENT
Telephone:	5306229387
Mailing Name:	Not reported
Mailing Address:	2591 COLD SPRINGS RD
Mailing City,St,Zip:	PLACERVILLE, CA 956670000
Gen County:	Not reported
TSD EPA ID:	NVD980895338
TSD County:	Not reported
Waste Category:	Unspecified organic liquid mixture
Disposal Method:	Recycler
Tons:	0.43
Facility County:	El Dorado

Click this hyperlink while viewing on your computer to access
35 additional CA_HAZNET: record(s) in the EDR Site Report.

B8 **SIERRA DISTRIBUTING** **CUPA Listings** **S105724150**
South **6650 MERCHANDISE WAY** **N/A**
< 1/8 **DIAMOND SPRINGS, CA 95619**
0.008 mi.
41 ft. **Site 2 of 35 in cluster B**

Relative:
Lower

Actual:
1755 ft.

CUPA EL DORADO:

PE:	BUSINESS PLANS/SMALL BUSINESS
Status:	Inactive, non-billable
Latitude:	Not reported
Longitude:	Not reported

PE:	HAZARDOUS MATERIALS - STATE SURCHARGE
Status:	Inactive, non-billable
Latitude:	Not reported
Longitude:	Not reported

PE:	BUSINESS PLANS/SMALL BUSINESS
Status:	Inactive, non-billable
Latitude:	Not reported
Longitude:	Not reported

B9
SW
< 1/8
0.009 mi.
46 ft.

ANTENNA CONCEPTS, INC. - HM
6626 MERCHANDISE WAY
DIAMOND SPRINGS, CA 95619

CUPA Listings **S110983504**
N/A

Site 3 of 35 in cluster B

Relative:
Lower

Actual:
1751 ft.

CUPA EL DORADO:

PE:	CUPA HW GENERATOR <55 GAL MATERIAL STORED
Status:	Inactive, non-billable
Latitude:	Not reported
Longitude:	Not reported

PE:	HAZARDOUS MATERIALS - STATE SURCHARGE
Status:	Inactive, non-billable
Latitude:	Not reported
Longitude:	Not reported

B10
SSW
< 1/8
0.009 mi.
48 ft.

6642 MERCHANDISE WAY
DIAMOND SPRINGS, CA 95619

EDR US Hist Auto Stat **1015594860**
N/A

Site 4 of 35 in cluster B

Relative:
Lower

Actual:
1754 ft.

EDR Historical Auto Stations:

Name:	QUICKSAND MOTORSPORTS
Year:	2012
Address:	6642 MERCHANDISE WAY

B11
SSW
< 1/8
0.009 mi.
48 ft.

AUTOTREND - HM
6642 MERCHANDISE DR UNIT D
DIAMOND SPRINGS, CA 95619

CUPA Listings **S111455821**
N/A

Site 5 of 35 in cluster B

Relative:
Lower

Actual:
1754 ft.

CUPA EL DORADO:

PE:	CUPA HW GENERATOR <55 GAL MATERIAL STORED
Status:	Inactive, non-billable
Latitude:	Not reported
Longitude:	Not reported

PE:	HAZARDOUS MATERIALS - STATE SURCHARGE
Status:	Inactive, non-billable
Latitude:	Not reported
Longitude:	Not reported

B12
SSW
< 1/8
0.009 mi.
48 ft.

ALLEN BRITISH CARS
6642 MERCHANDISE WAY STE C
DIAMOND SPRINGS, CA 95619

CUPA Listings **S110983553**
N/A

Site 6 of 35 in cluster B

Relative:
Lower

Actual:
1754 ft.

CUPA EL DORADO:

PE:	CUPA HW GENERATOR <55 GAL MATERIAL STORED
Status:	Inactive, non-billable
Latitude:	Not reported
Longitude:	Not reported

ALLEN BRITISH CARS (Continued) **S110983553**

PE: HAZARDOUS MATERIALS - STATE SURCHARGE
Status: Inactive, non-billable
Latitude: Not reported
Longitude: Not reported

B13
SW
< 1/8
0.010 mi.
54 ft.

COMCAST CABLE P'VILLE HEADEND **CUPA Listings** **S110983462**
6606 MERCHANDISE WAY **N/A**
DIAMOND SPRINGS, CA 95619

Site 7 of 35 in cluster B

Relative:
Lower

Actual:
1747 ft.

CUPA EL DORADO:
PE: BUSINESS PLANS/SMALL BUSINESS
Status: Inactive, non-billable
Latitude: Not reported
Longitude: Not reported

PE: HAZARDOUS MATERIALS - STATE SURCHARGE
Status: Inactive, non-billable
Latitude: Not reported
Longitude: Not reported

PE: BUSINESS PLANS/SMALL BUSINESS
Status: Active, billable
Latitude: 39
Longitude: -121

PE: HAZARDOUS MATERIALS - STATE SURCHARGE
Status: Active, billable
Latitude: 39
Longitude: -121

B14
SW
< 1/8
0.012 mi.
63 ft.

GRADUATE PRECISION **CUPA Listings** **S105092925**
6617 MERCHANDISE WAY **N/A**
DIAMOND SPRINGS, CA 95619

Site 8 of 35 in cluster B

Relative:
Lower

Actual:
1748 ft.

CUPA EL DORADO:
PE: BUSINESS PLANS/SMALL BUSINESS
Status: Active, billable
Latitude: 39
Longitude: -121

PE: CUPA HW GENERAL
Status: Active, exempt from billing
Latitude: 39
Longitude: -121

PE: HAZARDOUS MATERIALS - STATE SURCHARGE
Status: Active, billable
Latitude: 39
Longitude: -121

PE: BUSINESS PLANS/SMALL BUSINESS
Status: Inactive, non-billable

GRADUATE PRECISION (Continued) **S105092925**

Latitude: Not reported
Longitude: Not reported

PE: HAZARDOUS MATERIALS - STATE SURCHARGE
Status: Inactive, non-billable
Latitude: Not reported
Longitude: Not reported

B15 **MATRIX MOLDING INC** **HAZNET** **S113108652**
SW **6617 MERCHANDISE WAY** **N/A**
< 1/8 **DIAMOND SPRINGS, CA 95619**
0.012 mi.
63 ft. **Site 9 of 35 in cluster B**

Relative:
Lower

Actual:
1748 ft.

HAZNET:
Year: 2005
Gepaid: CAL000214424
Contact: CAROL PERKINS/V PRES
Telephone: 5306211413
Mailing Name: Not reported
Mailing Address: 6617 MERCHANDISE WAY
Mailing City,St,Zip: DIAMOND SPRINGS, CA 956190000
Gen County: Not reported
TSD EPA ID: CA0000084517
TSD County: Not reported
Waste Category: Hydrocarbon solvents (benzene, hexane, Stoddard, Etc.)
Disposal Method: Transfer Station
Tons: 0.05
Facility County: El Dorado

Year: 2005
Gepaid: CAL000214424
Contact: CAROL PERKINS/V PRES
Telephone: 5306211413
Mailing Name: Not reported
Mailing Address: 6617 MERCHANDISE WAY
Mailing City,St,Zip: DIAMOND SPRINGS, CA 956190000
Gen County: Not reported
TSD EPA ID: CA0000084517
TSD County: Not reported
Waste Category: Hydrocarbon solvents (benzene, hexane, Stoddard, Etc.)
Disposal Method: Not reported
Tons: 0.04
Facility County: El Dorado

Year: 2004
Gepaid: CAL000214424
Contact: CAROL PERKINS/V PRES
Telephone: 5306211413
Mailing Name: Not reported
Mailing Address: 6617 MERCHANDISE WAY
Mailing City,St,Zip: DIAMOND SPRINGS, CA 956190000
Gen County: Not reported
TSD EPA ID: CA0000084517
TSD County: Not reported
Waste Category: Hydrocarbon solvents (benzene, hexane, Stoddard, Etc.)
Disposal Method: Transfer Station
Tons: 0.14

MATRIX MOLDING INC (Continued) **S113108652**

Facility County: El Dorado

Year: 2002
Gepaid: CAL000214424
Contact: CAROL PERKINS/V PRES
Telephone: 5306211413
Mailing Name: Not reported
Mailing Address: 6617 MERCHANDISE WAY
Mailing City,St,Zip: DIAMOND SPRINGS, CA 956190000
Gen County: Not reported
TSD EPA ID: CA0000084517
TSD County: Not reported
Waste Category: Hydrocarbon solvents (benzene, hexane, Stoddard, Etc.)
Disposal Method: Transfer Station
Tons: 0.04
Facility County: El Dorado

Year: 2000
Gepaid: CAL000214424
Contact: CAROL PERKINS/V PRES
Telephone: 5306211413
Mailing Name: Not reported
Mailing Address: 6617 MERCHANDISE WAY
Mailing City,St,Zip: DIAMOND SPRINGS, CA 956190000
Gen County: Not reported
TSD EPA ID: CA0000084517
TSD County: Not reported
Waste Category: Hydrocarbon solvents (benzene, hexane, Stoddard, Etc.)
Disposal Method: Transfer Station
Tons: 0.04
Facility County: El Dorado

Click this hyperlink while viewing on your computer to access additional CA_HAZNET: detail in the EDR Site Report.

B16 **CO-ORAL-ITE DENTAL MFG** **CUPA Listings** **S110983620**
SSW **6635 MERCHANDISE WAY** **N/A**
< 1/8 **DIAMOND SPRINGS, CA 95619**
0.016 mi.
83 ft. **Site 10 of 35 in cluster B**

Relative:
Lower

Actual:
1752 ft.

CUPA EL DORADO:
PE: BUSINESS PLANS/SMALL BUSINESS
Status: Active, billable
Latitude: 39
Longitude: -121

PE: HAZARDOUS MATERIALS - STATE SURCHARGE
Status: Active, billable
Latitude: 39
Longitude: -121

B17
South
< 1/8
0.051 mi.
270 ft.

DAVID'S ALE WORKS
6675 MERCHANDISE WAY B
DIAMOND SPRINGS, CA 95609

CUPA Listings **S110983643**
N/A

Site 11 of 35 in cluster B

Relative:
Lower

Actual:
1759 ft.

CUPA EL DORADO:

PE:	BUSINESS PLANS/SMALL BUSINESS
Status:	Inactive, non-billable
Latitude:	Not reported
Longitude:	Not reported

PE:	HAZARDOUS MATERIALS - STATE SURCHARGE
Status:	Inactive, non-billable
Latitude:	Not reported
Longitude:	Not reported

C18
SE
< 1/8
0.052 mi.
277 ft.

NORCAL BEVERAGE CO INC
6230 ENTERPRISE DR
DIAMOND SPRINGS, CA 95619

HAZNET **S112954572**
N/A

Site 1 of 21 in cluster C

Relative:
Lower

Actual:
1763 ft.

HAZNET:

Year:	2006
Gepaid:	CAC002605401
Contact:	JOHN WOOD/ SAFETY MGR
Telephone:	9163742696
Mailing Name:	Not reported
Mailing Address:	2286 STONE BLVD
Mailing City,St,Zip:	WEST SACRAMENTO, CA 95691
Gen County:	Not reported
TSD EPA ID:	AZC950823111
TSD County:	Not reported
Waste Category:	Not reported
Disposal Method:	Disposal, Land Fill
Tons:	Not reported
Facility County:	El Dorado

Year:	2006
Gepaid:	CAC002605401
Contact:	JOHN WOOD/ SAFETY MGR
Telephone:	9163742696
Mailing Name:	Not reported
Mailing Address:	2286 STONE BLVD
Mailing City,St,Zip:	WEST SACRAMENTO, CA 95691
Gen County:	Not reported
TSD EPA ID:	CAD044003556
TSD County:	Not reported
Waste Category:	Unspecified oil-containing waste
Disposal Method:	Transfer Station
Tons:	1.33
Facility County:	El Dorado

Year:	2006
Gepaid:	CAC002605401
Contact:	JOHN WOOD/ SAFETY MGR
Telephone:	9163742696
Mailing Name:	Not reported
Mailing Address:	2286 STONE BLVD

NORCAL BEVERAGE CO INC (Continued) **S112954572**

Mailing City,St,Zip:	WEST SACRAMENTO, CA 95691
Gen County:	Not reported
TSD EPA ID:	AZC950823111
TSD County:	Not reported
Waste Category:	Asbestos containing waste
Disposal Method:	Not reported
Tons:	0.16
Facility County:	El Dorado

A19 **PACIFIC BELL** **HIST UST** **U001613568**
East **281 INDUSTRIAL DR** **N/A**
< 1/8 **PLACERVILLE, CA 95667**
0.070 mi.
372 ft. **Site 7 of 9 in cluster A**

Relative:
Higher

Actual:
1820 ft.

HIST UST:

Region:	STATE
Facility ID:	00000016331
Facility Type:	Other
Other Type:	PHONE CO.
Total Tanks:	0003
Contact Name:	E. J. KOEHLER
Telephone:	4155426758
Owner Name:	PACIFIC BELL
Owner Address:	370 THIRD STREET
Owner City,St,Zip:	SAN FRANCISCO, CA 94107
Tank Num:	001
Container Num:	G-81-10K-0
Year Installed:	1981
Tank Capacity:	00010000
Tank Used for:	PRODUCT
Type of Fuel:	DIESEL
Tank Construction:	Not reported
Leak Detection:	None
Tank Num:	002
Container Num:	G-81-10K-0
Year Installed:	1981
Tank Capacity:	00010000
Tank Used for:	PRODUCT
Type of Fuel:	UNLEADED
Tank Construction:	Not reported
Leak Detection:	None
Tank Num:	003
Container Num:	W-81-1K
Year Installed:	1981
Tank Capacity:	00001000
Tank Used for:	WASTE
Type of Fuel:	WASTE OIL
Tank Construction:	Not reported
Leak Detection:	None

A20 **CHMIRS** **S110419254**
East **281 INDUSTRIAL AVE** **N/A**
< 1/8 **PLACERVILLE, CA**
0.070 mi.
372 ft. **Site 8 of 9 in cluster A**

Relative:
Higher

Actual:
1820 ft.

CHMIRS:

OES Incident Number:	'08-3955
OES notification:	06/03/2008
OES Date:	Not reported
OES Time:	Not reported
Incident Date:	Not reported
Date Completed:	**Not reported**
Property Use:	Not reported
Agency Id Number:	Not reported
Agency Incident Number:	Not reported
Time Notified:	Not reported
Time Completed:	Not reported
Surrounding Area:	Not reported
Estimated Temperature:	Not reported
Property Management:	Not reported
Special Studies 1:	Not reported
Special Studies 2:	Not reported
Special Studies 3:	Not reported
Special Studies 4:	Not reported
Special Studies 5:	Not reported
Special Studies 6:	Not reported
More Than Two Substances Involved?:	Not reported
Resp Agncy Personel # Of Decontaminated:	Not reported
Responding Agency Personel # Of Injuries:	Not reported
Responding Agency Personel # Of Fatalities:	Not reported
Others Number Of Decontaminated:	Not reported
Others Number Of Injuries:	Not reported
Others Number Of Fatalities:	Not reported
Vehicle Make/year:	Not reported
Vehicle License Number:	Not reported
Vehicle State:	Not reported
Vehicle Id Number:	Not reported
CA/DOT/PUC/ICC Number:	Not reported
Company Name:	Not reported
Reporting Officer Name/ID:	Not reported
Report Date:	Not reported
Comments:	Not reported
Facility Telephone:	Not reported
Waterway Involved:	No
Waterway:	Not reported
Spill Site:	Merchant/Business
Cleanup By:	Reporting Party
Containment:	Not reported
What Happened:	Not reported
Type:	Not reported
Measure:	Gal(s)
Other:	Not reported
Date/Time:	1130
Year:	2008
Agency:	AT&T
Incident Date:	6/3/2008
Admin Agency:	El Dorado County Environmental Mgmt.
Amount:	Not reported

(Continued) **S110419254**

Contained:	Yes
Site Type:	Not reported
E Date:	Not reported
Substance:	hydraulic oil
Quantity Released:	1
BBLS:	Not reported
Cups:	Not reported
CUFT:	Not reported
Gallons:	Not reported
Grams:	Not reported
Pounds:	Not reported
Liters:	Not reported
Ounces:	Not reported
Pints:	Not reported
Quarts:	Not reported
Sheen:	Not reported
Tons:	Not reported
Unknown:	Not reported
Evacuations:	0
Number of Injuries:	0
Number of Fatalities:	0
Description:	RP States: A vehicle was in an accident and towed into the fleet yard and the boom had a leak. The release was cleaned up.

A21
East
< 1/8
0.070 mi.
372 ft.

Relative:
Higher

Actual:
1820 ft.

PACIFIC BELL C/O ALLEN TB72R
281 INDUSTRIAL DR
PLACERVILLE, CA

Site 9 of 9 in cluster A

RCRA-SQG **1000250712**
FINDS **CAD981994155**
HIST CORTESE
LUST
CA FID UST
CUPA Listings
SWEEPS UST

RCRA-SQG:

Date form received by agency:	09/01/1996
Facility name:	PACIFIC BELL C/O ALLEN TB72R
Facility address:	281 INDUSTRIAL DR PLACERVILLE, CA 95667
EPA ID:	CAD981994155
Mailing address:	2600 CAMINO RAMON RM 2E050 SAN RAMON, CA 94583
Contact:	Not reported
Contact address:	Not reported Not reported
Contact country:	Not reported
Contact telephone:	Not reported
Contact email:	Not reported
EPA Region:	09
Classification:	Small Small Quantity Generator
Description:	Handler: generates more than 100 and less than 1000 kg of hazardous waste during any calendar month and accumulates less than 6000 kg of hazardous waste at any time; or generates 100 kg or less of hazardous waste during any calendar month, and accumulates more than 1000 kg of hazardous waste at any time

Owner/Operator Summary:

Owner/operator name:	PACIFIC BELL
Owner/operator address:	NOT REQUIRED

PACIFIC BELL C/O ALLEN TB72R (Continued) **1000250712**

NOT REQUIRED, ME 99999
Owner/operator country: Not reported
Owner/operator telephone: (415) 555-1212
Legal status: Private
Owner/Operator Type: Owner
Owner/Op start date: Not reported
Owner/Op end date: Not reported

Owner/operator name: NOT REQUIRED
Owner/operator address: NOT REQUIRED
NOT REQUIRED, ME 99999
Owner/operator country: Not reported
Owner/operator telephone: (415) 555-1212
Legal status: Private
Owner/Operator Type: Operator
Owner/Op start date: Not reported
Owner/Op end date: Not reported

Handler Activities Summary:
U.S. importer of hazardous waste: No
Mixed waste (haz. and radioactive): No
Recycler of hazardous waste: No
Transporter of hazardous waste: No
Treater, storer or disposer of HW: No
Underground injection activity: No
On-site burner exemption: No
Furnace exemption: No
Used oil fuel burner: No
Used oil processor: No
User oil refiner: No
Used oil fuel marketer to burner: No
Used oil Specification marketer: No
Used oil transfer facility: No
Used oil transporter: No

Historical Generators:
Date form received by agency: 04/09/1990
Facility name: PACIFIC BELL C/O ALLEN TB72R
Site name: PACIFIC BELL
Classification: Large Quantity Generator

Date form received by agency: 03/19/1987
Facility name: PACIFIC BELL C/O ALLEN TB72R
Classification: Large Quantity Generator

Violation Status: No violations found

FINDS:

Registry ID: 110002770225

Environmental Interest/Information System
California Hazardous Waste Tracking System - Datamart (HWTS-DATAMART) provides California with information on hazardous waste shipments for generators, transporters, and treatment, storage, and disposal facilities.

PACIFIC BELL C/O ALLEN TB72R (Continued) **1000250712**

RCRAInfo is a national information system that supports the Resource Conservation and Recovery Act (RCRA) program through the tracking of events and activities related to facilities that generate, transport, and treat, store, or dispose of hazardous waste. RCRAInfo allows RCRA program staff to track the notification, permit, compliance, and corrective action activities required under RCRA.

HIST CORTESE:

Region:	CORTESE
Facility County Code:	9
Reg By:	LTNKA
Reg Id:	090021

LUST:

Region:	STATE
Global Id:	T0601700013
Latitude:	38.699660248
Longitude:	-120.825918353
Case Type:	LUST Cleanup Site
Status:	Completed - Case Closed
Status Date:	10/18/2011
Lead Agency:	EL DORADO COUNTY LOP
Case Worker:	RL
Local Agency:	EL DORADO COUNTY LOP
RB Case Number:	090021
LOC Case Number:	00013
File Location:	Local Agency
Potential Media Affect:	Aquifer used for drinking water supply
Potential Contaminants of Concern:	Gasoline
Site History:	In December 1986, 1,000 gallon waste oil UST was removed. In May 1997, one 10,000 gallon gas and one 10,000 gallon diesel UST were removed. In March 2005, one dual compartment gas/diesel 20,000 gallon UST was removed. Three groundwater monitoring wells installed In September 1997, four additional gw monitoring wells installed in September 1998. In September 1999, three more groundwater wells MW-8 through MW-10 installed. In September 2000, gw well MW-12 installed. In May 1998, cartridge socks of ORC installed in wells MW-1 through MW-3. In June 1998, separate phase hydrocarbons found ranging from 0.5 to 2.0 inches in thickness found in MW-1 through MW-3. Approximately 1,435 gallons of water and SPH removed over three days of pumping three wells. No free product noted in wells after pumping completed in July 1998. In September 1999 300 pounds of ORC slurry placed in bottom of former UST pit, ORC socks removed and replaced with passive SPH skimmers. In April and May 2000 two 4 days water/SPH pumping recovered approximately4,740 gallons of water and SPH. In September and October 2000 pumping recovered approximately 2,660 gallons of water/SPH. Groundwater recovery and re-injection of water with ozone saturation began operation in January 2003. Approximately 3.3 million gallons of groundwater pumped and processed from January 2003 to January 2005. A sparging (AS) and SVE system was installed and operational in August 2007. A Nutrient Addition Pilot Study was performed for 6 months ending in December 2007.

Click here to access the California GeoTracker records for this facility:

PACIFIC BELL C/O ALLEN TB72R (Continued) **1000250712**

Contact:

Global Id:	T0601700013
Contact Type:	Local Agency Caseworker
Contact Name:	ROBERT LAURITZEN
Organization Name:	EL DORADO COUNTY LOP
Address:	2850 Fairlane Ct., Building C
City:	Placerville
Email:	robert.lauritzen@edcgov.us
Phone Number:	Not reported

Global Id:	T0601700013
Contact Type:	Regional Board Caseworker
Contact Name:	PETER MINKEL
Organization Name:	CENTRAL VALLEY RWQCB (REGION 5S)
Address:	11020 SUN CENTER DRIVE #200
City:	RANCHO CORDOVA
Email:	pminkel@waterboards.ca.gov
Phone Number:	Not reported

Status History:

Global Id:	T0601700013
Status:	Open - Verification Monitoring
Status Date:	04/28/2005

Global Id:	T0601700013
Status:	Open - Remediation
Status Date:	04/17/2001

Global Id:	T0601700013
Status:	Open - Remediation
Status Date:	08/04/2003

Global Id:	T0601700013
Status:	Open - Remediation
Status Date:	04/28/2004

Global Id:	T0601700013
Status:	Open - Remediation
Status Date:	06/02/2004

Global Id:	T0601700013
Status:	Open - Remediation
Status Date:	09/29/2004

Global Id:	T0601700013
Status:	Completed - Case Closed
Status Date:	10/18/2011

Global Id:	T0601700013
Status:	Open - Case Begin Date
Status Date:	01/28/1987

Global Id:	T0601700013
Status:	Completed - Case Closed
Status Date:	04/28/2005

PACIFIC BELL C/O ALLEN TB72R (Continued) **1000250712**

Global Id: T0601700013
Status: Open - Site Assessment
Status Date: 05/19/1997

Global Id: T0601700013
Status: Open - Site Assessment
Status Date: 11/02/1999

Regulatory Activities:

Global Id: T0601700013
Action Type: RESPONSE
Date: 01/31/2006
Action: Monitoring Report - Quarterly

Global Id: T0601700013
Action Type: RESPONSE
Date: 04/30/2005
Action: Monitoring Report - Quarterly

Global Id: T0601700013
Action Type: RESPONSE
Date: 07/30/2007
Action: Other Report / Document

Global Id: T0601700013
Action Type: REMEDIATION
Date: 01/01/1950
Action: In Situ Physical/Chemical Treatment (other than SVE)

Global Id: T0601700013
Action Type: RESPONSE
Date: 07/30/2008
Action: Monitoring Report - Quarterly

Global Id: T0601700013
Action Type: RESPONSE
Date: 07/31/2003
Action: Remedial Progress Report

Global Id: T0601700013
Action Type: RESPONSE
Date: 01/31/2004
Action: Remedial Progress Report

Global Id: T0601700013
Action Type: RESPONSE
Date: 03/31/2003
Action: Monitoring Report - Quarterly

Global Id: T0601700013
Action Type: RESPONSE
Date: 01/30/2004
Action: Monitoring Report - Quarterly

Global Id: T0601700013
Action Type: ENFORCEMENT
Date: 03/10/2011

PACIFIC BELL C/O ALLEN TB72R (Continued) **1000250712**

Action: Staff Letter

Global Id: T0601700013
Action Type: REMEDIATION
Date: 01/01/1950
Action: Ex Situ Physical/Chemical Treatment (other than P&T, SVE, or Excavation)

Global Id: T0601700013
Action Type: Other
Date: 01/01/1950
Action: Leak Began

Global Id: T0601700013
Action Type: REMEDIATION
Date: 01/01/1950
Action: Soil Vapor Extraction (SVE)

Global Id: T0601700013
Action Type: REMEDIATION
Date: 01/01/1950
Action: In Situ Physical/Chemical Treatment (other than SVE)

Global Id: T0601700013
Action Type: ENFORCEMENT
Date: 11/06/2009
Action: Staff Letter

Global Id: T0601700013
Action Type: RESPONSE
Date: 05/30/2007
Action: Other Workplan

Global Id: T0601700013
Action Type: RESPONSE
Date: 04/30/2008
Action: Other Report / Document

Global Id: T0601700013
Action Type: REMEDIATION
Date: 01/01/1950
Action: Excavation

Global Id: T0601700013
Action Type: REMEDIATION
Date: 01/01/1950
Action: Excavation

Global Id: T0601700013
Action Type: REMEDIATION
Date: 01/01/1950
Action: Soil Vapor Extraction (SVE)

Global Id: T0601700013
Action Type: REMEDIATION
Date: 01/01/1950
Action: In Situ Physical/Chemical Treatment (other than SVE)

PACIFIC BELL C/O ALLEN TB72R (Continued) **1000250712**

Global Id: T0601700013
Action Type: REMEDIATION
Date: 01/01/1950
Action: Pump & Treat (P&T) Groundwater

Global Id: T0601700013
Action Type: REMEDIATION
Date: 01/01/1950
Action: Pump & Treat (P&T) Groundwater

Global Id: T0601700013
Action Type: REMEDIATION
Date: 01/01/1950
Action: Pump & Treat (P&T) Groundwater

Global Id: T0601700013
Action Type: REMEDIATION
Date: 01/01/1950
Action: Monitored Natural Attenuation

Global Id: T0601700013
Action Type: RESPONSE
Date: 07/31/2004
Action: Remedial Progress Report

Global Id: T0601700013
Action Type: RESPONSE
Date: 06/30/2003
Action: Monitoring Report - Quarterly

Global Id: T0601700013
Action Type: RESPONSE
Date: 01/30/2008
Action: Other Report / Document

Global Id: T0601700013
Action Type: RESPONSE
Date: 10/31/2005
Action: Monitoring Report - Quarterly

Global Id: T0601700013
Action Type: ENFORCEMENT
Date: 09/11/2000
Action: Staff Letter

Global Id: T0601700013
Action Type: ENFORCEMENT
Date: 05/16/2001
Action: Staff Letter

Global Id: T0601700013
Action Type: ENFORCEMENT
Date: 03/02/2006
Action: Staff Letter

Global Id: T0601700013
Action Type: ENFORCEMENT

PACIFIC BELL C/O ALLEN TB72R (Continued) **1000250712**

Date: 12/05/2000
Action: Staff Letter

Global Id: T0601700013
Action Type: ENFORCEMENT
Date: 07/10/2000
Action: Staff Letter

Global Id: T0601700013
Action Type: ENFORCEMENT
Date: 05/17/2001
Action: Staff Letter

Global Id: T0601700013
Action Type: ENFORCEMENT
Date: 08/30/2000
Action: Staff Letter

Global Id: T0601700013
Action Type: ENFORCEMENT
Date: 10/01/2008
Action: Letter - Notice

Global Id: T0601700013
Action Type: ENFORCEMENT
Date: 03/13/2007
Action: * Verbal Communication

Global Id: T0601700013
Action Type: ENFORCEMENT
Date: 08/28/2006
Action: Staff Letter

Global Id: T0601700013
Action Type: RESPONSE
Date: 09/30/2003
Action: Monitoring Report - Quarterly

Global Id: T0601700013
Action Type: RESPONSE
Date: 07/30/2005
Action: Monitoring Report - Quarterly

Global Id: T0601700013
Action Type: RESPONSE
Date: 10/30/2004
Action: Monitoring Report - Quarterly

Global Id: T0601700013
Action Type: ENFORCEMENT
Date: 02/08/2006
Action: * Verbal Communication

Global Id: T0601700013
Action Type: ENFORCEMENT
Date: 06/19/2007
Action: Staff Letter

PACIFIC BELL C/O ALLEN TB72R (Continued) **1000250712**

Global Id: T0601700013
Action Type: Other
Date: 01/01/1950
Action: Leak Discovery

Global Id: T0601700013
Action Type: ENFORCEMENT
Date: 06/07/2011
Action: LOP Case Closure Summary to RB

Global Id: T0601700013
Action Type: RESPONSE
Date: 04/30/2004
Action: Monitoring Report - Quarterly

Global Id: T0601700013
Action Type: RESPONSE
Date: 04/30/2006
Action: Monitoring Report - Quarterly

Global Id: T0601700013
Action Type: RESPONSE
Date: 01/31/2007
Action: Well Installation Report

Global Id: T0601700013
Action Type: RESPONSE
Date: 01/15/2005
Action: Other Report / Document

Global Id: T0601700013
Action Type: RESPONSE
Date: 09/30/2004
Action: Remedial Progress Report

Global Id: T0601700013
Action Type: RESPONSE
Date: 01/31/2007
Action: Monitoring Report - Quarterly

Global Id: T0601700013
Action Type: RESPONSE
Date: 10/30/2007
Action: Other Report / Document

Global Id: T0601700013
Action Type: RESPONSE
Date: 12/30/2002
Action: Monitoring Report - Quarterly

Global Id: T0601700013
Action Type: ENFORCEMENT
Date: 10/18/2011
Action: Closure/No Further Action Letter

Global Id: T0601700013
Action Type: RESPONSE

PACIFIC BELL C/O ALLEN TB72R (Continued) **1000250712**

Date: 10/31/2006
Action: Monitoring Report - Quarterly

Global Id: T0601700013
Action Type: RESPONSE
Date: 07/31/2006
Action: Monitoring Report - Quarterly

Global Id: T0601700013
Action Type: RESPONSE
Date: 04/30/2007
Action: Monitoring Report - Quarterly

Global Id: T0601700013
Action Type: ENFORCEMENT
Date: 01/14/2005
Action: Staff Letter

Global Id: T0601700013
Action Type: ENFORCEMENT
Date: 07/27/2009
Action: Staff Letter

Global Id: T0601700013
Action Type: RESPONSE
Date: 01/30/2005
Action: Monitoring Report - Quarterly

Global Id: T0601700013
Action Type: Other
Date: 01/01/1950
Action: Leak Stopped

Global Id: T0601700013
Action Type: Other
Date: 01/01/1950
Action: Leak Reported

LUST REG 5:
Region: 5
Status: Post remedial action monitoring
Case Number: 090021
Case Type: Drinking Water Aquifer affected
Substance: GASOLINE
Staff Initials: PGM
Lead Agency: Regional
Program: LUST
MTBE Code: 5

CA FID UST:
Facility ID: 09000076
Regulated By: UTNKA
Regulated ID: 00016331
Cortese Code: Not reported
SIC Code: Not reported

PACIFIC BELL C/O ALLEN TB72R (Continued) **1000250712**

Facility Phone: 4155426758
Mail To: Not reported
Mailing Address: 370 003RD ST
Mailing Address 2: Not reported
Mailing City,St,Zip: PLACERVILLE 95667
Contact: Not reported
Contact Phone: Not reported
DUNs Number: Not reported
NPDES Number: Not reported
EPA ID: Not reported
Comments: Not reported
Status: Active

CUPA EL DORADO:
PE: BUSINESS PLANS/SMALL BUSINESS
Status: Active, billable
Latitude: 39
Longitude: -121

PE: CONTAMINATED SITE/CLEAN-UP
Status: Active, billable
Latitude: 39
Longitude: -121

PE: CUPA HW GENERAL
Status: Active, exempt from billing
Latitude: 39
Longitude: -121

PE: HAZARDOUS MATERIALS - STATE SURCHARGE
Status: Active, billable
Latitude: 39
Longitude: -121

PE: LOCAL OVERSITE PROGRAM (LOP) E5G073
Status: Active, billable
Latitude: 39
Longitude: -121

PE: U.G.S.T. ANNUAL PERMIT
Status: Inactive, non-billable
Latitude: 39
Longitude: -121

PE: UGST - STATE SURCHARGE
Status: Inactive, non-billable
Latitude: 39
Longitude: -121

PE: BUSINESS PLANS/SMALL BUSINESS
Status: Inactive, non-billable
Latitude: Not reported
Longitude: Not reported

SWEEPS UST:
Status: Active

PACIFIC BELL C/O ALLEN TB72R (Continued) **1000250712**

Comp Number: 16331
Number: 9
Board Of Equalization: 44-001027
Referral Date: 07-01-85
Action Date: Not reported
Created Date: 10-13-88
Owner Tank Id: G-81-10K-0
SWRCB Tank Id: 09-000-016331-000001
Tank Status: A
Capacity: 10000
Active Date: 07-01-85
Tank Use: M.V. FUEL
STG: P
Content: DIESEL
Number Of Tanks: 3

Status: Active
Comp Number: 16331
Number: 9
Board Of Equalization: 44-001027
Referral Date: 07-01-85
Action Date: Not reported
Created Date: 10-13-88
Owner Tank Id: G-81-10K-0
SWRCB Tank Id: 09-000-016331-000002
Tank Status: A
Capacity: 10000
Active Date: 07-01-85
Tank Use: M.V. FUEL
STG: P
Content: REG UNLEADED
Number Of Tanks: Not reported

Status: Active
Comp Number: 16331
Number: 9
Board Of Equalization: 44-001027
Referral Date: 07-01-85
Action Date: Not reported
Created Date: 10-13-88
Owner Tank Id: W-81-1K
SWRCB Tank Id: 09-000-016331-000003
Tank Status: A
Capacity: 1000
Active Date: 07-01-85
Tank Use: OIL
STG: W
Content: WASTE OIL
Number Of Tanks: Not reported

B22 SSW < 1/8 0.078 mi. 410 ft. — **COOK CUSTOM CABINETRY LLC** — **HAZNET** — **S113466341** / **N/A**
6428 CAPITOL AVE
DIAMOND SPRINGS, CA 95619

Site 12 of 35 in cluster B

Relative: Lower

Actual: 1758 ft.

HAZNET:

Year:	2012
Gepaid:	CAL000319530
Contact:	MARY MENDOZA
Telephone:	5306210851
Mailing Name:	Not reported
Mailing Address:	6428 CAPITOL AVE
Mailing City,St,Zip:	DIAMOND SPRINGS, CA 956199393
Gen County:	El Dorado
TSD EPA ID:	UTD981552177
TSD County:	99
Waste Category:	Not reported
Disposal Method:	Incineration--Thermal Destruction Other Than Use As A Fuel
Tons:	0.22935
Facility County:	El Dorado

Year:	2010
Gepaid:	CAL000319530
Contact:	MARY MENDOZA
Telephone:	5306210851
Mailing Name:	Not reported
Mailing Address:	6428 CAPITOL AVE
Mailing City,St,Zip:	DIAMOND SPRINGS, CA 956199393
Gen County:	Not reported
TSD EPA ID:	CAD059494310
TSD County:	Not reported
Waste Category:	Other inorganic solid waste
Disposal Method:	Storage, Bulking, And/Or Transfer Off Site--No Treatment/Reovery (H010-H129) Or (H131-H135)
Tons:	0.0425
Facility County:	El Dorado

B23 SSW < 1/8 0.078 mi. 410 ft. — **US SMALL BUSINESS ADMINISTRATION** — **HAZNET** — **S112870919** / **N/A**
6428 CAPITOL AVE
DIAMOND SPRINGS, CA 95619

Site 13 of 35 in cluster B

Relative: Lower

Actual: 1758 ft.

HAZNET:

Year:	1997
Gepaid:	CAC001165344
Contact:	US SMALL ADMINISTRATION
Telephone:	9169623669
Mailing Name:	Not reported
Mailing Address:	ATTN: NOLA WILLIAMS
Mailing City,St,Zip:	CITRUS HEIGHTS, CA 900710000
Gen County:	Not reported
TSD EPA ID:	CAT000646117
TSD County:	Not reported
Waste Category:	Other organic solids
Disposal Method:	Disposal, Land Fill
Tons:	.6500
Facility County:	9

US SMALL BUSINESS ADMINISTRATION (Continued) **S112870919**

Year:	1997
Gepaid:	CAC001165344
Contact:	US SMALL ADMINISTRATION
Telephone:	9169623669
Mailing Name:	Not reported
Mailing Address:	ATTN: NOLA WILLIAMS
Mailing City,St,Zip:	CITRUS HEIGHTS, CA 900710000
Gen County:	Not reported
TSD EPA ID:	CAD044429835
TSD County:	Not reported
Waste Category:	Unspecified organic liquid mixture
Disposal Method:	Recycler
Tons:	.6880
Facility County:	9

Year:	1997
Gepaid:	CAC001165344
Contact:	US SMALL ADMINISTRATION
Telephone:	9169623669
Mailing Name:	Not reported
Mailing Address:	ATTN: NOLA WILLIAMS
Mailing City,St,Zip:	CITRUS HEIGHTS, CA 900710000
Gen County:	Not reported
TSD EPA ID:	CAD044003556
TSD County:	Not reported
Waste Category:	Unspecified oil-containing waste
Disposal Method:	Transfer Station
Tons:	1.6680
Facility County:	9

Year:	1997
Gepaid:	CAC001165344
Contact:	US SMALL ADMINISTRATION
Telephone:	9169623669
Mailing Name:	Not reported
Mailing Address:	ATTN: NOLA WILLIAMS
Mailing City,St,Zip:	CITRUS HEIGHTS, CA 900710000
Gen County:	Not reported
TSD EPA ID:	CAD044429835
TSD County:	Not reported
Waste Category:	Aqueous solution with total organic residues 10 percent or more
Disposal Method:	Disposal, Other
Tons:	.2293
Facility County:	9

B24 **COOK CUSTOM CABINETRY** **CUPA Listings** **S103667945**
SSW **6428 CAPITOL AVE** **N/A**
< 1/8 **DIAMOND SPRINGS, CA 95619**
0.078 mi.
410 ft. **Site 14 of 35 in cluster B**

Relative:
Lower

Actual:
1758 ft.

CUPA EL DORADO:

PE:	BUSINESS PLANS/SMALL BUSINESS
Status:	Active, billable
Latitude:	39
Longitude:	-121

PE:	CUPA HW GENERAL

COOK CUSTOM CABINETRY (Continued) **S103667945**

Status: Active, exempt from billing
Latitude: 39
Longitude: -121

PE: HAZARDOUS MATERIALS - STATE SURCHARGE
Status: Active, billable
Latitude: 39
Longitude: -121

PE: BUSINESS PLANS/SMALL BUSINESS
Status: Inactive, non-billable
Latitude: Not reported
Longitude: Not reported

B25
SSW
< 1/8
0.078 mi.
410 ft.

COOK CABINETS INC
6428 CAPITOL AVE
DIAMOND SPRINGS, CA 95619

RCRA-SQG **1001959854**
FINDS **CAR000065409**
HAZNET

Site 15 of 35 in cluster B

Relative:
Lower

Actual:
1758 ft.

RCRA-SQG:
Date form received by agency: 01/31/2000
Facility name: COOK CABINETS INC
Facility address: 6428 CAPITOL AVE
DIAMOND SPRINGS, CA 95619
EPA ID: CAR000065409
Contact: STEVE GULARTE
Contact address: 6428 CAPITOL AVE
DIAMOND SPRINGS, CA 95619
Contact country: US
Contact telephone: (530) 621-0851
Contact email: Not reported
EPA Region: 09
Classification: Small Small Quantity Generator
Description: Handler: generates more than 100 and less than 1000 kg of hazardous waste during any calendar month and accumulates less than 6000 kg of hazardous waste at any time; or generates 100 kg or less of hazardous waste during any calendar month, and accumulates more than 1000 kg of hazardous waste at any time

Owner/Operator Summary:
Owner/operator name: COOK CABINETS INC
Owner/operator address: 6428 CAPITOL AVE
DIAMOND SPRINGS, CA 95619
Owner/operator country: Not reported
Owner/operator telephone: (530) 621-0851
Legal status: Private
Owner/Operator Type: Owner
Owner/Op start date: Not reported
Owner/Op end date: Not reported

Handler Activities Summary:
U.S. importer of hazardous waste: No
Mixed waste (haz. and radioactive): No
Recycler of hazardous waste: No
Transporter of hazardous waste: No
Treater, storer or disposer of HW: No

COOK CABINETS INC (Continued) **1001959854**

Underground injection activity: No
On-site burner exemption: No
Furnace exemption: No
Used oil fuel burner: No
Used oil processor: No
User oil refiner: No
Used oil fuel marketer to burner: No
Used oil Specification marketer: No
Used oil transfer facility: No
Used oil transporter: No

Hazardous Waste Summary:

Waste code: D001
Waste name: IGNITABLE HAZARDOUS WASTES ARE THOSE WASTES WHICH HAVE A FLASHPOINT OF LESS THAN 140 DEGREES FAHRENHEIT AS DETERMINED BY A PENSKY-MARTENS CLOSED CUP FLASH POINT TESTER. ANOTHER METHOD OF DETERMINING THE FLASH POINT OF A WASTE IS TO REVIEW THE MATERIAL SAFETY DATA SHEET, WHICH CAN BE OBTAINED FROM THE MANUFACTURER OR DISTRIBUTOR OF THE MATERIAL. LACQUER THINNER IS AN EXAMPLE OF A COMMONLY USED SOLVENT WHICH WOULD BE CONSIDERED AS IGNITABLE HAZARDOUS WASTE.

Waste code: D007
Waste name: CHROMIUM

Waste code: D035
Waste name: METHYL ETHYL KETONE

Waste code: F003
Waste name: THE FOLLOWING SPENT NON-HALOGENATED SOLVENTS: XYLENE, ACETONE, ETHYL ACETATE, ETHYL BENZENE, ETHYL ETHER, METHYL ISOBUTYL KETONE, N-BUTYL ALCOHOL, CYCLOHEXANONE, AND METHANOL; ALL SPENT SOLVENT MIXTURES/BLENDS CONTAINING, BEFORE USE, ONLY THE ABOVE SPENT NON-HALOGENATED SOLVENTS; AND ALL SPENT SOLVENT MIXTURES/BLENDS CONTAINING, BEFORE USE, ONE OR MORE OF THE ABOVE NON-HALOGENATED SOLVENTS, AND, A TOTAL OF TEN PERCENT OR MORE (BY VOLUME) OF ONE OR MORE OF THOSE SOLVENTS LISTED IN F001, F002, F004, AND F005, AND STILL BOTTOMS FROM THE RECOVERY OF THESE SPENT SOLVENTS AND SPENT SOLVENT MIXTURES.

Waste code: F005
Waste name: THE FOLLOWING SPENT NON-HALOGENATED SOLVENTS: TOLUENE, METHYL ETHYL KETONE, CARBON DISULFIDE, ISOBUTANOL, PYRIDINE, BENZENE, 2-ETHOXYETHANOL, AND 2-NITROPROPANE; ALL SPENT SOLVENT MIXTURES/BLENDS CONTAINING, BEFORE USE, A TOTAL OF TEN PERCENT OR MORE (BY VOLUME) OF ONE OR MORE OF THE ABOVE NON-HALOGENATED SOLVENTS OR THOSE SOLVENTS LISTED IN F001, F002, OR F004; AND STILL BOTTOMS FROM THE RECOVERY OF THESE SPENT SOLVENTS AND SPENT SOLVENT MIXTURES.

Violation Status: No violations found

FINDS:

Registry ID: 110002932471

Environmental Interest/Information System
RCRAInfo is a national information system that supports the Resource Conservation and Recovery Act (RCRA) program through the tracking of

COOK CABINETS INC (Continued) **1001959854**

events and activities related to facilities that generate, transport, and treat, store, or dispose of hazardous waste. RCRAInfo allows RCRA program staff to track the notification, permit, compliance, and corrective action activities required under RCRA.

HAZNET:

Year:	2006
Gepaid:	CAR000065409
Contact:	COOK CABINETS INC
Telephone:	--
Mailing Name:	Not reported
Mailing Address:	6428 CAPITOL AVE
Mailing City,St,Zip:	DIAMOND SPRINGS, CA 956190000
Gen County:	Not reported
TSD EPA ID:	TXD077603371
TSD County:	Not reported
Waste Category:	Hydrocarbon solvents (benzene, hexane, Stoddard, Etc.)
Disposal Method:	Fuel Blending Prior To Energy Recovery At Another Site
Tons:	0.82
Facility County:	El Dorado

Year:	2006
Gepaid:	CAR000065409
Contact:	COOK CABINETS INC
Telephone:	--
Mailing Name:	Not reported
Mailing Address:	6428 CAPITOL AVE
Mailing City,St,Zip:	DIAMOND SPRINGS, CA 956190000
Gen County:	Not reported
TSD EPA ID:	TXD077603371
TSD County:	Not reported
Waste Category:	Hydrocarbon solvents (benzene, hexane, Stoddard, Etc.)
Disposal Method:	Fuel Blending Prior To Energy Recovery At Another Site
Tons:	1.06
Facility County:	El Dorado

Year:	2006
Gepaid:	CAR000065409
Contact:	COOK CABINETS INC
Telephone:	--
Mailing Name:	Not reported
Mailing Address:	6428 CAPITOL AVE
Mailing City,St,Zip:	DIAMOND SPRINGS, CA 956190000
Gen County:	Not reported
TSD EPA ID:	TXD077603371
TSD County:	Not reported
Waste Category:	Hydrocarbon solvents (benzene, hexane, Stoddard, Etc.)
Disposal Method:	Fuel Blending Prior To Energy Recovery At Another Site
Tons:	0.84
Facility County:	El Dorado

Year:	2004
Gepaid:	CAR000065409
Contact:	COOK CABINETS INC
Telephone:	--
Mailing Name:	Not reported

COOK CABINETS INC (Continued) **1001959854**

Mailing Address:	6428 CAPITOL AVE
Mailing City,St,Zip:	DIAMOND SPRINGS, CA 956190000
Gen County:	Not reported
TSD EPA ID:	KYD053348108
TSD County:	Not reported
Waste Category:	Other organic solids
Disposal Method:	Not reported
Tons:	0.71
Facility County:	El Dorado

Year:	2004
Gepaid:	CAR000065409
Contact:	COOK CABINETS INC
Telephone:	--
Mailing Name:	Not reported
Mailing Address:	6428 CAPITOL AVE
Mailing City,St,Zip:	DIAMOND SPRINGS, CA 956190000
Gen County:	Not reported
TSD EPA ID:	KYD053348108
TSD County:	Not reported
Waste Category:	Other organic solids
Disposal Method:	Invalid Code
Tons:	3.39
Facility County:	El Dorado

Click this hyperlink while viewing on your computer to access
1 additional CA_HAZNET: record(s) in the EDR Site Report.

B26 **STONY CREEK CASEGOODS CO.** **EMI** **S106840150**
SSW **6428 CAPITOL CT.** **N/A**
< 1/8 **DIAMOND SPRINGS, CA 95619**
0.078 mi.
410 ft. **Site 16 of 35 in cluster B**

Relative:
Lower

Actual:
1758 ft.

EMI:

Year:	1995
County Code:	9
Air Basin:	MC
Facility ID:	23
Air District Name:	ED
SIC Code:	2511
Air District Name:	EL DORADO COUNTY APCD
Community Health Air Pollution Info System:	Not reported
Consolidated Emission Reporting Rule:	Not reported
Total Organic Hydrocarbon Gases Tons/Yr:	19
Reactive Organic Gases Tons/Yr:	19
Carbon Monoxide Emissions Tons/Yr:	0
NOX - Oxides of Nitrogen Tons/Yr:	0
SOX - Oxides of Sulphur Tons/Yr:	0
Particulate Matter Tons/Yr:	2
Part. Matter 10 Micrometers & Smllr Tons/Yr:	1

C27 SSE < 1/8 0.078 mi. 414 ft. | **WESTERN SIGN COMPANY INC** | **HAZNET** | **S113118589**
6221 ENTERPRISE DR STE A | **N/A**
DIAMOND SPGS, CA 95619

Site 2 of 21 in cluster C

Relative: Lower

Actual: 1765 ft.

HAZNET:

Year:	2012
Gepaid:	CAL000249836
Contact:	TODD JOHNSTON
Telephone:	5306221420
Mailing Name:	Not reported
Mailing Address:	6221 ENTERPRISE DR STE A
Mailing City,St,Zip:	DIAMOND SPRINGS, CA 956190000
Gen County:	El Dorado
TSD EPA ID:	TXD077603371
TSD County:	99
Waste Category:	Not reported
Disposal Method:	Storage, Bulking, And/Or Transfer Off Site--No Treatment/Reovery (H010-H129) Or (H131-H135)
Tons:	0.265
Facility County:	El Dorado

Year:	2011
Gepaid:	CAL000249836
Contact:	TODD JOHNSTON
Telephone:	5306221420
Mailing Name:	Not reported
Mailing Address:	6221 ENTERPRISE DR STE A
Mailing City,St,Zip:	DIAMOND SPRINGS, CA 956190000
Gen County:	Not reported
TSD EPA ID:	NVT330010000
TSD County:	Not reported
Waste Category:	Other organic solids
Disposal Method:	Landfill Or Surface Impoundment That Will Be Closed As Landfill(To Include On-Site Treatment And/Or Stabilization)
Tons:	0.05
Facility County:	El Dorado

C28 SSE < 1/8 0.078 mi. 414 ft. | **AIRPOINT PRECISION INC** | **CUPA Listings** | **S109422794**
6221 ENTERPRISE DR STE D | **N/A**
DIAMOND SPRINGS, CA 95619

Site 3 of 21 in cluster C

Relative: Lower

Actual: 1765 ft.

CUPA EL DORADO:

PE:	BUSINESS PLANS/SMALL BUSINESS
Status:	Active, billable
Latitude:	39
Longitude:	-121

PE:	CUPA HW GENERAL
Status:	Active, exempt from billing
Latitude:	39
Longitude:	-121

PE:	HAZARDOUS MATERIALS - STATE SURCHARGE
Status:	Active, billable
Latitude:	39
Longitude:	-121

C29
SSE
< 1/8
0.078 mi.
414 ft.

6221 ENTERPRISE DR
DIAMOND SPRINGS, CA 95619

Site 4 of 21 in cluster C

EDR US Hist Auto Stat **1015580868**
N/A

Relative:
Lower

Actual:
1765 ft.

EDR Historical Auto Stations:

Name: ADVANCED MOBILE AUTO
Year: 2007
Address: 6221 ENTERPRISE DR

Name: ADVANCED MOBILE AUTO
Year: 2008
Address: 6221 ENTERPRISE DR

Name: ADVANCED MOBILE AUTO
Year: 2009
Address: 6221 ENTERPRISE DR

C30
SSE
< 1/8
0.078 mi.
414 ft.

AIRPOINT PRECISION INC
6221 ENTERPRISE DR STE D
DIAMOND SPRINGS, CA 95619

Site 5 of 21 in cluster C

HAZNET **S113146153**
N/A

Relative:
Lower

Actual:
1765 ft.

HAZNET:

Year: 2008
Gepaid: CAL000315975
Contact: JASON HANKS
Telephone: 5306220510
Mailing Name: Not reported
Mailing Address: 6221 ENTERPRISE DR STE D
Mailing City,St,Zip: DIAMOND SPRINGS, CA 956190000
Gen County: Not reported
TSD EPA ID: CAD980884183
TSD County: Not reported
Waste Category: Unspecified oil-containing waste
Disposal Method: Storage, Bulking, And/Or Transfer Off Site--No Treatment/Reovery (H010-H129) Or (H131-H135)
Tons: 0.22935
Facility County: El Dorado

Year: 2007
Gepaid: CAL000315975
Contact: JASON HANKS
Telephone: 5306220510
Mailing Name: Not reported
Mailing Address: 6221 ENTERPRISE DR STE D
Mailing City,St,Zip: DIAMOND SPRINGS, CA 956190000
Gen County: Not reported
TSD EPA ID: CAD980884183
TSD County: Not reported
Waste Category: Aqueous solution with total organic residues 10 percent or more
Disposal Method: Not reported
Tons: Not reported
Facility County: El Dorado

Year: 2007
Gepaid: CAL000315975
Contact: JASON HANKS

AIRPOINT PRECISION INC (Continued) **S113146153**

Telephone:	5306220510
Mailing Name:	Not reported
Mailing Address:	6221 ENTERPRISE DR STE D
Mailing City,St,Zip:	DIAMOND SPRINGS, CA 956190000
Gen County:	Not reported
TSD EPA ID:	CAD980884183
TSD County:	Not reported
Waste Category:	Not reported
Disposal Method:	Storage, Bulking, And/Or Transfer Off Site--No Treatment/Reovery (H010-H129) Or (H131-H135)
Tons:	0.22
Facility County:	El Dorado

Year:	2007
Gepaid:	CAL000315975
Contact:	JASON HANKS
Telephone:	5306220510
Mailing Name:	Not reported
Mailing Address:	6221 ENTERPRISE DR STE D
Mailing City,St,Zip:	DIAMOND SPRINGS, CA 956190000
Gen County:	Not reported
TSD EPA ID:	CAD980884183
TSD County:	Not reported
Waste Category:	Aqueous solution with total organic residues 10 percent or more
Disposal Method:	Storage, Bulking, And/Or Transfer Off Site--No Treatment/Reovery (H010-H129) Or (H131-H135)
Tons:	0.45
Facility County:	El Dorado

C31 **TNT AUTOMOTIVE - HM** **CUPA Listings** **S110984192**
SSE **6221 ENTERPRISE DR K** **N/A**
< 1/8 **DIAMOND SPRINGS, CA 95619**
0.078 mi.
414 ft. **Site 6 of 21 in cluster C**

Relative:
Lower

Actual:
1765 ft.

CUPA EL DORADO:

PE:	BUSINESS PLANS/SMALL BUSINESS
Status:	Inactive, non-billable
Latitude:	Not reported
Longitude:	Not reported

PE:	BUSINESS PLANS/SMALL BUSINESS
Status:	Active, billable
Latitude:	39
Longitude:	-121

PE:	CUPA HW GENERAL
Status:	Active, exempt from billing
Latitude:	39
Longitude:	-121

PE:	HAZARDOUS MATERIALS - STATE SURCHARGE
Status:	Active, billable
Latitude:	39
Longitude:	-121

PE:	CUPA HW GENERATOR <55 GAL MATERIAL STORED
Status:	Inactive, non-billable

TNT AUTOMOTIVE - HM (Continued) **S110984192**

Latitude: Not reported
Longitude: Not reported

PE: HAZARDOUS MATERIALS - STATE SURCHARGE
Status: Inactive, non-billable
Latitude: Not reported
Longitude: Not reported

PE: APSA - LESS THAN 10,000
Status: Active, billable
Latitude: 39
Longitude: -121

PE: BUSINESS PLANS/SMALL BUSINESS
Status: Active, billable
Latitude: 39
Longitude: -121

PE: CUPA HW GENERAL
Status: Active, exempt from billing
Latitude: 39
Longitude: -121

PE: HAZARDOUS MATERIALS - STATE SURCHARGE
Status: Active, billable
Latitude: 39
Longitude: -121

B32 **STONEY CREEK CASEGOODS CO.** **EMI** **S106840149**
SSW **6428 CAPITOL CT.** **N/A**
< 1/8 **PLACERVILLE, CA 95667**
0.079 mi.
418 ft. **Site 17 of 35 in cluster B**

Relative:
Lower

Actual:
1758 ft.

EMI:

Year:	1990
County Code:	9
Air Basin:	MC
Facility ID:	23
Air District Name:	ED
SIC Code:	2511
Air District Name:	EL DORADO COUNTY APCD
Community Health Air Pollution Info System:	Not reported
Consolidated Emission Reporting Rule:	Not reported
Total Organic Hydrocarbon Gases Tons/Yr:	19
Reactive Organic Gases Tons/Yr:	19
Carbon Monoxide Emissions Tons/Yr:	0
NOX - Oxides of Nitrogen Tons/Yr:	0
SOX - Oxides of Sulphur Tons/Yr:	0
Particulate Matter Tons/Yr:	2
Part. Matter 10 Micrometers & Smllr Tons/Yr:	1

C33 SSE < 1/8 0.080 mi. 420 ft. — **WESTERN SIGN CO., INC.** — **AST** — **A100325263** / **N/A**

6221-A ENTERPRISE
DIAMOND SPRINGS, CA

Site 7 of 21 in cluster C

Relative: Lower
Actual: 1766 ft.

AST:

Owner:	WESTERN SIGN COMPANY
Total Gallons:	1,500
Certified Unified Program Agencies:	El Dorado

B34 SSW < 1/8 0.082 mi. 431 ft. — **ENDWAVE CORP** — **HAZNET** — **S112977841** / **N/A**

6425 CAPITOL AVE
DIAMOND SPRINGS, CA 95619

Site 18 of 35 in cluster B

Relative: Lower
Actual: 1758 ft.

HAZNET:

Year:	2009
Gepaid:	CAC002642256
Contact:	NAOMI WEMHOFF
Telephone:	9168508563
Mailing Name:	Not reported
Mailing Address:	105 LAKE FOREST WAY
Mailing City,St,Zip:	FOLSOM, CA 95630
Gen County:	Not reported
TSD EPA ID:	CAT080014079
TSD County:	Not reported
Waste Category:	Unspecified organic liquid mixture
Disposal Method:	Storage, Bulking, And/Or Transfer Off Site--No Treatment/Reovery (H010-H129) Or (H131-H135)
Tons:	0.085
Facility County:	El Dorado

B35 SSW < 1/8 0.082 mi. 431 ft. — **ENDWAVE CORP** — **HAZNET** — **S113152320** / **N/A**

6425 CAPITOL AVE
DIAMOND SPRINGS, CA 95619

Site 19 of 35 in cluster B

Relative: Lower
Actual: 1758 ft.

HAZNET:

Year:	2008
Gepaid:	CAL000331656
Contact:	CRAIG LACKEY
Telephone:	5302956017
Mailing Name:	Not reported
Mailing Address:	6425 CAPITOL AVE
Mailing City,St,Zip:	DIAMOND SPRINGS, CA 956199457
Gen County:	Not reported
TSD EPA ID:	CAD980884183
TSD County:	Not reported
Waste Category:	Oxygenated solvents (acetone, butanol, ethyl acetate, etc.)
Disposal Method:	Storage, Bulking, And/Or Transfer Off Site--No Treatment/Reovery (H010-H129) Or (H131-H135)
Tons:	0.0165
Facility County:	El Dorado

B36 SSW < 1/8 0.082 mi. 431 ft. | **ENDWAVE**
6425 CAPITOL AVE
DIAMOND SPRINGS, CA 95619

Site 20 of 35 in cluster B

HAZNET | **S113110711**
N/A

Relative: Lower

Actual: 1758 ft.

HAZNET:

Year:	2003
Gepaid:	CAL000219701
Contact:	MELISSA EPPERLY
Telephone:	5302956079
Mailing Name:	Not reported
Mailing Address:	6425 CAPITOL AVE
Mailing City,St,Zip:	DIAMOND SPRINGS, CA 956190000
Gen County:	Not reported
TSD EPA ID:	CAD028409019
TSD County:	Not reported
Waste Category:	Other inorganic solid waste
Disposal Method:	Transfer Station
Tons:	0.01
Facility County:	El Dorado

Year:	2003
Gepaid:	CAL000219701
Contact:	MELISSA EPPERLY
Telephone:	5302956079
Mailing Name:	Not reported
Mailing Address:	6425 CAPITOL AVE
Mailing City,St,Zip:	DIAMOND SPRINGS, CA 956190000
Gen County:	Not reported
TSD EPA ID:	CAD008302903
TSD County:	Not reported
Waste Category:	Unspecified solvent mixture
Disposal Method:	Not reported
Tons:	0.07
Facility County:	El Dorado

Year:	2002
Gepaid:	CAL000219701
Contact:	MELISSA EPPERLY
Telephone:	5302956079
Mailing Name:	Not reported
Mailing Address:	6425 CAPITOL AVE
Mailing City,St,Zip:	DIAMOND SPRINGS, CA 956190000
Gen County:	Not reported
TSD EPA ID:	CAD008302903
TSD County:	Not reported
Waste Category:	Unspecified solvent mixture
Disposal Method:	Recycler
Tons:	0.22
Facility County:	El Dorado

Year:	2002
Gepaid:	CAL000219701
Contact:	MELISSA EPPERLY
Telephone:	5302956079
Mailing Name:	Not reported
Mailing Address:	6425 CAPITOL AVE
Mailing City,St,Zip:	DIAMOND SPRINGS, CA 956190000

ENDWAVE (Continued) **S113110711**

Gen County: Not reported
TSD EPA ID: CAD028409019
TSD County: Not reported
Waste Category: Other inorganic solid waste
Disposal Method: Transfer Station
Tons: 0.06
Facility County: El Dorado

Year: 2001
Gepaid: CAL000219701
Contact: MELISSA EPPERLY
Telephone: 5302956079
Mailing Name: Not reported
Mailing Address: 6425 CAPITOL AVE
Mailing City,St,Zip: DIAMOND SPRINGS, CA 956190000
Gen County: Not reported
TSD EPA ID: CAD028409019
TSD County: Not reported
Waste Category: Other inorganic solid waste
Disposal Method: Transfer Station
Tons: 0.03
Facility County: El Dorado

Click this hyperlink while viewing on your computer to access
1 additional CA_HAZNET: record(s) in the EDR Site Report.

B37 **MAZDAS ONLY** **HAZNET** **S113042678**
SSW **6425 CAPITOL AVENUE** **N/A**
< 1/8 **DIAMOND SPRINGS, CA 95619**
0.082 mi.
431 ft. **Site 21 of 35 in cluster B**

Relative:
Lower

Actual:
1758 ft.

HAZNET:
Year: 1996
Gepaid: CAL000050875
Contact: Not reported
Telephone: 0000000000
Mailing Name: Not reported
Mailing Address: 6425 CAPITOL AVE
Mailing City,St,Zip: DIAMOND SPRINGS, CA 956199457
Gen County: Not reported
TSD EPA ID: CAD980887418
TSD County: Not reported
Waste Category: Aqueous solution with total organic residues less than 10 percent
Disposal Method: Transfer Station
Tons: .3753
Facility County: 9

Year: 1995
Gepaid: CAL000050875
Contact: Not reported
Telephone: 0000000000
Mailing Name: Not reported
Mailing Address: 6425 CAPITOL AVE
Mailing City,St,Zip: DIAMOND SPRINGS, CA 956199457
Gen County: Not reported
TSD EPA ID: CAD980887418
TSD County: Not reported

MAZDAS ONLY (Continued) **S113042678**

Waste Category: Aqueous solution with total organic residues less than 10 percent
Disposal Method: Transfer Station
Tons: .2293
Facility County: 9

Year: 1994
Gepaid: CAL000050875
Contact: Not reported
Telephone: 0000000000
Mailing Name: Not reported
Mailing Address: 6425 CAPITOL AVE
Mailing City,St,Zip: DIAMOND SPRINGS, CA 956199457
Gen County: Not reported
TSD EPA ID: CAD980887418
TSD County: Not reported
Waste Category: Aqueous solution with total organic residues less than 10 percent
Disposal Method: Transfer Station
Tons: .2293
Facility County: 9

Year: 1994
Gepaid: CAL000050875
Contact: Not reported
Telephone: 0000000000
Mailing Name: Not reported
Mailing Address: 6425 CAPITOL AVE
Mailing City,St,Zip: DIAMOND SPRINGS, CA 956199457
Gen County: Not reported
TSD EPA ID: CAD980887418
TSD County: Not reported
Waste Category: Aqueous solution with total organic residues less than 10 percent
Disposal Method: Not reported
Tons: .2293
Facility County: 9

B38 **TRW MILLIWAVE** **HAZNET** **S113081150**
SSW **6425 CAPITOL AVE** **N/A**
< 1/8 **DIAMOND SPRINGS, CA 95619**
0.082 mi.
431 ft. **Site 22 of 35 in cluster B**

Relative:
Lower

Actual:
1758 ft.

HAZNET:
Year: 2000
Gepaid: CAL000147566
Contact: JOHN ESCARA
Telephone: 5302956026
Mailing Name: Not reported
Mailing Address: 6425 CAPITOL AVE
Mailing City,St,Zip: DIAMOND SPRINGS, CA 956190000
Gen County: Not reported
TSD EPA ID: CAD008302903
TSD County: Not reported
Waste Category: Unspecified solvent mixture
Disposal Method: Recycler
Tons: 0.2
Facility County: El Dorado

Year: 1999

TRW MILLIWAVE (Continued) **S113081150**

Gepaid:	CAL000147566
Contact:	TRW MILLIWAVE CORP
Telephone:	0000000000
Mailing Name:	Not reported
Mailing Address:	6425 CAPITOL AVE
Mailing City,St,Zip:	DIAMOND SPRINGS, CA 956190000
Gen County:	Not reported
TSD EPA ID:	CAD008302903
TSD County:	Not reported
Waste Category:	Unspecified solvent mixture
Disposal Method:	Recycler
Tons:	.3961
Facility County:	9

D39
East
< 1/8
0.082 mi.
433 ft.

PACIFIC BELL **HAZNET** **S113011687**
281 INDUSTRIAL DR **N/A**
PLACERVILLE, CA 95667

Site 1 of 8 in cluster D

Relative:
Higher

Actual:
1821 ft.

HAZNET:

Year:	2012
Gepaid:	CAD981994155
Contact:	JAMES CRANMER
Telephone:	3033917206
Mailing Name:	Not reported
Mailing Address:	1 AT&T WAY RM 2C140
Mailing City,St,Zip:	BEDMINSTER, NJ 079210000
Gen County:	El Dorado
TSD EPA ID:	CAD980887418
TSD County:	Alameda
Waste Category:	Not reported
Disposal Method:	Storage, Bulking, And/Or Transfer Off Site--No Treatment/Reovery (H010-H129) Or (H131-H135)
Tons:	0.3001
Facility County:	El Dorado

Year:	2012
Gepaid:	CAD981994155
Contact:	JAMES CRANMER
Telephone:	3033917206
Mailing Name:	Not reported
Mailing Address:	1 AT&T WAY RM 2C140
Mailing City,St,Zip:	BEDMINSTER, NJ 079210000
Gen County:	El Dorado
TSD EPA ID:	CAD982446874
TSD County:	Yolo
Waste Category:	Not reported
Disposal Method:	Storage, Bulking, And/Or Transfer Off Site--No Treatment/Reovery (H010-H129) Or (H131-H135)
Tons:	0.1251
Facility County:	El Dorado

Year:	2012
Gepaid:	CAD981994155
Contact:	JAMES CRANMER
Telephone:	3033917206
Mailing Name:	Not reported

PACIFIC BELL (Continued) **S113011687**

Mailing Address: 1 AT&T WAY RM 2C140
Mailing City,St,Zip: BEDMINSTER, NJ 079210000
Gen County: El Dorado
TSD EPA ID: CAD982446874
TSD County: Yolo
Waste Category: Not reported
Disposal Method: Storage, Bulking, And/Or Transfer Off Site--No Treatment/Reovery (H010-H129) Or (H131-H135)
Tons: 0.1251
Facility County: El Dorado

Year: 2012
Gepaid: CAD981994155
Contact: JAMES CRANMER
Telephone: 3033917206
Mailing Name: Not reported
Mailing Address: 1 AT&T WAY RM 2C140
Mailing City,St,Zip: BEDMINSTER, NJ 079210000
Gen County: El Dorado
TSD EPA ID: CAD980887418
TSD County: Alameda
Waste Category: Not reported
Disposal Method: Storage, Bulking, And/Or Transfer Off Site--No Treatment/Reovery (H010-H129) Or (H131-H135)
Tons: 0.3001
Facility County: El Dorado

Year: 2012
Gepaid: CAD981994155
Contact: JAMES CRANMER
Telephone: 3033917206
Mailing Name: Not reported
Mailing Address: 1 AT&T WAY RM 2C140
Mailing City,St,Zip: BEDMINSTER, NJ 079210000
Gen County: El Dorado
TSD EPA ID: CAD980887418
TSD County: Alameda
Waste Category: Not reported
Disposal Method: Discharge To Sewer/Potw Or Npdes(With Prior Storage--With Or Without Treatment)
Tons: 1.88484
Facility County: El Dorado

Click this hyperlink while viewing on your computer to access
85 additional CA_HAZNET: record(s) in the EDR Site Report.

B40 **END WAVE** **CUPA Listings** **S104579458**
SSW **6425 CAPITOL AVE** **N/A**
< 1/8 **DIAMOND SPRINGS, CA 95619**
0.084 mi.
443 ft. **Site 23 of 35 in cluster B**

Relative:
Lower

Actual:
1757 ft.

CUPA EL DORADO:
PE: BUSINESS PLANS/LARGE BUSINESSES
Status: Inactive, non-billable
Latitude: 39
Longitude: -121

END WAVE (Continued) **S104579458**

PE: CUPA HW GENERAL
Status: Inactive, non-billable
Latitude: 39
Longitude: -121

PE: HAZARDOUS MATERIALS - STATE SURCHARGE
Status: Inactive, non-billable
Latitude: 39
Longitude: -121

B41
SSW
< 1/8
0.089 mi.
471 ft.

SIERRA TOOL & CUTTER **CUPA Listings** **S110373068**
6417 CAPITOL AVE **N/A**
DIAMOND SPRINGS, CA 95619

Site 24 of 35 in cluster B

Relative:
Lower

Actual:
1757 ft.

CUPA EL DORADO:
PE: BUSINESS PLANS/SMALL BUSINESS
Status: Active, billable
Latitude: 39
Longitude: -121

PE: CUPA HW GENERAL
Status: Active, exempt from billing
Latitude: 39
Longitude: -121

PE: HAZARDOUS MATERIALS - STATE SURCHARGE
Status: Active, billable
Latitude: 39
Longitude: -121

B42
SSW
< 1/8
0.089 mi.
471 ft.

SIERRA TOOL & CUTTER **HAZNET** **S113082988**
6417 CAPITAL AVE **N/A**
DIAMOND SPRINGS, CA 95619

Site 25 of 35 in cluster B

Relative:
Lower

Actual:
1757 ft.

HAZNET:
Year: 2009
Gepaid: CAL000153085
Contact: SHAWN OR GLEN ST THOMAS
Telephone: 5306213100
Mailing Name: Not reported
Mailing Address: 6417 CAPITOL AVE
Mailing City,St,Zip: DIAMOND SPRINGS, CA 956199449
Gen County: Not reported
TSD EPA ID: CAD044003556
TSD County: Not reported
Waste Category: Unspecified oil-containing waste
Disposal Method: Storage, Bulking, And/Or Transfer Off Site--No Treatment/Reovery (H010-H129) Or (H131-H135)
Tons: 2.7522
Facility County: El Dorado

Year: 2009

SIERRA TOOL & CUTTER (Continued) **S113082988**

Gepaid:	CAL000153085
Contact:	SHAWN OR GLEN ST THOMAS
Telephone:	5306213100
Mailing Name:	Not reported
Mailing Address:	6417 CAPITOL AVE
Mailing City,St,Zip:	DIAMOND SPRINGS, CA 956199449
Gen County:	Not reported
TSD EPA ID:	CAD044003556
TSD County:	Not reported
Waste Category:	Unspecified oil-containing waste
Disposal Method:	Storage, Bulking, And/Or Transfer Off Site--No Treatment/Reovery (H010-H129) Or (H131-H135)
Tons:	2.7522
Facility County:	El Dorado

Year:	1998
Gepaid:	CAL000153085
Contact:	GLEN ST THOMAS/GARTH ST THOMAS
Telephone:	9169850386
Mailing Name:	Not reported
Mailing Address:	6417 CAPITAL AVE
Mailing City,St,Zip:	DIAMOND SPRINGS, CA 956190000
Gen County:	Not reported
TSD EPA ID:	CAT080013352
TSD County:	Not reported
Waste Category:	Unspecified organic liquid mixture
Disposal Method:	Recycler
Tons:	1.1467
Facility County:	9

Year:	1998
Gepaid:	CAL000153085
Contact:	GLEN ST THOMAS/GARTH ST THOMAS
Telephone:	9169850386
Mailing Name:	Not reported
Mailing Address:	6417 CAPITAL AVE
Mailing City,St,Zip:	DIAMOND SPRINGS, CA 956190000
Gen County:	Not reported
TSD EPA ID:	CAD044003556
TSD County:	Not reported
Waste Category:	Unspecified oil-containing waste
Disposal Method:	Transfer Station
Tons:	1.6471
Facility County:	9

Year:	1998
Gepaid:	CAL000153085
Contact:	GLEN ST THOMAS/GARTH ST THOMAS
Telephone:	9169850386
Mailing Name:	Not reported
Mailing Address:	6417 CAPITAL AVE
Mailing City,St,Zip:	DIAMOND SPRINGS, CA 956190000
Gen County:	Not reported
TSD EPA ID:	CAD044003556
TSD County:	Not reported
Waste Category:	Unspecified oil-containing waste
Disposal Method:	Transfer Station

SIERRA TOOL & CUTTER (Continued) **S113082988**

Tons: 1.6471
Facility County: 9

Click this hyperlink while viewing on your computer to access
1 additional CA_HAZNET: record(s) in the EDR Site Report.

B43
SSE
< 1/8
0.090 mi.
477 ft.

NESBITT AUTOMOTIVE DIAGNOSTICS
6693 MERCHANDISE WAY D
DIAMOND SPRINGS, CA 95619

CUPA Listings **S110373242**
N/A

Site 26 of 35 in cluster B

Relative:
Lower

Actual:
1761 ft.

CUPA EL DORADO:

PE: BUSINESS PLANS/SMALL BUSINESS
Status: Active, billable
Latitude: 39
Longitude: -121

PE: CUPA HW GENERAL
Status: Active, exempt from billing
Latitude: 39
Longitude: -121

PE: HAZARDOUS MATERIALS - STATE SURCHARGE
Status: Active, billable
Latitude: 39
Longitude: -121

PE: BUSINESS PLANS/SMALL BUSINESS
Status: Inactive, non-billable
Latitude: 39
Longitude: -121

PE: CUPA HW GENERAL
Status: Inactive, non-billable
Latitude: 39
Longitude: -121

PE: HAZARDOUS MATERIALS - STATE SURCHARGE
Status: Inactive, non-billable
Latitude: 39
Longitude: -121

PE: BUSINESS PLANS/SMALL BUSINESS
Status: Inactive, non-billable
Latitude: Not reported
Longitude: Not reported

PE: HAZARDOUS MATERIALS - STATE SURCHARGE
Status: Inactive, non-billable
Latitude: Not reported
Longitude: Not reported

B44 SSE < 1/8 0.090 mi. 477 ft. — **HINDS CUSTOMER MACHINE ENTERPRISE INC** — **HAZNET** — **S113110544** / **N/A**

6693 MERCHANDISE WAY
DIAMOND SPRINGS, CA 95619

Site 27 of 35 in cluster B

Relative: Lower
Actual: 1761 ft.

HAZNET:

Year:	2009
Gepaid:	CAL000219409
Contact:	GENE HINDS
Telephone:	5306228128
Mailing Name:	Not reported
Mailing Address:	6693 MERCHANDISE WAY
Mailing City,St,Zip:	DIAMOND SPRINGS, CA 956190000
Gen County:	Not reported
TSD EPA ID:	CAD982446874
TSD County:	Not reported
Waste Category:	Unspecified oil-containing waste
Disposal Method:	Storage, Bulking, And/Or Transfer Off Site--No Treatment/Reovery (H010-H129) Or (H131-H135)
Tons:	0.3336
Facility County:	El Dorado

B45 SSE < 1/8 0.090 mi. 477 ft. — **EDR US Hist Auto Stat** — **1015595775** / **N/A**

6693 MERCHANDISE WAY
DIAMOND SPRINGS, CA 95619

Site 28 of 35 in cluster B

Relative: Lower
Actual: 1761 ft.

EDR Historical Auto Stations:

Name:	HINDS AUTOMOTIVE MACHINE SHOP
Year:	2001
Address:	6693 MERCHANDISE WAY
Name:	HINDS AUTOMOTIVE MACHINE SHOP
Year:	2003
Address:	6693 MERCHANDISE WAY

E46 SSW < 1/8 0.095 mi. 502 ft. — **MATTESON MACHINE INC** — **HAZNET** — **S113100665** / **N/A**

6411 CAPITOL AVE
DIAMOND SPRINGS, CA 95619

Site 1 of 10 in cluster E

Relative: Lower
Actual: 1757 ft.

HAZNET:

Year:	2001
Gepaid:	CAL000191774
Contact:	DOUGLAS MATTESON/MGR
Telephone:	5306264163
Mailing Name:	Not reported
Mailing Address:	6411 CAPITOL AVE
Mailing City,St,Zip:	DIAMOND SPRINGS, CA 956190000
Gen County:	Not reported
TSD EPA ID:	CA0000084517
TSD County:	Not reported
Waste Category:	Liquids with halogenated organic compounds >= 1,000 Mg./L
Disposal Method:	Transfer Station
Tons:	0.12

MATTESON MACHINE INC (Continued) **S113100665**

Facility County: El Dorado

Year: 2000
Gepaid: CAL000191774
Contact: DOUGLAS MATTESON/MGR
Telephone: 5306264163
Mailing Name: Not reported
Mailing Address: 6411 CAPITOL AVE
Mailing City,St,Zip: DIAMOND SPRINGS, CA 956190000
Gen County: Not reported
TSD EPA ID: CA0000084517
TSD County: Not reported
Waste Category: Liquids with halogenated organic compounds >= 1,000 Mg./L
Disposal Method: Transfer Station
Tons: 0.12
Facility County: El Dorado

C47 **NOR-CAL BEVERAGE CO., INC.** **HIST UST** **U001613566**
SE **6230 ENTERPRISE DRIVE** **N/A**
< 1/8 **PLACERVILLE, CA 95667**
0.098 mi.
515 ft. **Site 8 of 21 in cluster C**

Relative:
Higher

Actual:
1800 ft.

HIST UST:
Region: STATE
Facility ID: 00000010281
Facility Type: Other
Other Type: BEER, SOFT DRINK DIS
Total Tanks: 0001
Contact Name: HERB LOYD
Telephone: 9166260755
Owner Name: NOR-CAL BEVERAGE CO., INC.
Owner Address: 2286 STONE BLVD.
Owner City,St,Zip: WEST SACRAMENTO, CA 95691

Tank Num: 001
Container Num: 12
Year Installed: 1981
Tank Capacity: 00012000
Tank Used for: PRODUCT
Type of Fuel: REGULAR
Tank Construction: Not reported
Leak Detection: Stock Inventor

C48 **NOR-CAL BEVERAGE CO., INC.** **CUPA Listings** **S106929934**
SE **6230 ENTERPRISE DR** **SWEEPS UST** **N/A**
< 1/8 **DIAMOND SPRINGS, CA 95619**
0.098 mi.
515 ft. **Site 9 of 21 in cluster C**

Relative:
Higher

Actual:
1800 ft.

CUPA EL DORADO:
PE: BUSINESS PLANS/SMALL BUSINESS
Status: Inactive, non-billable
Latitude: Not reported
Longitude: Not reported

NOR-CAL BEVERAGE CO., INC. (Continued) **S106929934**

PE: CUPA HW GENERAL
Status: Inactive, non-billable
Latitude: Not reported
Longitude: Not reported

PE: HAZARDOUS MATERIALS - STATE SURCHARGE
Status: Inactive, non-billable
Latitude: Not reported
Longitude: Not reported

PE: U.G.S.T. ANNUAL PERMIT
Status: Inactive, non-billable
Latitude: Not reported
Longitude: Not reported

PE: UGST - STATE SURCHARGE
Status: Inactive, non-billable
Latitude: Not reported
Longitude: Not reported

SWEEPS UST:
Status: Active
Comp Number: 10281
Number: 1
Board Of Equalization: 44-002915
Referral Date: 01-05-90
Action Date: 01-05-90
Created Date: 10-13-88
Owner Tank Id: 12
SWRCB Tank Id: 09-000-010281-000001
Tank Status: A
Capacity: 12000
Active Date: 01-05-90
Tank Use: M.V. FUEL
STG: P
Content: LEADED
Number Of Tanks: 2

Status: Active
Comp Number: 10281
Number: 1
Board Of Equalization: 44-002915
Referral Date: 01-05-90
Action Date: 01-05-90
Created Date: 10-13-88
Owner Tank Id: Not reported
SWRCB Tank Id: 09-000-010281-000002
Tank Status: A
Capacity: 8000
Active Date: 01-05-90
Tank Use: M.V. FUEL
STG: P
Content: REG UNLEADED
Number Of Tanks: Not reported

E49 SSW < 1/8 0.099 mi. 521 ft. | **PERSONAL TOUCH AUTO BODY**
6407 CAPITOL AVE
DIAMOND SPRINGS, CA 95619 | **HAZNET** | **S113058516**
N/A

Site 2 of 10 in cluster E

Relative: Lower

Actual: 1757 ft.

HAZNET:

Year:	2001
Gepaid:	CAL000096328
Contact:	THOMAS HICKS
Telephone:	5306420824
Mailing Name:	Not reported
Mailing Address:	6407 CAPITOL AVE
Mailing City,St,Zip:	DIAMOND SPRINGS, CA 956199449
Gen County:	Not reported
TSD EPA ID:	CA0000084517
TSD County:	Not reported
Waste Category:	Oxygenated solvents (acetone, butanol, ethyl acetate, etc.)
Disposal Method:	Not reported
Tons:	0.01
Facility County:	El Dorado

Year:	2001
Gepaid:	CAL000096328
Contact:	THOMAS HICKS
Telephone:	5306420824
Mailing Name:	Not reported
Mailing Address:	6407 CAPITOL AVE
Mailing City,St,Zip:	DIAMOND SPRINGS, CA 956199449
Gen County:	Not reported
TSD EPA ID:	CA0000084517
TSD County:	Not reported
Waste Category:	Oxygenated solvents (acetone, butanol, ethyl acetate, etc.)
Disposal Method:	Transfer Station
Tons:	0.14
Facility County:	El Dorado

Year:	2000
Gepaid:	CAL000096328
Contact:	THOMAS HICKS
Telephone:	5306420824
Mailing Name:	Not reported
Mailing Address:	6407 CAPITOL AVE
Mailing City,St,Zip:	DIAMOND SPRINGS, CA 956199449
Gen County:	Not reported
TSD EPA ID:	CA0000084517
TSD County:	Not reported
Waste Category:	Oxygenated solvents (acetone, butanol, ethyl acetate, etc.)
Disposal Method:	Transfer Station
Tons:	0.79
Facility County:	El Dorado

Year:	1999
Gepaid:	CAL000096328
Contact:	THOMAS HICKS
Telephone:	0000000000
Mailing Name:	Not reported
Mailing Address:	6407 CAPITOL AVE
Mailing City,St,Zip:	DIAMOND SPRINGS, CA 956199449

PERSONAL TOUCH AUTO BODY (Continued) **S113058516**

Gen County: Not reported
TSD EPA ID: CA0000084517
TSD County: Not reported
Waste Category: Oxygenated solvents (acetone, butanol, ethyl acetate, etc.)
Disposal Method: Transfer Station
Tons: .6260
Facility County: 9

Year: 1998
Gepaid: CAL000096328
Contact: THOMAS HICKS
Telephone: 0000000000
Mailing Name: Not reported
Mailing Address: 6407 CAPITOL AVE
Mailing City,St,Zip: DIAMOND SPRINGS, CA 956199449
Gen County: Not reported
TSD EPA ID: CA0000084517
TSD County: Not reported
Waste Category: Oxygenated solvents (acetone, butanol, ethyl acetate, etc.)
Disposal Method: Transfer Station
Tons: .6260
Facility County: 9

Click this hyperlink while viewing on your computer to access
11 additional CA_HAZNET: record(s) in the EDR Site Report.

E50 **PERSONAL TOUCH AUTOBODY** **HAZNET** **S113112677**
SSW **6407 CAPITOL AVE** **N/A**
< 1/8 **DIAMOND SPRINGS, CA 95619**
0.099 mi.
521 ft. **Site 3 of 10 in cluster E**

Relative:
Lower

Actual:
1757 ft.

HAZNET:
Year: 2002
Gepaid: CAL000223304
Contact: DAVE ZUBER - OWNER
Telephone: 5306420824
Mailing Name: Not reported
Mailing Address: 6407 CAPITOL AVE
Mailing City,St,Zip: DIAMOND SPRINGS, CA 956190000
Gen County: Not reported
TSD EPA ID: CA0000084517
TSD County: Not reported
Waste Category: Oxygenated solvents (acetone, butanol, ethyl acetate, etc.)
Disposal Method: Transfer Station
Tons: 0.13
Facility County: El Dorado

Year: 2001
Gepaid: CAL000223304
Contact: DAVE ZUBER - OWNER
Telephone: 5306420824
Mailing Name: Not reported
Mailing Address: 6407 CAPITOL AVE
Mailing City,St,Zip: DIAMOND SPRINGS, CA 956190000
Gen County: Not reported
TSD EPA ID: CA0000084517
TSD County: Not reported

PERSONAL TOUCH AUTOBODY (Continued) **S113112677**

Waste Category: Oxygenated solvents (acetone, butanol, ethyl acetate, etc.)
Disposal Method: Transfer Station
Tons: 0.48
Facility County: El Dorado

Year: 2001
Gepaid: CAL000223304
Contact: DAVE ZUBER - OWNER
Telephone: 5306420824
Mailing Name: Not reported
Mailing Address: 6407 CAPITOL AVE
Mailing City,St,Zip: DIAMOND SPRINGS, CA 956190000
Gen County: Not reported
TSD EPA ID: CA0000084517
TSD County: Not reported
Waste Category: Oxygenated solvents (acetone, butanol, ethyl acetate, etc.)
Disposal Method: Not reported
Tons: 0.07
Facility County: El Dorado

E51 **CALIF TRUCKIN CONCEPTS** **CUPA Listings** **S100942202**
SSW **6407 CAPITOL AVE** **N/A**
< 1/8 **DIAMOND SPRINGS, CA 95619**
0.099 mi.
521 ft. **Site 4 of 10 in cluster E**

Relative:
Lower

Actual:
1757 ft.

CUPA EL DORADO:
PE: BUSINESS PLANS/SMALL BUSINESS
Status: Inactive, non-billable
Latitude: 39
Longitude: -121

PE: CUPA HW GENERAL
Status: Inactive, non-billable
Latitude: 39
Longitude: -121

PE: HAZARDOUS MATERIALS - STATE SURCHARGE
Status: Inactive, non-billable
Latitude: 39
Longitude: -121

E52 **EDR US Hist Auto Stat** **1015587743**
SSW **6407 CAPITOL AVE** **N/A**
< 1/8 **DIAMOND SPRINGS, CA 95619**
0.099 mi.
521 ft. **Site 5 of 10 in cluster E**

Relative:
Lower

Actual:
1757 ft.

EDR Historical Auto Stations:
Name: PERSONAL TOUCH AUTOBODY & PAINTING
Year: 1999
Address: 6407 CAPITOL AVE

Name: PERSONAL TOUCH AUTOBODY & PAINTING
Year: 2000
Address: 6407 CAPITOL AVE

(Continued) **1015587743**

Name: PERSONAL TOUCH AUTO BODY
Year: 2001
Address: 6407 CAPITOL AVE

Name: PERSONAL TOUCH AUTO BODY
Year: 2002
Address: 6407 CAPITOL AVE

Name: CALIFORNIA TRCKNG CNCPT & AUTO
Year: 2003
Address: 6407 CAPITOL AVE

Name: TRUCKING CONCEPT AND AUTO
Year: 2005
Address: 6407 CAPITOL AVE

C53 **ELDORADO METAL FINISHING** **HAZNET** **S113119570**
SSE **6192 ENTERPRISE DR STE K** **N/A**
< 1/8 **DIAMOND SPRINGS, CA 95619**
0.099 mi.
523 ft. **Site 10 of 21 in cluster C**

Relative:
Lower

Actual:
1765 ft.

HAZNET:
Year: 2003
Gepaid: CAL000252538
Contact: BRIAN BEAUBIEN
Telephone: 5306422960
Mailing Name: Not reported
Mailing Address: PO BOX 1098
Mailing City,St,Zip: DIAMOND SPRINGS, CA 956190000
Gen County: Not reported
TSD EPA ID: NVD980895338
TSD County: Not reported
Waste Category: Liquids with pH <= 2
Disposal Method: Not reported
Tons: 0.12
Facility County: El Dorado

Year: 2003
Gepaid: CAL000252538
Contact: BRIAN BEAUBIEN
Telephone: 5306422960
Mailing Name: Not reported
Mailing Address: PO BOX 1098
Mailing City,St,Zip: DIAMOND SPRINGS, CA 956190000
Gen County: Not reported
TSD EPA ID: NVD980895338
TSD County: Not reported
Waste Category: Liquids with nickel >= 134 Mg./L
Disposal Method: Not reported
Tons: 0.21
Facility County: El Dorado

Year: 2003
Gepaid: CAL000252538
Contact: BRIAN BEAUBIEN
Telephone: 5306422960
Mailing Name: Not reported

ELDORADO METAL FINISHING (Continued) **S113119570**

Mailing Address:	PO BOX 1098
Mailing City,St,Zip:	DIAMOND SPRINGS, CA 956190000
Gen County:	Not reported
TSD EPA ID:	NVD980895338
TSD County:	Not reported
Waste Category:	Liquids with cyanides >= 1,000 Mg./L
Disposal Method:	Recycler
Tons:	0.2
Facility County:	El Dorado

Year:	2003
Gepaid:	CAL000252538
Contact:	BRIAN BEAUBIEN
Telephone:	5306422960
Mailing Name:	Not reported
Mailing Address:	PO BOX 1098
Mailing City,St,Zip:	DIAMOND SPRINGS, CA 956190000
Gen County:	Not reported
TSD EPA ID:	NVD980895338
TSD County:	Not reported
Waste Category:	Liquids with cyanides >= 1,000 Mg./L
Disposal Method:	Treatment, Tank
Tons:	0.22
Facility County:	El Dorado

Year:	2003
Gepaid:	CAL000252538
Contact:	BRIAN BEAUBIEN
Telephone:	5306422960
Mailing Name:	Not reported
Mailing Address:	PO BOX 1098
Mailing City,St,Zip:	DIAMOND SPRINGS, CA 956190000
Gen County:	Not reported
TSD EPA ID:	NVD980895338
TSD County:	Not reported
Waste Category:	Other inorganic solid waste
Disposal Method:	Treatment, Incineration
Tons:	0.02
Facility County:	El Dorado

Click this hyperlink while viewing on your computer to access
2 additional CA_HAZNET: record(s) in the EDR Site Report.

C54 **EL DORADO METAL FINISHING - CUPA** **CUPA Listings** **S106093403**
SSE **6192 ENTERPRISE DR K** **N/A**
< 1/8 **DIAMOND SPRINGS, CA 95619**
0.099 mi.
523 ft. **Site 11 of 21 in cluster C**

Relative:
Lower

Actual:
1765 ft.

CUPA EL DORADO:

PE:	BUSINESS PLANS/SMALL BUSINESS
Status:	Inactive, non-billable
Latitude:	Not reported
Longitude:	Not reported

PE:	HAZARDOUS MATERIALS - STATE SURCHARGE
Status:	Inactive, non-billable
Latitude:	Not reported

EL DORADO METAL FINISHING - CUPA (Continued) **S106093403**

Longitude: Not reported

C55
SSE
< 1/8
0.099 mi.
523 ft.

CALIFORNIA MOTORCARS, L.P. - **CUPA Listings** **S110983757**
6192 ENTERPRISE DR G **N/A**
DIAMOND SPRINGS, CA 95619

Site 12 of 21 in cluster C

Relative:
Lower

Actual:
1765 ft.

CUPA EL DORADO:
PE: CUPA HW GENERATOR <55 GAL MATERIAL STORED
Status: Inactive, non-billable
Latitude: Not reported
Longitude: Not reported

PE: HAZARDOUS MATERIALS - STATE SURCHARGE
Status: Inactive, non-billable
Latitude: Not reported
Longitude: Not reported

B56
South
< 1/8
0.104 mi.
551 ft.

SNYDER'S AUTOMOTIVE **CUPA Listings** **S102822147**
4603 ENTERPRISE CT **N/A**
DIAMOND SPRINGS, CA 95619

Site 29 of 35 in cluster B

Relative:
Lower

Actual:
1763 ft.

CUPA EL DORADO:
PE: BUSINESS PLANS/SMALL BUSINESS
Status: Inactive, non-billable
Latitude: Not reported
Longitude: Not reported

PE: HAZARDOUS MATERIALS - STATE SURCHARGE
Status: Inactive, non-billable
Latitude: Not reported
Longitude: Not reported

B57
South
< 1/8
0.104 mi.
551 ft.

EDR US Hist Auto Stat **1015506660**
4603 ENTERPRISE CT **N/A**
DIAMOND SPRINGS, CA 95619

Site 30 of 35 in cluster B

Relative:
Lower

Actual:
1763 ft.

EDR Historical Auto Stations:
Name: DAVEZ AUTOMOTIVE
Year: 2008
Address: 4603 ENTERPRISE CT

Name: DAVEZ AUTOMOTIVE REPAIR
Year: 2011
Address: 4603 ENTERPRISE CT

B58 South < 1/8 0.104 mi. 551 ft. | **SNYDER'S AUTOMOTIVE**
4603 ENTERPRISE CT
DIAMOND SPRINGS, CA 95619 | **HAZNET** | **S113071719**
N/A

Site 31 of 35 in cluster B

Relative: Lower

Actual: 1763 ft.

HAZNET:

Year:	2000
Gepaid:	CAL000126761
Contact:	BOB SNYDER/OWNER
Telephone:	9166268720
Mailing Name:	Not reported
Mailing Address:	BOX 742
Mailing City,St,Zip:	EL DORADO, CA 956239392
Gen County:	Not reported
TSD EPA ID:	CAD059494310
TSD County:	Not reported
Waste Category:	Other organic solids
Disposal Method:	Transfer Station
Tons:	0.1
Facility County:	El Dorado

Year:	2000
Gepaid:	CAL000126761
Contact:	BOB SNYDER/OWNER
Telephone:	9166268720
Mailing Name:	Not reported
Mailing Address:	BOX 742
Mailing City,St,Zip:	EL DORADO, CA 956239392
Gen County:	Not reported
TSD EPA ID:	CAD059494310
TSD County:	Not reported
Waste Category:	Liquids with halogenated organic compounds >= 1,000 Mg./L
Disposal Method:	Disposal, Other
Tons:	0.06
Facility County:	El Dorado

Year:	1994
Gepaid:	CAL000126761
Contact:	SNYDER'S AUTOMOTIVE
Telephone:	9166268720
Mailing Name:	Not reported
Mailing Address:	4603 ENTERPRISE CT
Mailing City,St,Zip:	DIAMOND SPRINGS, CA 956199392
Gen County:	Not reported
TSD EPA ID:	CAD980887418
TSD County:	Not reported
Waste Category:	Aqueous solution with total organic residues less than 10 percent
Disposal Method:	Transfer Station
Tons:	.3336
Facility County:	9

E59
SSW
< 1/8
0.105 mi.
556 ft.

EDR US Hist Auto Stat — **1015587519** / **N/A**

6401 CAPITOL CT
PLACERVILLE, CA 95667

Site 6 of 10 in cluster E

Relative:
Lower

Actual:
1757 ft.

EDR Historical Auto Stations:

Name: N C P MOTORS INCORPORATED
Year: 1999
Address: 6401 CAPITOL CT

Name: N C P MOTORS INCORPORATED
Year: 2000
Address: 6401 CAPITOL CT

B60
South
< 1/8
0.105 mi.
557 ft.

EDR US Hist Auto Stat — **1015506826** / **N/A**

4607 ENTERPRISE CT
DIAMOND SPRINGS, CA 95619

Site 32 of 35 in cluster B

Relative:
Lower

Actual:
1763 ft.

EDR Historical Auto Stations:

Name: PRO BUILT TRANSMISSIONS
Year: 1999
Address: 4607 ENTERPRISE CT

Name: PRO BUILT TRANSMISSIONS
Year: 2000
Address: 4607 ENTERPRISE CT

Name: PRO BUILT TRANSMISSIONS
Year: 2002
Address: 4607 ENTERPRISE CT

B61
South
< 1/8
0.105 mi.
557 ft.

DON'S AUTO SPECIALTIES
4607 ENTERPRISE CT
DIAMOND SPRINGS, CA 95619

CUPA Listings — **S110983652** / **N/A**

Site 33 of 35 in cluster B

Relative:
Lower

Actual:
1763 ft.

CUPA EL DORADO:

PE: BUSINESS PLANS/SMALL BUSINESS
Status: Inactive, non-billable
Latitude: Not reported
Longitude: Not reported

C62
SSE
< 1/8
0.106 mi.
559 ft.

AVIAN HEALTH SERVICES
6201 ENTERPRISE DR STE C
DIAMOND SPRINGS, CA 95682

CUPA Listings — **S111826770** / **N/A**

Site 13 of 21 in cluster C

Relative:
Lower

Actual:
1763 ft.

CUPA EL DORADO:

PE: LIMITED QUANTITY HAULING EXEMPTION
Status: Active, billable
Latitude: Not reported
Longitude: Not reported

C63 SSE < 1/8 0.106 mi. 559 ft. | **ALL CITY ELECTRIC** | **HAZNET** | **S113103719**
6201 ENTERPRISE DR | **N/A**
DIAMOND SPRINGS, CA 95619

Site 14 of 21 in cluster C

Relative: Lower

Actual: 1763 ft.

HAZNET:

Year:	2009
Gepaid:	CAL000203246
Contact:	KAREN HOLVICK
Telephone:	5306265802
Mailing Name:	Not reported
Mailing Address:	6201 ENTERPRISE DR
Mailing City,St,Zip:	DIAMOND SPRINGS, CA 956190000
Gen County:	Not reported
TSD EPA ID:	CA0000084517
TSD County:	Not reported
Waste Category:	Organic liquids with metals (Alkaline solution (pH >= 12.5) with metals)
Disposal Method:	Storage, Bulking, And/Or Transfer Off Site--No Treatment/Reovery (H010-H129) Or (H131-H135)
Tons:	0.22935
Facility County:	El Dorado

B64 South < 1/8 0.108 mi. 571 ft. | **PERFECTO LABEL COMPANY INC** | **HAZNET** | **S113090520**
4610 ENTERPRISE CT | **N/A**
DIAMOND SPRINGS, CA 95619

Site 34 of 35 in cluster B

Relative: Lower

Actual: 1763 ft.

HAZNET:

Year:	2012
Gepaid:	CAL000172222
Contact:	PAUL CHAVEZ/PRESIDENT
Telephone:	5306263731
Mailing Name:	Not reported
Mailing Address:	4610 ENTERPRISE CT
Mailing City,St,Zip:	DIAMOND SPRINGS, CA 956190000
Gen County:	El Dorado
TSD EPA ID:	TXD077603371
TSD County:	99
Waste Category:	Not reported
Disposal Method:	Fuel Blending Prior To Energy Recovery At Another Site
Tons:	0.2075
Facility County:	El Dorado

Year:	2011
Gepaid:	CAL000172222
Contact:	PAUL CHAVEZ/PRESIDENT
Telephone:	5306263731
Mailing Name:	Not reported
Mailing Address:	4610 ENTERPRISE CT
Mailing City,St,Zip:	DIAMOND SPRINGS, CA 956190000
Gen County:	Not reported
TSD EPA ID:	TXD077603371
TSD County:	Not reported
Waste Category:	Unspecified organic liquid mixture
Disposal Method:	Fuel Blending Prior To Energy Recovery At Another Site
Tons:	0.2
Facility County:	El Dorado

PERFECTO LABEL COMPANY INC (Continued) **S113090520**

Year:	2009
Gepaid:	CAL000172222
Contact:	PAUL CHAVEZ/PRESIDENT
Telephone:	5306263731
Mailing Name:	Not reported
Mailing Address:	4610 ENTERPRISE CT
Mailing City,St,Zip:	DIAMOND SPRINGS, CA 956190000
Gen County:	Not reported
TSD EPA ID:	OHD048415665
TSD County:	Not reported
Waste Category:	Not reported
Disposal Method:	Incineration--Thermal Destruction Other Than Use As A Fuel
Tons:	0.2
Facility County:	El Dorado

Year:	2007
Gepaid:	CAL000172222
Contact:	PAUL CHAVEZ/PRESIDENT
Telephone:	5306263731
Mailing Name:	Not reported
Mailing Address:	4610 ENTERPRISE CT
Mailing City,St,Zip:	DIAMOND SPRINGS, CA 956190000
Gen County:	Not reported
TSD EPA ID:	OHD048415665
TSD County:	Not reported
Waste Category:	Not reported
Disposal Method:	Incineration--Thermal Destruction Other Than Use As A Fuel
Tons:	0.22
Facility County:	El Dorado

Year:	2006
Gepaid:	CAL000172222
Contact:	PAUL CHAVEZ/PRESIDENT
Telephone:	5306263731
Mailing Name:	Not reported
Mailing Address:	4610 ENTERPRISE CT
Mailing City,St,Zip:	DIAMOND SPRINGS, CA 956190000
Gen County:	Not reported
TSD EPA ID:	OHD048415665
TSD County:	Not reported
Waste Category:	Other still bottom waste
Disposal Method:	Not reported
Tons:	0.2
Facility County:	El Dorado

Click this hyperlink while viewing on your computer to access
7 additional CA_HAZNET: record(s) in the EDR Site Report.

B65 **PERFECTO LABEL** **CUPA Listings** **S103981513**
South **4610 ENTERPRISE CT** **N/A**
< 1/8 **DIAMOND SPRINGS, CA 95619**
0.108 mi.
571 ft. **Site 35 of 35 in cluster B**

Relative:
Lower

Actual:
1763 ft.

CUPA EL DORADO:

PE:	BUSINESS PLANS/SMALL BUSINESS
Status:	Active, billable
Latitude:	39
Longitude:	-121

PE:	CUPA HW GENERAL
Status:	Active, exempt from billing
Latitude:	39
Longitude:	-121

PE:	HAZARDOUS MATERIALS - STATE SURCHARGE
Status:	Active, billable
Latitude:	39
Longitude:	-121

E66 **EDR US Hist Auto Stat** **1015587518**
SSW **6401 CAPITOL AVE** **N/A**
< 1/8 **DIAMOND SPRINGS, CA 95619**
0.108 mi.
572 ft. **Site 7 of 10 in cluster E**

Relative:
Lower

Actual:
1757 ft.

EDR Historical Auto Stations:

Name:	NCP MOTORS INC
Year:	2001
Address:	6401 CAPITOL AVE

Name:	NCP MOTORS INC
Year:	2010
Address:	6401 CAPITOL AVE

Name:	N C P MOTORS INC
Year:	2012
Address:	6401 CAPITOL AVE

E67 **NCP MOTORS INC** **CUPA Listings** **S100940648**
SSW **6401 CAPITOL AVE** **N/A**
< 1/8 **DIAMOND SPRINGS, CA 95619**
0.108 mi.
572 ft. **Site 8 of 10 in cluster E**

Relative:
Lower

Actual:
1757 ft.

CUPA EL DORADO:

PE:	BUSINESS PLANS/SMALL BUSINESS
Status:	Inactive, non-billable
Latitude:	39
Longitude:	-121

PE:	CUPA HW GENERAL
Status:	Inactive, non-billable
Latitude:	39
Longitude:	-121

NCP MOTORS INC (Continued) **S100940648**

PE: HAZARDOUS MATERIALS - STATE SURCHARGE
Status: Inactive, non-billable
Latitude: 39
Longitude: -121

E68
SSW
< 1/8
0.108 mi.
572 ft.

NCP MOTORS INC **HAZNET** **S113062368**
6401 CAPITOL CT **N/A**
DIAMOND SPRINGS, CA 95619

Site 9 of 10 in cluster E

Relative:
Lower

Actual:
1757 ft.

HAZNET:
Year: 2005
Gepaid: CAL000108220
Contact: NORMAN SAPPENFIELD
Telephone: 9166223920
Mailing Name: Not reported
Mailing Address: 6401 CAPITOL AVE
Mailing City,St,Zip: DIAMOND SPRINGS, CA 956199449
Gen County: Not reported
TSD EPA ID: CAD980887418
TSD County: Not reported
Waste Category: Waste oil and mixed oil
Disposal Method: Recycler
Tons: 0.29
Facility County: El Dorado

Year: 2002
Gepaid: CAL000108220
Contact: NORMAN SAPPENFIELD
Telephone: 9166223920
Mailing Name: Not reported
Mailing Address: 6401 CAPITOL AVE
Mailing City,St,Zip: DIAMOND SPRINGS, CA 956199449
Gen County: Not reported
TSD EPA ID: CAD980887418
TSD County: Not reported
Waste Category: Waste oil and mixed oil
Disposal Method: Recycler
Tons: 0.47
Facility County: El Dorado

Year: 1998
Gepaid: CAL000108220
Contact: NORMAN SAPPENFIELD
Telephone: 9166223920
Mailing Name: Not reported
Mailing Address: 6401 CAPITOL AVE
Mailing City,St,Zip: DIAMOND SPRINGS, CA 956199449
Gen County: Not reported
TSD EPA ID: NVD82358483
TSD County: Not reported
Waste Category: Unspecified oil-containing waste
Disposal Method: Not reported
Tons: .3711
Facility County: 9

Year: 1998

NCP MOTORS INC (Continued) **S113062368**

Gepaid:	CAL000108220
Contact:	NORMAN SAPPENFIELD
Telephone:	9166223920
Mailing Name:	Not reported
Mailing Address:	6401 CAPITOL AVE
Mailing City,St,Zip:	DIAMOND SPRINGS, CA 956199449
Gen County:	Not reported
TSD EPA ID:	NVD982358483
TSD County:	Not reported
Waste Category:	Unspecified oil-containing waste
Disposal Method:	Recycler
Tons:	1.0466
Facility County:	9

Year:	1997
Gepaid:	CAL000108220
Contact:	NORMAN SAPPENFIELD
Telephone:	9166223920
Mailing Name:	Not reported
Mailing Address:	6401 CAPITOL AVE
Mailing City,St,Zip:	DIAMOND SPRINGS, CA 956199449
Gen County:	Not reported
TSD EPA ID:	NVD982358483
TSD County:	Not reported
Waste Category:	Unspecified oil-containing waste
Disposal Method:	Recycler
Tons:	.4003
Facility County:	9

Click this hyperlink while viewing on your computer to access
5 additional CA_HAZNET: record(s) in the EDR Site Report.

C69
SSE
< 1/8
0.113 mi.
597 ft.

MCDANIEL MANUFACTURING INC **HAZNET** **S113110126**
6180 ENTERPRISE DR **N/A**
DIAMOND SPRINGS, CA 95619

Site 15 of 21 in cluster C

Relative:
Lower

Actual:
1763 ft.

HAZNET:

Year:	2003
Gepaid:	CAL000218706
Contact:	ANNETTE VANDERSCHUUR/OFFIC MGR
Telephone:	5306266336
Mailing Name:	Not reported
Mailing Address:	6180 ENTERPRISE DR
Mailing City,St,Zip:	DIAMOND SPRINGS, CA 956190000
Gen County:	Not reported
TSD EPA ID:	NVD980895338
TSD County:	Not reported
Waste Category:	Unspecified organic liquid mixture
Disposal Method:	Disposal, Land Fill
Tons:	0.45
Facility County:	El Dorado

Year:	2001
Gepaid:	CAL000218706
Contact:	ANNETTE VANDERSCHUUR/OFFIC MGR
Telephone:	5306266336

MCDANIEL MANUFACTURING INC (Continued) **S113110126**

Mailing Name:	Not reported
Mailing Address:	6180 ENTERPRISE DR
Mailing City,St,Zip:	DIAMOND SPRINGS, CA 956190000
Gen County:	Not reported
TSD EPA ID:	CA0000084517
TSD County:	Not reported
Waste Category:	Liquids with halogenated organic compounds >= 1,000 Mg./L
Disposal Method:	Transfer Station
Tons:	0.14
Facility County:	El Dorado

Year:	2000
Gepaid:	CAL000218706
Contact:	ANNETTE VANDERSCHUUR/OFFIC MGR
Telephone:	5306266336
Mailing Name:	Not reported
Mailing Address:	6180 ENTERPRISE DR
Mailing City,St,Zip:	DIAMOND SPRINGS, CA 956190000
Gen County:	Not reported
TSD EPA ID:	CA0000084517
TSD County:	Not reported
Waste Category:	Liquids with halogenated organic compounds >= 1,000 Mg./L
Disposal Method:	Transfer Station
Tons:	0.06
Facility County:	El Dorado

C70 **EDR US Hist Auto Stat** **1015578591**
SSE **6180 ENTERPRISE DR** **N/A**
< 1/8 **DIAMOND SPRINGS, CA 95619**
0.113 mi.
597 ft. **Site 16 of 21 in cluster C**

Relative:
Lower

Actual:
1763 ft.

EDR Historical Auto Stations:

Name:	ADC MITCHELL AUTO REPAIR S
Year:	2004
Address:	6180 ENTERPRISE DR

E71 **BROTHERS AUTOMOTIVE - HM** **CUPA Listings** **S110983578**
SSW **6391 CAPITOL AVE** **N/A**
< 1/8 **DIAMOND SPRINGS, CA 95619**
0.118 mi.
621 ft. **Site 10 of 10 in cluster E**

Relative:
Lower

Actual:
1758 ft.

CUPA EL DORADO:

PE:	BUSINESS PLANS/SMALL BUSINESS
Status:	Inactive, non-billable
Latitude:	39
Longitude:	-121

PE:	CUPA HW GENERAL
Status:	Inactive, non-billable
Latitude:	39
Longitude:	-121

PE:	HAZARDOUS MATERIALS - STATE SURCHARGE
Status:	Inactive, non-billable

BROTHERS AUTOMOTIVE - HM (Continued) **S110983578**

Latitude: 39
Longitude: -121

D72 East < 1/8 0.120 mi. 634 ft. **PACIFIC BELL 3251 PIERROZ ROAD PLACERVILLE, CA** **RCRA NonGen / NLR FINDS** **1000251549 CAT080024474**

Site 2 of 8 in cluster D

Relative: Higher

Actual: 1824 ft.

RCRA NonGen / NLR:

Date form received by agency:	09/09/1997
Facility name:	PACIFIC BELL
Facility address:	3251 PIERROZ ROAD PLACERVILLE, CA 95667
EPA ID:	CAT080024474
Mailing address:	3707 KINGS WAY SEC A-6 SACRAMENTO, CA 95821
Contact:	ENVIRONMENTAL MANAGER
Contact address:	3251 PIERROZ ROAD PLACERVILLE, CA 95667
Contact country:	US
Contact telephone:	(916) 485-0997
Contact email:	Not reported
EPA Region:	09
Classification:	Non-Generator
Description:	Handler: Non-Generators do not presently generate hazardous waste

Owner/Operator Summary:

Owner/operator name:	BEATRICE I HENDREN
Owner/operator address:	NOT REQUIRED NOT REQUIRED, ME 99999
Owner/operator country:	Not reported
Owner/operator telephone:	(415) 555-1212
Legal status:	Private
Owner/Operator Type:	Owner
Owner/Op start date:	Not reported
Owner/Op end date:	Not reported

Handler Activities Summary:

U.S. importer of hazardous waste:	No
Mixed waste (haz. and radioactive):	No
Recycler of hazardous waste:	No
Transporter of hazardous waste:	No
Treater, storer or disposer of HW:	No
Underground injection activity:	No
On-site burner exemption:	No
Furnace exemption:	No
Used oil fuel burner:	No
Used oil processor:	No
User oil refiner:	No
Used oil fuel marketer to burner:	No
Used oil Specification marketer:	No
Used oil transfer facility:	No
Used oil transporter:	No

Historical Generators:

PACIFIC BELL (Continued) **1000251549**

Date form received by agency: 09/01/1996
Facility name: PACIFIC BELL
Classification: Small Quantity Generator

Date form received by agency: 01/22/1981
Facility name: PACIFIC BELL
Classification: Large Quantity Generator

Violation Status: No violations found

FINDS:

Registry ID: 110002951976

Environmental Interest/Information System
RCRAInfo is a national information system that supports the Resource Conservation and Recovery Act (RCRA) program through the tracking of events and activities related to facilities that generate, transport, and treat, store, or dispose of hazardous waste. RCRAInfo allows RCRA program staff to track the notification, permit, compliance, and corrective action activities required under RCRA.

C73
South
< 1/8
0.122 mi.
646 ft.

BORDGES TIMBER **CUPA Listings** **S103960663**
6166 ENTERPRISE DR **N/A**
DIAMOND SPRINGS, CA 95619

Site 17 of 21 in cluster C

Relative:
Lower

Actual:
1762 ft.

CUPA EL DORADO:
PE: BUSINESS PLANS/SMALL BUSINESS
Status: Active, billable
Latitude: 39
Longitude: -121

PE: CUPA HW GENERAL
Status: Active, exempt from billing
Latitude: 39
Longitude: -121

PE: HAZARDOUS MATERIALS - STATE SURCHARGE
Status: Active, billable
Latitude: 39
Longitude: -121

C74
South
< 1/8
0.122 mi.
646 ft.

DIAMOND DESIGNS **HAZNET** **S113076791**
6166 ENTERPRISE DR **N/A**
DIAMOND SPRINGS, CA 95619

Site 18 of 21 in cluster C

Relative:
Lower

Actual:
1762 ft.

HAZNET:
Year: 1998
Gepaid: CAL000140429
Contact: RICK DRILLER
Telephone: 5306264470
Mailing Name: Not reported

DIAMOND DESIGNS (Continued) **S113076791**

Mailing Address: 685 PLACERVILLE DR
Mailing City,St,Zip: PLACERVILLE, CA 956670000
Gen County: Not reported
TSD EPA ID: CA0000084517
TSD County: Not reported
Waste Category: Oxygenated solvents (acetone, butanol, ethyl acetate, etc.)
Disposal Method: Transfer Station
Tons: .0920
Facility County: 9

Year: 1998
Gepaid: CAL000140429
Contact: RICK DRILLER
Telephone: 5306264470
Mailing Name: Not reported
Mailing Address: 685 PLACERVILLE DR
Mailing City,St,Zip: PLACERVILLE, CA 956670000
Gen County: Not reported
TSD EPA ID: CA0000084517
TSD County: Not reported
Waste Category: Oil/water separation sludge
Disposal Method: Transfer Station
Tons: .2240
Facility County: 9

C75 **EDR US Hist Auto Stat** **1015578047**
South **6166 ENTERPRISE DR** **N/A**
< 1/8 **DIAMOND SPRINGS, CA 95619**
0.122 mi.
646 ft. **Site 19 of 21 in cluster C**

Relative:
Lower

Actual:
1762 ft.

EDR Historical Auto Stations:
Name: AUTOMATIC GATE SYSTEMS
Year: 2004
Address: 6166 ENTERPRISE DR

D76 **EL DORADO TRUSS** **CUPA Listings** **S110983764**
East **300 INDUSTRIAL DR** **N/A**
< 1/8 **PLACERVILLE, CA 95667**
0.125 mi.
658 ft. **Site 3 of 8 in cluster D**

Relative:
Higher

Actual:
1824 ft.

CUPA EL DORADO:
PE: BUSINESS PLANS/SMALL BUSINESS
Status: Active, billable
Latitude: 39
Longitude: -121

PE: CUPA HW GENERAL
Status: Active, exempt from billing
Latitude: 39
Longitude: -121

PE: HAZARDOUS MATERIALS - STATE SURCHARGE
Status: Active, billable
Latitude: 39

EL DORADO TRUSS (Continued) **S110983764**

Longitude: -121

F77
South
1/8-1/4
0.128 mi.
674 ft.

TC WELDING & FABRICATION
6160 ENTERPRISE DR UNIT E
DIAMOND SPRINGS, CA 95619

CUPA Listings **S111456157**
N/A

Site 1 of 11 in cluster F

Relative:
Lower

Actual:
1761 ft.

CUPA EL DORADO:
PE: BUSINESS PLANS/SMALL BUSINESS
Status: Inactive, non-billable
Latitude: 39
Longitude: -121

PE: HAZARDOUS MATERIALS - STATE SURCHARGE
Status: Inactive, non-billable
Latitude: 39
Longitude: -121

F78
South
1/8-1/4
0.130 mi.
689 ft.

GUTS
6165 ENTERPRISE DR
DIAMOND SPRINGS, CA 95619

CUPA Listings **S110983822**
N/A

Site 2 of 11 in cluster F

Relative:
Lower

Actual:
1761 ft.

CUPA EL DORADO:
PE: BUSINESS PLANS/SMALL BUSINESS
Status: Active, billable
Latitude: 39
Longitude: -121

PE: HAZARDOUS MATERIALS - STATE SURCHARGE
Status: Active, billable
Latitude: 39
Longitude: -121

C79
SSE
1/8-1/4
0.135 mi.
715 ft.

ADC MITCHELL AUTO REPAIR
6180 ENTERPRISE DR #A
DIAMOND SPRINGS, CA 95619

CUPA Listings **S107147059**
N/A

Site 20 of 21 in cluster C

Relative:
Lower

Actual:
1768 ft.

CUPA EL DORADO:
PE: BUSINESS PLANS/SMALL BUSINESS
Status: Inactive, non-billable
Latitude: Not reported
Longitude: Not reported

PE: HAZARDOUS MATERIALS - STATE SURCHARGE
Status: Inactive, non-billable
Latitude: Not reported
Longitude: Not reported

PE: BUSINESS PLANS/SMALL BUSINESS
Status: Inactive, non-billable

ADC MITCHELL AUTO REPAIR (Continued) **S107147059**

Latitude: Not reported
Longitude: Not reported

PE: HAZARDOUS MATERIALS - STATE SURCHARGE
Status: Inactive, non-billable
Latitude: Not reported
Longitude: Not reported

PE: BUSINESS PLANS/SMALL BUSINESS
Status: Inactive, non-billable
Latitude: 39
Longitude: -121

PE: CUPA HW GENERAL
Status: Inactive, non-billable
Latitude: 39
Longitude: -121

PE: HAZARDOUS MATERIALS - STATE SURCHARGE
Status: Inactive, non-billable
Latitude: 39
Longitude: -121

D80
East
1/8-1/4
0.137 mi.
723 ft.

APPLIED CONTROL ELECTRONICS **CUPA Listings** **S110983506**
327 - 1 INDUSTRIAL DR **N/A**
PLACERVILLE, CA 95667

Site 4 of 8 in cluster D

Relative:
Higher

Actual:
1825 ft.

CUPA EL DORADO:
PE: BUSINESS PLANS/SMALL BUSINESS
Status: Inactive, non-billable
Latitude: Not reported
Longitude: Not reported

PE: HAZARDOUS MATERIALS - STATE SURCHARGE
Status: Inactive, non-billable
Latitude: Not reported
Longitude: Not reported

D81
East
1/8-1/4
0.139 mi.
736 ft.

BAKER ART FOUNDRY **CUPA Listings** **S110983562**
329 INDUSTRIAL DR STE 4 **N/A**
PLACERVILLE, CA 95667

Site 5 of 8 in cluster D

Relative:
Higher

Actual:
1825 ft.

CUPA EL DORADO:
PE: BUSINESS PLANS/SMALL BUSINESS
Status: Active, billable
Latitude: 39
Longitude: -121

PE: CUPA Onsite HW Treatment (CE)
Status: Active, exempt from billing
Latitude: 39
Longitude: -121

BAKER ART FOUNDRY (Continued) **S110983562**

PE: HAZARDOUS MATERIALS - STATE SURCHARGE
Status: Active, billable
Latitude: 39
Longitude: -121

D82 **EDR US Hist Auto Stat** **1015428544**
East **329 INDUSTRIAL DR** **N/A**
1/8-1/4 **PLACERVILLE, CA 95667**
0.139 mi.
736 ft. **Site 6 of 8 in cluster D**

Relative:
Higher

Actual:
1825 ft.

EDR Historical Auto Stations:
Name: ALLIED AUTO REPAIR CLUB INC
Year: 2010
Address: 329 INDUSTRIAL DR

D83 **SIERRA ELECTRIC MOTOR & PUMP CO** **RCRA-SQG** **1000368684**
East **333-1 INDUSTRIAL DR** **FINDS** **CAD982465437**
1/8-1/4 **PLACERVILLE, CA 95667**
0.144 mi.
761 ft. **Site 7 of 8 in cluster D**

Relative:
Higher

Actual:
1826 ft.

RCRA-SQG:
Date form received by agency: 09/01/1996
Facility name: SIERRA ELECTRIC MOTOR & PUMP CO
Facility address: 333-1 INDUSTRIAL DR
PLACERVILLE, CA 95667
EPA ID: CAD982465437
Mailing address: PO BOX 2166
PLACERVILLE, CA 95667
Contact: Not reported
Contact address: Not reported
Not reported
Contact country: Not reported
Contact telephone: Not reported
Contact email: Not reported
EPA Region: 09
Classification: Small Small Quantity Generator
Description: Handler: generates more than 100 and less than 1000 kg of hazardous waste during any calendar month and accumulates less than 6000 kg of hazardous waste at any time; or generates 100 kg or less of hazardous waste during any calendar month, and accumulates more than 1000 kg of hazardous waste at any time

Owner/Operator Summary:
Owner/operator name: ROGERS SAM & ROGERS JOE
Owner/operator address: NOT REQUIRED
NOT REQUIRED, ME 99999
Owner/operator country: Not reported
Owner/operator telephone: (415) 555-1212
Legal status: Private
Owner/Operator Type: Owner
Owner/Op start date: Not reported
Owner/Op end date: Not reported

Owner/operator name: NOT REQUIRED

SIERRA ELECTRIC MOTOR & PUMP CO (Continued) **1000368684**

Owner/operator address: NOT REQUIRED
NOT REQUIRED, ME 99999
Owner/operator country: Not reported
Owner/operator telephone: (415) 555-1212
Legal status: Private
Owner/Operator Type: Operator
Owner/Op start date: Not reported
Owner/Op end date: Not reported

Handler Activities Summary:
U.S. importer of hazardous waste: No
Mixed waste (haz. and radioactive): No
Recycler of hazardous waste: No
Transporter of hazardous waste: No
Treater, storer or disposer of HW: No
Underground injection activity: No
On-site burner exemption: No
Furnace exemption: No
Used oil fuel burner: No
Used oil processor: No
User oil refiner: No
Used oil fuel marketer to burner: No
Used oil Specification marketer: No
Used oil transfer facility: No
Used oil transporter: No

Historical Generators:
Date form received by agency: 11/02/1988
Facility name: SIERRA ELECTRIC MOTOR & PUMP CO
Classification: Large Quantity Generator

Violation Status: No violations found

FINDS:

Registry ID: 110002817710

Environmental Interest/Information System
RCRAInfo is a national information system that supports the Resource Conservation and Recovery Act (RCRA) program through the tracking of events and activities related to facilities that generate, transport, and treat, store, or dispose of hazardous waste. RCRAInfo allows RCRA program staff to track the notification, permit, compliance, and corrective action activities required under RCRA.

D84 **EDR US Hist Auto Stat** **1015434568**
East **337 INDUSTRIAL DR** **N/A**
1/8-1/4 **PLACERVILLE, CA 95667**
0.149 mi.
787 ft. **Site 8 of 8 in cluster D**

Relative:
Higher

Actual:
1826 ft.

EDR Historical Auto Stations:
Name: C N C ENGINEERING
Year: 2006
Address: 337 INDUSTRIAL DR

C85
SSE
1/8-1/4
0.154 mi.
812 ft.

VAROZZA 4X4 OUTFITTERS
6166 D ENTERPRISE DR
DIAMOND SPRINGS, CA 95619

CUPA Listings **S111456172**
N/A

Site 21 of 21 in cluster C

Relative:
Higher

Actual:
1772 ft.

CUPA EL DORADO:

PE: BUSINESS PLANS/SMALL BUSINESS
Status: Active, billable
Latitude: 39
Longitude: -121

PE: CUPA HW GENERAL
Status: Active, exempt from billing
Latitude: 39
Longitude: -121

PE: HAZARDOUS MATERIALS - STATE SURCHARGE
Status: Active, billable
Latitude: 39
Longitude: -121

F86
South
1/8-1/4
0.180 mi.
949 ft.

EURO TECH
6125 ENTERPRISE DR 11
DIAMOND SPRINGS, CA 95619

CUPA Listings **S103666878**
N/A

Site 3 of 11 in cluster F

Relative:
Lower

Actual:
1763 ft.

CUPA EL DORADO:

PE: BUSINESS PLANS/SMALL BUSINESS
Status: Inactive, non-billable
Latitude: Not reported
Longitude: Not reported

PE: HAZARDOUS MATERIALS - STATE SURCHARGE
Status: Inactive, non-billable
Latitude: Not reported
Longitude: Not reported

PE: BUSINESS PLANS/SMALL BUSINESS
Status: Inactive, non-billable
Latitude: Not reported
Longitude: Not reported

PE: CUPA HW GENERATOR <55 GAL MATERIAL STORED
Status: Inactive, non-billable
Latitude: 39
Longitude: -121

PE: HAZARDOUS MATERIALS - STATE SURCHARGE
Status: Inactive, non-billable
Latitude: 39
Longitude: -121

PE: BUSINESS PLANS/SMALL BUSINESS
Status: Active, billable
Latitude: Not reported
Longitude: Not reported

PE: CUPA HW GENERAL

EURO TECH (Continued) **S103666878**

Status: Active, exempt from billing
Latitude: Not reported
Longitude: Not reported

PE: HAZARDOUS MATERIALS - STATE SURCHARGE
Status: Active, billable
Latitude: Not reported
Longitude: Not reported

F87
South
1/8-1/4
0.180 mi.
949 ft.

PLASTIC WELDING TECHNOLOGIES **CUPA Listings** **S108753111**
6125 ENTERPRISE DR STE 10 **N/A**
DIAMOND SPRINGS, CA 95619

Site 4 of 11 in cluster F

Relative:
Lower

Actual:
1763 ft.

CUPA EL DORADO:
PE: CUPA HW GENERATOR <55 GAL MATERIAL STORED
Status: Inactive, non-billable
Latitude: Not reported
Longitude: Not reported

PE: HAZARDOUS MATERIALS - STATE SURCHARGE
Status: Inactive, non-billable
Latitude: Not reported
Longitude: Not reported

G88
SSW
1/8-1/4
0.187 mi.
989 ft.

EDR US Hist Auto Stat **1015576122**
N/A

6120 ENTERPRISE DR
SHINGLE SPRINGS, CA 95682

Site 1 of 10 in cluster G

Relative:
Lower

Actual:
1762 ft.

EDR Historical Auto Stations:
Name: PRO BUILT TRANSMISSIONS DIAMOND SPRINGS
Year: 1999
Address: 6120 ENTERPRISE DR

G89
SSW
1/8-1/4
0.188 mi.
995 ft.

EDR US Hist Auto Stat **1015576121**
N/A

6120 ENTERPRISE DR
DIAMOND SPRINGS, CA 95619

Site 2 of 10 in cluster G

Relative:
Lower

Actual:
1762 ft.

EDR Historical Auto Stations:
Name: PRO BUILT TRANSMISSIONS DIAMOND SPRINGS
Year: 1999
Address: 6120 ENTERPRISE DR

Name: INDEPENDENT DIESEL REPAIR
Year: 2000
Address: 6120 ENTERPRISE DR

Name: MITCHELL AUTO REPAIR
Year: 2001
Address: 6120 ENTERPRISE DR

(Continued) **1015576121**

Name: ADC MITCHELL AUTO RPR SPCLTY
Year: 2002
Address: 6120 ENTERPRISE DR

Name: ADC MITCHELL AUTO RPR SPCLTY
Year: 2003
Address: 6120 ENTERPRISE DR

Name: MITCHELL AUTO REPAIR SPECIALTY
Year: 2004
Address: 6120 ENTERPRISE DR

Name: PRO BUILT TRANSMISSIONS
Year: 2008
Address: 6120 ENTERPRISE DR

Name: PRO BUILT TRANSMISSIONS
Year: 2009
Address: 6120 ENTERPRISE DR

Name: ROBINSONS AUTOMOTIVE
Year: 2010
Address: 6120 ENTERPRISE DR

Name: ROBINSONS AUTOMOTIVE
Year: 2011
Address: 6120 ENTERPRISE DR

G90 **BROWN, THOMAS OLLIVER - HM** **CUPA Listings** **S110984007**
SSW **6120 ENTERPRISE DR** **N/A**
1/8-1/4 **DIAMOND SPRINGS, CA 95619**
0.188 mi.
995 ft. **Site 3 of 10 in cluster G**

Relative:
Lower

Actual:
1762 ft.

CUPA EL DORADO:
PE: CONTAMINATED SITE/CLEAN-UP
Status: Inactive, non-billable
Latitude: 39
Longitude: -121

PE: BUSINESS PLANS/SMALL BUSINESS
Status: Inactive, non-billable
Latitude: Not reported
Longitude: Not reported

PE: HAZARDOUS MATERIALS - STATE SURCHARGE
Status: Inactive, non-billable
Latitude: Not reported
Longitude: Not reported

F91 South 1/8-1/4 0.189 mi. 996 ft. | **COMCAST OF CALIFORNIA XV LLC**
6517 COMMERCE WAY
DIAMOND SPRINGS, CA 95619 | **RCRA-SQG** | **1015740439**
CAR000231506

Site 5 of 11 in cluster F

Relative: Higher

Actual: 1775 ft.

RCRA-SQG:

Date form received by agency:	11/01/2012
Facility name:	COMCAST OF CALIFORNIA XV LLC
Facility address:	6517 COMMERCE WAY DIAMOND SPRINGS, CA 95619 9390
EPA ID:	CAR000231506
Mailing address:	3055 COMCAST PL LIVERMORE, CA 94551
Contact:	MICHAEL MINERVA
Contact address:	3055 COMCAST PL LIVERMORE, CA 94551
Contact country:	US
Contact telephone:	925-424-0195
Contact email:	MICHAEL_MINERVA@CABLE.COMCAST.COM
EPA Region:	09
Classification:	Small Small Quantity Generator
Description:	Handler: generates more than 100 and less than 1000 kg of hazardous waste during any calendar month and accumulates less than 6000 kg of hazardous waste at any time; or generates 100 kg or less of hazardous waste during any calendar month, and accumulates more than 1000 kg of hazardous waste at any time

Owner/Operator Summary:

Owner/operator name:	MR ED NEWELL J AND L PROPERTIES
Owner/operator address:	6517 COMMERCE WAY DIAMOND SPRINGS, CA 95619
Owner/operator country:	US
Owner/operator telephone:	530-622-9386
Legal status:	Private
Owner/Operator Type:	Owner
Owner/Op start date:	04/30/1986
Owner/Op end date:	Not reported
Owner/operator name:	COMCAST OF CALIFORNIA XV LLC
Owner/operator address:	Not reported Not reported
Owner/operator country:	US
Owner/operator telephone:	Not reported
Legal status:	Private
Owner/Operator Type:	Operator
Owner/Op start date:	08/01/1987
Owner/Op end date:	Not reported

Handler Activities Summary:

U.S. importer of hazardous waste:	No
Mixed waste (haz. and radioactive):	No
Recycler of hazardous waste:	No
Transporter of hazardous waste:	No
Treater, storer or disposer of HW:	No
Underground injection activity:	No
On-site burner exemption:	No
Furnace exemption:	No

COMCAST OF CALIFORNIA XV LLC (Continued) **1015740439**

Used oil fuel burner: No
Used oil processor: No
User oil refiner: No
Used oil fuel marketer to burner: No
Used oil Specification marketer: No
Used oil transfer facility: No
Used oil transporter: No

Hazardous Waste Summary:
Waste code: 134
Waste name: 134

Waste code: 135
Waste name: 135

Waste code: 221
Waste name: 221

Waste code: 223
Waste name: 223

Waste code: D001
Waste name: IGNITABLE HAZARDOUS WASTES ARE THOSE WASTES WHICH HAVE A FLASHPOINT OF LESS THAN 140 DEGREES FAHRENHEIT AS DETERMINED BY A PENSKY-MARTENS CLOSED CUP FLASH POINT TESTER. ANOTHER METHOD OF DETERMINING THE FLASH POINT OF A WASTE IS TO REVIEW THE MATERIAL SAFETY DATA SHEET, WHICH CAN BE OBTAINED FROM THE MANUFACTURER OR DISTRIBUTOR OF THE MATERIAL. LACQUER THINNER IS AN EXAMPLE OF A COMMONLY USED SOLVENT WHICH WOULD BE CONSIDERED AS IGNITABLE HAZARDOUS WASTE.

Violation Status: No violations found

F92
South
1/8-1/4
0.190 mi.
1001 ft.

Relative:
Higher

Actual:
1775 ft.

PLACERVILLE COCA COLA **CUPA Listings** **S110983990**
6516 COMMERCE WAY **N/A**
DIAMOND SPRINGS, CA 95619

Site 6 of 11 in cluster F

CUPA EL DORADO:
PE: BUSINESS PLANS/SMALL BUSINESS
Status: Inactive, non-billable
Latitude: Not reported
Longitude: Not reported

PE: HAZARDOUS MATERIALS - STATE SURCHARGE
Status: Inactive, non-billable
Latitude: Not reported
Longitude: Not reported

G93 **EDR US Hist Auto Stat** **1015575736**
SSW **6115 ENTERPRISE DR** **N/A**
1/8-1/4 **DIAMOND SPRINGS, CA 95619**
0.190 mi.
1004 ft. **Site 4 of 10 in cluster G**

Relative:
Lower

Actual:
1762 ft.

EDR Historical Auto Stations:

Name: DONS AUTO SPECIALITIES
Year: 1999
Address: 6115 ENTERPRISE DR

Name: DONS AUTO SPECIALITIES
Year: 2000
Address: 6115 ENTERPRISE DR

Name: DONS AUTO SPECIALTIES
Year: 2001
Address: 6115 ENTERPRISE DR

Name: DONS AUTO SPECIALTIES
Year: 2002
Address: 6115 ENTERPRISE DR

Name: DONS AUTO SPECIALTIES
Year: 2003
Address: 6115 ENTERPRISE DR

Name: DONS AUTO SPECIALTIES
Year: 2004
Address: 6115 ENTERPRISE DR

Name: DONS AUTO SPECIALTIES
Year: 2005
Address: 6115 ENTERPRISE DR

Name: DONS AUTO SPECIALTIES
Year: 2006
Address: 6115 ENTERPRISE DR

Name: DONS AUTO SPECIALTIES
Year: 2007
Address: 6115 ENTERPRISE DR

Name: DONS AUTO SPECIALTIES
Year: 2008
Address: 6115 ENTERPRISE DR

G94 **READ'S POWER SPORTS** **CUPA Listings** **S110984037**
SSW **6115 ENTERPRISE DR STE C** **N/A**
1/8-1/4 **DIAMOND SPRINGS, CA 95619**
0.190 mi.
1004 ft. **Site 5 of 10 in cluster G**

Relative:
Lower

Actual:
1762 ft.

CUPA EL DORADO:

PE: CUPA HW GENERATOR <55 GAL MATERIAL STORED
Status: Inactive, non-billable
Latitude: 39
Longitude: -121

PE: HAZARDOUS MATERIALS - STATE SURCHARGE

READ'S POWER SPORTS (Continued) **S110984037**

Status: Inactive, non-billable
Latitude: 39
Longitude: -121

F95 **EDR US Hist Auto Stat** **1015591446**
South **6518 COMMERCE WAY** **N/A**
1/8-1/4 **DIAMOND SPRINGS, CA 95619**
0.192 mi.
1013 ft. **Site 7 of 11 in cluster F**

Relative:
Higher

Actual:
1777 ft.

EDR Historical Auto Stations:
Name: FOOTHILL AUTO UPHOLSTERY
Year: 2011
Address: 6518 COMMERCE WAY

G96 **MAVERICK INSULATION - HM** **CUPA Listings** **S110983920**
SSW **6110 ENTERPRISE DR** **N/A**
1/8-1/4 **DIAMOND SPRINGS, CA 95619**
0.196 mi.
1036 ft. **Site 6 of 10 in cluster G**

Relative:
Lower

Actual:
1760 ft.

CUPA EL DORADO:
PE: BUSINESS PLANS/SMALL BUSINESS
Status: Inactive, non-billable
Latitude: Not reported
Longitude: Not reported

PE: HAZARDOUS MATERIALS - STATE SURCHARGE
Status: Inactive, non-billable
Latitude: Not reported
Longitude: Not reported

PE: U.G.S.T. ANNUAL PERMIT
Status: Inactive, non-billable
Latitude: Not reported
Longitude: Not reported

PE: UGST - STATE SURCHARGE
Status: Inactive, non-billable
Latitude: Not reported
Longitude: Not reported

F97 **SUB SEA SYSTEMS** **CUPA Listings** **S111347271**
South **6524 COMMERCE WAY** **N/A**
1/8-1/4 **DIAMOND SPRINGS, CA 95619**
0.198 mi.
1043 ft. **Site 8 of 11 in cluster F**

Relative:
Higher

Actual:
1779 ft.

CUPA EL DORADO:
PE: BUSINESS PLANS/SMALL BUSINESS
Status: Inactive, non-billable
Latitude: Not reported
Longitude: Not reported

G98
SSW
1/8-1/4
0.204 mi.
1078 ft.

BURLESON ANTIQUES
6090 ENTERPRISE DR STE C
DIAMOND SPRINGS, CA 95619

CUPA Listings **S111826773**
N/A

Site 7 of 10 in cluster G

Relative:
Lower

Actual:
1754 ft.

CUPA EL DORADO:

PE:	BUSINESS PLANS/SMALL BUSINESS
Status:	Active, billable
Latitude:	39
Longitude:	-121

PE:	CUPA HW GENERAL
Status:	Active, exempt from billing
Latitude:	39
Longitude:	-121

PE:	HAZARDOUS MATERIALS - STATE SURCHARGE
Status:	Active, billable
Latitude:	39
Longitude:	-121

G99
SSW
1/8-1/4
0.205 mi.
1080 ft.

SIERRA PERFORMANCE
6100 ENTERPRISE DR G
DIAMOND SPRINGS, CA 95619

CUPA Listings **S110983475**
N/A

Site 8 of 10 in cluster G

Relative:
Lower

Actual:
1757 ft.

CUPA EL DORADO:

PE:	BUSINESS PLANS/SMALL BUSINESS
Status:	Inactive, non-billable
Latitude:	39
Longitude:	-121

PE:	CUPA HW GENERAL
Status:	Inactive, non-billable
Latitude:	39
Longitude:	-121

PE:	HAZARDOUS MATERIALS - STATE SURCHARGE
Status:	Inactive, non-billable
Latitude:	39
Longitude:	-121

PE:	CUPA HW GENERATOR <55 GAL MATERIAL STORED
Status:	Inactive, non-billable
Latitude:	Not reported
Longitude:	Not reported

PE:	HAZARDOUS MATERIALS - STATE SURCHARGE
Status:	Inactive, non-billable
Latitude:	Not reported
Longitude:	Not reported

G100
SSW
1/8-1/4
0.205 mi.
1080 ft.

EDR US Hist Cleaners **1015080686**
N/A

6100 ENTERPRISE DR
DIAMOND SPRINGS, CA 95619

Site 9 of 10 in cluster G

Relative:
Lower

Actual:
1757 ft.

EDR Historical Cleaners:
Name: POLLOCK PINES CUSTOM CARPET CLEANING
Year: 2011
Address: 6100 ENTERPRISE DR

H101
ENE
1/8-1/4
0.210 mi.
1107 ft.

CUPA Listings **S110983532**
N/A

AT&T MOBILITY HWY 49
3457 WEDGE HILL RD
PLACERVILLE, CA 95667

Site 1 of 2 in cluster H

Relative:
Higher

Actual:
1873 ft.

CUPA EL DORADO:
PE: BUSINESS PLANS/SMALL BUSINESS
Status: Inactive, non-billable
Latitude: 39
Longitude: -121

PE: HAZARDOUS MATERIALS - STATE SURCHARGE
Status: Inactive, non-billable
Latitude: 39
Longitude: -121

PE: BUSINESS PLANS/SMALL BUSINESS
Status: Active, billable
Latitude: 39
Longitude: -121

PE: HAZARDOUS MATERIALS - STATE SURCHARGE
Status: Active, billable
Latitude: 39
Longitude: -121

PE: BUSINESS PLANS/SMALL BUSINESS
Status: Active, billable
Latitude: 39
Longitude: -121

PE: HAZARDOUS MATERIALS - STATE SURCHARGE
Status: Active, billable
Latitude: 39
Longitude: -121

F102
South
1/8-1/4
0.215 mi.
1136 ft.

CUPA Listings **S110983674**
N/A

EDUHSD MAINTENANCE & OPS
6540 COMMERCE WAY
DIAMOND SPRINGS, CA 95619

Site 9 of 11 in cluster F

Relative:
Higher

Actual:
1786 ft.

CUPA EL DORADO:
PE: BUSINESS PLANS/SMALL BUSINESS
Status: Active, billable
Latitude: 39

EDUHSD MAINTENANCE & OPS (Continued) **S110983674**

Longitude: -121

PE: HAZARDOUS MATERIALS - STATE SURCHARGE
Status: Active, billable
Latitude: 39
Longitude: -121

I103
SW
1/8-1/4
0.215 mi.
1136 ft.

OR TOOLWORKS **CUPA Listings** **S110983965**
6070 ENTERPRISE DR UNIT J **N/A**
DIAMOND SPRINGS, CA 95619

Site 1 of 7 in cluster I

Relative:
Lower

Actual:
1761 ft.

CUPA EL DORADO:
PE: BUSINESS PLANS/SMALL BUSINESS
Status: Active, billable
Latitude: 39
Longitude: -121

PE: CUPA HW GENERAL
Status: Active, exempt from billing
Latitude: 39
Longitude: -121

PE: HAZARDOUS MATERIALS - STATE SURCHARGE
Status: Active, billable
Latitude: 39
Longitude: -121

I104
SW
1/8-1/4
0.215 mi.
1136 ft.

PERFORMANCE CYCLE **CUPA Listings** **S109933909**
6070 ENTERPRISE DR STE H **N/A**
DIAMOND SPRINGS, CA 95619

Site 2 of 7 in cluster I

Relative:
Lower

Actual:
1761 ft.

CUPA EL DORADO:
PE: BUSINESS PLANS/SMALL BUSINESS
Status: Active, billable
Latitude: 39
Longitude: -121

PE: CUPA HW GENERAL
Status: Active, exempt from billing
Latitude: 39
Longitude: -121

PE: HAZARDOUS MATERIALS - STATE SURCHARGE
Status: Active, billable
Latitude: 39
Longitude: -121

G105
South
1/8-1/4
0.224 mi.
1183 ft.

ROBINSON'S AUTOMOTIVE
6120 C ENTERPRISE DR
DIAMOND SPRINGS, CA 95619

CUPA Listings **S111456097**
N/A

Site 10 of 10 in cluster G

Relative:
Higher

Actual:
1772 ft.

CUPA EL DORADO:

PE:	BUSINESS PLANS/SMALL BUSINESS
Status:	Active, billable
Latitude:	39
Longitude:	-121

PE:	CUPA HW GENERAL
Status:	Active, exempt from billing
Latitude:	39
Longitude:	-121

PE:	HAZARDOUS MATERIALS - STATE SURCHARGE
Status:	Active, billable
Latitude:	39
Longitude:	-121

J106
East
1/8-1/4
0.226 mi.
1194 ft.

ED SHAIDEL ENTERPRISES
4568 MISSOURI FLAT RD #I
PLACERVILLE, CA 95667

CUPA Listings **S110983666**
N/A

Site 1 of 17 in cluster J

Relative:
Higher

Actual:
1818 ft.

CUPA EL DORADO:

PE:	BUSINESS PLANS/SMALL BUSINESS
Status:	Inactive, non-billable
Latitude:	Not reported
Longitude:	Not reported

F107
South
1/8-1/4
0.230 mi.
1213 ft.

JOE'S GARAGE
6560 COMMERCE WAY STE A
DIAMOND SPRINGS, CA 95619

CUPA Listings **S110983860**
N/A

Site 10 of 11 in cluster F

Relative:
Higher

Actual:
1795 ft.

CUPA EL DORADO:

PE:	BUSINESS PLANS/SMALL BUSINESS
Status:	Inactive, non-billable
Latitude:	39
Longitude:	-121

PE:	CUPA HW GENERAL
Status:	Inactive, non-billable
Latitude:	39
Longitude:	-121

PE:	HAZARDOUS MATERIALS - STATE SURCHARGE
Status:	Inactive, non-billable
Latitude:	39
Longitude:	-121

F108 **EL DORADO TRANSIT** **NPDES** **S106104185**
South **6565 COMMERCE WAY** **CUPA Listings** **N/A**
1/8-1/4 **DIAMOND SPRINGS, CA 95619** **WDS**
0.230 mi.
1216 ft. **Site 11 of 11 in cluster F**

Relative:
Higher

Actual:
1795 ft.

NPDES:

Npdes Number:	CAS000001
Facility Status:	Active
Agency Id:	0
Region:	5S
Regulatory Measure Id:	198423
Order No:	97-03-DWQ
Regulatory Measure Type:	Enrollee
Place Id:	Not reported
WDID:	5S09I015039
Program Type:	Industrial
Adoption Date Of Regulatory Measure:	Not reported
Effective Date Of Regulatory Measure:	04/01/1999
Expiration Date Of Regulatory Measure:	Not reported
Termination Date Of Regulatory Measure:	Not reported
Discharge Name:	El Dorado Cnty Transit Authority
Discharge Address:	6565 Commerce Way
Discharge City:	Diamond Springs
Discharge State:	California
Discharge Zip:	95619

CUPA EL DORADO:

PE:	BUSINESS PLANS/SMALL BUSINESS
Status:	Active, billable
Latitude:	39
Longitude:	-121

PE:	CUPA HW GENERAL
Status:	Active, exempt from billing
Latitude:	39
Longitude:	-121

PE:	HAZARDOUS MATERIALS - STATE SURCHARGE
Status:	Active, billable
Latitude:	39
Longitude:	-121

CA WDS:

Facility ID:	5S 09I015039
Facility Type:	Other - Does not fall into the category of Municipal/Domestic, Industrial, Agricultural or Solid Waste (Class I, II or III)
Facility Status:	Active - Any facility with a continuous or seasonal discharge that is under Waste Discharge Requirements.
NPDES Number:	CAS000001 The 1st 2 characters designate the state. The remaining 7 are assigned by the Regional Board
Subregion:	0
Facility Telephone:	5306425383
Facility Contact:	MINDY JACKSON
Agency Name:	EL DORADO CO TRANSIT AUTHORITY
Agency Address:	6565 COMMERCE WY
Agency City,St,Zip:	DIAMOND SPRINGS 95619
Agency Contact:	MINDY JACKSON

EL DORADO TRANSIT (Continued) **S106104185**

Agency Telephone:	5306425383
Agency Type:	County
SIC Code:	4111
SIC Code 2:	Not reported
Primary Waste Type:	Nonhazardous Solid Wastes/Influent or Solid Wastes that contain nonhazardous putrescible and non putrescible solid, semisolid, and liquid wastes (E.G., garbage, trash, refuse, paper, demolition and construction wastes, manure, vegetable or animal solid and semisolid waste).
Primary Waste:	STORMS
Waste Type2:	Not reported
Waste2:	Stormwater Runoff
Primary Waste Type:	Nonhazardous Solid Wastes/Influent or Solid Wastes that contain nonhazardous putrescible and non putrescible solid, semisolid, and liquid wastes (E.G., garbage, trash, refuse, paper, demolition and construction wastes, manure, vegetable or animal solid and semisolid waste).
Secondary Waste:	Not reported
Secondary Waste Type:	Not reported
Design Flow:	0
Baseline Flow:	0
Reclamation:	No reclamation requirements associated with this facility.
POTW:	The facility is not a POTW.
Treat To Water:	Minor Threat to Water Quality. A violation of a regional board order should cause a relatively minor impairment of beneficial uses compared to a major or minor threat. Not: All nurds without a TTWQ will be considered a minor threat to water quality unless coded at a higher Level. A Zero (0) may be used to code those NURDS that are found to represent no threat to water quality.
Complexity:	Category C - Facilities having no waste treatment systems, such as cooling water dischargers or thosewho must comply through best management practices, facilities with passive waste treatment and disposal systems, such as septic systems with subsurface disposal, or dischargers having waste storage systems with land disposal such as dairy waste ponds.

J109 **PLACERVILLE FRUIT GROWERS** **CUPA Listings** **S110983991**
ESE **4590 MISSOURI FLAT RD** **N/A**
1/8-1/4 **PLACERVILLE, CA 95667**
0.231 mi.
1222 ft. **Site 2 of 17 in cluster J**

Relative:
Higher

Actual:
1811 ft.

CUPA EL DORADO:

PE:	BUSINESS PLANS/SMALL BUSINESS
Status:	Active, billable
Latitude:	39
Longitude:	-121

PE:	CAL ARP - STATE SURCHARGE
Status:	Inactive, non-billable
Latitude:	39
Longitude:	-121

PE:	HAZARDOUS MATERIALS - STATE SURCHARGE
Status:	Active, billable
Latitude:	39
Longitude:	-121

J110 East 1/8-1/4 0.232 mi. 1226 ft. | **TRUE VALUE HARDWARE**
4571 MISSOURI FLAT RD
PLACERVILLE, CA 95667 | **CUPA Listings** | **S108208336**
N/A

Site 3 of 17 in cluster J

Relative: Higher

Actual: 1815 ft.

CUPA EL DORADO:

PE:	BUSINESS PLANS/SMALL BUSINESS
Status:	Active, billable
Latitude:	39
Longitude:	-121

PE:	CUPA HW GENERAL
Status:	Active, exempt from billing
Latitude:	39
Longitude:	-121

PE:	HAZARDOUS MATERIALS - STATE SURCHARGE
Status:	Active, billable
Latitude:	39
Longitude:	-121

K111 South 1/8-1/4 0.233 mi. 1232 ft. | **FOOTHILL AUTO REPAIR**
6566-C COMMERCE WAY
DIAMOND SPRINGS, CA 95619 | **ENVIROSTOR** | **S116165452**
N/A

Site 1 of 3 in cluster K

Relative: Higher

Actual: 1796 ft.

ENVIROSTOR:

Facility ID:	9750002
Status:	Refer: RWQCB
Status Date:	07/15/1987
Site Code:	Not reported
Site Type:	Evaluation
Site Type Detailed:	Evaluation
Acres:	1
NPL:	NO
Regulatory Agencies:	NONE SPECIFIED
Lead Agency:	NONE SPECIFIED
Program Manager:	Not reported
Supervisor:	Referred - Not Assigned
Division Branch:	Cleanup Sacramento
Assembly:	5
Senate:	1
Special Program:	* Rural County Survey Program
Restricted Use:	NO
Site Mgmt Req:	NONE SPECIFIED
Funding:	Not reported
Latitude:	38.69283
Longitude:	-120.8278
APN:	NONE SPECIFIED
Past Use:	NONE SPECIFIED
Potential COC:	"10097 * UNSPECIFIED OIL CONTAINING WASTE * UNSPECIFIED SOLVENT MIXTURES 10199"
Confirmed COC:	NONE SPECIFIED
Potential Description:	NONE SPECIFIED
Alias Name:	Not reported
Alias Type:	Not reported

Completed Info:

FOOTHILL AUTO REPAIR (Continued) **S116165452**

Completed Area Name:	Not reported
Completed Sub Area Name:	Not reported
Completed Document Type:	Not reported
Completed Date:	Not reported
Comments:	Not reported
Future Area Name:	Not reported
Future Sub Area Name:	Not reported
Future Document Type:	Not reported
Future Due Date:	Not reported
Schedule Area Name:	Not reported
Schedule Sub Area Name:	Not reported
Schedule Document Type:	Not reported
Schedule Due Date:	Not reported
Schedule Revised Date:	Not reported

K112 **CALIFORNIA AUTO SALES** **CUPA Listings** **S100868176**
South **6566 COMMERCE WAY C** **N/A**
1/8-1/4 **DIAMOND SPRINGS, CA 95619**
0.233 mi.
1232 ft. **Site 2 of 3 in cluster K**

Relative:
Higher

Actual:
1796 ft.

CUPA EL DORADO:

PE:	BUSINESS PLANS/SMALL BUSINESS
Status:	Inactive, non-billable
Latitude:	39
Longitude:	-121
PE:	CUPA HW GENERAL
Status:	Inactive, non-billable
Latitude:	39
Longitude:	-121
PE:	HAZARDOUS MATERIALS - STATE SURCHARGE
Status:	Inactive, non-billable
Latitude:	39
Longitude:	-121

K113 **FOOTHILL AUTO REPAIR** **RCRA-SQG** **1000819429**
South **6566 COMMERCE WY UNIT C** **FINDS** **CAD983654112**
1/8-1/4 **DIAMOND SPRINGS, CA 95619**
0.233 mi.
1232 ft. **Site 3 of 3 in cluster K**

Relative:
Higher

Actual:
1796 ft.

RCRA-SQG:

Date form received by agency:	12/10/1992
Facility name:	FOOTHILL AUTO REPAIR
Facility address:	6566 COMMERCE WY UNIT C DIAMOND SPRINGS, CA 95619
EPA ID:	CAD983654112
Mailing address:	COMMERCE WY UNIT C DIAMOND SPRINGS, CA 95619
Contact:	MICHAEL CLINE
Contact address:	6566 COMMERCE WY UNIT C DIAMOND SPRINGS, CA 95619
Contact country:	US

FOOTHILL AUTO REPAIR (Continued) **1000819429**

Contact telephone: (916) 621-0585
Contact email: Not reported
EPA Region: 09
Classification: Small Small Quantity Generator
Description: Handler: generates more than 100 and less than 1000 kg of hazardous waste during any calendar month and accumulates less than 6000 kg of hazardous waste at any time; or generates 100 kg or less of hazardous waste during any calendar month, and accumulates more than 1000 kg of hazardous waste at any time

Owner/Operator Summary:
Owner/operator name: MICHAEL CLINE
Owner/operator address: 6566 COMMERCE WY UNIT C
DIAMOND SPRINGS, CA 95619
Owner/operator country: Not reported
Owner/operator telephone: (916) 621-0585
Legal status: Private
Owner/Operator Type: Owner
Owner/Op start date: Not reported
Owner/Op end date: Not reported

Handler Activities Summary:
U.S. importer of hazardous waste: No
Mixed waste (haz. and radioactive): No
Recycler of hazardous waste: No
Transporter of hazardous waste: No
Treater, storer or disposer of HW: No
Underground injection activity: No
On-site burner exemption: No
Furnace exemption: No
Used oil fuel burner: No
Used oil processor: No
User oil refiner: No
Used oil fuel marketer to burner: No
Used oil Specification marketer: No
Used oil transfer facility: No
Used oil transporter: No

Violation Status: No violations found

FINDS:

Registry ID: 110002888607

Environmental Interest/Information System
RCRAInfo is a national information system that supports the Resource Conservation and Recovery Act (RCRA) program through the tracking of events and activities related to facilities that generate, transport, and treat, store, or dispose of hazardous waste. RCRAInfo allows RCRA program staff to track the notification, permit, compliance, and corrective action activities required under RCRA.

I114 **EDR US Hist Auto Stat** **1015572690**
SW **6069 ENTERPRISE DR** **N/A**
1/8-1/4 **DIAMOND SPRINGS, CA 95619**
0.234 mi.
1233 ft. **Site 3 of 7 in cluster I**

Relative:
Lower

Actual:
1763 ft.

EDR Historical Auto Stations:

Name: RUBICON AUTOMOTIVE & TIRE
Year: 2009
Address: 6069 ENTERPRISE DR

Name: RUBICON AUTOMOTIVE & TIRE
Year: 2010
Address: 6069 ENTERPRISE DR

Name: RUBICON AUTOMOTIVE & TIRE
Year: 2011
Address: 6069 ENTERPRISE DR

I115 **RUBICON RENTALS** **CUPA Listings** **S110983878**
SW **6069 ENTERPRISE DR STE A** **N/A**
1/8-1/4 **DIAMOND SPRINGS, CA 95619**
0.234 mi.
1233 ft. **Site 4 of 7 in cluster I**

Relative:
Lower

Actual:
1763 ft.

CUPA EL DORADO:

PE: BUSINESS PLANS/SMALL BUSINESS
Status: Active, billable
Latitude: 39
Longitude: -121

PE: CUPA HW GENERAL
Status: Active, exempt from billing
Latitude: 39
Longitude: -121

PE: HAZARDOUS MATERIALS - STATE SURCHARGE
Status: Active, billable
Latitude: 39
Longitude: -121

PE: BUSINESS PLANS/SMALL BUSINESS
Status: Inactive, non-billable
Latitude: 39
Longitude: -121

PE: CUPA HW GENERAL
Status: Inactive, non-billable
Latitude: 39
Longitude: -121

PE: HAZARDOUS MATERIALS - STATE SURCHARGE
Status: Inactive, non-billable
Latitude: 39
Longitude: -121

PE: BUSINESS PLANS/SMALL BUSINESS
Status: Inactive, non-billable
Latitude: 39
Longitude: -121

RUBICON RENTALS (Continued) **S110983878**

PE: CUPA HW GENERAL
Status: Inactive, non-billable
Latitude: 39
Longitude: -121

PE: HAZARDOUS MATERIALS - STATE SURCHARGE
Status: Inactive, non-billable
Latitude: 39
Longitude: -121

PE: BUSINESS PLANS/SMALL BUSINESS
Status: Inactive, non-billable
Latitude: 39
Longitude: -121

PE: CUPA HW GENERAL
Status: Inactive, non-billable
Latitude: 39
Longitude: -121

PE: HAZARDOUS MATERIALS - STATE SURCHARGE
Status: Inactive, non-billable
Latitude: 39
Longitude: -121

I116 **COOK CABINETS INC** **RCRA NonGen / NLR** **1001815488**
SW **6048 ENTERPRISE DR** **FINDS** **CAR000054197**
1/8-1/4 **DIAMOND SPRINGS, CA 95619**
0.234 mi.
1236 ft. **Site 5 of 7 in cluster I**

Relative:
Lower

Actual:
1763 ft.

RCRA NonGen / NLR:
Date form received by agency: 01/31/2000
Facility name: COOK CABINETS INC
Facility address: 6048 ENTERPRISE DR
DIAMOND SPRINGS, CA 956190034
EPA ID: CAR000054197
Contact: STEVEN GULARTE
Contact address: 6428 CAPITOL AVE
DIAMOND SPRINGS, CA 95619
Contact country: US
Contact telephone: (530) 621-0851
Contact email: Not reported
EPA Region: 09
Classification: Non-Generator
Description: Handler: Non-Generators do not presently generate hazardous waste

Owner/Operator Summary:
Owner/operator name: R GULARTE AND C COOK
Owner/operator address: 6048 ENTERPRISE DR
DIAMOND SPRINGS, CA 95619
Owner/operator country: Not reported
Owner/operator telephone: (530) 621-0851
Legal status: Private
Owner/Operator Type: Owner
Owner/Op start date: Not reported
Owner/Op end date: Not reported

COOK CABINETS INC (Continued) **1001815488**

Handler Activities Summary:

U.S. importer of hazardous waste:	No
Mixed waste (haz. and radioactive):	No
Recycler of hazardous waste:	No
Transporter of hazardous waste:	No
Treater, storer or disposer of HW:	No
Underground injection activity:	No
On-site burner exemption:	No
Furnace exemption:	No
Used oil fuel burner:	No
Used oil processor:	No
User oil refiner:	No
Used oil fuel marketer to burner:	No
Used oil Specification marketer:	No
Used oil transfer facility:	No
Used oil transporter:	No

Hazardous Waste Summary:

Waste code: D000
Waste name: Not Defined

Waste code: D001
Waste name: IGNITABLE HAZARDOUS WASTES ARE THOSE WASTES WHICH HAVE A FLASHPOINT OF LESS THAN 140 DEGREES FAHRENHEIT AS DETERMINED BY A PENSKY-MARTENS CLOSED CUP FLASH POINT TESTER. ANOTHER METHOD OF DETERMINING THE FLASH POINT OF A WASTE IS TO REVIEW THE MATERIAL SAFETY DATA SHEET, WHICH CAN BE OBTAINED FROM THE MANUFACTURER OR DISTRIBUTOR OF THE MATERIAL. LACQUER THINNER IS AN EXAMPLE OF A COMMONLY USED SOLVENT WHICH WOULD BE CONSIDERED AS IGNITABLE HAZARDOUS WASTE.

Waste code: D035
Waste name: METHYL ETHYL KETONE

Waste code: U002
Waste name: ACETONE (I)

Waste code: U161
Waste name: METHYL ISOBUTYL KETONE (I)

Waste code: U220
Waste name: BENZENE, METHYL-

Waste code: U239
Waste name: BENZENE, DIMETHYL- (I,T)

Violation Status: No violations found

FINDS:

Registry ID: 110002928869

Environmental Interest/Information System
RCRAInfo is a national information system that supports the Resource Conservation and Recovery Act (RCRA) program through the tracking of events and activities related to facilities that generate, transport, and treat, store, or dispose of hazardous waste. RCRAInfo allows RCRA program staff to track the notification, permit, compliance, and

COOK CABINETS INC (Continued) **1001815488**

corrective action activities required under RCRA.

I117 **EDR US Hist Auto Stat** **1015571507**
SW **6048 ENTERPRISE DR** **N/A**
1/8-1/4 **DIAMOND SPRINGS, CA 95619**
0.234 mi.
1236 ft. **Site 6 of 7 in cluster I**

Relative:
Lower

Actual:
1763 ft.

EDR Historical Auto Stations:

Name: AUTOMOTIVE EXCELLENCE BAR NONE
Year: 2002
Address: 6048 ENTERPRISE DR

Name: AUTOMOTIVE EXCELLENCE
Year: 2003
Address: 6048 ENTERPRISE DR

Name: AUTOMOTIVE EXCELLENCE
Year: 2005
Address: 6048 ENTERPRISE DR

I118 **EDR US Hist Cleaners** **1015079869**
SW **6048 ENTERPRISE DR** **N/A**
1/8-1/4 **DIAMOND SPRINGS, CA 95619**
0.234 mi.
1236 ft. **Site 7 of 7 in cluster I**

Relative:
Lower

Actual:
1763 ft.

EDR Historical Cleaners:

Name: POLLOCK PINES CUSTOM CARPET CLEANING
Year: 2011
Address: 6048 ENTERPRISE DR

Name: POLLOCK PINES CUSTOM CARPET CLEANING
Year: 2012
Address: 6048 ENTERPRISE DR

L119 **EDR US Hist Auto Stat** **1015506383**
ESE **4600 MISSOURI FLAT RD** **N/A**
1/8-1/4 **PLACERVILLE, CA 95667**
0.242 mi.
1278 ft. **Site 1 of 13 in cluster L**

Relative:
Higher

Actual:
1807 ft.

EDR Historical Auto Stations:

Name: CURTISS AUTOMOTIVE BODY FENDER & FRAME
Year: 1999
Address: 4600 MISSOURI FLAT RD

Name: CURTISS AUTOMOTIVE BODY FENDER & FRAME
Year: 2000
Address: 4600 MISSOURI FLAT RD

Name: BOB CURTISS AUTOMOTIVE
Year: 2005
Address: 4600 MISSOURI FLAT RD

(Continued) **1015506383**

Name: CURTISS AUTO BODY
Year: 2008
Address: 4600 MISSOURI FLAT RD

Name: CURTISS AUTO BODY
Year: 2009
Address: 4600 MISSOURI FLAT RD

Name: BOB CURTISS AUTOMOTIVE
Year: 2010
Address: 4600 MISSOURI FLAT RD

Name: AUTOMOTIVE EXCELLENCE
Year: 2011
Address: 4600 MISSOURI FLAT RD

Name: AUTOMOTIVE EXCELLENCE
Year: 2012
Address: 4600 MISSOURI FLAT RD

L120 **BOB CURTISS AUTOMOTIVE BODY** **CUPA Listings** **S100933454**
ESE **4600 MISSOURI FLAT RD UNIT D** **N/A**
1/8-1/4 **PLACERVILLE, CA 95667**
0.242 mi.
1278 ft. **Site 2 of 13 in cluster L**

Relative:
Higher

Actual:
1807 ft.

CUPA EL DORADO:
PE: CUPA HW GENERAL
Status: Inactive, non-billable
Latitude: 39
Longitude: -121

PE: CUPA HW GENERATOR <55 GAL MATERIAL STORED
Status: Inactive, non-billable
Latitude: 39
Longitude: -121

PE: HAZARDOUS MATERIALS - STATE SURCHARGE
Status: Inactive, non-billable
Latitude: 39
Longitude: -121

L121 **AUTOMOTIVE EXCELLENCE** **CUPA Listings** **S100927674**
ESE **4600 MISSOURI FLAT RD UNIT 14** **N/A**
1/8-1/4 **PLACERVILLE, CA 95667**
0.242 mi.
1278 ft. **Site 3 of 13 in cluster L**

Relative:
Higher

Actual:
1807 ft.

CUPA EL DORADO:
PE: BUSINESS PLANS/SMALL BUSINESS
Status: Active, billable
Latitude: 39
Longitude: -121

PE: Not reported
Status: Inactive, non-billable

AUTOMOTIVE EXCELLENCE (Continued) **S100927674**

Latitude: Not reported
Longitude: Not reported

PE: CUPA HW GENERAL
Status: Active, exempt from billing
Latitude: 39
Longitude: -121

PE: HAZARDOUS MATERIALS - STATE SURCHARGE
Status: Active, billable
Latitude: 39
Longitude: -121

J122 **CELEBRITY INCORPORATED** **RCRA-SQG** **1000473044**
East **4512 MISSOURI FLAT ROAD** **FINDS** **CAD982444523**
1/8-1/4 **PLACERVILLE, CA**
0.243 mi.
1283 ft. **Site 4 of 17 in cluster J**

Relative:
Higher

Actual:
1821 ft.

RCRA-SQG:
Date form received by agency: 09/01/1996
Facility name: CELEBRITY INCORPORATED
Facility address: 4512 MISSOURI FLAT ROAD
PLACERVILLE, CA 95667
EPA ID: CAD982444523
Mailing address: MISSOURI FLAT ROAD
PLACERVILLE, CA 95667
Contact: Not reported
Contact address: Not reported
Not reported
Contact country: Not reported
Contact telephone: Not reported
Contact email: Not reported
EPA Region: 09
Classification: Small Small Quantity Generator
Description: Handler: generates more than 100 and less than 1000 kg of hazardous waste during any calendar month and accumulates less than 6000 kg of hazardous waste at any time; or generates 100 kg or less of hazardous waste during any calendar month, and accumulates more than 1000 kg of hazardous waste at any time

Owner/Operator Summary:
Owner/operator name: CELEBRITY INCORPORATED
Owner/operator address: NOT REQUIRED
NOT REQUIRED, ME 99999
Owner/operator country: Not reported
Owner/operator telephone: (415) 555-1212
Legal status: Private
Owner/Operator Type: Owner
Owner/Op start date: Not reported
Owner/Op end date: Not reported

Owner/operator name: NOT REQUIRED
Owner/operator address: NOT REQUIRED
NOT REQUIRED, ME 99999
Owner/operator country: Not reported
Owner/operator telephone: (415) 555-1212

CELEBRITY INCORPORATED (Continued) **1000473044**

Legal status: Private
Owner/Operator Type: Operator
Owner/Op start date: Not reported
Owner/Op end date: Not reported

Handler Activities Summary:
U.S. importer of hazardous waste: No
Mixed waste (haz. and radioactive): No
Recycler of hazardous waste: No
Transporter of hazardous waste: No
Treater, storer or disposer of HW: No
Underground injection activity: No
On-site burner exemption: No
Furnace exemption: No
Used oil fuel burner: No
Used oil processor: No
User oil refiner: No
Used oil fuel marketer to burner: No
Used oil Specification marketer: No
Used oil transfer facility: No
Used oil transporter: No

Violation Status: No violations found

FINDS:

Registry ID: 110002814223

Environmental Interest/Information System
RCRAInfo is a national information system that supports the Resource Conservation and Recovery Act (RCRA) program through the tracking of events and activities related to facilities that generate, transport, and treat, store, or dispose of hazardous waste. RCRAInfo allows RCRA program staff to track the notification, permit, compliance, and corrective action activities required under RCRA.

L123 **IDLE WHEELS R.V. CENTER** **CUPA Listings** **S110983845**
ESE **4625 MISSOURI FLAT RD** **N/A**
1/8-1/4 **PLACERVILLE, CA 95667**
0.243 mi.
1283 ft. **Site 4 of 13 in cluster L**

Relative:
Higher

Actual:
1807 ft.

CUPA EL DORADO:
PE: BUSINESS PLANS/SMALL BUSINESS
Status: Inactive, non-billable
Latitude: Not reported
Longitude: Not reported

J124 **EDR US Hist Auto Stat** **1015502781**
East **4510 MISSOURI FLAT RD** **N/A**
1/8-1/4 **PLACERVILLE, CA 95667**
0.244 mi.
1286 ft. **Site 5 of 17 in cluster J**

Relative:
Higher

Actual:
1821 ft.

EDR Historical Auto Stations:

Name: KEVINS BODY WORKS
Year: 1999
Address: 4510 MISSOURI FLAT RD

Name: KEVINS BODY WORKS
Year: 2000
Address: 4510 MISSOURI FLAT RD

Name: KEVINS BODY WORKS
Year: 2003
Address: 4510 MISSOURI FLAT RD

Name: SIERRA BODY WORKS
Year: 2004
Address: 4510 MISSOURI FLAT RD

Name: SIERRA BODY WORKS
Year: 2005
Address: 4510 MISSOURI FLAT RD

Name: SIERRA BODY WORKS
Year: 2006
Address: 4510 MISSOURI FLAT RD

Name: SIERRA BODY WORKS
Year: 2009
Address: 4510 MISSOURI FLAT RD

Name: SIERRA BODY WORKS
Year: 2011
Address: 4510 MISSOURI FLAT RD

Name: SIERRA BODY WORKS
Year: 2012
Address: 4510 MISSOURI FLAT RD

J125 **SIERRA AUTO BODY** **CUPA Listings** **S110984057**
East **4510 MISSOURI FLAT RD** **N/A**
1/8-1/4 **PLACERVILLE, CA 95667**
0.244 mi.
1286 ft. **Site 6 of 17 in cluster J**

Relative:
Higher

Actual:
1821 ft.

CUPA EL DORADO:

PE: BUSINESS PLANS/SMALL BUSINESS
Status: Active, billable
Latitude: 39
Longitude: -121

PE: CUPA HW GENERAL
Status: Active, exempt from billing
Latitude: 39
Longitude: -121

SIERRA AUTO BODY (Continued) **S110984057**

PE: HAZARDOUS MATERIALS - STATE SURCHARGE
Status: Active, billable
Latitude: 39
Longitude: -121

J126 **RIVER ROCK MOTORS** **CUPA Listings** **S106086768**
East **4508 MISSOURI FLAT RD** **N/A**
1/8-1/4 **PLACERVILLE, CA 95667**
0.244 mi.
1288 ft. **Site 7 of 17 in cluster J**

Relative:
Higher

Actual:
1821 ft.

CUPA EL DORADO:
PE: BUSINESS PLANS/SMALL BUSINESS
Status: Inactive, non-billable
Latitude: 39
Longitude: -121

PE: CUPA HW GENERAL
Status: Inactive, non-billable
Latitude: 39
Longitude: -121

PE: HAZARDOUS MATERIALS - STATE SURCHARGE
Status: Inactive, non-billable
Latitude: 39
Longitude: -121

PE: CONTAMINATED SITE/CLEAN-UP
Status: Inactive, non-billable
Latitude: Not reported
Longitude: Not reported

J127 **EDR US Hist Auto Stat** **1015502519**
East **4508 MISSOURI FLAT RD** **N/A**
1/8-1/4 **PLACERVILLE, CA 95667**
0.244 mi.
1288 ft. **Site 8 of 17 in cluster J**

Relative:
Higher

Actual:
1821 ft.

EDR Historical Auto Stations:
Name: GORE LARRY L SIERRA AUTO CENTER
Year: 1999
Address: 4508 MISSOURI FLAT RD

Name: SIERRA AUTO CENTER
Year: 2000
Address: 4508 MISSOURI FLAT RD

Name: SIERRA AUTO CTR
Year: 2002
Address: 4508 MISSOURI FLAT RD

Name: SIERRA AUTO CTR
Year: 2003
Address: 4508 MISSOURI FLAT RD

Name: SIERRA AUTO CTR

(Continued) **1015502519**

Year: 2004
Address: 4508 MISSOURI FLAT RD

Name: SIERRA AUTO CENTER
Year: 2005
Address: 4508 MISSOURI FLAT RD

Name: SIERRA AUTO CENTER
Year: 2006
Address: 4508 MISSOURI FLAT RD

Name: SIERRA AUTO CENTER
Year: 2007
Address: 4508 MISSOURI FLAT RD

Name: SIERRA AUTO CENTER
Year: 2008
Address: 4508 MISSOURI FLAT RD

Name: SIERRA AUTO CENTER
Year: 2009
Address: 4508 MISSOURI FLAT RD

Name: RIVER ROCK MOTORS
Year: 2012
Address: 4508 MISSOURI FLAT RD

J128 **EDR US Hist Auto Stat** **1015502458**
East **4506 MISSOURI FLAT RD** **N/A**
1/8-1/4 **PLACERVILLE, CA 95667**
0.245 mi.
1292 ft. **Site 9 of 17 in cluster J**

Relative:
Higher

Actual:
1821 ft.

EDR Historical Auto Stations:
Name: C & R MOTORSPORT
Year: 2008
Address: 4506 MISSOURI FLAT RD

J129 **CELEBRITY PLATING** **CHMIRS** **S100216352**
East **4502 MISSOURI FLAT ROAD** **ENVIROSTOR** **N/A**
1/8-1/4 **PLACERVILLE, CA 95667**
0.246 mi.
1297 ft. **Site 10 of 17 in cluster J**

Relative:
Higher

Actual:
1822 ft.

CHMIRS:
OES Incident Number: 8803168
OES notification: Not reported
OES Date: Not reported
OES Time: Not reported
Incident Date: 28-SEP-88
Date Completed: 28-SEP-88
Property Use: 700
Agency Id Number: 9806
Agency Incident Number: 0D1002
Time Notified: 1230
Time Completed: 1330

CELEBRITY PLATING (Continued) **S100216352**

Surrounding Area:	500
Estimated Temperature:	80
Property Management:	P
Special Studies 1:	Not reported
Special Studies 2:	Not reported
Special Studies 3:	Not reported
Special Studies 4:	Not reported
Special Studies 5:	Not reported
Special Studies 6:	Not reported
More Than Two Substances Involved?:	N
Resp Agncy Personel # Of Decontaminated:	Not reported
Responding Agency Personel # Of Injuries:	Not reported
Responding Agency Personel # Of Fatalities:	Not reported
Others Number Of Decontaminated:	Not reported
Others Number Of Injuries:	Not reported
Others Number Of Fatalities:	Not reported
Vehicle Make/year:	Not reported
Vehicle License Number:	Not reported
Vehicle State:	Not reported
Vehicle Id Number:	Not reported
CA/DOT/PUC/ICC Number:	Not reported
Company Name:	Not reported
Reporting Officer Name/ID:	DAVID JOHNSTON
Report Date:	29-SEP-88
Comments:	Y
Facility Telephone:	916 626-0034
Waterway Involved:	Not reported
Waterway:	Not reported
Spill Site:	Not reported
Cleanup By:	Not reported
Containment:	Not reported
What Happened:	Not reported
Type:	Not reported
Measure:	Not reported
Other:	Not reported
Date/Time:	Not reported
Year:	88-92
Agency:	Not reported
Incident Date:	Not reported
Admin Agency:	Not reported
Amount:	Not reported
Contained:	Not reported
Site Type:	Not reported
E Date:	04-MAY-89
Substance:	Not reported
Quantity Released:	Not reported
BBLS:	Not reported
Cups:	Not reported
CUFT:	Not reported
Gallons:	Not reported
Grams:	Not reported
Pounds:	Not reported
Liters:	Not reported
Ounces:	Not reported
Pints:	Not reported
Quarts:	Not reported
Sheen:	Not reported

CELEBRITY PLATING (Continued) **S100216352**

Tons:	Not reported
Unknown:	Not reported
Evacuations:	Not reported
Number of Injuries:	Not reported
Number of Fatalities:	Not reported
Description:	Not reported

ENVIROSTOR:

Facility ID:	9340001
Status:	No Further Action
Status Date:	04/05/2010
Site Code:	101525
Site Type:	Corrective Action
Site Type Detailed:	Corrective Action
Acres:	10
NPL:	NO
Regulatory Agencies:	"HWMP, EL DORADO COUNTY"
Lead Agency:	HWMP
Program Manager:	Lance Mcmahan
Supervisor:	Noel Shrum
Division Branch:	Cleanup Sacramento
Assembly:	5
Senate:	1
Special Program:	EPA - PASI
Restricted Use:	NO
Site Mgmt Req:	NONE SPECIFIED
Funding:	Not reported
Latitude:	38.69997
Longitude:	-120.8230
APN:	NONE SPECIFIED
Past Use:	"HAZARDOUS WASTE TREATMENT, METAL PLATING - CHROME"
Potential COC:	"30152 Chromium VI Cyanide (free 30406"
Confirmed COC:	"30152 30153-NO Cyanide (free 30406"
Potential Description:	"AQUI, SOIL"
Alias Name:	Not reported
Alias Type:	Not reported

Completed Info:

Completed Area Name:	Not reported
Completed Sub Area Name:	Not reported
Completed Document Type:	Not reported
Completed Date:	Not reported
Comments:	Not reported
Future Area Name:	Not reported
Future Sub Area Name:	Not reported
Future Document Type:	Not reported
Future Due Date:	Not reported
Schedule Area Name:	Not reported
Schedule Sub Area Name:	Not reported
Schedule Document Type:	Not reported
Schedule Due Date:	Not reported
Schedule Revised Date:	Not reported

J130 **EDR US Hist Auto Stat** **1015502023**
East **4500 MISSOURI FLAT RD** **N/A**
1/8-1/4 **PLACERVILLE, CA 95667**
0.246 mi.
1300 ft. **Site 11 of 17 in cluster J**

Relative:
Higher

Actual:
1822 ft.

EDR Historical Auto Stations:

Name:	CASPERS MUFFLER AND HITCH SERVICE
Year:	1999
Address:	4500 MISSOURI FLAT RD
Name:	CASPERS MUFFLER AND HITCH SERVICE
Year:	2000
Address:	4500 MISSOURI FLAT RD

J131 **CASPER'S MUFFLER & HITCH** **CUPA Listings** **S110983602**
East **4500 MISSOURI FLAT RD** **N/A**
1/8-1/4 **PLACERVILLE, CA 95667**
0.246 mi.
1300 ft. **Site 12 of 17 in cluster J**

Relative:
Higher

Actual:
1822 ft.

CUPA EL DORADO:

PE:	BUSINESS PLANS/SMALL BUSINESS
Status:	Inactive, non-billable
Latitude:	Not reported
Longitude:	Not reported

L132 **ADVANCED GASES & EQUIPMENT** **CUPA Listings** **S112135664**
ESE **4639 MISSOURI FLAT RD** **N/A**
1/8-1/4 **PLACERVILLE, CA 95667**
0.247 mi.
1304 ft. **Site 5 of 13 in cluster L**

Relative:
Higher

Actual:
1803 ft.

CUPA EL DORADO:

PE:	BUSINESS PLANS/LARGE BUSINESSES
Status:	Active, billable
Latitude:	39
Longitude:	-121
PE:	HAZARDOUS MATERIALS - STATE SURCHARGE
Status:	Active, billable
Latitude:	39
Longitude:	-121

M133 **EDR US Hist Auto Stat** **1015572069**
SW **6051 ENTERPRISE DR** **N/A**
1/8-1/4 **DIAMOND SPRINGS, CA 95619**
0.249 mi.
1317 ft. **Site 1 of 2 in cluster M**

Relative:
Lower

Actual:
1754 ft.

EDR Historical Auto Stations:

Name:	RUXCO ENGINEERING
Year:	2007
Address:	6051 ENTERPRISE DR
Name:	RUXCO ENGINEERING INC
Year:	2008

(Continued) **1015572069**

Address: 6051 ENTERPRISE DR

M134 **RUXCO ENGINEERING** **CUPA Listings** **S110984188**
SW **6051 ENTERPRISE DR STE 105** **N/A**
1/8-1/4 **DIAMOND SPRINGS, CA 95619**
0.249 mi.
1317 ft. **Site 2 of 2 in cluster M**

Relative:
Lower

Actual:
1754 ft.

CUPA EL DORADO:

PE: BUSINESS PLANS/SMALL BUSINESS
Status: Inactive, non-billable
Latitude: Not reported
Longitude: Not reported

PE: CUPA HW GENERAL
Status: Inactive, non-billable
Latitude: Not reported
Longitude: Not reported

PE: HAZARDOUS MATERIALS - STATE SURCHARGE
Status: Inactive, non-billable
Latitude: Not reported
Longitude: Not reported

PE: BUSINESS PLANS/SMALL BUSINESS
Status: Active, billable
Latitude: 39
Longitude: -121

PE: CUPA HW GENERAL
Status: Active, exempt from billing
Latitude: 39
Longitude: -121

PE: HAZARDOUS MATERIALS - STATE SURCHARGE
Status: Active, billable
Latitude: 39
Longitude: -121

PE: BUSINESS PLANS/SMALL BUSINESS
Status: Active, billable
Latitude: 39
Longitude: -121

PE: HAZARDOUS MATERIALS - STATE SURCHARGE
Status: Active, billable
Latitude: 39
Longitude: -121

PE: CUPA HW GENERATOR <55 GAL MATERIAL STORED
Status: Inactive, non-billable
Latitude: Not reported
Longitude: Not reported

PE: HAZARDOUS MATERIALS - STATE SURCHARGE
Status: Inactive, non-billable
Latitude: Not reported
Longitude: Not reported

J135 ENE 1/4-1/2 0.250 mi. 1322 ft. | **WES CUT CORP.** | **CUPA Listings** | **S110984248** | **N/A**

4496 MISSOURI FLAT RD
PLACERVILLE, CA 95667

Site 13 of 17 in cluster J

Relative: Higher

Actual: 1823 ft.

CUPA EL DORADO:

PE:	BUSINESS PLANS/SMALL BUSINESS
Status:	Inactive, non-billable
Latitude:	Not reported
Longitude:	Not reported

J136 ENE 1/4-1/2 0.251 mi. 1325 ft. | **MISSOURI STATION** | **SWEEPS UST** | **S106929471** | **N/A**

4535 MISSOURI FLAT RD
DIAMOND SPRINGS, CA 95619

Site 14 of 17 in cluster J

Relative: Higher

Actual: 1823 ft.

SWEEPS UST:

Status:	Active
Comp Number:	51
Number:	3
Board Of Equalization:	Not reported
Referral Date:	07-12-89
Action Date:	07-12-89
Created Date:	07-12-89
Owner Tank Id:	G01
SWRCB Tank Id:	09-000-000051-000001
Tank Status:	A
Capacity:	12000
Active Date:	07-12-89
Tank Use:	M.V. FUEL
STG:	P
Content:	LEADED
Number Of Tanks:	4

Status:	Active
Comp Number:	51
Number:	3
Board Of Equalization:	Not reported
Referral Date:	07-12-89
Action Date:	07-12-89
Created Date:	07-12-89
Owner Tank Id:	G02
SWRCB Tank Id:	09-000-000051-000002
Tank Status:	A
Capacity:	12000
Active Date:	07-12-89
Tank Use:	M.V. FUEL
STG:	P
Content:	REG UNLEADED
Number Of Tanks:	Not reported

Status:	Active
Comp Number:	51
Number:	3
Board Of Equalization:	Not reported
Referral Date:	07-12-89
Action Date:	07-12-89
Created Date:	07-12-89

MISSOURI STATION (Continued) **S106929471**

Owner Tank Id: Not reported
SWRCB Tank Id: 09-000-000051-000003
Tank Status: A
Capacity: 6000
Active Date: 07-12-89
Tank Use: M.V. FUEL
STG: P
Content: REG UNLEADED
Number Of Tanks: Not reported

Status: Active
Comp Number: 51
Number: 3
Board Of Equalization: Not reported
Referral Date: 07-12-89
Action Date: 07-12-89
Created Date: 07-12-89
Owner Tank Id: Not reported
SWRCB Tank Id: 09-000-000051-000004
Tank Status: A
Capacity: 6000
Active Date: 07-12-89
Tank Use: M.V. FUEL
STG: P
Content: DIESEL
Number Of Tanks: Not reported

L137 **EL DORADO UNION HIGH SCHOOL DI** **HIST UST** **U001612634**
ESE **4675 MISSOURI FLAT ROAD** **N/A**
1/4-1/2 **DIAMOND SPRINGS, CA 95619**
0.252 mi.
1331 ft. **Site 6 of 13 in cluster L**

Relative:
Higher

Actual:
1804 ft.

HIST UST:
Region: STATE
Facility ID: 00000046253
Facility Type: Other
Other Type: TRANSPORTATION
Total Tanks: 0003
Contact Name: GLEN HUNTER
Telephone: 9166226306
Owner Name: EL DORADO UNION HIGH SCHOOL DI
Owner Address: 4675 MISSOURI FLAT ROAD
Owner City,St,Zip: DIAMOND SPRINGS, CA 95619

Tank Num: 001
Container Num: 1
Year Installed: 1976
Tank Capacity: 00012000
Tank Used for: PRODUCT
Type of Fuel: DIESEL
Tank Construction: 1/4 inches
Leak Detection: Stock Inventor

Tank Num: 002
Container Num: 2
Year Installed: 1976
Tank Capacity: 00008000

EL DORADO UNION HIGH SCHOOL DI (Continued) **U001612634**

Tank Used for: PRODUCT
Type of Fuel: UNLEADED
Tank Construction: 1/4 inches
Leak Detection: Stock Inventor

Tank Num: 003
Container Num: 3
Year Installed: 1976
Tank Capacity: 00001000
Tank Used for: PRODUCT
Type of Fuel: REGULAR
Tank Construction: 10 gauge
Leak Detection: None

Tank Num: 004
Container Num: #1 TRANS
Year Installed: 1976
Tank Capacity: 00012000
Tank Used for: PRODUCT
Type of Fuel: DIESEL
Tank Construction: 1/4 inches
Leak Detection: Stock Inventor

Tank Num: 005
Container Num: #2 TRANS
Year Installed: 1976
Tank Capacity: 00008000
Tank Used for: PRODUCT
Type of Fuel: UNLEADED
Tank Construction: 1/4 inches
Leak Detection: Stock Inventor

Tank Num: 006
Container Num: #3 TRANS
Year Installed: 1976
Tank Capacity: 00001000
Tank Used for: PRODUCT
Type of Fuel: REGULAR
Tank Construction: 10 gauge
Leak Detection: Stock Inventor

L138 **EDUHSD: DISTRICT OFFICE/TRANSP** **NPDES** **S106104193**
ESE **4675 MISSOURI FLAT RD** **CUPA Listings** **N/A**
1/4-1/2 **DIAMOND SPRINGS, CA 95619** **SWEEPS UST**
0.252 mi. **WDS**
1331 ft. **Site 7 of 13 in cluster L**

Relative:
Higher

Actual:
1804 ft.

NPDES:

Npdes Number:	CAS000001
Facility Status:	Active
Agency Id:	0
Region:	5S
Regulatory Measure Id:	198439
Order No:	97-03-DWQ
Regulatory Measure Type:	Enrollee
Place Id:	Not reported
WDID:	5S09I017856
Program Type:	Industrial

EDUHSD: DISTRICT OFFICE/TRANSP (Continued) **S106104193**

Adoption Date Of Regulatory Measure:	Not reported
Effective Date Of Regulatory Measure:	03/04/2003
Expiration Date Of Regulatory Measure:	Not reported
Termination Date Of Regulatory Measure:	Not reported
Discharge Name:	El Dorado Union HSD
Discharge Address:	4675 Missouri Flat Rd
Discharge City:	Placerville
Discharge State:	California
Discharge Zip:	95667

CUPA EL DORADO:

PE:	BUSINESS PLANS/SMALL BUSINESS
Status:	Inactive, non-billable
Latitude:	Not reported
Longitude:	Not reported

SWEEPS UST:

Status:	Active
Comp Number:	46253
Number:	9
Board Of Equalization:	44-003046
Referral Date:	07-01-85
Action Date:	Not reported
Created Date:	10-13-88
Owner Tank Id:	1
SWRCB Tank Id:	09-000-046253-000001
Tank Status:	A
Capacity:	12000
Active Date:	07-01-85
Tank Use:	M.V. FUEL
STG:	P
Content:	DIESEL
Number Of Tanks:	6

Status:	Active
Comp Number:	46253
Number:	9
Board Of Equalization:	44-003046
Referral Date:	07-01-85
Action Date:	Not reported
Created Date:	10-13-88
Owner Tank Id:	2
SWRCB Tank Id:	09-000-046253-000002
Tank Status:	A
Capacity:	8000
Active Date:	07-01-85
Tank Use:	M.V. FUEL
STG:	P
Content:	REG UNLEADED
Number Of Tanks:	Not reported

Status:	Active
Comp Number:	46253
Number:	9
Board Of Equalization:	44-003046
Referral Date:	07-01-85

EDUHSD: DISTRICT OFFICE/TRANSP (Continued) **S106104193**

Action Date:	Not reported
Created Date:	10-13-88
Owner Tank Id:	3
SWRCB Tank Id:	09-000-046253-000003
Tank Status:	A
Capacity:	1000
Active Date:	07-01-85
Tank Use:	M.V. FUEL
STG:	P
Content:	LEADED
Number Of Tanks:	Not reported

Status:	Active
Comp Number:	46253
Number:	9
Board Of Equalization:	44-003046
Referral Date:	07-01-85
Action Date:	Not reported
Created Date:	10-13-88
Owner Tank Id:	#1 TRANS
SWRCB Tank Id:	09-000-046253-000004
Tank Status:	A
Capacity:	12000
Active Date:	07-01-85
Tank Use:	M.V. FUEL
STG:	P
Content:	DIESEL
Number Of Tanks:	Not reported

Status:	Active
Comp Number:	46253
Number:	9
Board Of Equalization:	44-003046
Referral Date:	07-01-85
Action Date:	Not reported
Created Date:	10-13-88
Owner Tank Id:	#2 TRANS
SWRCB Tank Id:	09-000-046253-000005
Tank Status:	A
Capacity:	8000
Active Date:	07-01-85
Tank Use:	M.V. FUEL
STG:	P
Content:	REG UNLEADED
Number Of Tanks:	Not reported

Status:	Active
Comp Number:	46253
Number:	9
Board Of Equalization:	44-003046
Referral Date:	07-01-85
Action Date:	Not reported
Created Date:	10-13-88
Owner Tank Id:	#3 TRANS
SWRCB Tank Id:	09-000-046253-000006
Tank Status:	A
Capacity:	1000

EDUHSD: DISTRICT OFFICE/TRANSP (Continued) **S106104193**

Active Date:	07-01-85
Tank Use:	M.V. FUEL
STG:	P
Content:	LEADED
Number Of Tanks:	Not reported

CA WDS:

Facility ID:	5S 09I017856
Facility Type:	Industrial - Facility that treats and/or disposes of liquid or semisolid wastes from any servicing, producing, manufacturing or processing operation of whatever nature, including mining, gravel washing, geothermal operations, air conditioning, ship building and repairing, oil production, storage and disposal operations, water pumping.
Facility Status:	Active - Any facility with a continuous or seasonal discharge that is under Waste Discharge Requirements.
NPDES Number:	CAS000001 The 1st 2 characters designate the state. The remaining 7 are assigned by the Regional Board
Subregion:	0
Facility Telephone:	5306225081
Facility Contact:	AUGINO DANIEL J
Agency Name:	EL DORADO UNION HIGH SCH DIST
Agency Address:	6540 Commerce Way
Agency City,St,Zip:	Diamond Springs 956199391
Agency Contact:	AUGINO DANIEL J
Agency Telephone:	5306220140
Agency Type:	?
SIC Code:	0
SIC Code 2:	Not reported
Primary Waste Type:	Not reported
Primary Waste:	Not reported
Waste Type2:	Not reported
Waste2:	Not reported
Primary Waste Type:	Not reported
Secondary Waste:	Not reported
Secondary Waste Type:	Not reported
Design Flow:	0
Baseline Flow:	0
Reclamation:	Not reported
POTW:	Not reported
Treat To Water:	Minor Threat to Water Quality. A violation of a regional board order should cause a relatively minor impairment of beneficial uses compared to a major or minor threat. Not: All nurds without a TTWQ will be considered a minor threat to water quality unless coded at a higher Level. A Zero (0) may be used to code those NURDS that are found to represent no threat to water quality.
Complexity:	Category C - Facilities having no waste treatment systems, such as cooling water dischargers or thosewho must comply through best management practices, facilities with passive waste treatment and disposal systems, such as septic systems with subsurface disposal, or dischargers having waste storage systems with land disposal such as dairy waste ponds.

J139 ENE 1/4-1/2 0.252 mi. 1333 ft. — **ABOUT FACE SKIN CARE**, **4535 MISSOURI FLAT RD**, **PLACERVILLE, CA 95667** — **CUPA Listings** — **S112135663**, **N/A**

Site 15 of 17 in cluster J

Relative: Higher
Actual: 1823 ft.

CUPA EL DORADO:

PE:	LIMITED QUANTITY HAULING EXEMPTION
Status:	Inactive, non-billable
Latitude:	Not reported
Longitude:	Not reported

J140 ENE 1/4-1/2 0.252 mi. 1333 ft. — **MISSOURI GAS STATION**, **4535 MISSOURI FLAT RD STE 1C**, **PLACERVILLE, CA 95667** — **CUPA Listings** — **S110983938**, **N/A**

Site 16 of 17 in cluster J

Relative: Higher
Actual: 1823 ft.

CUPA EL DORADO:

PE:	BUSINESS PLANS/SMALL BUSINESS
Status:	Active, billable
Latitude:	39
Longitude:	-121

PE:	CUPA HW GENERAL
Status:	Active, exempt from billing
Latitude:	39
Longitude:	-121

PE:	HAZARDOUS MATERIALS - STATE SURCHARGE
Status:	Active, billable
Latitude:	39
Longitude:	-121

PE:	U.G.S.T. ANNUAL PERMIT
Status:	Active, billable
Latitude:	39
Longitude:	-121

PE:	UGST - STATE SURCHARGE
Status:	Active, billable
Latitude:	39
Longitude:	-121

PE:	MED WST-SM QTY W/O ONSITE/INITIAL FILING FEE
Status:	Inactive, non-billable
Latitude:	Not reported
Longitude:	Not reported

J141 ENE 1/4-1/2 0.252 mi. 1333 ft. — **MISSOURI STATION**, **4535 MISSOURI FLAT RD**, **PLACERVILLE, CA 95667** — **UST** — **U003785681** / **N/A**

Site 17 of 17 in cluster J

Relative: Higher

Actual: 1823 ft.

UST:

Facility ID:	FA0000423
Latitude:	38.7008329
Longitude:	-120.8213573
Permitting Agency	EL DORADO COUNTY

L142 ESE 1/4-1/2 0.256 mi. 1352 ft. — **PG&E EL DORADO SERVICE CENTER**, **4636 MISSOURI FLATE RD**, **PLACERVILLE, CA 95667** — **CA FID UST** — **S101581278** / **N/A**

Site 8 of 13 in cluster L

Relative: Higher

Actual: 1803 ft.

CA FID UST:

Facility ID:	09000284
Regulated By:	UTNKA
Regulated ID:	00028491
Cortese Code:	Not reported
SIC Code:	Not reported
Facility Phone:	Not reported
Mail To:	Not reported
Mailing Address:	343 SACRAMENTO ST
Mailing Address 2:	Not reported
Mailing City,St,Zip:	PLACERVILLE 95667
Contact:	Not reported
Contact Phone:	Not reported
DUNs Number:	Not reported
NPDES Number:	Not reported
EPA ID:	Not reported
Comments:	Not reported
Status:	Active

L143 ESE 1/4-1/2 0.256 mi. 1352 ft. — **PG&E EL DORADO SERVICE CENTER**, **4636 MISSOURI FLAT RD**, **PLACERVILLE, CA 95667** — **HIST UST**, **CUPA Listings**, **SWEEPS UST** — **U001613521** / **N/A**

Site 9 of 13 in cluster L

Relative: Higher

Actual: 1803 ft.

HIST UST:

Region:	STATE
Facility ID:	00000028491
Facility Type:	Other
Other Type:	UTILITY SERVICE YARD
Total Tanks:	0004
Contact Name:	J. R. BRANSCOMB
Telephone:	9166226110
Owner Name:	PACIFIC GAS AND ELECTRIC COMPA
Owner Address:	77 BEALE ST.
Owner City,St,Zip:	SAN FRANCISCO, CA 94106
Tank Num:	001
Container Num:	GS 16
Year Installed:	1977

PG&E EL DORADO SERVICE CENTER (Continued) **U001613521**

Tank Capacity: 00001000
Tank Used for: WASTE
Type of Fuel: WASTE OIL
Tank Construction: Not reported
Leak Detection: Visual

Tank Num: 002
Container Num: GS 17
Year Installed: 1977
Tank Capacity: 00000000
Tank Used for: WASTE
Type of Fuel: Not reported
Tank Construction: Not reported
Leak Detection: None

Tank Num: 003
Container Num: GS 1
Year Installed: 1977
Tank Capacity: 00008000
Tank Used for: PRODUCT
Type of Fuel: UNLEADED
Tank Construction: Not reported
Leak Detection: Stock Inventor

Tank Num: 004
Container Num: GS2
Year Installed: 1977
Tank Capacity: 00001000
Tank Used for: WASTE
Type of Fuel: WASTE OIL
Tank Construction: Not reported
Leak Detection: Stock Inventor

CUPA EL DORADO:
PE: APSA - LESS THAN 10,000
Status: Active, billable
Latitude: 39
Longitude: -121

PE: BUSINESS PLANS/LARGE BUSINESSES
Status: Active, billable
Latitude: 39
Longitude: -121

PE: CUPA HW GENERAL
Status: Active, exempt from billing
Latitude: 39
Longitude: -121

PE: HAZARDOUS MATERIALS - STATE SURCHARGE
Status: Active, billable
Latitude: 39
Longitude: -121

PE: U.G.S.T. ANNUAL PERMIT
Status: Inactive, non-billable
Latitude: 39

PG&E EL DORADO SERVICE CENTER (Continued) **U001613521**

Longitude: -121

PE: UGST - STATE SURCHARGE
Status: Inactive, non-billable
Latitude: 39
Longitude: -121

SWEEPS UST:
Status: Not reported
Comp Number: 28491
Number: Not reported
Board Of Equalization: 44-002884
Referral Date: Not reported
Action Date: Not reported
Created Date: Not reported
Owner Tank Id: Not reported
SWRCB Tank Id: 09-000-028491-000001
Tank Status: Not reported
Capacity: 8000
Active Date: Not reported
Tank Use: M.V. FUEL
STG: PRODUCT
Content: REG UNLEADED
Number Of Tanks: 1

Status: Active
Comp Number: 28491
Number: 1
Board Of Equalization: 44-002884
Referral Date: 04-30-92
Action Date: 06-01-93
Created Date: 10-13-88
Owner Tank Id: GS2
SWRCB Tank Id: 09-000-028491-000002
Tank Status: A
Capacity: 500
Active Date: 07-12-89
Tank Use: OIL
STG: W
Content: WASTE OIL
Number Of Tanks: 3

Status: Active
Comp Number: 28491
Number: 1
Board Of Equalization: 44-002884
Referral Date: 04-30-92
Action Date: 06-01-93
Created Date: 10-13-88
Owner Tank Id: Not reported
SWRCB Tank Id: 09-000-028491-000003
Tank Status: A
Capacity: 12000
Active Date: 04-30-92
Tank Use: M.V. FUEL
STG: P
Content: REG UNLEADED

PG&E EL DORADO SERVICE CENTER (Continued) **U001613521**

Number Of Tanks:	Not reported
Status:	Active
Comp Number:	28491
Number:	1
Board Of Equalization:	44-002884
Referral Date:	04-30-92
Action Date:	06-01-93
Created Date:	10-13-88
Owner Tank Id:	Not reported
SWRCB Tank Id:	09-000-028491-000004
Tank Status:	A
Capacity:	12000
Active Date:	04-30-92
Tank Use:	M.V. FUEL
STG:	P
Content:	DIESEL
Number Of Tanks:	Not reported

L144 **EL DORADO SERVICE CENTER** **RCRA-SQG** **1000137194**
ESE **4636 MISSOUR FLAT ROAD** **CAD981373434**
1/4-1/2 **PLACERVILLE, CA 95667**
0.256 mi.
1352 ft. **Site 10 of 13 in cluster L**

Relative:
Higher

Actual:
1803 ft.

RCRA-SQG:

Date form received by agency:	03/09/2006
Facility name:	EL DORADO SERVICE CENTER
Facility address:	4636 MISSOUR FLAT ROAD PLACERVILLE, CA 95667
EPA ID:	CAD981373434
Mailing address:	4801 OAKPORT STREET, BLDG. 2 OAKLAND, CA 94601
Contact:	LARRY DENISTON
Contact address:	Not reported Not reported
Contact country:	Not reported
Contact telephone:	(510) 437-2581
Contact email:	LCD1@PGE.COM
EPA Region:	09
Classification:	Small Small Quantity Generator
Description:	Handler: generates more than 100 and less than 1000 kg of hazardous waste during any calendar month and accumulates less than 6000 kg of hazardous waste at any time; or generates 100 kg or less of hazardous waste during any calendar month, and accumulates more than 1000 kg of hazardous waste at any time

Owner/Operator Summary:

Owner/operator name:	PACIFIC GAS AND ELECTRIC COMPANY
Owner/operator address:	Not reported Not reported
Owner/operator country:	US
Owner/operator telephone:	Not reported
Legal status:	Private
Owner/Operator Type:	Operator
Owner/Op start date:	01/01/1978
Owner/Op end date:	Not reported

EL DORADO SERVICE CENTER (Continued) **1000137194**

Owner/operator name: PG&E
Owner/operator address: 77 BEALE ST
SAN FRANCISCO, CA 94105
Owner/operator country: US
Owner/operator telephone: Not reported
Legal status: Private
Owner/Operator Type: Owner
Owner/Op start date: 01/01/1978
Owner/Op end date: Not reported

Owner/operator name: PG&E
Owner/operator address: Not reported
Not reported
Owner/operator country: US
Owner/operator telephone: Not reported
Legal status: Private
Owner/Operator Type: Operator
Owner/Op start date: 01/01/1978
Owner/Op end date: Not reported

Owner/operator name: PACIFIC GAS AND ELECTRIC COMPANY
Owner/operator address: 77 BEALE STREET
SAN FRANCISCO, CA 94105
Owner/operator country: US
Owner/operator telephone: Not reported
Legal status: Private
Owner/Operator Type: Owner
Owner/Op start date: 01/01/1978
Owner/Op end date: Not reported

Handler Activities Summary:
U.S. importer of hazardous waste: No
Mixed waste (haz. and radioactive): No
Recycler of hazardous waste: No
Transporter of hazardous waste: No
Treater, storer or disposer of HW: No
Underground injection activity: No
On-site burner exemption: No
Furnace exemption: No
Used oil fuel burner: No
Used oil processor: No
User oil refiner: No
Used oil fuel marketer to burner: No
Used oil Specification marketer: No
Used oil transfer facility: No
Used oil transporter: No

Historical Generators:
Date form received by agency: 03/09/2006
Facility name: EL DORADO SERVICE CENTER
Classification: Large Quantity Generator

Date form received by agency: 02/19/2004
Facility name: EL DORADO SERVICE CENTER
Site name: EL DORADO SVC CTR
Classification: Large Quantity Generator

EL DORADO SERVICE CENTER (Continued) **1000137194**

Date form received by agency: 09/01/1996
Facility name: EL DORADO SERVICE CENTER
Site name: PG & E EL DORADO SVC CR
Classification: Large Quantity Generator

Date form received by agency: 04/13/1990
Facility name: EL DORADO SERVICE CENTER
Site name: PG&E EL DORADO SERVICE CENTER
Classification: Large Quantity Generator

Date form received by agency: 02/04/1986
Facility name: EL DORADO SERVICE CENTER
Site name: PG & E EL DORADO SVC CR
Classification: Large Quantity Generator

Hazardous Waste Summary:

Waste code: D001
Waste name: IGNITABLE HAZARDOUS WASTES ARE THOSE WASTES WHICH HAVE A FLASHPOINT OF LESS THAN 140 DEGREES FAHRENHEIT AS DETERMINED BY A PENSKY-MARTENS CLOSED CUP FLASH POINT TESTER. ANOTHER METHOD OF DETERMINING THE FLASH POINT OF A WASTE IS TO REVIEW THE MATERIAL SAFETY DATA SHEET, WHICH CAN BE OBTAINED FROM THE MANUFACTURER OR DISTRIBUTOR OF THE MATERIAL. LACQUER THINNER IS AN EXAMPLE OF A COMMONLY USED SOLVENT WHICH WOULD BE CONSIDERED AS IGNITABLE HAZARDOUS WASTE.

Waste code: D018
Waste name: BENZENE

Waste code: F002
Waste name: THE FOLLOWING SPENT HALOGENATED SOLVENTS: TETRACHLOROETHYLENE, METHYLENE CHLORIDE, TRICHLOROETHYLENE, 1,1,1-TRICHLOROETHANE, CHLOROBENZENE, 1,1,2-TRICHLORO-1,2,2-TRIFLUOROETHANE, ORTHO-DICHLOROBENZENE, TRICHLOROFLUOROMETHANE, AND 1,1,2-TRICHLOROETHANE; ALL SPENT SOLVENT MIXTURES/BLENDS CONTAINING, BEFORE USE, A TOTAL OF TEN PERCENT OR MORE (BY VOLUME) OF ONE OR MORE OF THE ABOVE HALOGENATED SOLVENTS OR THOSE LISTED IN F001, F004, OR F005, AND STILL BOTTOMS FROM THE RECOVERY OF THESE SPENT SOLVENTS AND SPENT SOLVENT MIXTURES.

Waste code: F003
Waste name: THE FOLLOWING SPENT NON-HALOGENATED SOLVENTS: XYLENE, ACETONE, ETHYL ACETATE, ETHYL BENZENE, ETHYL ETHER, METHYL ISOBUTYL KETONE, N-BUTYL ALCOHOL, CYCLOHEXANONE, AND METHANOL; ALL SPENT SOLVENT MIXTURES/BLENDS CONTAINING, BEFORE USE, ONLY THE ABOVE SPENT NON-HALOGENATED SOLVENTS; AND ALL SPENT SOLVENT MIXTURES/BLENDS CONTAINING, BEFORE USE, ONE OR MORE OF THE ABOVE NON-HALOGENATED SOLVENTS, AND, A TOTAL OF TEN PERCENT OR MORE (BY VOLUME) OF ONE OR MORE OF THOSE SOLVENTS LISTED IN F001, F002, F004, AND F005, AND STILL BOTTOMS FROM THE RECOVERY OF THESE SPENT SOLVENTS AND SPENT SOLVENT MIXTURES.

Violation Status: No violations found

L145 ESE 1/4-1/2 0.263 mi. 1388 ft. — **EDUHSD TRANSPORTATION**, **4675 MISSOURI FLAT RD**, **PLACERVILLE, CA 95667** — **UST** — **U004126445** / **N/A**

Site 11 of 13 in cluster L

Relative: Higher
Actual: 1802 ft.

UST:
Facility ID: FA0000680
Latitude: 38.6960122
Longitude: -120.8217438
Permitting Agency: EL DORADO COUNTY

L146 ESE 1/4-1/2 0.263 mi. 1388 ft. — **EDUHSD TRANSPORTATION**, **4675 MISSOURI FLAT RD**, **PLACERVILLE, CA 95667** — **CUPA Listings** — **S103661044** / **N/A**

Site 12 of 13 in cluster L

Relative: Higher
Actual: 1802 ft.

CUPA EL DORADO:
PE: BUSINESS PLANS/SMALL BUSINESS
Status: Active, billable
Latitude: 39
Longitude: -121

PE: CUPA HW GENERAL
Status: Active, exempt from billing
Latitude: 39
Longitude: -121

PE: HAZARDOUS MATERIALS - STATE SURCHARGE
Status: Active, billable
Latitude: 39
Longitude: -121

PE: U.G.S.T. ANNUAL PERMIT
Status: Active, billable
Latitude: 39
Longitude: -121

PE: UGST - STATE SURCHARGE
Status: Active, billable
Latitude: 39
Longitude: -121

L147 ESE 1/4-1/2 0.263 mi. 1388 ft. — **4675 MISSOURI FLAT RD**, **PLACERVILLE, CA 95667** — **EDR US Hist Auto Stat** — **1015509288** / **N/A**

Site 13 of 13 in cluster L

Relative: Higher
Actual: 1802 ft.

EDR Historical Auto Stations:
Name: AUTOMOTIVE ENGINE
Year: 2004
Address: 4675 MISSOURI FLAT RD

148 ENE 1/4-1/2 0.292 mi. 1542 ft. | **TETERS AUTO WRECKERS**
4487 MISSOURI FLAT ROAD
PLACERVILLE, CA 95667 | **ENVIROSTOR** | **S102860835**
N/A

Relative: Higher

Actual: 1822 ft.

ENVIROSTOR:

Facility ID:	9500006
Status:	Refer: Other Agency
Status Date:	09/12/1995
Site Code:	Not reported
Site Type:	Evaluation
Site Type Detailed:	Evaluation
Acres:	1
NPL:	NO
Regulatory Agencies:	NONE SPECIFIED
Lead Agency:	NONE SPECIFIED
Program Manager:	Not reported
Supervisor:	Referred - Not Assigned
Division Branch:	Cleanup Sacramento
Assembly:	5
Senate:	1
Special Program:	* Rural County Survey Program
Restricted Use:	NO
Site Mgmt Req:	NONE SPECIFIED
Funding:	Not reported
Latitude:	38.7
Longitude:	-120.8222
APN:	NONE SPECIFIED
Past Use:	NONE SPECIFIED
Potential COC:	"10097 * UNSPECIFIED OIL CONTAINING WASTE * WASTE OIL & MIXED OIL Lead 30018"
Confirmed COC:	NONE SPECIFIED
Potential Description:	NONE SPECIFIED
Alias Name:	Not reported
Alias Type:	Not reported

Completed Info:

Completed Area Name:	Not reported
Completed Sub Area Name:	Not reported
Completed Document Type:	Not reported
Completed Date:	Not reported
Comments:	Not reported
Future Area Name:	Not reported
Future Sub Area Name:	Not reported
Future Document Type:	Not reported
Future Due Date:	Not reported
Schedule Area Name:	Not reported
Schedule Sub Area Name:	Not reported
Schedule Document Type:	Not reported
Schedule Due Date:	Not reported
Schedule Revised Date:	Not reported

H149 ENE 1/4-1/2 0.309 mi. 1634 ft. | **THE ROCK SPOT**
4465 MISSOURI FLAT RD
PLACERVILLE, CA 95667

Site 2 of 2 in cluster H

CUPA Listings | **S110984189**
N/A

Relative: Higher

Actual: 1821 ft.

CUPA EL DORADO:

PE:	CONTAMINATED SITE/CLEAN-UP
Status:	Inactive, non-billable
Latitude:	39
Longitude:	-121

PE:	BUSINESS PLANS/SMALL BUSINESS
Status:	Inactive, non-billable
Latitude:	Not reported
Longitude:	Not reported

N150 NE 1/4-1/2 0.312 mi. 1648 ft. | **SIERRA DOOR**
4415 MISSOURI FLAT RD
PLACERVILLE, CA 95667

Site 1 of 3 in cluster N

HIST CORTESE
LUST
CA FID UST
CUPA Listings
SWEEPS UST

S101581227
N/A

Relative: Higher

Actual: 1808 ft.

HIST CORTESE:

Region:	CORTESE
Facility County Code:	9
Reg By:	LTNKA
Reg Id:	090068

LUST:

Region:	STATE
Global Id:	T0601700050
Latitude:	38.7019795
Longitude:	-120.823637
Case Type:	LUST Cleanup Site
Status:	Completed - Case Closed
Status Date:	03/25/2010
Lead Agency:	EL DORADO COUNTY LOP
Case Worker:	RL
Local Agency:	EL DORADO COUNTY LOP
RB Case Number:	090068
LOC Case Number:	Not reported
File Location:	Local Agency
Potential Media Affect:	Aquifer used for drinking water supply
Potential Contaminants of Concern:	Gasoline
Site History:	Not reported

Click here to access the California GeoTracker records for this facility:

Contact:

Global Id:	T0601700050
Contact Type:	Regional Board Caseworker
Contact Name:	PETER MINKEL
Organization Name:	CENTRAL VALLEY RWQCB (REGION 5S)
Address:	11020 SUN CENTER DRIVE #200
City:	RANCHO CORDOVA
Email:	pminkel@waterboards.ca.gov
Phone Number:	Not reported

Global Id:	T0601700050

SIERRA DOOR (Continued) **S101581227**

Contact Type: Local Agency Caseworker
Contact Name: ROBERT LAURITZEN
Organization Name: EL DORADO COUNTY LOP
Address: 2850 Fairlane Ct., Building C
City: Placerville
Email: robert.lauritzen@edcgov.us
Phone Number: Not reported

Status History:
Global Id: T0601700050
Status: Open - Verification Monitoring
Status Date: 11/04/2009

Global Id: T0601700050
Status: Open - Case Begin Date
Status Date: 07/22/1992

Global Id: T0601700050
Status: Completed - Case Closed
Status Date: 03/25/2010

Global Id: T0601700050
Status: Open - Site Assessment
Status Date: 07/24/1992

Global Id: T0601700050
Status: Open - Site Assessment
Status Date: 06/23/2006

Regulatory Activities:
Global Id: T0601700050
Action Type: ENFORCEMENT
Date: 08/26/2009
Action: Notice to Comply

Global Id: T0601700050
Action Type: ENFORCEMENT
Date: 11/05/2009
Action: Staff Letter

Global Id: T0601700050
Action Type: ENFORCEMENT
Date: 09/30/2009
Action: Staff Letter

Global Id: T0601700050
Action Type: ENFORCEMENT
Date: 02/24/2010
Action: Closure/No Further Action Letter

Global Id: T0601700050
Action Type: ENFORCEMENT
Date: 02/24/2010
Action: LOP Case Closure Summary to RB

Global Id: T0601700050

SIERRA DOOR (Continued) **S101581227**

Action Type: ENFORCEMENT
Date: 10/01/2008
Action: Letter - Notice

Global Id: T0601700050
Action Type: ENFORCEMENT
Date: 03/25/2010
Action: LOP Case Closure Summary to RB

Global Id: T0601700050
Action Type: ENFORCEMENT
Date: 03/25/2010
Action: Closure/No Further Action Letter

Global Id: T0601700050
Action Type: ENFORCEMENT
Date: 06/13/2006
Action: Verbal Enforcement

Global Id: T0601700050
Action Type: ENFORCEMENT
Date: 05/03/2006
Action: Staff Letter

Global Id: T0601700050
Action Type: Other
Date: 01/01/1950
Action: Leak Discovery

Global Id: T0601700050
Action Type: RESPONSE
Date: 06/23/2006
Action: Soil and Water Investigation Workplan

Global Id: T0601700050
Action Type: ENFORCEMENT
Date: 06/29/2006
Action: Staff Letter

Global Id: T0601700050
Action Type: Other
Date: 01/01/1950
Action: Leak Reported

LUST REG 5:
Region: 5
Status: Pollution Characterization
Case Number: 090068
Case Type: Drinking Water Aquifer affected
Substance: GASOLINE
Staff Initials: PGM
Lead Agency: Regional
Program: LUST
MTBE Code: N/A

SIERRA DOOR (Continued) **S101581227**

CA FID UST:

Facility ID:	09000030
Regulated By:	UTNKI
Regulated ID:	Not reported
Cortese Code:	Not reported
SIC Code:	Not reported
Facility Phone:	9166263500
Mail To:	Not reported
Mailing Address:	466 OLIVE ORCHARD DR
Mailing Address 2:	Not reported
Mailing City,St,Zip:	PLACERVILLE 95667
Contact:	Not reported
Contact Phone:	Not reported
DUNs Number:	Not reported
NPDES Number:	Not reported
EPA ID:	Not reported
Comments:	Not reported
Status:	Inactive

CUPA EL DORADO:

PE:	BUSINESS PLANS/SMALL BUSINESS
Status:	Inactive, non-billable
Latitude:	Not reported
Longitude:	Not reported

PE:	CONTAMINATED SITE/CLEAN-UP
Status:	Inactive, non-billable
Latitude:	Not reported
Longitude:	Not reported

PE:	LOCAL OVERSITE PROGRAM (LOP) E5G073
Status:	Active, billable
Latitude:	Not reported
Longitude:	Not reported

PE:	UGST-GENERAL/PERMIT, TEMP. CLOSE, RENEW
Status:	Inactive, non-billable
Latitude:	Not reported
Longitude:	Not reported

SWEEPS UST:

Status:	Not reported
Comp Number:	464
Number:	Not reported
Board Of Equalization:	Not reported
Referral Date:	Not reported
Action Date:	Not reported
Created Date:	Not reported
Owner Tank Id:	Not reported
SWRCB Tank Id:	09-000-000464-000001
Tank Status:	Not reported
Capacity:	550
Active Date:	Not reported
Tank Use:	M.V. FUEL
STG:	PRODUCT
Content:	LEADED

SIERRA DOOR (Continued) **S101581227**

Number Of Tanks: 2

Status: Not reported
Comp Number: 464
Number: Not reported
Board Of Equalization: Not reported
Referral Date: Not reported
Action Date: Not reported
Created Date: Not reported
Owner Tank Id: Not reported
SWRCB Tank Id: 09-000-000464-000002
Tank Status: Not reported
Capacity: 550
Active Date: Not reported
Tank Use: M.V. FUEL
STG: PRODUCT
Content: DIESEL
Number Of Tanks: Not reported

N151 **COLLINS SANDBLASTING & PAINT** **CUPA Listings** **S110983829**
NE **4451 MISSOURI FLAT RD** **N/A**
1/4-1/2 **PLACERVILLE, CA 95667**
0.317 mi.
1672 ft. **Site 2 of 3 in cluster N**

Relative:
Higher

Actual:
1813 ft.

CUPA EL DORADO:
PE: CONTAMINATED SITE/CLEAN-UP
Status: Inactive, non-billable
Latitude: 39
Longitude: -121

PE: BUSINESS PLANS/SMALL BUSINESS
Status: Inactive, non-billable
Latitude: Not reported
Longitude: Not reported

PE: BUSINESS PLANS/SMALL BUSINESS
Status: Inactive, non-billable
Latitude: Not reported
Longitude: Not reported

N152 **EDR US Hist Auto Stat** **1015499946**
NE **4451 MISSOURI FLAT RD** **N/A**
1/4-1/2 **PLACERVILLE, CA 95667**
0.317 mi.
1672 ft. **Site 3 of 3 in cluster N**

Relative:
Higher

Actual:
1813 ft.

EDR Historical Auto Stations:
Name: KM TIRE INC
Year: 2001
Address: 4451 MISSOURI FLAT RD

Name: KM TIRE SERVICE INC
Year: 2003
Address: 4451 MISSOURI FLAT RD

(Continued) **1015499946**

Name: K M TIRE INC
Year: 2005
Address: 4451 MISSOURI FLAT RD

O153
SE
1/4-1/2
0.351 mi.
1853 ft.

DAWSON OIL CARDLOCK **UST** **U003786053**
321 PLEASANT VALLEY RD **N/A**
DIAMOND SPRINGS, CA 95619

Site 1 of 2 in cluster O

Relative:
Lower

Actual:
1762 ft.

UST:
Facility ID: FA0002252
Latitude: 38.694353
Longitude: -120.823257
Permitting Agency EL DORADO COUNTY

O154
SE
1/4-1/2
0.351 mi.
1853 ft.

DAWSON OIL **CUPA Listings** **S109428960**
321 PLEASANT VALLEY RD **N/A**
DIAMOND SPRINGS, CA 95619

Site 2 of 2 in cluster O

Relative:
Lower

Actual:
1762 ft.

CUPA EL DORADO:
PE: APSA - LESS THAN 10,000
Status: Active, billable
Latitude: 39
Longitude: -121

PE: BUSINESS PLANS/LARGE BUSINESSES
Status: Active, billable
Latitude: 39
Longitude: -121

PE: CUPA HW GENERAL
Status: Active, exempt from billing
Latitude: 39
Longitude: -121

PE: HAZARDOUS MATERIALS - STATE SURCHARGE
Status: Active, billable
Latitude: 39
Longitude: -121

PE: U.G.S.T. ANNUAL PERMIT
Status: Active, billable
Latitude: 39
Longitude: -121

PE: UGST - STATE SURCHARGE
Status: Active, billable
Latitude: 39
Longitude: -121

155 ENE 1/4-1/2 0.355 mi. 1873 ft.

RUSSELL J GRIBBLE
3550 CHINA GARDEN RD NO 62
PLACERVILLE, CA 95667

RCRA NonGen / NLR **1004676904**
FINDS **CAR000090944**

Relative: Higher

Actual: 1804 ft.

RCRA NonGen / NLR:

Date form received by agency:	01/30/2001
Facility name:	RUSSELL J GRIBBLE
Facility address:	3550 CHINA GARDEN RD NO 62 PLACERVILLE, CA 95667
EPA ID:	CAR000090944
Contact:	RUSSELL GRIBBLE
Contact address:	3550 CHINA GARDEN RD NO 62 PLACERVILLE, CA 95667
Contact country:	US
Contact telephone:	(530) 626-4657
Contact email:	Not reported
EPA Region:	09
Classification:	Non-Generator
Description:	Handler: Non-Generators do not presently generate hazardous waste

Owner/Operator Summary:

Owner/operator name:	RUSSELL J GRIBBLE
Owner/operator address:	3550 CHINA GARDEN RD NO 62 PLACERVILLE, CA 95667
Owner/operator country:	Not reported
Owner/operator telephone:	(530) 626-4657
Legal status:	Private
Owner/Operator Type:	Owner
Owner/Op start date:	Not reported
Owner/Op end date:	Not reported

Handler Activities Summary:

U.S. importer of hazardous waste:	No
Mixed waste (haz. and radioactive):	No
Recycler of hazardous waste:	No
Transporter of hazardous waste:	Yes
Treater, storer or disposer of HW:	No
Underground injection activity:	No
On-site burner exemption:	No
Furnace exemption:	No
Used oil fuel burner:	No
Used oil processor:	No
User oil refiner:	No
Used oil fuel marketer to burner:	No
Used oil Specification marketer:	No
Used oil transfer facility:	No
Used oil transporter:	No

Violation Status: No violations found

FINDS:

Registry ID: 110012242821

Environmental Interest/Information System

RCRAInfo is a national information system that supports the Resource Conservation and Recovery Act (RCRA) program through the tracking of

RUSSELL J GRIBBLE (Continued) **1004676904**

events and activities related to facilities that generate, transport, and treat, store, or dispose of hazardous waste. RCRAInfo allows RCRA program staff to track the notification, permit, compliance, and corrective action activities required under RCRA.

156
East
1/4-1/2
0.446 mi.
2357 ft.

OXYGEN SERVICE & SUPPLY CO
13 CHINA GARDEN RD
DIAMOND SPRINGS, CA 95619

CERC-NFRAP **1003877982**
CAD982358681

Relative:
Higher

Actual:
1844 ft.

CERC-NFRAP:

Site ID:	0900108
Federal Facility:	Not a Federal Facility
NPL Status:	Not on the NPL
Non NPL Status:	NFRAP-Site does not qualify for the NPL based on existing information

CERCLIS-NFRAP Site Contact Details:

Contact Sequence ID:	13285316.00000
Person ID:	13003854.00000
Contact Sequence ID:	13290911.00000
Person ID:	13003858.00000
Contact Sequence ID:	13296769.00000
Person ID:	13004003.00000

CERCLIS-NFRAP Assessment History:

Action:	DISCOVERY
Date Started:	/ /
Date Completed:	12/01/87
Priority Level:	Not reported
Action:	ARCHIVE SITE
Date Started:	/ /
Date Completed:	09/01/88
Priority Level:	Not reported
Action:	PRELIMINARY ASSESSMENT
Date Started:	/ /
Date Completed:	09/01/88
Priority Level:	NFRAP-Site does not qualify for the NPL based on existing information

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157
South
1/4-1/2
0.491 mi.
2592 ft.

STEVE'S CHEAPER
130 PLEASANT VALLEY
DIAMOND SPRINGS, CA 95619

HIST CORTESE **S102596901**
LUST **N/A**
CUPA Listings
SWEEPS UST

Relative:
Lower

Actual:
1748 ft.

HIST CORTESE:

Region:	CORTESE
Facility County Code:	9
Reg By:	LTNKA
Reg Id:	090096

STEVE'S CHEAPER (Continued) **S102596901**

LUST:

Region:	STATE
Global Id:	T0601700077
Latitude:	38.688922579
Longitude:	-120.831051235
Case Type:	LUST Cleanup Site
Status:	Completed - Case Closed
Status Date:	01/02/2013
Lead Agency:	EL DORADO COUNTY LOP
Case Worker:	RL
Local Agency:	EL DORADO COUNTY LOP
RB Case Number:	090096
LOC Case Number:	00077
File Location:	Local Agency
Potential Media Affect:	Aquifer used for drinking water supply
Potential Contaminants of Concern:	Gasoline
Site History:	The first three monitoring wells were installed on site in November 1999. By the time of the initiation of the off site investigation in the fall of 2001, the average reported MtBE concentrations in these three wells was 50,083 "g/L. The average concentration in these three wells for the last four semi-annual monitoring events is 566 "g/L. This represents a 98.9 percent reduction since onsite remediation began in early 2002. Off site investigation continued through to the summer of 2004 with concurrent remedial activities. By August 2004 there were 29 monitoring wells and two extraction wells in use. Eleven of the monitoring wells define the outward extent or edges of the MtBE plume, comprising the wells that have consistently been reported with MtBE below the drinking water standard. A Sensitive Receptor Survey was completed in late 2000. There were no water supply wells located within the extent of the plume, later defined, and only five wells were found in the 2000 foot search radius. The closest was over 500 feet cross gradient of the plume and has subsequently been removed. Groundwater as a potential source vapor emanations was addressed in workplan dated January 26, 2007 indicating that there were no areas that could potentially be impacted to investigate. This was affirmed in the workplan approval letter from the Regional Board dated 6 February 2007. Patterson Lake is situated downgradient of the southwesterly directed plume that originated at the property now owned by Tower Energy Group. The lake has functioned as a hydraulic barrier, lowering the groundwater gradient in its area and slowing the preremedial advancement of the plume. Three 10,000 gallon UST's and associated piping were removed from the site in the summer of 2010 station upgrades activities.

Click here to access the California GeoTracker records for this facility:

Contact:

Global Id:	T0601700077
Contact Type:	Regional Board Caseworker
Contact Name:	PETER MINKEL
Organization Name:	CENTRAL VALLEY RWQCB (REGION 5S)
Address:	11020 SUN CENTER DRIVE #200
City:	RANCHO CORDOVA
Email:	pminkel@waterboards.ca.gov
Phone Number:	Not reported

Global Id: T0601700077

STEVE'S CHEAPER (Continued) **S102596901**

Contact Type:	Local Agency Caseworker
Contact Name:	ROBERT LAURITZEN
Organization Name:	EL DORADO COUNTY LOP
Address:	2850 Fairlane Ct., Building C
City:	Placerville
Email:	robert.lauritzen@edcgov.us
Phone Number:	Not reported

Status History:

Global Id:	T0601700077
Status:	Open - Verification Monitoring
Status Date:	11/06/2009
Global Id:	T0601700077
Status:	Open - Remediation
Status Date:	04/08/2004
Global Id:	T0601700077
Status:	Open - Remediation
Status Date:	07/11/2005
Global Id:	T0601700077
Status:	Open - Remediation
Status Date:	07/30/2007
Global Id:	T0601700077
Status:	Open - Remediation
Status Date:	03/06/2008
Global Id:	T0601700077
Status:	Open - Remediation
Status Date:	03/08/2008
Global Id:	T0601700077
Status:	Completed - Case Closed
Status Date:	01/02/2013
Global Id:	T0601700077
Status:	Open - Site Assessment
Status Date:	06/22/1997
Global Id:	T0601700077
Status:	Open - Case Begin Date
Status Date:	06/22/1997
Global Id:	T0601700077
Status:	Open - Site Assessment
Status Date:	12/01/2000
Global Id:	T0601700077
Status:	Open - Site Assessment
Status Date:	04/18/2001
Global Id:	T0601700077
Status:	Open - Eligible for Closure
Status Date:	10/10/2012

STEVE'S CHEAPER (Continued) **S102596901**

Regulatory Activities:

Global Id:	T0601700077
Action Type:	RESPONSE
Date:	01/15/2003
Action:	Monitoring Report - Quarterly
Global Id:	T0601700077
Action Type:	RESPONSE
Date:	04/30/2007
Action:	Monitoring Report - Quarterly
Global Id:	T0601700077
Action Type:	RESPONSE
Date:	10/30/2007
Action:	Other Report / Document
Global Id:	T0601700077
Action Type:	ENFORCEMENT
Date:	08/24/2012
Action:	Staff Letter
Global Id:	T0601700077
Action Type:	ENFORCEMENT
Date:	06/08/2012
Action:	Staff Letter
Global Id:	T0601700077
Action Type:	ENFORCEMENT
Date:	02/06/2007
Action:	Staff Letter
Global Id:	T0601700077
Action Type:	RESPONSE
Date:	07/15/2003
Action:	Monitoring Report - Quarterly
Global Id:	T0601700077
Action Type:	RESPONSE
Date:	10/15/2003
Action:	Monitoring Report - Quarterly
Global Id:	T0601700077
Action Type:	RESPONSE
Date:	01/15/2004
Action:	Monitoring Report - Quarterly
Global Id:	T0601700077
Action Type:	RESPONSE
Date:	04/30/2006
Action:	Monitoring Report - Quarterly
Global Id:	T0601700077
Action Type:	ENFORCEMENT
Date:	08/12/2010
Action:	Staff Letter
Global Id:	T0601700077

STEVE'S CHEAPER (Continued) **S102596901**

Action Type: RESPONSE
Date: 04/30/2008
Action: Remedial Progress Report

Global Id: T0601700077
Action Type: RESPONSE
Date: 01/31/2008
Action: Remedial Progress Report

Global Id: T0601700077
Action Type: REMEDIATION
Date: 01/01/1950
Action: Pump & Treat (P&T) Groundwater

Global Id: T0601700077
Action Type: Other
Date: 01/01/1950
Action: Leak Began

Global Id: T0601700077
Action Type: ENFORCEMENT
Date: 10/01/2008
Action: Letter - Notice

Global Id: T0601700077
Action Type: RESPONSE
Date: 01/31/2006
Action: Monitoring Report - Quarterly

Global Id: T0601700077
Action Type: RESPONSE
Date: 04/30/2008
Action: Other Report / Document

Global Id: T0601700077
Action Type: ENFORCEMENT
Date: 01/02/2013
Action: Closure/No Further Action Letter

Global Id: T0601700077
Action Type: ENFORCEMENT
Date: 02/01/2007
Action: Site Visit / Inspection / Sampling

Global Id: T0601700077
Action Type: RESPONSE
Date: 04/15/2003
Action: Monitoring Report - Quarterly

Global Id: T0601700077
Action Type: ENFORCEMENT
Date: 04/15/2004
Action: Staff Letter

Global Id: T0601700077
Action Type: ENFORCEMENT
Date: 02/27/2009

STEVE'S CHEAPER (Continued) **S102596901**

Action: Staff Letter

Global Id: T0601700077
Action Type: RESPONSE
Date: 04/15/0204
Action: Monitoring Report - Quarterly

Global Id: T0601700077
Action Type: RESPONSE
Date: 10/15/2004
Action: Monitoring Report - Quarterly

Global Id: T0601700077
Action Type: ENFORCEMENT
Date: 04/11/2010
Action: Staff Letter

Global Id: T0601700077
Action Type: ENFORCEMENT
Date: 10/24/2000
Action: Staff Letter

Global Id: T0601700077
Action Type: ENFORCEMENT
Date: 07/11/2001
Action: Staff Letter

Global Id: T0601700077
Action Type: ENFORCEMENT
Date: 10/17/2001
Action: Staff Letter

Global Id: T0601700077
Action Type: ENFORCEMENT
Date: 05/26/2000
Action: Staff Letter

Global Id: T0601700077
Action Type: ENFORCEMENT
Date: 04/20/2001
Action: Staff Letter

Global Id: T0601700077
Action Type: Other
Date: 01/01/1950
Action: Leak Discovery

Global Id: T0601700077
Action Type: ENFORCEMENT
Date: 08/12/2010
Action: Staff Letter

Global Id: T0601700077
Action Type: RESPONSE
Date: 07/15/2005
Action: Monitoring Report - Quarterly

STEVE'S CHEAPER (Continued) **S102596901**

Global Id: T0601700077
Action Type: RESPONSE
Date: 01/31/2007
Action: Other Workplan

Global Id: T0601700077
Action Type: RESPONSE
Date: 01/31/2007
Action: Other Report / Document

Global Id: T0601700077
Action Type: ENFORCEMENT
Date: 02/16/2012
Action: Staff Letter

Global Id: T0601700077
Action Type: ENFORCEMENT
Date: 10/30/2012
Action: LOP Case Closure Summary to RB

Global Id: T0601700077
Action Type: RESPONSE
Date: 10/31/2005
Action: Monitoring Report - Quarterly

Global Id: T0601700077
Action Type: RESPONSE
Date: 07/30/2007
Action: Remedial Progress Report

Global Id: T0601700077
Action Type: ENFORCEMENT
Date: 12/19/2006
Action: Staff Letter

Global Id: T0601700077
Action Type: ENFORCEMENT
Date: 02/27/2004
Action: Staff Letter

Global Id: T0601700077
Action Type: ENFORCEMENT
Date: 07/23/1997
Action: Referral to Regional Board

Global Id: T0601700077
Action Type: RESPONSE
Date: 01/31/2007
Action: Monitoring Report - Quarterly

Global Id: T0601700077
Action Type: RESPONSE
Date: 12/29/2006
Action: Other Report / Document

Global Id: T0601700077
Action Type: RESPONSE

STEVE'S CHEAPER (Continued) **S102596901**

Date: 07/30/2006
Action: Monitoring Report - Quarterly

Global Id: T0601700077
Action Type: ENFORCEMENT
Date: 04/10/2007
Action: Meeting

Global Id: T0601700077
Action Type: ENFORCEMENT
Date: 10/24/2006
Action: * Verbal Communication

Global Id: T0601700077
Action Type: ENFORCEMENT
Date: 08/25/2010
Action: Staff Letter

Global Id: T0601700077
Action Type: RESPONSE
Date: 10/31/2006
Action: Monitoring Report - Quarterly

Global Id: T0601700077
Action Type: ENFORCEMENT
Date: 02/25/2002
Action: File review

Global Id: T0601700077
Action Type: ENFORCEMENT
Date: 07/25/2002
Action: File review

Global Id: T0601700077
Action Type: ENFORCEMENT
Date: 07/26/2002
Action: File review

Global Id: T0601700077
Action Type: RESPONSE
Date: 04/09/2004
Action: Other Workplan

Global Id: T0601700077
Action Type: RESPONSE
Date: 07/15/2004
Action: Monitoring Report - Quarterly

Global Id: T0601700077
Action Type: RESPONSE
Date: 01/31/2005
Action: Monitoring Report - Quarterly

Global Id: T0601700077
Action Type: RESPONSE
Date: 04/30/2005
Action: Monitoring Report - Quarterly

STEVE'S CHEAPER (Continued) **S102596901**

Global Id: T0601700077
Action Type: RESPONSE
Date: 04/15/2004
Action: Monitoring Report - Quarterly

Global Id: T0601700077
Action Type: Other
Date: 01/01/1950
Action: Leak Stopped

Global Id: T0601700077
Action Type: Other
Date: 01/01/1950
Action: Leak Reported

Global Id: T0601700077
Action Type: RESPONSE
Date: 04/30/2007
Action: Interim Remedial Action Report

Global Id: T0601700077
Action Type: ENFORCEMENT
Date: 09/30/2012
Action: Letter - Notice

Global Id: T0601700077
Action Type: REMEDIATION
Date: 01/01/1950
Action: In Situ Physical/Chemical Treatment (other than SVE)

Global Id: T0601700077
Action Type: REMEDIATION
Date: 01/01/1950
Action: Other (Use Description Field)

LUST REG 5:
Region: 5
Status: Remedial action (cleanup) Underway
Case Number: 090096
Case Type: Drinking Water Aquifer affected
Substance: GASOLINE
Staff Initials: PGM
Lead Agency: Regional
Program: LUST
MTBE Code: 8

CUPA EL DORADO:
PE: BUSINESS PLANS/SMALL BUSINESS
Status: Active, billable
Latitude: 39
Longitude: -121

PE: CONTAMINATED SITE/CLEAN-UP
Status: Active, billable
Latitude: 39

STEVE'S CHEAPER (Continued) **S102596901**

Longitude: -121

PE: CUPA HW GENERAL
Status: Active, exempt from billing
Latitude: 39
Longitude: -121

PE: HAZARDOUS MATERIALS - STATE SURCHARGE
Status: Active, billable
Latitude: 39
Longitude: -121

PE: LOCAL OVERSITE PROGRAM (LOP) E5G073
Status: Active, billable
Latitude: 39
Longitude: -121

PE: U.G.S.T. ANNUAL PERMIT
Status: Active, billable
Latitude: 39
Longitude: -121

PE: UGST - STATE SURCHARGE
Status: Active, billable
Latitude: 39
Longitude: -121

SWEEPS UST:
Status: Active
Comp Number: 358
Number: 1
Board Of Equalization: Not reported
Referral Date: 11-12-92
Action Date: 06-01-93
Created Date: 06-01-93
Owner Tank Id: 182P
SWRCB Tank Id: 09-000-000358-000001
Tank Status: A
Capacity: 12000
Active Date: 11-12-92
Tank Use: M.V. FUEL
STG: P
Content: PRM UNLEADED
Number Of Tanks: 3

Status: Active
Comp Number: 358
Number: 1
Board Of Equalization: Not reported
Referral Date: 11-12-92
Action Date: 06-01-93
Created Date: 06-01-93
Owner Tank Id: 182U
SWRCB Tank Id: 09-000-000358-000002
Tank Status: A
Capacity: 12000
Active Date: 11-12-92

STEVE'S CHEAPER (Continued) **S102596901**

Tank Use:	M.V. FUEL
STG:	P
Content:	REG UNLEADED
Number Of Tanks:	Not reported

Status:	Active
Comp Number:	358
Number:	1
Board Of Equalization:	Not reported
Referral Date:	11-12-92
Action Date:	06-01-93
Created Date:	06-01-93
Owner Tank Id:	182S
SWRCB Tank Id:	09-000-000358-000003
Tank Status:	A
Capacity:	12000
Active Date:	11-12-92
Tank Use:	M.V. FUEL
STG:	P
Content:	PRM UNLEADED
Number Of Tanks:	Not reported

158
ESE
1/2-1
0.583 mi.
3076 ft.

FORMER SS
493 MAIN
DIAMOND SPRINGS, CA 95619

HIST CORTESE **S102423350**
LUST **N/A**

Relative:
Higher

Actual:
1787 ft.

HIST CORTESE:

Region:	CORTESE
Facility County Code:	9
Reg By:	LTNKA
Reg Id:	090065

LUST:

Region:	STATE
Global Id:	T0601700047
Latitude:	38.69424
Longitude:	-120.817803
Case Type:	LUST Cleanup Site
Status:	Completed - Case Closed
Status Date:	06/22/1992
Lead Agency:	CENTRAL VALLEY RWQCB (REGION 5S)
Case Worker:	PGM
Local Agency:	Not reported
RB Case Number:	090065
LOC Case Number:	Not reported
File Location:	Not reported
Potential Media Affect:	Soil
Potential Contaminants of Concern:	Gasoline
Site History:	Not reported

Click here to access the California GeoTracker records for this facility:

Contact:

Global Id:	T0601700047
Contact Type:	Regional Board Caseworker
Contact Name:	PETER MINKEL

FORMER SS (Continued) **S102423350**

Organization Name: CENTRAL VALLEY RWQCB (REGION 5S)
Address: 11020 SUN CENTER DRIVE #200
City: RANCHO CORDOVA
Email: pminkel@waterboards.ca.gov
Phone Number: Not reported

Status History:
Global Id: T0601700047
Status: Completed - Case Closed
Status Date: 06/22/1992

Global Id: T0601700047
Status: Open - Case Begin Date
Status Date: 02/28/1992

Global Id: T0601700047
Status: Open - Site Assessment
Status Date: 04/01/1992

Regulatory Activities:
Global Id: T0601700047
Action Type: ENFORCEMENT
Date: 11/13/1996
Action: Closure/No Further Action Letter

Global Id: T0601700047
Action Type: Other
Date: 01/01/1950
Action: Leak Discovery

Global Id: T0601700047
Action Type: Other
Date: 01/01/1950
Action: Leak Reported

LUST REG 5:
Region: 5
Status: Case Closed
Case Number: 090065
Case Type: Soil only
Substance: GASOLINE
Staff Initials: PGM
Lead Agency: Regional
Program: LUST
MTBE Code: N/A

159 SW 1/2-1 0.817 mi. 4315 ft.

BOB S SALVAGE SCRAP METAL
4468 FORNI RD
EL DORADO, CA 95623

NPDES **S103660087**
ENVIROSTOR **N/A**
WDS

Relative: Lower

Actual: 1684 ft.

NPDES:

Npdes Number:	CAS000001
Facility Status:	Active
Agency Id:	0
Region:	5S
Regulatory Measure Id:	198432
Order No:	97-03-DWQ
Regulatory Measure Type:	Enrollee
Place Id:	Not reported
WDID:	5S09I016774
Program Type:	Industrial
Adoption Date Of Regulatory Measure:	Not reported
Effective Date Of Regulatory Measure:	09/13/2001
Expiration Date Of Regulatory Measure:	Not reported
Termination Date Of Regulatory Measure:	Not reported
Discharge Name:	Robert W Ameral Sr
Discharge Address:	PO Box 782
Discharge City:	El Dorado
Discharge State:	California
Discharge Zip:	95623

ENVIROSTOR:

Facility ID:	9500005
Status:	Refer: Other Agency
Status Date:	11/16/1994
Site Code:	Not reported
Site Type:	Evaluation
Site Type Detailed:	Evaluation
Acres:	1
NPL:	NO
Regulatory Agencies:	NONE SPECIFIED
Lead Agency:	NONE SPECIFIED
Program Manager:	Not reported
Supervisor:	Referred - Not Assigned
Division Branch:	Cleanup Sacramento
Assembly:	5
Senate:	1
Special Program:	* Rural County Survey Program
Restricted Use:	NO
Site Mgmt Req:	NONE SPECIFIED
Funding:	Not reported
Latitude:	38.68825
Longitude:	-120.8428
APN:	NONE SPECIFIED
Past Use:	NONE SPECIFIED
Potential COC:	"10196 * WASTE OIL & MIXED OIL Lead 30018"
Confirmed COC:	NONE SPECIFIED
Potential Description:	NONE SPECIFIED
Alias Name:	Not reported
Alias Type:	Not reported

Completed Info:

Completed Area Name:	Not reported

BOB S SALVAGE SCRAP METAL (Continued) **S103660087**

Completed Sub Area Name: Not reported
Completed Document Type: Not reported
Completed Date: Not reported
Comments: Not reported

Future Area Name: Not reported
Future Sub Area Name: Not reported
Future Document Type: Not reported
Future Due Date: Not reported
Schedule Area Name: Not reported
Schedule Sub Area Name: Not reported
Schedule Document Type: Not reported
Schedule Due Date: Not reported
Schedule Revised Date: Not reported

CA WDS:
Facility ID: 5S 09I011754
Facility Type: Other - Does not fall into the category of Municipal/Domestic, Industrial, Agricultural or Solid Waste (Class I, II or III)
Facility Status: Active - Any facility with a continuous or seasonal discharge that is under Waste Discharge Requirements.
NPDES Number: CAS000001 The 1st 2 characters designate the state. The remaining 7 are assigned by the Regional Board
Subregion: 0
Facility Telephone: 5306221721
Facility Contact: CATTERLIN KIT
Agency Name: CATERLINS TRUCK DISMANTLING
Agency Address: 4468 FORNI RD
Agency City,St,Zip: EL DORADO 95623
Agency Contact: CATTERLIN KIT
Agency Telephone: 5306221721
Agency Type: Private
SIC Code: 5015
SIC Code 2: Not reported
Primary Waste Type: Nonhazardous Solid Wastes/Influent or Solid Wastes that contain nonhazardous putrescible and non putrescible solid, semisolid, and liquid wastes (E.G., garbage, trash, refuse, paper, demolition and construction wastes, manure, vegetable or animal solid and semisolid waste).
Primary Waste: STORMS
Waste Type2: Not reported
Waste2: Stormwater Runoff
Primary Waste Type: Nonhazardous Solid Wastes/Influent or Solid Wastes that contain nonhazardous putrescible and non putrescible solid, semisolid, and liquid wastes (E.G., garbage, trash, refuse, paper, demolition and construction wastes, manure, vegetable or animal solid and semisolid waste).
Secondary Waste: Not reported
Secondary Waste Type: Not reported
Design Flow: 0
Baseline Flow: 0
Reclamation: No reclamation requirements associated with this facility.
POTW: The facility is not a POTW.
Treat To Water: Minor Threat to Water Quality. A violation of a regional board order should cause a relatively minor impairment of beneficial uses compared to a major or minor threat. Not: All nurds without a TTWQ will be considered a minor threat to water quality unless coded at a higher

BOB S SALVAGE SCRAP METAL (Continued) **S103660087**

Level. A Zero (0) may be used to code those NURDS that are found to represent no threat to water quality.

Complexity: Category C - Facilities having no waste treatment systems, such as cooling water dischargers or thosewho must comply through best management practices, facilities with passive waste treatment and disposal systems, such as septic systems with subsurface disposal, or dischargers having waste storage systems with land disposal such as dairy waste ponds.

Count: 39 records.

ORPHAN SUMMARY

City	EDR ID	Site Name	Site Address	Zip	Database(s)
DIAMOND SPRINGS	S110984010	QUIK STOP MARKET #161	4185 HWY 49	95619	CUPA Listings
DIAMOND SPRINGS	A100323667	EL DORADO DISPOSAL SERVICE	3940 HWY 49		AST
DIAMOND SPRINGS	1003878551	OLD CALDOR LUMBER CO YD	HWY 49 & FLAT RD	95619	CERC-NFRAP
DIAMOND SPRINGS	S106925365	DIAMOND INDUSTRIAL PARK	BRIGHT CT	95619	SWEEPS UST
DIAMOND SPRINGS	S113044079	EURO TECH	6391 CAPITOL AVENUE STE A	95667	HAZNET
DIAMOND SPRINGS	S111456091	RESCO PRINTING	6160 F ENTERPRISE DR STE F	95619	CUPA Listings
DIAMOND SPRINGS	S111455804	ADVANCED MOBILE AUTO SVCS	6221 L ENTERPRISE DR J	95619	CUPA Listings
DIAMOND SPRINGS	S111455900	EID HERBERT GREEN LIFT STATION	FORNI & MISSOURI FLAT RD	95619	CUPA Listings
DIAMOND SPRINGS	S113074339	EAGLE PRESS	333 INDUSTRIAL DRIVE	95619	HAZNET
DIAMOND SPRINGS	S113088887	KEVINS BODYWORKS	4510 MISSOURI FLAT RD	95619	HAZNET
DIAMOND SPRINGS	S111455848	CELEBRITY, INC. - HM	4502 MISSOURI FLAT RD	95619	CUPA Listings
DIAMOND SPRINGS	S110983986	PG&E MISSOURI FLAT SUBSTATION	4636 MISSOURI FLAT RD	95619	CUPA Listings
DIAMOND SPRINGS	S110983853	J & S PAVING	4600 MISSOURI FLAT RD	95619	CUPA Listings
EL DORADO	S110983769	EQUIPMENT SALES	5137 HWY 49	95623	CUPA Listings
EL DORADO	S106925766	EL DORADO EXXON	HWY 49 & PLEASANT VL RD	95623	SWEEPS UST
EL DORADO	S112859583	R. ROBT. WATSON	CRYSTAL AND STATE HWY 49	95623	HAZNET
EL DORADO	S111455913	EL DORADO COUNTY D.O.T.	FORNI RD	95623	CUPA Listings
EL DORADO	S106927890	JOHN FORNI INC.	OFF HWY 49 NEAR EL D	95623	SWEEPS UST
EL DORADO	S105023620	GEORGES PIT STOP	PLEASANT VALLEY RD/HWY 49	95623	HIST CORTESE, LUST
KIRKWOOD	S105256635	KIRKWOOD MEADOWS WWTF	HWY 88	95667	WDS
ORLAND	A100324089	JENSEN PRECAST	7210 HIGHWAY 32	95623	AST
PLACERVILLE	S113003931	PG & E CHILI BAR POWERHOUSE	HWY 193 3 MI N OF P'VILLE	95667	HAZNET
PLACERVILLE	S112862715	PLACERVILLE INDUSTRIES	11380 HWY 193	95667	HAZNET
PLACERVILLE	1000137193	PG & E CHILI BAR POWERHOUSE	HWY 193 3 MI N OF P'VILLE	95667	RCRA-SQG
PLACERVILLE	S110983964	OLSON'S GARAGE	2488 HWY 49	95667	CUPA Listings
PLACERVILLE	1015732828	ELDORADO DISPOSAL SERVICE INC	3940 HWY 49	95667	CERC-NFRAP, RCRA NonGen / NLR
PLACERVILLE	S110737096	US50 MO FLAT RD I C RECONSTRUCTION	US 50 MISSOURI FLAT RD INTERCH	95667	NPDES
PLACERVILLE	S112940856	CALTRANS DIST 3/CONSTR/EA03-3C4904	HWY 89 PM 17.5-17.8	95667	HAZNET
PLACERVILLE	S112898007	US FOREST SERVICE/EL DORADO NAT'L	ON CARSON RD, 2.5MI NE OF HWY	95667	HAZNET
PLACERVILLE	S109443867	FORNI RETAIL PLAZA	NW CORNER FORNI RD MISSOURI FL	95667	NPDES
PLACERVILLE	S110983842	HOPKINS TERMITE CONTROL	6221 ENTERPRISE DR	95667	CUPA Listings
PLACERVILLE	S112284910	SIERRA PACIFIC INDUSTRIES - HAZEL	HAZEL CREEK MINE RD, S OF HWY	95667	SPILLS 90
PLACERVILLE	S109287665	SIERRA PACIFIC INDUSTRIES - HAZEL	HAZEL CREEK MINE RD, S OF HWY	95667	LDS
PLACERVILLE	S110983476	ALL POINTS WELDING	6641 MERCHANDISE WAY UNIT A	95667	CUPA Listings
PLACERVILLE	1004676957	ALBERTSONS NO 7256	3966 A MISSOURI FLAT RD	95667	RCRA NonGen / NLR, FINDS, CUPA Listings
PLACERVILLE	S111215928	POINT VIEW DRIVE EXTENSION	POINT VIEW DRIVE AT HWY 50	95667	NPDES
PLACERVILLE	S112894207	J & M LAND RESTORATION INC	POLLACK PINES/HWY 50,1/2 MI SL	95667	HAZNET
PLACERVILLE	S110733655	HAPA LN APN 0892 022 34 100	STATE HWY 49 E OF EMMERSON RD	95667	NPDES
POLLOCK PINES	S113003928	PG&E CAMP 5 HYDRO SVC CTR	CAMP 5 HWY 50	95667	HAZNET

GOVERNMENT RECORDS SEARCHED / DATA CURRENCY TRACKING

To maintain currency of the following federal and state databases, EDR contacts the appropriate governmental agency on a monthly or quarterly basis, as required.

Number of Days to Update: Provides confirmation that EDR is reporting records that have been updated within 90 days from the date the government agency made the information available to the public.

STANDARD ENVIRONMENTAL RECORDS

Federal NPL site list

NPL: National Priority List

National Priorities List (Superfund). The NPL is a subset of CERCLIS and identifies over 1,200 sites for priority cleanup under the Superfund Program. NPL sites may encompass relatively large areas. As such, EDR provides polygon coverage for over 1,000 NPL site boundaries produced by EPA's Environmental Photographic Interpretation Center (EPIC) and regional EPA offices.

Date of Government Version: 10/25/2013
Date Data Arrived at EDR: 11/11/2013
Date Made Active in Reports: 01/28/2014
Number of Days to Update: 78

Source: EPA
Telephone: N/A
Last EDR Contact: 04/08/2014
Next Scheduled EDR Contact: 07/21/2014
Data Release Frequency: Quarterly

NPL Site Boundaries

Sources:

EPA's Environmental Photographic Interpretation Center (EPIC)
Telephone: 202-564-7333

EPA Region 1
Telephone 617-918-1143

EPA Region 6
Telephone: 214-655-6659

EPA Region 3
Telephone 215-814-5418

EPA Region 7
Telephone: 913-551-7247

EPA Region 4
Telephone 404-562-8033

EPA Region 8
Telephone: 303-312-6774

EPA Region 5
Telephone 312-886-6686

EPA Region 9
Telephone: 415-947-4246

EPA Region 10
Telephone 206-553-8665

Proposed NPL: Proposed National Priority List Sites

A site that has been proposed for listing on the National Priorities List through the issuance of a proposed rule in the Federal Register. EPA then accepts public comments on the site, responds to the comments, and places on the NPL those sites that continue to meet the requirements for listing.

Date of Government Version: 10/25/2013
Date Data Arrived at EDR: 11/11/2013
Date Made Active in Reports: 01/28/2014
Number of Days to Update: 78

Source: EPA
Telephone: N/A
Last EDR Contact: 04/08/2014
Next Scheduled EDR Contact: 07/21/2014
Data Release Frequency: Quarterly

NPL LIENS: Federal Superfund Liens

Federal Superfund Liens. Under the authority granted the USEPA by CERCLA of 1980, the USEPA has the authority to file liens against real property in order to recover remedial action expenditures or when the property owner received notification of potential liability. USEPA compiles a listing of filed notices of Superfund Liens.

Date of Government Version: 10/15/1991
Date Data Arrived at EDR: 02/02/1994
Date Made Active in Reports: 03/30/1994
Number of Days to Update: 56

Source: EPA
Telephone: 202-564-4267
Last EDR Contact: 08/15/2011
Next Scheduled EDR Contact: 11/28/2011
Data Release Frequency: No Update Planned

Federal Delisted NPL site list

DELISTED NPL: National Priority List Deletions

The National Oil and Hazardous Substances Pollution Contingency Plan (NCP) establishes the criteria that the EPA uses to delete sites from the NPL. In accordance with 40 CFR 300.425.(e), sites may be deleted from the NPL where no further response is appropriate.

Date of Government Version: 10/25/2013	Source: EPA
Date Data Arrived at EDR: 11/11/2013	Telephone: N/A
Date Made Active in Reports: 01/28/2014	Last EDR Contact: 04/08/2014
Number of Days to Update: 78	Next Scheduled EDR Contact: 07/21/2014
	Data Release Frequency: Quarterly

Federal CERCLIS list

CERCLIS: Comprehensive Environmental Response, Compensation, and Liability Information System

CERCLIS contains data on potentially hazardous waste sites that have been reported to the USEPA by states, municipalities, private companies and private persons, pursuant to Section 103 of the Comprehensive Environmental Response, Compensation, and Liability Act (CERCLA). CERCLIS contains sites which are either proposed to or on the National Priorities List (NPL) and sites which are in the screening and assessment phase for possible inclusion on the NPL.

Date of Government Version: 10/25/2013	Source: EPA
Date Data Arrived at EDR: 11/11/2013	Telephone: 703-412-9810
Date Made Active in Reports: 02/13/2014	Last EDR Contact: 02/28/2014
Number of Days to Update: 94	Next Scheduled EDR Contact: 06/09/2014
	Data Release Frequency: Quarterly

FEDERAL FACILITY: Federal Facility Site Information listing

A listing of National Priority List (NPL) and Base Realignment and Closure (BRAC) sites found in the Comprehensive Environmental Response, Compensation and Liability Information System (CERCLIS) Database where EPA Federal Facilities Restoration and Reuse Office is involved in cleanup activities.

Date of Government Version: 05/31/2013	Source: Environmental Protection Agency
Date Data Arrived at EDR: 07/08/2013	Telephone: 703-603-8704
Date Made Active in Reports: 12/06/2013	Last EDR Contact: 04/11/2014
Number of Days to Update: 151	Next Scheduled EDR Contact: 07/21/2014
	Data Release Frequency: Varies

Federal CERCLIS NFRAP site List

CERCLIS-NFRAP: CERCLIS No Further Remedial Action Planned

Archived sites are sites that have been removed and archived from the inventory of CERCLIS sites. Archived status indicates that, to the best of EPA's knowledge, assessment at a site has been completed and that EPA has determined no further steps will be taken to list this site on the National Priorities List (NPL), unless information indicates this decision was not appropriate or other considerations require a recommendation for listing at a later time. This decision does not necessarily mean that there is no hazard associated with a given site; it only means that, based upon available information, the location is not judged to be a potential NPL site.

Date of Government Version: 10/25/2013	Source: EPA
Date Data Arrived at EDR: 11/11/2013	Telephone: 703-412-9810
Date Made Active in Reports: 02/13/2014	Last EDR Contact: 02/28/2014
Number of Days to Update: 94	Next Scheduled EDR Contact: 06/09/2014
	Data Release Frequency: Quarterly

Federal RCRA CORRACTS facilities list

CORRACTS: Corrective Action Report

CORRACTS identifies hazardous waste handlers with RCRA corrective action activity.

Date of Government Version: 03/11/2014
Date Data Arrived at EDR: 03/13/2014
Date Made Active in Reports: 04/09/2014
Number of Days to Update: 27

Source: EPA
Telephone: 800-424-9346
Last EDR Contact: 03/13/2014
Next Scheduled EDR Contact: 07/14/2014
Data Release Frequency: Quarterly

Federal RCRA non-CORRACTS TSD facilities list

RCRA-TSDF: RCRA - Treatment, Storage and Disposal

RCRAInfo is EPA's comprehensive information system, providing access to data supporting the Resource Conservation and Recovery Act (RCRA) of 1976 and the Hazardous and Solid Waste Amendments (HSWA) of 1984. The database includes selective information on sites which generate, transport, store, treat and/or dispose of hazardous waste as defined by the Resource Conservation and Recovery Act (RCRA). Transporters are individuals or entities that move hazardous waste from the generator offsite to a facility that can recycle, treat, store, or dispose of the waste. TSDFs treat, store, or dispose of the waste.

Date of Government Version: 03/11/2014
Date Data Arrived at EDR: 03/13/2014
Date Made Active in Reports: 04/09/2014
Number of Days to Update: 27

Source: Environmental Protection Agency
Telephone: (415) 495-8895
Last EDR Contact: 03/13/2014
Next Scheduled EDR Contact: 07/14/2014
Data Release Frequency: Quarterly

Federal RCRA generators list

RCRA-LQG: RCRA - Large Quantity Generators

RCRAInfo is EPA's comprehensive information system, providing access to data supporting the Resource Conservation and Recovery Act (RCRA) of 1976 and the Hazardous and Solid Waste Amendments (HSWA) of 1984. The database includes selective information on sites which generate, transport, store, treat and/or dispose of hazardous waste as defined by the Resource Conservation and Recovery Act (RCRA). Large quantity generators (LQGs) generate over 1,000 kilograms (kg) of hazardous waste, or over 1 kg of acutely hazardous waste per month.

Date of Government Version: 03/11/2014
Date Data Arrived at EDR: 03/13/2014
Date Made Active in Reports: 04/09/2014
Number of Days to Update: 27

Source: Environmental Protection Agency
Telephone: (415) 495-8895
Last EDR Contact: 03/13/2014
Next Scheduled EDR Contact: 07/14/2014
Data Release Frequency: Quarterly

RCRA-SQG: RCRA - Small Quantity Generators

RCRAInfo is EPA's comprehensive information system, providing access to data supporting the Resource Conservation and Recovery Act (RCRA) of 1976 and the Hazardous and Solid Waste Amendments (HSWA) of 1984. The database includes selective information on sites which generate, transport, store, treat and/or dispose of hazardous waste as defined by the Resource Conservation and Recovery Act (RCRA). Small quantity generators (SQGs) generate between 100 kg and 1,000 kg of hazardous waste per month.

Date of Government Version: 03/11/2014
Date Data Arrived at EDR: 03/13/2014
Date Made Active in Reports: 04/09/2014
Number of Days to Update: 27

Source: Environmental Protection Agency
Telephone: (415) 495-8895
Last EDR Contact: 03/13/2014
Next Scheduled EDR Contact: 07/14/2014
Data Release Frequency: Quarterly

RCRA-CESQG: RCRA - Conditionally Exempt Small Quantity Generators

RCRAInfo is EPA's comprehensive information system, providing access to data supporting the Resource Conservation and Recovery Act (RCRA) of 1976 and the Hazardous and Solid Waste Amendments (HSWA) of 1984. The database includes selective information on sites which generate, transport, store, treat and/or dispose of hazardous waste as defined by the Resource Conservation and Recovery Act (RCRA). Conditionally exempt small quantity generators (CESQGs) generate less than 100 kg of hazardous waste, or less than 1 kg of acutely hazardous waste per month.

Date of Government Version: 03/11/2014
Date Data Arrived at EDR: 03/13/2014
Date Made Active in Reports: 04/09/2014
Number of Days to Update: 27

Source: Environmental Protection Agency
Telephone: (415) 495-8895
Last EDR Contact: 03/13/2014
Next Scheduled EDR Contact: 07/14/2014
Data Release Frequency: Varies

Federal institutional controls / engineering controls registries

US ENG CONTROLS: Engineering Controls Sites List

A listing of sites with engineering controls in place. Engineering controls include various forms of caps, building foundations, liners, and treatment methods to create pathway elimination for regulated substances to enter environmental media or effect human health.

Date of Government Version: 12/17/2013
Date Data Arrived at EDR: 01/14/2014
Date Made Active in Reports: 01/28/2014
Number of Days to Update: 14

Source: Environmental Protection Agency
Telephone: 703-603-0695
Last EDR Contact: 03/10/2014
Next Scheduled EDR Contact: 06/23/2014
Data Release Frequency: Varies

US INST CONTROL: Sites with Institutional Controls

A listing of sites with institutional controls in place. Institutional controls include administrative measures, such as groundwater use restrictions, construction restrictions, property use restrictions, and post remediation care requirements intended to prevent exposure to contaminants remaining on site. Deed restrictions are generally required as part of the institutional controls.

Date of Government Version: 12/17/2013
Date Data Arrived at EDR: 01/14/2014
Date Made Active in Reports: 01/28/2014
Number of Days to Update: 14

Source: Environmental Protection Agency
Telephone: 703-603-0695
Last EDR Contact: 03/10/2014
Next Scheduled EDR Contact: 06/23/2014
Data Release Frequency: Varies

LUCIS: Land Use Control Information System

LUCIS contains records of land use control information pertaining to the former Navy Base Realignment and Closure properties.

Date of Government Version: 02/26/2014
Date Data Arrived at EDR: 02/28/2014
Date Made Active in Reports: 04/24/2014
Number of Days to Update: 55

Source: Department of the Navy
Telephone: 843-820-7326
Last EDR Contact: 02/14/2014
Next Scheduled EDR Contact: 06/02/2014
Data Release Frequency: Varies

Federal ERNS list

ERNS: Emergency Response Notification System

Emergency Response Notification System. ERNS records and stores information on reported releases of oil and hazardous substances.

Date of Government Version: 09/30/2013
Date Data Arrived at EDR: 10/01/2013
Date Made Active in Reports: 12/06/2013
Number of Days to Update: 66

Source: National Response Center, United States Coast Guard
Telephone: 202-267-2180
Last EDR Contact: 04/04/2014
Next Scheduled EDR Contact: 07/14/2014
Data Release Frequency: Annually

State- and tribal - equivalent NPL

RESPONSE: State Response Sites

Identifies confirmed release sites where DTSC is involved in remediation, either in a lead or oversight capacity. These confirmed release sites are generally high-priority and high potential risk.

Date of Government Version: 03/12/2014
Date Data Arrived at EDR: 03/13/2014
Date Made Active in Reports: 04/10/2014
Number of Days to Update: 28

Source: Department of Toxic Substances Control
Telephone: 916-323-3400
Last EDR Contact: 03/13/2014
Next Scheduled EDR Contact: 05/19/2014
Data Release Frequency: Quarterly

State- and tribal - equivalent CERCLIS

ENVIROSTOR: EnviroStor Database

The Department of Toxic Substances Control's (DTSC's) Site Mitigation and Brownfields Reuse Program's (SMBRP's) EnviroStor database identifes sites that have known contamination or sites for which there may be reasons to investigate further. The database includes the following site types: Federal Superfund sites (National Priorities List (NPL)); State Response, including Military Facilities and State Superfund; Voluntary Cleanup; and School sites. EnviroStor provides similar information to the information that was available in CalSites, and provides additional site information, including, but not limited to, identification of formerly-contaminated properties that have been released for reuse, properties where environmental deed restrictions have been recorded to prevent inappropriate land uses, and risk characterization information that is used to assess potential impacts to public health and the environment at contaminated sites.

Date of Government Version: 03/12/2014
Date Data Arrived at EDR: 03/13/2014
Date Made Active in Reports: 04/10/2014
Number of Days to Update: 28

Source: Department of Toxic Substances Control
Telephone: 916-323-3400
Last EDR Contact: 03/13/2014
Next Scheduled EDR Contact: 05/19/2014
Data Release Frequency: Quarterly

State and tribal landfill and/or solid waste disposal site lists

SWF/LF (SWIS): Solid Waste Information System

Active, Closed and Inactive Landfills. SWF/LF records typically contain an inve ntory of solid waste disposal facilities or landfills. These may be active or i nactive facilities or open dumps that failed to meet RCRA Section 4004 criteria for solid waste landfills or disposal sites.

Date of Government Version: 02/14/2014
Date Data Arrived at EDR: 02/18/2014
Date Made Active in Reports: 03/18/2014
Number of Days to Update: 28

Source: Department of Resources Recycling and Recovery
Telephone: 916-341-6320
Last EDR Contact: 02/18/2014
Next Scheduled EDR Contact: 06/02/2014
Data Release Frequency: Quarterly

State and tribal leaking storage tank lists

LUST REG 9: Leaking Underground Storage Tank Report

Orange, Riverside, San Diego counties. For more current information, please refer to the State Water Resources Control Board's LUST database.

Date of Government Version: 03/01/2001
Date Data Arrived at EDR: 04/23/2001
Date Made Active in Reports: 05/21/2001
Number of Days to Update: 28

Source: California Regional Water Quality Control Board San Diego Region (9)
Telephone: 858-637-5595
Last EDR Contact: 09/26/2011
Next Scheduled EDR Contact: 01/09/2012
Data Release Frequency: No Update Planned

LUST REG 8: Leaking Underground Storage Tanks

California Regional Water Quality Control Board Santa Ana Region (8). For more current information, please refer to the State Water Resources Control Board's LUST database.

Date of Government Version: 02/14/2005
Date Data Arrived at EDR: 02/15/2005
Date Made Active in Reports: 03/28/2005
Number of Days to Update: 41

Source: California Regional Water Quality Control Board Santa Ana Region (8)
Telephone: 909-782-4496
Last EDR Contact: 08/15/2011
Next Scheduled EDR Contact: 11/28/2011
Data Release Frequency: Varies

LUST REG 7: Leaking Underground Storage Tank Case Listing

Leaking Underground Storage Tank locations. Imperial, Riverside, San Diego, Santa Barbara counties.

Date of Government Version: 02/26/2004
Date Data Arrived at EDR: 02/26/2004
Date Made Active in Reports: 03/24/2004
Number of Days to Update: 27

Source: California Regional Water Quality Control Board Colorado River Basin Region (7)
Telephone: 760-776-8943
Last EDR Contact: 08/01/2011
Next Scheduled EDR Contact: 11/14/2011
Data Release Frequency: No Update Planned

LUST REG 6V: Leaking Underground Storage Tank Case Listing
Leaking Underground Storage Tank locations. Inyo, Kern, Los Angeles, Mono, San Bernardino counties.

Date of Government Version: 06/07/2005
Date Data Arrived at EDR: 06/07/2005
Date Made Active in Reports: 06/29/2005
Number of Days to Update: 22

Source: California Regional Water Quality Control Board Victorville Branch Office (6)
Telephone: 760-241-7365
Last EDR Contact: 09/12/2011
Next Scheduled EDR Contact: 12/26/2011
Data Release Frequency: No Update Planned

LUST REG 6L: Leaking Underground Storage Tank Case Listing
For more current information, please refer to the State Water Resources Control Board's LUST database.

Date of Government Version: 09/09/2003
Date Data Arrived at EDR: 09/10/2003
Date Made Active in Reports: 10/07/2003
Number of Days to Update: 27

Source: California Regional Water Quality Control Board Lahontan Region (6)
Telephone: 530-542-5572
Last EDR Contact: 09/12/2011
Next Scheduled EDR Contact: 12/26/2011
Data Release Frequency: No Update Planned

LUST REG 5: Leaking Underground Storage Tank Database
Leaking Underground Storage Tank locations. Alameda, Alpine, Amador, Butte, Colusa, Contra Costa, Calveras, El Dorado, Fresno, Glenn, Kern, Kings, Lake, Lassen, Madera, Mariposa, Merced, Modoc, Napa, Nevada, Placer, Plumas, Sacramento, San Joaquin, Shasta, Solano, Stanislaus, Sutter, Tehama, Tulare, Tuolumne, Yolo, Yuba counties.

Date of Government Version: 07/01/2008
Date Data Arrived at EDR: 07/22/2008
Date Made Active in Reports: 07/31/2008
Number of Days to Update: 9

Source: California Regional Water Quality Control Board Central Valley Region (5)
Telephone: 916-464-4834
Last EDR Contact: 07/01/2011
Next Scheduled EDR Contact: 10/17/2011
Data Release Frequency: No Update Planned

LUST REG 4: Underground Storage Tank Leak List
Los Angeles, Ventura counties. For more current information, please refer to the State Water Resources Control Board's LUST database.

Date of Government Version: 09/07/2004
Date Data Arrived at EDR: 09/07/2004
Date Made Active in Reports: 10/12/2004
Number of Days to Update: 35

Source: California Regional Water Quality Control Board Los Angeles Region (4)
Telephone: 213-576-6710
Last EDR Contact: 09/06/2011
Next Scheduled EDR Contact: 12/19/2011
Data Release Frequency: No Update Planned

LUST REG 3: Leaking Underground Storage Tank Database
Leaking Underground Storage Tank locations. Monterey, San Benito, San Luis Obispo, Santa Barbara, Santa Cruz counties.

Date of Government Version: 05/19/2003
Date Data Arrived at EDR: 05/19/2003
Date Made Active in Reports: 06/02/2003
Number of Days to Update: 14

Source: California Regional Water Quality Control Board Central Coast Region (3)
Telephone: 805-542-4786
Last EDR Contact: 07/18/2011
Next Scheduled EDR Contact: 10/31/2011
Data Release Frequency: No Update Planned

LUST REG 2: Fuel Leak List
Leaking Underground Storage Tank locations. Alameda, Contra Costa, Marin, Napa, San Francisco, San Mateo, Santa Clara, Solano, Sonoma counties.

Date of Government Version: 09/30/2004
Date Data Arrived at EDR: 10/20/2004
Date Made Active in Reports: 11/19/2004
Number of Days to Update: 30

Source: California Regional Water Quality Control Board San Francisco Bay Region (2)
Telephone: 510-622-2433
Last EDR Contact: 09/19/2011
Next Scheduled EDR Contact: 01/02/2012
Data Release Frequency: Quarterly

LUST REG 1: Active Toxic Site Investigation
Del Norte, Humboldt, Lake, Mendocino, Modoc, Siskiyou, Sonoma, Trinity counties. For more current information, please refer to the State Water Resources Control Board's LUST database.

Date of Government Version: 02/01/2001
Date Data Arrived at EDR: 02/28/2001
Date Made Active in Reports: 03/29/2001
Number of Days to Update: 29

Source: California Regional Water Quality Control Board North Coast (1)
Telephone: 707-570-3769
Last EDR Contact: 08/01/2011
Next Scheduled EDR Contact: 11/14/2011
Data Release Frequency: No Update Planned

LUST: Geotracker's Leaking Underground Fuel Tank Report

Leaking Underground Storage Tank Incident Reports. LUST records contain an inventory of reported leaking underground storage tank incidents. Not all states maintain these records, and the information stored varies by state. For more information on a particular leaking underground storage tank sites, please contact the appropriate regulatory agency.

Date of Government Version: 03/17/2014
Date Data Arrived at EDR: 03/19/2014
Date Made Active in Reports: 04/24/2014
Number of Days to Update: 36

Source: State Water Resources Control Board
Telephone: see region list
Last EDR Contact: 03/19/2014
Next Scheduled EDR Contact: 06/30/2014
Data Release Frequency: Quarterly

SLIC: Statewide SLIC Cases

The SLIC (Spills, Leaks, Investigations and Cleanup) program is designed to protect and restore water quality from spills, leaks, and similar discharges.

Date of Government Version: 12/16/2013
Date Data Arrived at EDR: 12/17/2013
Date Made Active in Reports: 01/16/2014
Number of Days to Update: 30

Source: State Water Resources Control Board
Telephone: 866-480-1028
Last EDR Contact: 03/19/2014
Next Scheduled EDR Contact: 06/30/2014
Data Release Frequency: Varies

SLIC REG 1: Active Toxic Site Investigations

The SLIC (Spills, Leaks, Investigations and Cleanup) program is designed to protect and restore water quality from spills, leaks, and similar discharges.

Date of Government Version: 04/03/2003
Date Data Arrived at EDR: 04/07/2003
Date Made Active in Reports: 04/25/2003
Number of Days to Update: 18

Source: California Regional Water Quality Control Board, North Coast Region (1)
Telephone: 707-576-2220
Last EDR Contact: 08/01/2011
Next Scheduled EDR Contact: 11/14/2011
Data Release Frequency: No Update Planned

SLIC REG 2: Spills, Leaks, Investigation & Cleanup Cost Recovery Listing

The SLIC (Spills, Leaks, Investigations and Cleanup) program is designed to protect and restore water quality from spills, leaks, and similar discharges.

Date of Government Version: 09/30/2004
Date Data Arrived at EDR: 10/20/2004
Date Made Active in Reports: 11/19/2004
Number of Days to Update: 30

Source: Regional Water Quality Control Board San Francisco Bay Region (2)
Telephone: 510-286-0457
Last EDR Contact: 09/19/2011
Next Scheduled EDR Contact: 01/02/2012
Data Release Frequency: Quarterly

SLIC REG 3: Spills, Leaks, Investigation & Cleanup Cost Recovery Listing

The SLIC (Spills, Leaks, Investigations and Cleanup) program is designed to protect and restore water quality from spills, leaks, and similar discharges.

Date of Government Version: 05/18/2006
Date Data Arrived at EDR: 05/18/2006
Date Made Active in Reports: 06/15/2006
Number of Days to Update: 28

Source: California Regional Water Quality Control Board Central Coast Region (3)
Telephone: 805-549-3147
Last EDR Contact: 07/18/2011
Next Scheduled EDR Contact: 10/31/2011
Data Release Frequency: Semi-Annually

SLIC REG 4: Spills, Leaks, Investigation & Cleanup Cost Recovery Listing

The SLIC (Spills, Leaks, Investigations and Cleanup) program is designed to protect and restore water quality from spills, leaks, and similar discharges.

Date of Government Version: 11/17/2004
Date Data Arrived at EDR: 11/18/2004
Date Made Active in Reports: 01/04/2005
Number of Days to Update: 47

Source: Region Water Quality Control Board Los Angeles Region (4)
Telephone: 213-576-6600
Last EDR Contact: 07/01/2011
Next Scheduled EDR Contact: 10/17/2011
Data Release Frequency: Varies

SLIC REG 5: Spills, Leaks, Investigation & Cleanup Cost Recovery Listing
The SLIC (Spills, Leaks, Investigations and Cleanup) program is designed to protect and restore water quality from spills, leaks, and similar discharges.

Date of Government Version: 04/01/2005
Date Data Arrived at EDR: 04/05/2005
Date Made Active in Reports: 04/21/2005
Number of Days to Update: 16

Source: Regional Water Quality Control Board Central Valley Region (5)
Telephone: 916-464-3291
Last EDR Contact: 09/12/2011
Next Scheduled EDR Contact: 12/26/2011
Data Release Frequency: Semi-Annually

SLIC REG 6V: Spills, Leaks, Investigation & Cleanup Cost Recovery Listing
The SLIC (Spills, Leaks, Investigations and Cleanup) program is designed to protect and restore water quality from spills, leaks, and similar discharges.

Date of Government Version: 05/24/2005
Date Data Arrived at EDR: 05/25/2005
Date Made Active in Reports: 06/16/2005
Number of Days to Update: 22

Source: Regional Water Quality Control Board, Victorville Branch
Telephone: 619-241-6583
Last EDR Contact: 08/15/2011
Next Scheduled EDR Contact: 11/28/2011
Data Release Frequency: Semi-Annually

SLIC REG 6L: SLIC Sites
The SLIC (Spills, Leaks, Investigations and Cleanup) program is designed to protect and restore water quality from spills, leaks, and similar discharges.

Date of Government Version: 09/07/2004
Date Data Arrived at EDR: 09/07/2004
Date Made Active in Reports: 10/12/2004
Number of Days to Update: 35

Source: California Regional Water Quality Control Board, Lahontan Region
Telephone: 530-542-5574
Last EDR Contact: 08/15/2011
Next Scheduled EDR Contact: 11/28/2011
Data Release Frequency: No Update Planned

SLIC REG 7: SLIC List
The SLIC (Spills, Leaks, Investigations and Cleanup) program is designed to protect and restore water quality from spills, leaks, and similar discharges.

Date of Government Version: 11/24/2004
Date Data Arrived at EDR: 11/29/2004
Date Made Active in Reports: 01/04/2005
Number of Days to Update: 36

Source: California Regional Quality Control Board, Colorado River Basin Region
Telephone: 760-346-7491
Last EDR Contact: 08/01/2011
Next Scheduled EDR Contact: 11/14/2011
Data Release Frequency: No Update Planned

SLIC REG 8: Spills, Leaks, Investigation & Cleanup Cost Recovery Listing
The SLIC (Spills, Leaks, Investigations and Cleanup) program is designed to protect and restore water quality from spills, leaks, and similar discharges.

Date of Government Version: 04/03/2008
Date Data Arrived at EDR: 04/03/2008
Date Made Active in Reports: 04/14/2008
Number of Days to Update: 11

Source: California Region Water Quality Control Board Santa Ana Region (8)
Telephone: 951-782-3298
Last EDR Contact: 09/12/2011
Next Scheduled EDR Contact: 12/26/2011
Data Release Frequency: Semi-Annually

SLIC REG 9: Spills, Leaks, Investigation & Cleanup Cost Recovery Listing
The SLIC (Spills, Leaks, Investigations and Cleanup) program is designed to protect and restore water quality from spills, leaks, and similar discharges.

Date of Government Version: 09/10/2007
Date Data Arrived at EDR: 09/11/2007
Date Made Active in Reports: 09/28/2007
Number of Days to Update: 17

Source: California Regional Water Quality Control Board San Diego Region (9)
Telephone: 858-467-2980
Last EDR Contact: 08/08/2011
Next Scheduled EDR Contact: 11/21/2011
Data Release Frequency: Annually

INDIAN LUST R8: Leaking Underground Storage Tanks on Indian Land
LUSTs on Indian land in Colorado, Montana, North Dakota, South Dakota, Utah and Wyoming.

Date of Government Version: 08/27/2012
Date Data Arrived at EDR: 08/28/2012
Date Made Active in Reports: 10/16/2012
Number of Days to Update: 49

Source: EPA Region 8
Telephone: 303-312-6271
Last EDR Contact: 04/28/2014
Next Scheduled EDR Contact: 08/11/2014
Data Release Frequency: Quarterly

INDIAN LUST R7: Leaking Underground Storage Tanks on Indian Land
LUSTs on Indian land in Iowa, Kansas, and Nebraska

Date of Government Version: 02/20/2014
Date Data Arrived at EDR: 02/21/2014
Date Made Active in Reports: 04/24/2014
Number of Days to Update: 62

Source: EPA Region 7
Telephone: 913-551-7003
Last EDR Contact: 04/28/2014
Next Scheduled EDR Contact: 08/11/2014
Data Release Frequency: Varies

INDIAN LUST R6: Leaking Underground Storage Tanks on Indian Land
LUSTs on Indian land in New Mexico and Oklahoma.

Date of Government Version: 09/12/2011
Date Data Arrived at EDR: 09/13/2011
Date Made Active in Reports: 11/11/2011
Number of Days to Update: 59

Source: EPA Region 6
Telephone: 214-665-6597
Last EDR Contact: 02/21/2014
Next Scheduled EDR Contact: 05/12/2014
Data Release Frequency: Varies

INDIAN LUST R4: Leaking Underground Storage Tanks on Indian Land
LUSTs on Indian land in Florida, Mississippi and North Carolina.

Date of Government Version: 11/21/2013
Date Data Arrived at EDR: 11/26/2013
Date Made Active in Reports: 02/24/2014
Number of Days to Update: 90

Source: EPA Region 4
Telephone: 404-562-8677
Last EDR Contact: 04/22/2014
Next Scheduled EDR Contact: 08/11/2014
Data Release Frequency: Semi-Annually

INDIAN LUST R1: Leaking Underground Storage Tanks on Indian Land
A listing of leaking underground storage tank locations on Indian Land.

Date of Government Version: 02/01/2013
Date Data Arrived at EDR: 05/01/2013
Date Made Active in Reports: 11/01/2013
Number of Days to Update: 184

Source: EPA Region 1
Telephone: 617-918-1313
Last EDR Contact: 01/30/2014
Next Scheduled EDR Contact: 05/12/2014
Data Release Frequency: Varies

INDIAN LUST R9: Leaking Underground Storage Tanks on Indian Land
LUSTs on Indian land in Arizona, California, New Mexico and Nevada

Date of Government Version: 03/01/2013
Date Data Arrived at EDR: 03/01/2013
Date Made Active in Reports: 04/12/2013
Number of Days to Update: 42

Source: Environmental Protection Agency
Telephone: 415-972-3372
Last EDR Contact: 04/28/2014
Next Scheduled EDR Contact: 08/11/2014
Data Release Frequency: Quarterly

INDIAN LUST R5: Leaking Underground Storage Tanks on Indian Land
Leaking underground storage tanks located on Indian Land in Michigan, Minnesota and Wisconsin.

Date of Government Version: 02/13/2014
Date Data Arrived at EDR: 02/14/2014
Date Made Active in Reports: 02/24/2014
Number of Days to Update: 10

Source: EPA, Region 5
Telephone: 312-886-7439
Last EDR Contact: 04/28/2014
Next Scheduled EDR Contact: 08/11/2014
Data Release Frequency: Varies

INDIAN LUST R10: Leaking Underground Storage Tanks on Indian Land
LUSTs on Indian land in Alaska, Idaho, Oregon and Washington.

Date of Government Version: 11/06/2013
Date Data Arrived at EDR: 11/07/2013
Date Made Active in Reports: 12/06/2013
Number of Days to Update: 29

Source: EPA Region 10
Telephone: 206-553-2857
Last EDR Contact: 04/28/2014
Next Scheduled EDR Contact: 08/11/2014
Data Release Frequency: Quarterly

State and tribal registered storage tank lists

UST: Active UST Facilities
Active UST facilities gathered from the local regulatory agencies

Date of Government Version: 03/17/2014
Date Data Arrived at EDR: 03/19/2014
Date Made Active in Reports: 04/25/2014
Number of Days to Update: 37

Source: SWRCB
Telephone: 916-341-5851
Last EDR Contact: 03/19/2014
Next Scheduled EDR Contact: 06/30/2014
Data Release Frequency: Semi-Annually

AST: Aboveground Petroleum Storage Tank Facilities
A listing of aboveground storage tank petroleum storage tank locations.

Date of Government Version: 08/01/2009
Date Data Arrived at EDR: 09/10/2009
Date Made Active in Reports: 10/01/2009
Number of Days to Update: 21

Source: California Environmental Protection Agency
Telephone: 916-327-5092
Last EDR Contact: 04/07/2014
Next Scheduled EDR Contact: 07/21/2014
Data Release Frequency: Quarterly

INDIAN UST R1: Underground Storage Tanks on Indian Land
The Indian Underground Storage Tank (UST) database provides information about underground storage tanks on Indian land in EPA Region 1 (Connecticut, Maine, Massachusetts, New Hampshire, Rhode Island, Vermont and ten Tribal Nations).

Date of Government Version: 02/01/2013
Date Data Arrived at EDR: 05/01/2013
Date Made Active in Reports: 01/27/2014
Number of Days to Update: 271

Source: EPA, Region 1
Telephone: 617-918-1313
Last EDR Contact: 01/30/2014
Next Scheduled EDR Contact: 05/12/2014
Data Release Frequency: Varies

INDIAN UST R4: Underground Storage Tanks on Indian Land
The Indian Underground Storage Tank (UST) database provides information about underground storage tanks on Indian land in EPA Region 4 (Alabama, Florida, Georgia, Kentucky, Mississippi, North Carolina, South Carolina, Tennessee and Tribal Nations)

Date of Government Version: 11/21/2013
Date Data Arrived at EDR: 11/26/2013
Date Made Active in Reports: 02/24/2014
Number of Days to Update: 90

Source: EPA Region 4
Telephone: 404-562-9424
Last EDR Contact: 04/22/2014
Next Scheduled EDR Contact: 08/11/2014
Data Release Frequency: Semi-Annually

INDIAN UST R5: Underground Storage Tanks on Indian Land

The Indian Underground Storage Tank (UST) database provides information about underground storage tanks on Indian land in EPA Region 5 (Michigan, Minnesota and Wisconsin and Tribal Nations).

Date of Government Version: 02/13/2014
Date Data Arrived at EDR: 02/14/2014
Date Made Active in Reports: 02/24/2014
Number of Days to Update: 10

Source: EPA Region 5
Telephone: 312-886-6136
Last EDR Contact: 04/28/2014
Next Scheduled EDR Contact: 08/11/2014
Data Release Frequency: Varies

INDIAN UST R6: Underground Storage Tanks on Indian Land

The Indian Underground Storage Tank (UST) database provides information about underground storage tanks on Indian land in EPA Region 6 (Louisiana, Arkansas, Oklahoma, New Mexico, Texas and 65 Tribes).

Date of Government Version: 01/29/2014
Date Data Arrived at EDR: 01/29/2014
Date Made Active in Reports: 03/12/2014
Number of Days to Update: 42

Source: EPA Region 6
Telephone: 214-665-7591
Last EDR Contact: 01/27/2014
Next Scheduled EDR Contact: 05/12/2014
Data Release Frequency: Semi-Annually

INDIAN UST R7: Underground Storage Tanks on Indian Land

The Indian Underground Storage Tank (UST) database provides information about underground storage tanks on Indian land in EPA Region 7 (Iowa, Kansas, Missouri, Nebraska, and 9 Tribal Nations).

Date of Government Version: 02/20/2014
Date Data Arrived at EDR: 02/21/2014
Date Made Active in Reports: 04/24/2014
Number of Days to Update: 62

Source: EPA Region 7
Telephone: 913-551-7003
Last EDR Contact: 04/28/2014
Next Scheduled EDR Contact: 08/11/2014
Data Release Frequency: Varies

INDIAN UST R8: Underground Storage Tanks on Indian Land

The Indian Underground Storage Tank (UST) database provides information about underground storage tanks on Indian land in EPA Region 8 (Colorado, Montana, North Dakota, South Dakota, Utah, Wyoming and 27 Tribal Nations).

Date of Government Version: 07/29/2013
Date Data Arrived at EDR: 08/01/2013
Date Made Active in Reports: 11/01/2013
Number of Days to Update: 92

Source: EPA Region 8
Telephone: 303-312-6137
Last EDR Contact: 04/28/2014
Next Scheduled EDR Contact: 08/11/2014
Data Release Frequency: Quarterly

INDIAN UST R9: Underground Storage Tanks on Indian Land

The Indian Underground Storage Tank (UST) database provides information about underground storage tanks on Indian land in EPA Region 9 (Arizona, California, Hawaii, Nevada, the Pacific Islands, and Tribal Nations).

Date of Government Version: 07/29/2013
Date Data Arrived at EDR: 07/30/2013
Date Made Active in Reports: 12/06/2013
Number of Days to Update: 129

Source: EPA Region 9
Telephone: 415-972-3368
Last EDR Contact: 04/28/2014
Next Scheduled EDR Contact: 08/11/2014
Data Release Frequency: Quarterly

INDIAN UST R10: Underground Storage Tanks on Indian Land

The Indian Underground Storage Tank (UST) database provides information about underground storage tanks on Indian land in EPA Region 10 (Alaska, Idaho, Oregon, Washington, and Tribal Nations).

Date of Government Version: 02/05/2013
Date Data Arrived at EDR: 02/06/2013
Date Made Active in Reports: 04/12/2013
Number of Days to Update: 65

Source: EPA Region 10
Telephone: 206-553-2857
Last EDR Contact: 04/28/2014
Next Scheduled EDR Contact: 08/11/2014
Data Release Frequency: Quarterly

FEMA UST: Underground Storage Tank Listing
A listing of all FEMA owned underground storage tanks.

Date of Government Version: 01/01/2010
Date Data Arrived at EDR: 02/16/2010
Date Made Active in Reports: 04/12/2010
Number of Days to Update: 55

Source: FEMA
Telephone: 202-646-5797
Last EDR Contact: 04/15/2014
Next Scheduled EDR Contact: 07/28/2014
Data Release Frequency: Varies

State and tribal voluntary cleanup sites

INDIAN VCP R1: Voluntary Cleanup Priority Listing
A listing of voluntary cleanup priority sites located on Indian Land located in Region 1.

Date of Government Version: 09/17/2013
Date Data Arrived at EDR: 10/01/2013
Date Made Active in Reports: 12/06/2013
Number of Days to Update: 66

Source: EPA, Region 1
Telephone: 617-918-1102
Last EDR Contact: 04/01/2014
Next Scheduled EDR Contact: 07/14/2014
Data Release Frequency: Varies

INDIAN VCP R7: Voluntary Cleanup Priority Lisitng
A listing of voluntary cleanup priority sites located on Indian Land located in Region 7.

Date of Government Version: 03/20/2008
Date Data Arrived at EDR: 04/22/2008
Date Made Active in Reports: 05/19/2008
Number of Days to Update: 27

Source: EPA, Region 7
Telephone: 913-551-7365
Last EDR Contact: 04/20/2009
Next Scheduled EDR Contact: 07/20/2009
Data Release Frequency: Varies

VCP: Voluntary Cleanup Program Properties
Contains low threat level properties with either confirmed or unconfirmed releases and the project proponents have request that DTSC oversee investigation and/or cleanup activities and have agreed to provide coverage for DTSC's costs.

Date of Government Version: 03/12/2014
Date Data Arrived at EDR: 03/13/2014
Date Made Active in Reports: 04/10/2014
Number of Days to Update: 28

Source: Department of Toxic Substances Control
Telephone: 916-323-3400
Last EDR Contact: 03/13/2014
Next Scheduled EDR Contact: 05/19/2014
Data Release Frequency: Quarterly

ADDITIONAL ENVIRONMENTAL RECORDS

Local Brownfield lists

US BROWNFIELDS: A Listing of Brownfields Sites
Brownfields are real property, the expansion, redevelopment, or reuse of which may be complicated by the presence or potential presence of a hazardous substance, pollutant, or contaminant. Cleaning up and reinvesting in these properties takes development pressures off of undeveloped, open land, and both improves and protects the environment. Assessment, Cleanup and Redevelopment Exchange System (ACRES) stores information reported by EPA Brownfields grant recipients on brownfields properties assessed or cleaned up with grant funding as well as information on Targeted Brownfields Assessments performed by EPA Regions. A listing of ACRES Brownfield sites is obtained from Cleanups in My Community. Cleanups in My Community provides information on Brownfields properties for which information is reported back to EPA, as well as areas served by Brownfields grant programs.

Date of Government Version: 03/20/2014
Date Data Arrived at EDR: 03/20/2014
Date Made Active in Reports: 04/09/2014
Number of Days to Update: 20

Source: Environmental Protection Agency
Telephone: 202-566-2777
Last EDR Contact: 03/20/2014
Next Scheduled EDR Contact: 07/07/2014
Data Release Frequency: Semi-Annually

Local Lists of Landfill / Solid Waste Disposal Sites

ODI: Open Dump Inventory
An open dump is defined as a disposal facility that does not comply with one or more of the Part 257 or Part 258 Subtitle D Criteria.

Date of Government Version: 06/30/1985
Date Data Arrived at EDR: 08/09/2004
Date Made Active in Reports: 09/17/2004
Number of Days to Update: 39

Source: Environmental Protection Agency
Telephone: 800-424-9346
Last EDR Contact: 06/09/2004
Next Scheduled EDR Contact: N/A
Data Release Frequency: No Update Planned

DEBRIS REGION 9: Torres Martinez Reservation Illegal Dump Site Locations
A listing of illegal dump sites location on the Torres Martinez Indian Reservation located in eastern Riverside County and northern Imperial County, California.

Date of Government Version: 01/12/2009
Date Data Arrived at EDR: 05/07/2009
Date Made Active in Reports: 09/21/2009
Number of Days to Update: 137

Source: EPA, Region 9
Telephone: 415-947-4219
Last EDR Contact: 04/28/2014
Next Scheduled EDR Contact: 08/11/2014
Data Release Frequency: No Update Planned

WMUDS/SWAT: Waste Management Unit Database
Waste Management Unit Database System. WMUDS is used by the State Water Resources Control Board staff and the Regional Water Quality Control Boards for program tracking and inventory of waste management units. WMUDS is composed of the following databases: Facility Information, Scheduled Inspections Information, Waste Management Unit Information, SWAT Program Information, SWAT Report Summary Information, SWAT Report Summary Data, Chapter 15 (formerly Subchapter 15) Information, Chapter 15 Monitoring Parameters, TPCA Program Information, RCRA Program Information, Closure Information, and Interested Parties Information.

Date of Government Version: 04/01/2000
Date Data Arrived at EDR: 04/10/2000
Date Made Active in Reports: 05/10/2000
Number of Days to Update: 30

Source: State Water Resources Control Board
Telephone: 916-227-4448
Last EDR Contact: 02/10/2014
Next Scheduled EDR Contact: 05/26/2014
Data Release Frequency: No Update Planned

SWRCY: Recycler Database
A listing of recycling facilities in California.

Date of Government Version: 03/17/2014
Date Data Arrived at EDR: 03/18/2014
Date Made Active in Reports: 04/24/2014
Number of Days to Update: 37

Source: Department of Conservation
Telephone: 916-323-3836
Last EDR Contact: 03/18/2014
Next Scheduled EDR Contact: 06/30/2014
Data Release Frequency: Quarterly

HAULERS: Registered Waste Tire Haulers Listing
A listing of registered waste tire haulers.

Date of Government Version: 02/18/2014
Date Data Arrived at EDR: 02/20/2014
Date Made Active in Reports: 03/27/2014
Number of Days to Update: 35

Source: Integrated Waste Management Board
Telephone: 916-341-6422
Last EDR Contact: 02/14/2014
Next Scheduled EDR Contact: 06/02/2014
Data Release Frequency: Varies

INDIAN ODI: Report on the Status of Open Dumps on Indian Lands
Location of open dumps on Indian land.

Date of Government Version: 12/31/1998
Date Data Arrived at EDR: 12/03/2007
Date Made Active in Reports: 01/24/2008
Number of Days to Update: 52

Source: Environmental Protection Agency
Telephone: 703-308-8245
Last EDR Contact: 11/04/2013
Next Scheduled EDR Contact: 02/17/2014
Data Release Frequency: Varies

Local Lists of Hazardous waste / Contaminated Sites

US CDL: Clandestine Drug Labs

A listing of clandestine drug lab locations. The U.S. Department of Justice ("the Department") provides this web site as a public service. It contains addresses of some locations where law enforcement agencies reported they found chemicals or other items that indicated the presence of either clandestine drug laboratories or dumpsites. In most cases, the source of the entries is not the Department, and the Department has not verified the entry and does not guarantee its accuracy. Members of the public must verify the accuracy of all entries by, for example, contacting local law enforcement and local health departments.

Date of Government Version: 12/04/2013
Date Data Arrived at EDR: 12/10/2013
Date Made Active in Reports: 02/13/2014
Number of Days to Update: 65

Source: Drug Enforcement Administration
Telephone: 202-307-1000
Last EDR Contact: 03/04/2014
Next Scheduled EDR Contact: 06/16/2014
Data Release Frequency: Quarterly

HIST CAL-SITES: Calsites Database

The Calsites database contains potential or confirmed hazardous substance release properties. In 1996, California EPA reevaluated and significantly reduced the number of sites in the Calsites database. No longer updated by the state agency. It has been replaced by ENVIROSTOR.

Date of Government Version: 08/08/2005
Date Data Arrived at EDR: 08/03/2006
Date Made Active in Reports: 08/24/2006
Number of Days to Update: 21

Source: Department of Toxic Substance Control
Telephone: 916-323-3400
Last EDR Contact: 02/23/2009
Next Scheduled EDR Contact: 05/25/2009
Data Release Frequency: No Update Planned

SCH: School Property Evaluation Program

This category contains proposed and existing school sites that are being evaluated by DTSC for possible hazardous materials contamination. In some cases, these properties may be listed in the CalSites category depending on the level of threat to public health and safety or the environment they pose.

Date of Government Version: 03/12/2014
Date Data Arrived at EDR: 03/13/2014
Date Made Active in Reports: 04/10/2014
Number of Days to Update: 28

Source: Department of Toxic Substances Control
Telephone: 916-323-3400
Last EDR Contact: 03/13/2014
Next Scheduled EDR Contact: 05/19/2014
Data Release Frequency: Quarterly

TOXIC PITS: Toxic Pits Cleanup Act Sites

Toxic PITS Cleanup Act Sites. TOXIC PITS identifies sites suspected of containing hazardous substances where cleanup has not yet been completed.

Date of Government Version: 07/01/1995
Date Data Arrived at EDR: 08/30/1995
Date Made Active in Reports: 09/26/1995
Number of Days to Update: 27

Source: State Water Resources Control Board
Telephone: 916-227-4364
Last EDR Contact: 01/26/2009
Next Scheduled EDR Contact: 04/27/2009
Data Release Frequency: No Update Planned

CDL: Clandestine Drug Labs

A listing of drug lab locations. Listing of a location in this database does not indicate that any illegal drug lab materials were or were not present there, and does not constitute a determination that the location either requires or does not require additional cleanup work.

Date of Government Version: 12/31/2013
Date Data Arrived at EDR: 02/28/2014
Date Made Active in Reports: 03/20/2014
Number of Days to Update: 20

Source: Department of Toxic Substances Control
Telephone: 916-255-6504
Last EDR Contact: 04/10/2014
Next Scheduled EDR Contact: 07/28/2014
Data Release Frequency: Varies

US HIST CDL: National Clandestine Laboratory Register

A listing of clandestine drug lab locations. The U.S. Department of Justice ("the Department") provides this web site as a public service. It contains addresses of some locations where law enforcement agencies reported they found chemicals or other items that indicated the presence of either clandestine drug laboratories or dumpsites. In most cases, the source of the entries is not the Department, and the Department has not verified the entry and does not guarantee its accuracy. Members of the public must verify the accuracy of all entries by, for example, contacting local law enforcement and local health departments.

Date of Government Version: 09/01/2007
Date Data Arrived at EDR: 11/19/2008
Date Made Active in Reports: 03/30/2009
Number of Days to Update: 131

Source: Drug Enforcement Administration
Telephone: 202-307-1000
Last EDR Contact: 03/04/2014
Next Scheduled EDR Contact: 06/16/2014
Data Release Frequency: No Update Planned

Local Lists of Registered Storage Tanks

CA FID UST: Facility Inventory Database

The Facility Inventory Database (FID) contains a historical listing of active and inactive underground storage tank locations from the State Water Resource Control Board. Refer to local/county source for current data.

Date of Government Version: 10/31/1994
Date Data Arrived at EDR: 09/05/1995
Date Made Active in Reports: 09/29/1995
Number of Days to Update: 24

Source: California Environmental Protection Agency
Telephone: 916-341-5851
Last EDR Contact: 12/28/1998
Next Scheduled EDR Contact: N/A
Data Release Frequency: No Update Planned

UST MENDOCINO: Mendocino County UST Database

A listing of underground storage tank locations in Mendocino County.

Date of Government Version: 09/23/2009
Date Data Arrived at EDR: 09/23/2009
Date Made Active in Reports: 10/01/2009
Number of Days to Update: 8

Source: Department of Public Health
Telephone: 707-463-4466
Last EDR Contact: 03/03/2014
Next Scheduled EDR Contact: 06/16/2014
Data Release Frequency: Annually

HIST UST: Hazardous Substance Storage Container Database

The Hazardous Substance Storage Container Database is a historical listing of UST sites. Refer to local/county source for current data.

Date of Government Version: 10/15/1990
Date Data Arrived at EDR: 01/25/1991
Date Made Active in Reports: 02/12/1991
Number of Days to Update: 18

Source: State Water Resources Control Board
Telephone: 916-341-5851
Last EDR Contact: 07/26/2001
Next Scheduled EDR Contact: N/A
Data Release Frequency: No Update Planned

SWEEPS UST: SWEEPS UST Listing

Statewide Environmental Evaluation and Planning System. This underground storage tank listing was updated and maintained by a company contacted by the SWRCB in the early 1990's. The listing is no longer updated or maintained. The local agency is the contact for more information on a site on the SWEEPS list.

Date of Government Version: 06/01/1994
Date Data Arrived at EDR: 07/07/2005
Date Made Active in Reports: 08/11/2005
Number of Days to Update: 35

Source: State Water Resources Control Board
Telephone: N/A
Last EDR Contact: 06/03/2005
Next Scheduled EDR Contact: N/A
Data Release Frequency: No Update Planned

Local Land Records

LIENS 2: CERCLA Lien Information

A Federal CERCLA ('Superfund') lien can exist by operation of law at any site or property at which EPA has spent Superfund monies. These monies are spent to investigate and address releases and threatened releases of contamination. CERCLIS provides information as to the identity of these sites and properties.

Date of Government Version: 02/18/2014
Date Data Arrived at EDR: 03/18/2014
Date Made Active in Reports: 04/24/2014
Number of Days to Update: 37

Source: Environmental Protection Agency
Telephone: 202-564-6023
Last EDR Contact: 04/28/2014
Next Scheduled EDR Contact: 08/11/2014
Data Release Frequency: Varies

LIENS: Environmental Liens Listing

A listing of property locations with environmental liens for California where DTSC is a lien holder.

Date of Government Version: 01/17/2014
Date Data Arrived at EDR: 01/21/2014
Date Made Active in Reports: 02/11/2014
Number of Days to Update: 21

Source: Department of Toxic Substances Control
Telephone: 916-323-3400
Last EDR Contact: 03/10/2014
Next Scheduled EDR Contact: 06/23/2014
Data Release Frequency: Varies

DEED: Deed Restriction Listing

Site Mitigation and Brownfields Reuse Program Facility Sites with Deed Restrictions & Hazardous Waste Management Program Facility Sites with Deed / Land Use Restriction. The DTSC Site Mitigation and Brownfields Reuse Program (SMBRP) list includes sites cleaned up under the program's oversight and generally does not include current or former hazardous waste facilities that required a hazardous waste facility permit. The list represents deed restrictions that are active. Some sites have multiple deed restrictions. The DTSC Hazardous Waste Management Program (HWMP) has developed a list of current or former hazardous waste facilities that have a recorded land use restriction at the local county recorder's office. The land use restrictions on this list were required by the DTSC HWMP as a result of the presence of hazardous substances that remain on site after the facility (or part of the facility) has been closed or cleaned up. The types of land use restriction include deed notice, deed restriction, or a land use restriction that binds current and future owners.

Date of Government Version: 03/10/2014
Date Data Arrived at EDR: 03/11/2014
Date Made Active in Reports: 04/10/2014
Number of Days to Update: 30

Source: DTSC and SWRCB
Telephone: 916-323-3400
Last EDR Contact: 03/11/2014
Next Scheduled EDR Contact: 06/23/2014
Data Release Frequency: Semi-Annually

Records of Emergency Release Reports

HMIRS: Hazardous Materials Information Reporting System

Hazardous Materials Incident Report System. HMIRS contains hazardous material spill incidents reported to DOT.

Date of Government Version: 12/31/2013
Date Data Arrived at EDR: 01/03/2014
Date Made Active in Reports: 02/24/2014
Number of Days to Update: 52

Source: U.S. Department of Transportation
Telephone: 202-366-4555
Last EDR Contact: 04/01/2014
Next Scheduled EDR Contact: 07/14/2014
Data Release Frequency: Annually

CHMIRS: California Hazardous Material Incident Report System

California Hazardous Material Incident Reporting System. CHMIRS contains information on reported hazardous material incidents (accidental releases or spills).

Date of Government Version: 10/14/2013
Date Data Arrived at EDR: 10/30/2013
Date Made Active in Reports: 12/03/2013
Number of Days to Update: 34

Source: Office of Emergency Services
Telephone: 916-845-8400
Last EDR Contact: 01/30/2014
Next Scheduled EDR Contact: 05/12/2014
Data Release Frequency: Varies

LDS: Land Disposal Sites Listing

The Land Disposal program regulates of waste discharge to land for treatment, storage and disposal in waste management units.

Date of Government Version: 03/17/2014
Date Data Arrived at EDR: 03/19/2014
Date Made Active in Reports: 04/24/2014
Number of Days to Update: 36

Source: State Water Qualilty Control Board
Telephone: 866-480-1028
Last EDR Contact: 03/19/2014
Next Scheduled EDR Contact: 06/30/2014
Data Release Frequency: Quarterly

MCS: Military Cleanup Sites Listing

The State Water Resources Control Board and nine Regional Water Quality Control Boards partner with the Department of Defense (DoD) through the Defense and State Memorandum of Agreement (DSMOA) to oversee the investigation and remediation of water quality issues at military facilities.

Date of Government Version: 03/17/2014
Date Data Arrived at EDR: 03/19/2014
Date Made Active in Reports: 04/25/2014
Number of Days to Update: 37

Source: State Water Resources Control Board
Telephone: 866-480-1028
Last EDR Contact: 03/19/2014
Next Scheduled EDR Contact: 06/30/2014
Data Release Frequency: Quarterly

SPILLS 90: SPILLS90 data from FirstSearch

Spills 90 includes those spill and release records available exclusively from FirstSearch databases. Typically, they may include chemical, oil and/or hazardous substance spills recorded after 1990. Duplicate records that are already included in EDR incident and release records are not included in Spills 90.

Date of Government Version: 06/06/2012
Date Data Arrived at EDR: 01/03/2013
Date Made Active in Reports: 02/22/2013
Number of Days to Update: 50

Source: FirstSearch
Telephone: N/A
Last EDR Contact: 01/03/2013
Next Scheduled EDR Contact: N/A
Data Release Frequency: No Update Planned

Other Ascertainable Records

RCRA NonGen / NLR: RCRA - Non Generators

RCRAInfo is EPA's comprehensive information system, providing access to data supporting the Resource Conservation and Recovery Act (RCRA) of 1976 and the Hazardous and Solid Waste Amendments (HSWA) of 1984. The database includes selective information on sites which generate, transport, store, treat and/or dispose of hazardous waste as defined by the Resource Conservation and Recovery Act (RCRA). Non-Generators do not presently generate hazardous waste.

Date of Government Version: 03/11/2014
Date Data Arrived at EDR: 03/13/2014
Date Made Active in Reports: 04/09/2014
Number of Days to Update: 27

Source: Environmental Protection Agency
Telephone: (415) 495-8895
Last EDR Contact: 03/13/2014
Next Scheduled EDR Contact: 07/14/2014
Data Release Frequency: Varies

DOT OPS: Incident and Accident Data

Department of Transporation, Office of Pipeline Safety Incident and Accident data.

Date of Government Version: 07/31/2012
Date Data Arrived at EDR: 08/07/2012
Date Made Active in Reports: 09/18/2012
Number of Days to Update: 42

Source: Department of Transporation, Office of Pipeline Safety
Telephone: 202-366-4595
Last EDR Contact: 02/06/2014
Next Scheduled EDR Contact: 05/19/2014
Data Release Frequency: Varies

DOD: Department of Defense Sites

This data set consists of federally owned or administered lands, administered by the Department of Defense, that have any area equal to or greater than 640 acres of the United States, Puerto Rico, and the U.S. Virgin Islands.

Date of Government Version: 12/31/2005
Date Data Arrived at EDR: 11/10/2006
Date Made Active in Reports: 01/11/2007
Number of Days to Update: 62

Source: USGS
Telephone: 888-275-8747
Last EDR Contact: 04/18/2014
Next Scheduled EDR Contact: 07/28/2014
Data Release Frequency: Semi-Annually

FUDS: Formerly Used Defense Sites

The listing includes locations of Formerly Used Defense Sites properties where the US Army Corps of Engineers is actively working or will take necessary cleanup actions.

Date of Government Version: 12/31/2012
Date Data Arrived at EDR: 02/28/2014
Date Made Active in Reports: 04/24/2014
Number of Days to Update: 55

Source: U.S. Army Corps of Engineers
Telephone: 202-528-4285
Last EDR Contact: 03/10/2014
Next Scheduled EDR Contact: 06/23/2014
Data Release Frequency: Varies

CONSENT: Superfund (CERCLA) Consent Decrees

Major legal settlements that establish responsibility and standards for cleanup at NPL (Superfund) sites. Released periodically by United States District Courts after settlement by parties to litigation matters.

Date of Government Version: 12/31/2013
Date Data Arrived at EDR: 01/24/2014
Date Made Active in Reports: 02/24/2014
Number of Days to Update: 31

Source: Department of Justice, Consent Decree Library
Telephone: Varies
Last EDR Contact: 03/27/2014
Next Scheduled EDR Contact: 07/14/2014
Data Release Frequency: Varies

ROD: Records Of Decision

Record of Decision. ROD documents mandate a permanent remedy at an NPL (Superfund) site containing technical and health information to aid in the cleanup.

Date of Government Version: 11/25/2013
Date Data Arrived at EDR: 12/12/2013
Date Made Active in Reports: 02/24/2014
Number of Days to Update: 74

Source: EPA
Telephone: 703-416-0223
Last EDR Contact: 03/11/2014
Next Scheduled EDR Contact: 06/23/2014
Data Release Frequency: Annually

UMTRA: Uranium Mill Tailings Sites

Uranium ore was mined by private companies for federal government use in national defense programs. When the mills shut down, large piles of the sand-like material (mill tailings) remain after uranium has been extracted from the ore. Levels of human exposure to radioactive materials from the piles are low; however, in some cases tailings were used as construction materials before the potential health hazards of the tailings were recognized.

Date of Government Version: 09/14/2010
Date Data Arrived at EDR: 10/07/2011
Date Made Active in Reports: 03/01/2012
Number of Days to Update: 146

Source: Department of Energy
Telephone: 505-845-0011
Last EDR Contact: 02/25/2014
Next Scheduled EDR Contact: 06/09/2014
Data Release Frequency: Varies

US MINES: Mines Master Index File

Contains all mine identification numbers issued for mines active or opened since 1971. The data also includes violation information.

Date of Government Version: 08/01/2013
Date Data Arrived at EDR: 09/05/2013
Date Made Active in Reports: 10/03/2013
Number of Days to Update: 28

Source: Department of Labor, Mine Safety and Health Administration
Telephone: 303-231-5959
Last EDR Contact: 03/05/2014
Next Scheduled EDR Contact: 06/16/2014
Data Release Frequency: Semi-Annually

TRIS: Toxic Chemical Release Inventory System

Toxic Release Inventory System. TRIS identifies facilities which release toxic chemicals to the air, water and land in reportable quantities under SARA Title III Section 313.

Date of Government Version: 12/31/2011
Date Data Arrived at EDR: 07/31/2013
Date Made Active in Reports: 09/13/2013
Number of Days to Update: 44

Source: EPA
Telephone: 202-566-0250
Last EDR Contact: 02/26/2014
Next Scheduled EDR Contact: 06/09/2014
Data Release Frequency: Annually

TSCA: Toxic Substances Control Act

Toxic Substances Control Act. TSCA identifies manufacturers and importers of chemical substances included on the TSCA Chemical Substance Inventory list. It includes data on the production volume of these substances by plant site.

Date of Government Version: 12/31/2006
Date Data Arrived at EDR: 09/29/2010
Date Made Active in Reports: 12/02/2010
Number of Days to Update: 64

Source: EPA
Telephone: 202-260-5521
Last EDR Contact: 03/28/2014
Next Scheduled EDR Contact: 07/07/2014
Data Release Frequency: Every 4 Years

FTTS: FIFRA/ TSCA Tracking System - FIFRA (Federal Insecticide, Fungicide, & Rodenticide Act)/TSCA (Toxic Substances Control Act)
FTTS tracks administrative cases and pesticide enforcement actions and compliance activities related to FIFRA, TSCA and EPCRA (Emergency Planning and Community Right-to-Know Act). To maintain currency, EDR contacts the Agency on a quarterly basis.

Date of Government Version: 04/09/2009
Date Data Arrived at EDR: 04/16/2009
Date Made Active in Reports: 05/11/2009
Number of Days to Update: 25

Source: EPA/Office of Prevention, Pesticides and Toxic Substances
Telephone: 202-566-1667
Last EDR Contact: 02/24/2014
Next Scheduled EDR Contact: 06/09/2014
Data Release Frequency: Quarterly

FTTS INSP: FIFRA/ TSCA Tracking System - FIFRA (Federal Insecticide, Fungicide, & Rodenticide Act)/TSCA (Toxic Substances Control Act)
A listing of FIFRA/TSCA Tracking System (FTTS) inspections and enforcements.

Date of Government Version: 04/09/2009
Date Data Arrived at EDR: 04/16/2009
Date Made Active in Reports: 05/11/2009
Number of Days to Update: 25

Source: EPA
Telephone: 202-566-1667
Last EDR Contact: 02/24/2014
Next Scheduled EDR Contact: 06/09/2014
Data Release Frequency: Quarterly

HIST FTTS: FIFRA/TSCA Tracking System Administrative Case Listing
A complete administrative case listing from the FIFRA/TSCA Tracking System (FTTS) for all ten EPA regions. The information was obtained from the National Compliance Database (NCDB). NCDB supports the implementation of FIFRA (Federal Insecticide, Fungicide, and Rodenticide Act) and TSCA (Toxic Substances Control Act). Some EPA regions are now closing out records. Because of that, and the fact that some EPA regions are not providing EPA Headquarters with updated records, it was decided to create a HIST FTTS database. It included records that may not be included in the newer FTTS database updates. This database is no longer updated.

Date of Government Version: 10/19/2006
Date Data Arrived at EDR: 03/01/2007
Date Made Active in Reports: 04/10/2007
Number of Days to Update: 40

Source: Environmental Protection Agency
Telephone: 202-564-2501
Last EDR Contact: 12/17/2007
Next Scheduled EDR Contact: 03/17/2008
Data Release Frequency: No Update Planned

HIST FTTS INSP: FIFRA/TSCA Tracking System Inspection & Enforcement Case Listing
A complete inspection and enforcement case listing from the FIFRA/TSCA Tracking System (FTTS) for all ten EPA regions. The information was obtained from the National Compliance Database (NCDB). NCDB supports the implementation of FIFRA (Federal Insecticide, Fungicide, and Rodenticide Act) and TSCA (Toxic Substances Control Act). Some EPA regions are now closing out records. Because of that, and the fact that some EPA regions are not providing EPA Headquarters with updated records, it was decided to create a HIST FTTS database. It included records that may not be included in the newer FTTS database updates. This database is no longer updated.

Date of Government Version: 10/19/2006
Date Data Arrived at EDR: 03/01/2007
Date Made Active in Reports: 04/10/2007
Number of Days to Update: 40

Source: Environmental Protection Agency
Telephone: 202-564-2501
Last EDR Contact: 12/17/2008
Next Scheduled EDR Contact: 03/17/2008
Data Release Frequency: No Update Planned

SSTS: Section 7 Tracking Systems
Section 7 of the Federal Insecticide, Fungicide and Rodenticide Act, as amended (92 Stat. 829) requires all registered pesticide-producing establishments to submit a report to the Environmental Protection Agency by March 1st each year. Each establishment must report the types and amounts of pesticides, active ingredients and devices being produced, and those having been produced and sold or distributed in the past year.

Date of Government Version: 12/31/2009
Date Data Arrived at EDR: 12/10/2010
Date Made Active in Reports: 02/25/2011
Number of Days to Update: 77

Source: EPA
Telephone: 202-564-4203
Last EDR Contact: 01/28/2014
Next Scheduled EDR Contact: 05/12/2014
Data Release Frequency: Annually

ICIS: Integrated Compliance Information System

The Integrated Compliance Information System (ICIS) supports the information needs of the national enforcement and compliance program as well as the unique needs of the National Pollutant Discharge Elimination System (NPDES) program.

Date of Government Version: 07/20/2011
Date Data Arrived at EDR: 11/10/2011
Date Made Active in Reports: 01/10/2012
Number of Days to Update: 61

Source: Environmental Protection Agency
Telephone: 202-564-5088
Last EDR Contact: 10/09/2014
Next Scheduled EDR Contact: 07/21/2014
Data Release Frequency: Quarterly

PADS: PCB Activity Database System

PCB Activity Database. PADS Identifies generators, transporters, commercial storers and/or brokers and disposers of PCB's who are required to notify the EPA of such activities.

Date of Government Version: 06/01/2013
Date Data Arrived at EDR: 07/17/2013
Date Made Active in Reports: 11/01/2013
Number of Days to Update: 107

Source: EPA
Telephone: 202-566-0500
Last EDR Contact: 04/18/2014
Next Scheduled EDR Contact: 07/28/2014
Data Release Frequency: Annually

MLTS: Material Licensing Tracking System

MLTS is maintained by the Nuclear Regulatory Commission and contains a list of approximately 8,100 sites which possess or use radioactive materials and which are subject to NRC licensing requirements. To maintain currency, EDR contacts the Agency on a quarterly basis.

Date of Government Version: 07/22/2013
Date Data Arrived at EDR: 08/02/2013
Date Made Active in Reports: 11/01/2013
Number of Days to Update: 91

Source: Nuclear Regulatory Commission
Telephone: 301-415-7169
Last EDR Contact: 03/10/2014
Next Scheduled EDR Contact: 06/23/2014
Data Release Frequency: Quarterly

RADINFO: Radiation Information Database

The Radiation Information Database (RADINFO) contains information about facilities that are regulated by U.S. Environmental Protection Agency (EPA) regulations for radiation and radioactivity.

Date of Government Version: 01/09/2014
Date Data Arrived at EDR: 01/10/2014
Date Made Active in Reports: 03/12/2014
Number of Days to Update: 61

Source: Environmental Protection Agency
Telephone: 202-343-9775
Last EDR Contact: 04/09/2014
Next Scheduled EDR Contact: 07/21/2014
Data Release Frequency: Quarterly

FINDS: Facility Index System/Facility Registry System

Facility Index System. FINDS contains both facility information and 'pointers' to other sources that contain more detail. EDR includes the following FINDS databases in this report: PCS (Permit Compliance System), AIRS (Aerometric Information Retrieval System), DOCKET (Enforcement Docket used to manage and track information on civil judicial enforcement cases for all environmental statutes), FURS (Federal Underground Injection Control), C-DOCKET (Criminal Docket System used to track criminal enforcement actions for all environmental statutes), FFIS (Federal Facilities Information System), STATE (State Environmental Laws and Statutes), and PADS (PCB Activity Data System).

Date of Government Version: 11/18/2013
Date Data Arrived at EDR: 02/27/2014
Date Made Active in Reports: 03/12/2014
Number of Days to Update: 13

Source: EPA
Telephone: (415) 947-8000
Last EDR Contact: 03/14/2014
Next Scheduled EDR Contact: 06/23/2014
Data Release Frequency: Quarterly

RAATS: RCRA Administrative Action Tracking System

RCRA Administration Action Tracking System. RAATS contains records based on enforcement actions issued under RCRA pertaining to major violators and includes administrative and civil actions brought by the EPA. For administration actions after September 30, 1995, data entry in the RAATS database was discontinued. EPA will retain a copy of the database for historical records. It was necessary to terminate RAATS because a decrease in agency resources made it impossible to continue to update the information contained in the database.

Date of Government Version: 04/17/1995
Date Data Arrived at EDR: 07/03/1995
Date Made Active in Reports: 08/07/1995
Number of Days to Update: 35

Source: EPA
Telephone: 202-564-4104
Last EDR Contact: 06/02/2008
Next Scheduled EDR Contact: 09/01/2008
Data Release Frequency: No Update Planned

RMP: Risk Management Plans

When Congress passed the Clean Air Act Amendments of 1990, it required EPA to publish regulations and guidance for chemical accident prevention at facilities using extremely hazardous substances. The Risk Management Program Rule (RMP Rule) was written to implement Section 112(r) of these amendments. The rule, which built upon existing industry codes and standards, requires companies of all sizes that use certain flammable and toxic substances to develop a Risk Management Program, which includes a(n): Hazard assessment that details the potential effects of an accidental release, an accident history of the last five years, and an evaluation of worst-case and alternative accidental releases; Prevention program that includes safety precautions and maintenance, monitoring, and employee training measures; and Emergency response program that spells out emergency health care, employee training measures and procedures for informing the public and response agencies (e.g the fire department) should an accident occur.

Date of Government Version: 11/01/2013
Date Data Arrived at EDR: 12/12/2013
Date Made Active in Reports: 02/13/2014
Number of Days to Update: 63

Source: Environmental Protection Agency
Telephone: 202-564-8600
Last EDR Contact: 04/28/2014
Next Scheduled EDR Contact: 08/11/2014
Data Release Frequency: Varies

BRS: Biennial Reporting System

The Biennial Reporting System is a national system administered by the EPA that collects data on the generation and management of hazardous waste. BRS captures detailed data from two groups: Large Quantity Generators (LQG) and Treatment, Storage, and Disposal Facilities.

Date of Government Version: 12/31/2011
Date Data Arrived at EDR: 02/26/2013
Date Made Active in Reports: 04/19/2013
Number of Days to Update: 52

Source: EPA/NTIS
Telephone: 800-424-9346
Last EDR Contact: 02/28/2014
Next Scheduled EDR Contact: 06/09/2014
Data Release Frequency: Biennially

CA BOND EXP. PLAN: Bond Expenditure Plan

Department of Health Services developed a site-specific expenditure plan as the basis for an appropriation of Hazardous Substance Cleanup Bond Act funds. It is not updated.

Date of Government Version: 01/01/1989
Date Data Arrived at EDR: 07/27/1994
Date Made Active in Reports: 08/02/1994
Number of Days to Update: 6

Source: Department of Health Services
Telephone: 916-255-2118
Last EDR Contact: 05/31/1994
Next Scheduled EDR Contact: N/A
Data Release Frequency: No Update Planned

NPDES: NPDES Permits Listing

A listing of NPDES permits, including stormwater.

Date of Government Version: 02/17/2014
Date Data Arrived at EDR: 02/18/2014
Date Made Active in Reports: 03/27/2014
Number of Days to Update: 37

Source: State Water Resources Control Board
Telephone: 916-445-9379
Last EDR Contact: 02/18/2014
Next Scheduled EDR Contact: 06/02/2014
Data Release Frequency: Quarterly

UIC: UIC Listing
A listing of wells identified as underground injection wells, in the California Oil and Gas Wells database.

Date of Government Version: 01/15/2014
Date Data Arrived at EDR: 03/18/2014
Date Made Active in Reports: 04/24/2014
Number of Days to Update: 37

Source: Deaprtment of Conservation
Telephone: 916-445-2408
Last EDR Contact: 03/18/2014
Next Scheduled EDR Contact: 06/30/2014
Data Release Frequency: Varies

CORTESE: "Cortese" Hazardous Waste & Substances Sites List
The sites for the list are designated by the State Water Resource Control Board (LUST), the Integrated Waste Board (SWF/LS), and the Department of Toxic Substances Control (Cal-Sites).

Date of Government Version: 12/30/2013
Date Data Arrived at EDR: 12/31/2013
Date Made Active in Reports: 02/11/2014
Number of Days to Update: 42

Source: CAL EPA/Office of Emergency Information
Telephone: 916-323-3400
Last EDR Contact: 04/01/2014
Next Scheduled EDR Contact: 07/14/2014
Data Release Frequency: Quarterly

HIST CORTESE: Hazardous Waste & Substance Site List
The sites for the list are designated by the State Water Resource Control Board [LUST], the Integrated Waste Board [SWF/LS], and the Department of Toxic Substances Control [CALSITES]. This listing is no longer updated by the state agency.

Date of Government Version: 04/01/2001
Date Data Arrived at EDR: 01/22/2009
Date Made Active in Reports: 04/08/2009
Number of Days to Update: 76

Source: Department of Toxic Substances Control
Telephone: 916-323-3400
Last EDR Contact: 01/22/2009
Next Scheduled EDR Contact: N/A
Data Release Frequency: No Update Planned

NOTIFY 65: Proposition 65 Records
Listings of all Proposition 65 incidents reported to counties by the State Water Resources Control Board and the Regional Water Quality Control Board. This database is no longer updated by the reporting agency.

Date of Government Version: 10/21/1993
Date Data Arrived at EDR: 11/01/1993
Date Made Active in Reports: 11/19/1993
Number of Days to Update: 18

Source: State Water Resources Control Board
Telephone: 916-445-3846
Last EDR Contact: 04/07/2014
Next Scheduled EDR Contact: 07/07/2014
Data Release Frequency: No Update Planned

DRYCLEANERS: Cleaner Facilities
A list of drycleaner related facilities that have EPA ID numbers. These are facilities with certain SIC codes: power laundries, family and commercial; garment pressing and cleaner's agents; linen supply; coin-operated laundries and cleaning; drycleaning plants, except rugs; carpet and upholster cleaning; industrial launderers; laundry and garment services.

Date of Government Version: 09/10/2013
Date Data Arrived at EDR: 09/11/2013
Date Made Active in Reports: 10/16/2013
Number of Days to Update: 35

Source: Department of Toxic Substance Control
Telephone: 916-327-4498
Last EDR Contact: 03/10/2014
Next Scheduled EDR Contact: 06/23/2014
Data Release Frequency: Annually

WIP: Well Investigation Program Case List
Well Investigation Program case in the San Gabriel and San Fernando Valley area.

Date of Government Version: 07/03/2009
Date Data Arrived at EDR: 07/21/2009
Date Made Active in Reports: 08/03/2009
Number of Days to Update: 13

Source: Los Angeles Water Quality Control Board
Telephone: 213-576-6726
Last EDR Contact: 03/31/2014
Next Scheduled EDR Contact: 07/14/2014
Data Release Frequency: Varies

ENF: Enforcement Action Listing

A listing of Water Board Enforcement Actions. Formal is everything except Oral/Verbal Communication, Notice of Violation, Expedited Payment Letter, and Staff Enforcement Letter.

Date of Government Version: 02/25/2014
Date Data Arrived at EDR: 02/27/2014
Date Made Active in Reports: 03/18/2014
Number of Days to Update: 19

Source: State Water Resoruces Control Board
Telephone: 916-445-9379
Last EDR Contact: 04/28/2014
Next Scheduled EDR Contact: 08/11/2014
Data Release Frequency: Varies

HAZNET: Facility and Manifest Data

Facility and Manifest Data. The data is extracted from the copies of hazardous waste manifests received each year by the DTSC. The annual volume of manifests is typically 700,000 - 1,000,000 annually, representing approximately 350,000 - 500,000 shipments. Data are from the manifests submitted without correction, and therefore many contain some invalid values for data elements such as generator ID, TSD ID, waste category, and disposal method.

Date of Government Version: 12/31/2012
Date Data Arrived at EDR: 07/16/2013
Date Made Active in Reports: 08/26/2013
Number of Days to Update: 41

Source: California Environmental Protection Agency
Telephone: 916-255-1136
Last EDR Contact: 04/18/2014
Next Scheduled EDR Contact: 07/28/2014
Data Release Frequency: Annually

EMI: Emissions Inventory Data

Toxics and criteria pollutant emissions data collected by the ARB and local air pollution agencies.

Date of Government Version: 12/31/2010
Date Data Arrived at EDR: 06/25/2013
Date Made Active in Reports: 08/22/2013
Number of Days to Update: 58

Source: California Air Resources Board
Telephone: 916-322-2990
Last EDR Contact: 03/25/2014
Next Scheduled EDR Contact: 07/07/2014
Data Release Frequency: Varies

INDIAN RESERV: Indian Reservations

This map layer portrays Indian administered lands of the United States that have any area equal to or greater than 640 acres.

Date of Government Version: 12/31/2005
Date Data Arrived at EDR: 12/08/2006
Date Made Active in Reports: 01/11/2007
Number of Days to Update: 34

Source: USGS
Telephone: 202-208-3710
Last EDR Contact: 04/18/2014
Next Scheduled EDR Contact: 07/28/2014
Data Release Frequency: Semi-Annually

SCRD DRYCLEANERS: State Coalition for Remediation of Drycleaners Listing

The State Coalition for Remediation of Drycleaners was established in 1998, with support from the U.S. EPA Office of Superfund Remediation and Technology Innovation. It is comprised of representatives of states with established drycleaner remediation programs. Currently the member states are Alabama, Connecticut, Florida, Illinois, Kansas, Minnesota, Missouri, North Carolina, Oregon, South Carolina, Tennessee, Texas, and Wisconsin.

Date of Government Version: 03/07/2011
Date Data Arrived at EDR: 03/09/2011
Date Made Active in Reports: 05/02/2011
Number of Days to Update: 54

Source: Environmental Protection Agency
Telephone: 615-532-8599
Last EDR Contact: 04/21/2014
Next Scheduled EDR Contact: 08/04/2014
Data Release Frequency: Varies

2020 COR ACTION: 2020 Corrective Action Program List

The EPA has set ambitious goals for the RCRA Corrective Action program by creating the 2020 Corrective Action Universe. This RCRA cleanup baseline includes facilities expected to need corrective action. The 2020 universe contains a wide variety of sites. Some properties are heavily contaminated while others were contaminated but have since been cleaned up. Still others have not been fully investigated yet, and may require little or no remediation. Inclusion in the 2020 Universe does not necessarily imply failure on the part of a facility to meet its RCRA obligations.

Date of Government Version: 11/11/2011
Date Data Arrived at EDR: 05/18/2012
Date Made Active in Reports: 05/25/2012
Number of Days to Update: 7

Source: Environmental Protection Agency
Telephone: 703-308-4044
Last EDR Contact: 02/14/2014
Next Scheduled EDR Contact: 05/26/2014
Data Release Frequency: Varies

LEAD SMELTER 1: Lead Smelter Sites
A listing of former lead smelter site locations.

Date of Government Version: 01/29/2013
Date Data Arrived at EDR: 02/14/2013
Date Made Active in Reports: 02/27/2013
Number of Days to Update: 13

Source: Environmental Protection Agency
Telephone: 703-603-8787
Last EDR Contact: 04/04/2014
Next Scheduled EDR Contact: 07/21/2014
Data Release Frequency: Varies

LEAD SMELTER 2: Lead Smelter Sites
A list of several hundred sites in the U.S. where secondary lead smelting was done from 1931and 1964. These sites may pose a threat to public health through ingestion or inhalation of contaminated soil or dust

Date of Government Version: 04/05/2001
Date Data Arrived at EDR: 10/27/2010
Date Made Active in Reports: 12/02/2010
Number of Days to Update: 36

Source: American Journal of Public Health
Telephone: 703-305-6451
Last EDR Contact: 12/02/2009
Next Scheduled EDR Contact: N/A
Data Release Frequency: No Update Planned

PRP: Potentially Responsible Parties
A listing of verified Potentially Responsible Parties

Date of Government Version: 04/15/2013
Date Data Arrived at EDR: 07/03/2013
Date Made Active in Reports: 09/13/2013
Number of Days to Update: 72

Source: EPA
Telephone: 202-564-6023
Last EDR Contact: 04/04/2014
Next Scheduled EDR Contact: 07/14/2014
Data Release Frequency: Quarterly

WDS: Waste Discharge System
Sites which have been issued waste discharge requirements.

Date of Government Version: 06/19/2007
Date Data Arrived at EDR: 06/20/2007
Date Made Active in Reports: 06/29/2007
Number of Days to Update: 9

Source: State Water Resources Control Board
Telephone: 916-341-5227
Last EDR Contact: 02/24/2014
Next Scheduled EDR Contact: 06/09/2014
Data Release Frequency: Quarterly

FEDLAND: Federal and Indian Lands
Federally and Indian administrated lands of the United States. Lands included are administrated by: Army Corps of Engineers, Bureau of Reclamation, National Wild and Scenic River, National Wildlife Refuge, Public Domain Land, Wilderness, Wilderness Study Area, Wildlife Management Area, Bureau of Indian Affairs, Bureau of Land Management, Department of Justice, Forest Service, Fish and Wildlife Service, National Park Service.

Date of Government Version: 12/31/2005
Date Data Arrived at EDR: 02/06/2006
Date Made Active in Reports: 01/11/2007
Number of Days to Update: 339

Source: U.S. Geological Survey
Telephone: 888-275-8747
Last EDR Contact: 04/18/2014
Next Scheduled EDR Contact: 07/28/2014
Data Release Frequency: N/A

US AIRS (AFS): Aerometric Information Retrieval System Facility Subsystem (AFS)
The database is a sub-system of Aerometric Information Retrieval System (AIRS). AFS contains compliance data on air pollution point sources regulated by the U.S. EPA and/or state and local air regulatory agencies. This information comes from source reports by various stationary sources of air pollution, such as electric power plants, steel mills, factories, and universities, and provides information about the air pollutants they produce. Action, air program, air program pollutant, and general level plant data. It is used to track emissions and compliance data from industrial plants.

Date of Government Version: 10/23/2013
Date Data Arrived at EDR: 11/06/2013
Date Made Active in Reports: 12/06/2013
Number of Days to Update: 30

Source: EPA
Telephone: 202-564-5962
Last EDR Contact: 03/31/2014
Next Scheduled EDR Contact: 07/14/2014
Data Release Frequency: Annually

US AIRS MINOR: Air Facility System Data
A listing of minor source facilities.

Date of Government Version: 10/23/2013
Date Data Arrived at EDR: 11/06/2013
Date Made Active in Reports: 12/06/2013
Number of Days to Update: 30

Source: EPA
Telephone: 202-564-5962
Last EDR Contact: 03/31/2014
Next Scheduled EDR Contact: 07/14/2014
Data Release Frequency: Annually

MWMP: Medical Waste Management Program Listing
The Medical Waste Management Program (MWMP) ensures the proper handling and disposal of medical waste by permitting and inspecting medical waste Offsite Treatment Facilities (PDF) and Transfer Stations (PDF) throughout the state. MWMP also oversees all Medical Waste Transporters.

Date of Government Version: 02/21/2014
Date Data Arrived at EDR: 03/12/2014
Date Made Active in Reports: 04/14/2014
Number of Days to Update: 33

Source: Department of Public Health
Telephone: 916-558-1784
Last EDR Contact: 03/10/2014
Next Scheduled EDR Contact: 06/23/2014
Data Release Frequency: Varies

COAL ASH DOE: Sleam-Electric Plan Operation Data
A listing of power plants that store ash in surface ponds.

Date of Government Version: 12/31/2005
Date Data Arrived at EDR: 08/07/2009
Date Made Active in Reports: 10/22/2009
Number of Days to Update: 76

Source: Department of Energy
Telephone: 202-586-8719
Last EDR Contact: 04/18/2014
Next Scheduled EDR Contact: 07/28/2014
Data Release Frequency: Varies

HWT: Registered Hazardous Waste Transporter Database
A listing of hazardous waste transporters. In California, unless specifically exempted, it is unlawful for any person to transport hazardous wastes unless the person holds a valid registration issued by DTSC. A hazardous waste transporter registration is valid for one year and is assigned a unique registration number.

Date of Government Version: 04/14/2014
Date Data Arrived at EDR: 04/15/2014
Date Made Active in Reports: 04/24/2014
Number of Days to Update: 9

Source: Department of Toxic Substances Control
Telephone: 916-440-7145
Last EDR Contact: 04/15/2014
Next Scheduled EDR Contact: 07/28/2014
Data Release Frequency: Quarterly

HWP: EnviroStor Permitted Facilities Listing
Detailed information on permitted hazardous waste facilities and corrective action ("cleanups") tracked in EnviroStor.

Date of Government Version: 02/24/2014
Date Data Arrived at EDR: 02/25/2014
Date Made Active in Reports: 03/18/2014
Number of Days to Update: 21

Source: Department of Toxic Substances Control
Telephone: 916-323-3400
Last EDR Contact: 02/25/2014
Next Scheduled EDR Contact: 06/09/2014
Data Release Frequency: Quarterly

US FIN ASSUR: Financial Assurance Information
All owners and operators of facilities that treat, store, or dispose of hazardous waste are required to provide proof that they will have sufficient funds to pay for the clean up, closure, and post-closure care of their facilities.

Date of Government Version: 02/25/2014
Date Data Arrived at EDR: 02/27/2014
Date Made Active in Reports: 04/09/2014
Number of Days to Update: 41

Source: Environmental Protection Agency
Telephone: 202-566-1917
Last EDR Contact: 02/14/2014
Next Scheduled EDR Contact: 06/02/2014
Data Release Frequency: Quarterly

Financial Assurance 2: Financial Assurance Information Listing

A listing of financial assurance information for solid waste facilities. Financial assurance is intended to ensure that resources are available to pay for the cost of closure, post-closure care, and corrective measures if the owner or operator of a regulated facility is unable or unwilling to pay.

Date of Government Version: 02/14/2014
Date Data Arrived at EDR: 02/18/2014
Date Made Active in Reports: 03/18/2014
Number of Days to Update: 28

Source: California Integrated Waste Management Board
Telephone: 916-341-6066
Last EDR Contact: 02/14/2014
Next Scheduled EDR Contact: 06/02/2014
Data Release Frequency: Varies

Financial Assurance 1: Financial Assurance Information Listing

Financial Assurance information

Date of Government Version: 01/28/2014
Date Data Arrived at EDR: 01/30/2014
Date Made Active in Reports: 02/11/2014
Number of Days to Update: 12

Source: Department of Toxic Substances Control
Telephone: 916-255-3628
Last EDR Contact: 04/28/2014
Next Scheduled EDR Contact: 08/11/2014
Data Release Frequency: Varies

COAL ASH EPA: Coal Combustion Residues Surface Impoundments List

A listing of coal combustion residues surface impoundments with high hazard potential ratings.

Date of Government Version: 08/17/2010
Date Data Arrived at EDR: 01/03/2011
Date Made Active in Reports: 03/21/2011
Number of Days to Update: 77

Source: Environmental Protection Agency
Telephone: N/A
Last EDR Contact: 03/11/2014
Next Scheduled EDR Contact: 06/23/2014
Data Release Frequency: Varies

PCB TRANSFORMER: PCB Transformer Registration Database

The database of PCB transformer registrations that includes all PCB registration submittals.

Date of Government Version: 02/01/2011
Date Data Arrived at EDR: 10/19/2011
Date Made Active in Reports: 01/10/2012
Number of Days to Update: 83

Source: Environmental Protection Agency
Telephone: 202-566-0517
Last EDR Contact: 01/30/2014
Next Scheduled EDR Contact: 05/12/2014
Data Release Frequency: Varies

PROC: Certified Processors Database

A listing of certified processors.

Date of Government Version: 03/17/2014
Date Data Arrived at EDR: 03/18/2014
Date Made Active in Reports: 04/24/2014
Number of Days to Update: 37

Source: Department of Conservation
Telephone: 916-323-3836
Last EDR Contact: 03/18/2014
Next Scheduled EDR Contact: 06/30/2014
Data Release Frequency: Quarterly

EPA WATCH LIST: EPA WATCH LIST

EPA maintains a "Watch List" to facilitate dialogue between EPA, state and local environmental agencies on enforcement matters relating to facilities with alleged violations identified as either significant or high priority. Being on the Watch List does not mean that the facility has actually violated the law only that an investigation by EPA or a state or local environmental agency has led those organizations to allege that an unproven violation has in fact occurred. Being on the Watch List does not represent a higher level of concern regarding the alleged violations that were detected, but instead indicates cases requiring additional dialogue between EPA, state and local agencies - primarily because of the length of time the alleged violation has gone unaddressed or unresolved.

Date of Government Version: 06/30/2013
Date Data Arrived at EDR: 08/13/2013
Date Made Active in Reports: 09/13/2013
Number of Days to Update: 31

Source: Environmental Protection Agency
Telephone: 617-520-3000
Last EDR Contact: 02/10/2014
Next Scheduled EDR Contact: 05/26/2014
Data Release Frequency: Quarterly

EDR HIGH RISK HISTORICAL RECORDS

EDR Exclusive Records

EDR MGP: EDR Proprietary Manufactured Gas Plants

The EDR Proprietary Manufactured Gas Plant Database includes records of coal gas plants (manufactured gas plants) compiled by EDR's researchers. Manufactured gas sites were used in the United States from the 1800's to 1950's to produce a gas that could be distributed and used as fuel. These plants used whale oil, rosin, coal, or a mixture of coal, oil, and water that also produced a significant amount of waste. Many of the byproducts of the gas production, such as coal tar (oily waste containing volatile and non-volatile chemicals), sludges, oils and other compounds are potentially hazardous to human health and the environment. The byproduct from this process was frequently disposed of directly at the plant site and can remain or spread slowly, serving as a continuous source of soil and groundwater contamination.

Date of Government Version: N/A
Date Data Arrived at EDR: N/A
Date Made Active in Reports: N/A
Number of Days to Update: N/A

Source: EDR, Inc.
Telephone: N/A
Last EDR Contact: N/A
Next Scheduled EDR Contact: N/A
Data Release Frequency: No Update Planned

EDR US Hist Auto Stat: EDR Exclusive Historic Gas Stations

EDR has searched selected national collections of business directories and has collected listings of potential gas station/filling station/service station sites that were available to EDR researchers. EDR's review was limited to those categories of sources that might, in EDR's opinion, include gas station/filling station/service station establishments. The categories reviewed included, but were not limited to gas, gas station, gasoline station, filling station, auto, automobile repair, auto service station, service station, etc. This database falls within a category of information EDR classifies as "High Risk Historical Records", or HRHR. EDR's HRHR effort presents unique and sometimes proprietary data about past sites and operations that typically create environmental concerns, but may not show up in current government records searches.

Date of Government Version: N/A
Date Data Arrived at EDR: N/A
Date Made Active in Reports: N/A
Number of Days to Update: N/A

Source: EDR, Inc.
Telephone: N/A
Last EDR Contact: N/A
Next Scheduled EDR Contact: N/A
Data Release Frequency: Varies

EDR US Hist Cleaners: EDR Exclusive Historic Dry Cleaners

EDR has searched selected national collections of business directories and has collected listings of potential dry cleaner sites that were available to EDR researchers. EDR's review was limited to those categories of sources that might, in EDR's opinion, include dry cleaning establishments. The categories reviewed included, but were not limited to dry cleaners, cleaners, laundry, laundromat, cleaning/laundry, wash & dry etc. This database falls within a category of information EDR classifies as "High Risk Historical Records", or HRHR. EDR's HRHR effort presents unique and sometimes proprietary data about past sites and operations that typically create environmental concerns, but may not show up in current government records searches.

Date of Government Version: N/A
Date Data Arrived at EDR: N/A
Date Made Active in Reports: N/A
Number of Days to Update: N/A

Source: EDR, Inc.
Telephone: N/A
Last EDR Contact: N/A
Next Scheduled EDR Contact: N/A
Data Release Frequency: Varies

EDR US Hist Cleaners: EDR Proprietary Historic Dry Cleaners - Cole

Date of Government Version: N/A
Date Data Arrived at EDR: N/A
Date Made Active in Reports: N/A
Number of Days to Update: N/A

Source: N/A
Telephone: N/A
Last EDR Contact: N/A
Next Scheduled EDR Contact: N/A
Data Release Frequency: Varies

EDR US Hist Auto Stat: EDR Proprietary Historic Gas Stations - Cole

Date of Government Version: N/A
Date Data Arrived at EDR: N/A
Date Made Active in Reports: N/A
Number of Days to Update: N/A

Source: N/A
Telephone: N/A
Last EDR Contact: N/A
Next Scheduled EDR Contact: N/A
Data Release Frequency: Varies

EDR RECOVERED GOVERNMENT ARCHIVES

Exclusive Recovered Govt. Archives

RGA LF: Recovered Government Archive Solid Waste Facilities List

The EDR Recovered Government Archive Landfill database provides a list of landfills derived from historical databases and includes many records that no longer appear in current government lists. Compiled from Records formerly available from the Department of Resources Recycling and Recovery in California.

Date of Government Version: N/A
Date Data Arrived at EDR: 07/01/2013
Date Made Active in Reports: 01/13/2014
Number of Days to Update: 196

Source: Department of Resources Recycling and Recovery
Telephone: N/A
Last EDR Contact: 06/01/2012
Next Scheduled EDR Contact: N/A
Data Release Frequency: Varies

RGA LUST: Recovered Government Archive Leaking Underground Storage Tank

The EDR Recovered Government Archive Leaking Underground Storage Tank database provides a list of LUST incidents derived from historical databases and includes many records that no longer appear in current government lists. Compiled from Records formerly available from the State Water Resources Control Board in California.

Date of Government Version: N/A
Date Data Arrived at EDR: 07/01/2013
Date Made Active in Reports: 12/30/2013
Number of Days to Update: 182

Source: State Water Resources Control Board
Telephone: N/A
Last EDR Contact: 06/01/2012
Next Scheduled EDR Contact: N/A
Data Release Frequency: Varies

COUNTY RECORDS

ALAMEDA COUNTY:

Contaminated Sites

A listing of contaminated sites overseen by the Toxic Release Program (oil and groundwater contamination from chemical releases and spills) and the Leaking Underground Storage Tank Program (soil and ground water contamination from leaking petroleum USTs).

Date of Government Version: 01/22/2014
Date Data Arrived at EDR: 01/23/2014
Date Made Active in Reports: 02/11/2014
Number of Days to Update: 19

Source: Alameda County Environmental Health Services
Telephone: 510-567-6700
Last EDR Contact: 03/31/2014
Next Scheduled EDR Contact: 07/14/2014
Data Release Frequency: Semi-Annually

Underground Tanks

Underground storage tank sites located in Alameda county.

Date of Government Version: 01/22/2014
Date Data Arrived at EDR: 01/23/2014
Date Made Active in Reports: 02/12/2014
Number of Days to Update: 20

Source: Alameda County Environmental Health Services
Telephone: 510-567-6700
Last EDR Contact: 03/31/2014
Next Scheduled EDR Contact: 07/14/2014
Data Release Frequency: Semi-Annually

AMADOR COUNTY:

CUPA Facility List
Cupa Facility List

Date of Government Version: 12/05/2013
Date Data Arrived at EDR: 12/10/2013
Date Made Active in Reports: 01/03/2014
Number of Days to Update: 24

Source: Amador County Environmental Health
Telephone: 209-223-6439
Last EDR Contact: 03/24/2014
Next Scheduled EDR Contact: 06/23/2014
Data Release Frequency: Varies

BUTTE COUNTY:

CUPA Facility Listing
Cupa facility list.

Date of Government Version: 08/01/2013
Date Data Arrived at EDR: 08/02/2013
Date Made Active in Reports: 08/22/2013
Number of Days to Update: 20

Source: Public Health Department
Telephone: 530-538-7149
Last EDR Contact: 04/10/2014
Next Scheduled EDR Contact: 07/28/2014
Data Release Frequency: No Update Planned

CALVERAS COUNTY:

CUPA Facility Listing
Cupa Facility Listing

Date of Government Version: 09/30/2013
Date Data Arrived at EDR: 10/01/2013
Date Made Active in Reports: 11/26/2013
Number of Days to Update: 56

Source: Calveras County Environmental Health
Telephone: 209-754-6399
Last EDR Contact: 03/31/2014
Next Scheduled EDR Contact: 07/14/2014
Data Release Frequency: Quarterly

COLUSA COUNTY:

CUPA Facility List
Cupa facility list.

Date of Government Version: 12/05/2013
Date Data Arrived at EDR: 12/05/2013
Date Made Active in Reports: 01/27/2014
Number of Days to Update: 53

Source: Health & Human Services
Telephone: 530-458-0396
Last EDR Contact: 03/13/2014
Next Scheduled EDR Contact: 05/26/2014
Data Release Frequency: Varies

CONTRA COSTA COUNTY:

Site List
List includes sites from the underground tank, hazardous waste generator and business plan/2185 programs.

Date of Government Version: 02/24/2014
Date Data Arrived at EDR: 02/25/2014
Date Made Active in Reports: 03/18/2014
Number of Days to Update: 21

Source: Contra Costa Health Services Department
Telephone: 925-646-2286
Last EDR Contact: 02/05/2014
Next Scheduled EDR Contact: 05/19/2014
Data Release Frequency: Semi-Annually

DEL NORTE COUNTY:

CUPA Facility List
Cupa Facility list

Date of Government Version: 01/09/2013
Date Data Arrived at EDR: 01/10/2013
Date Made Active in Reports: 02/25/2013
Number of Days to Update: 46

Source: Del Norte County Environmental Health Division
Telephone: 707-465-0426
Last EDR Contact: 11/04/2013
Next Scheduled EDR Contact: 02/17/2014
Data Release Frequency: Varies

EL DORADO COUNTY:

CUPA Facility List
CUPA facility list.

Date of Government Version: 02/20/2014
Date Data Arrived at EDR: 02/21/2014
Date Made Active in Reports: 03/20/2014
Number of Days to Update: 27

Source: El Dorado County Environmental Management Department
Telephone: 530-621-6623
Last EDR Contact: 02/04/2014
Next Scheduled EDR Contact: 05/19/2014
Data Release Frequency: Varies

FRESNO COUNTY:

CUPA Resources List
Certified Unified Program Agency. CUPA's are responsible for implementing a unified hazardous materials and hazardous waste management regulatory program. The agency provides oversight of businesses that deal with hazardous materials, operate underground storage tanks or aboveground storage tanks.

Date of Government Version: 12/31/2013
Date Data Arrived at EDR: 01/14/2014
Date Made Active in Reports: 02/11/2014
Number of Days to Update: 28

Source: Dept. of Community Health
Telephone: 559-445-3271
Last EDR Contact: 04/14/2014
Next Scheduled EDR Contact: 07/28/2014
Data Release Frequency: Semi-Annually

HUMBOLDT COUNTY:

CUPA Facility List
CUPA facility list.

Date of Government Version: 12/16/2013
Date Data Arrived at EDR: 12/17/2013
Date Made Active in Reports: 01/07/2014
Number of Days to Update: 21

Source: Humboldt County Environmental Health
Telephone: N/A
Last EDR Contact: 02/24/2014
Next Scheduled EDR Contact: 06/09/2014
Data Release Frequency: Varies

IMPERIAL COUNTY:

CUPA Facility List
Cupa facility list.

Date of Government Version: 01/27/2014
Date Data Arrived at EDR: 01/28/2014
Date Made Active in Reports: 02/11/2014
Number of Days to Update: 14

Source: San Diego Border Field Office
Telephone: 760-339-2777
Last EDR Contact: 04/28/2014
Next Scheduled EDR Contact: 08/11/2014
Data Release Frequency: Varies

INYO COUNTY:

CUPA Facility List
Cupa facility list.

Date of Government Version: 09/10/2013
Date Data Arrived at EDR: 09/11/2013
Date Made Active in Reports: 10/14/2013
Number of Days to Update: 33

Source: Inyo County Environmental Health Services
Telephone: 760-878-0238
Last EDR Contact: 02/24/2014
Next Scheduled EDR Contact: 06/09/2014
Data Release Frequency: Varies

KERN COUNTY:

Underground Storage Tank Sites & Tank Listing
Kern County Sites and Tanks Listing.

Date of Government Version: 08/31/2010
Date Data Arrived at EDR: 09/01/2010
Date Made Active in Reports: 09/30/2010
Number of Days to Update: 29

Source: Kern County Environment Health Services Department
Telephone: 661-862-8700
Last EDR Contact: 02/10/2014
Next Scheduled EDR Contact: 05/26/2014
Data Release Frequency: Quarterly

KINGS COUNTY:

CUPA Facility List
A listing of sites included in the county's Certified Unified Program Agency database. California's Secretary for Environmental Protection established the unified hazardous materials and hazardous waste regulatory program as required by chapter 6.11 of the California Health and Safety Code. The Unified Program consolidates the administration, permits, inspections, and enforcement activities.

Date of Government Version: 02/25/2014
Date Data Arrived at EDR: 02/27/2014
Date Made Active in Reports: 03/20/2014
Number of Days to Update: 21

Source: Kings County Department of Public Health
Telephone: 559-584-1411
Last EDR Contact: 02/24/2014
Next Scheduled EDR Contact: 06/09/2014
Data Release Frequency: Varies

LAKE COUNTY:

CUPA Facility List
Cupa facility list

Date of Government Version: 01/23/2013
Date Data Arrived at EDR: 01/25/2013
Date Made Active in Reports: 02/27/2013
Number of Days to Update: 33

Source: Lake County Environmental Health
Telephone: 707-263-1164
Last EDR Contact: 04/21/2014
Next Scheduled EDR Contact: 08/04/2014
Data Release Frequency: Varies

LOS ANGELES COUNTY:

San Gabriel Valley Areas of Concern
San Gabriel Valley areas where VOC contamination is at or above the MCL as designated by region 9 EPA office.

Date of Government Version: 03/30/2009
Date Data Arrived at EDR: 03/31/2009
Date Made Active in Reports: 10/23/2009
Number of Days to Update: 206

Source: EPA Region 9
Telephone: 415-972-3178
Last EDR Contact: 03/24/2014
Next Scheduled EDR Contact: 07/07/2014
Data Release Frequency: No Update Planned

HMS: Street Number List
Industrial Waste and Underground Storage Tank Sites.

Date of Government Version: 12/06/2013
Date Data Arrived at EDR: 01/28/2014
Date Made Active in Reports: 03/17/2014
Number of Days to Update: 48

Source: Department of Public Works
Telephone: 626-458-3517
Last EDR Contact: 04/02/2014
Next Scheduled EDR Contact: 07/28/2014
Data Release Frequency: Semi-Annually

List of Solid Waste Facilities
Solid Waste Facilities in Los Angeles County.

Date of Government Version: 01/20/2014
Date Data Arrived at EDR: 01/21/2014
Date Made Active in Reports: 02/11/2014
Number of Days to Update: 21

Source: La County Department of Public Works
Telephone: 818-458-5185
Last EDR Contact: 04/22/2014
Next Scheduled EDR Contact: 08/04/2014
Data Release Frequency: Varies

City of Los Angeles Landfills
Landfills owned and maintained by the City of Los Angeles.

Date of Government Version: 03/05/2009
Date Data Arrived at EDR: 03/10/2009
Date Made Active in Reports: 04/08/2009
Number of Days to Update: 29

Source: Engineering & Construction Division
Telephone: 213-473-7869
Last EDR Contact: 04/17/2014
Next Scheduled EDR Contact: 08/04/2014
Data Release Frequency: Varies

Site Mitigation List
Industrial sites that have had some sort of spill or complaint.

Date of Government Version: 01/07/2014
Date Data Arrived at EDR: 02/25/2014
Date Made Active in Reports: 03/25/2014
Number of Days to Update: 28

Source: Community Health Services
Telephone: 323-890-7806
Last EDR Contact: 04/17/2014
Next Scheduled EDR Contact: 08/04/2014
Data Release Frequency: Annually

City of El Segundo Underground Storage Tank
Underground storage tank sites located in El Segundo city.

Date of Government Version: 02/10/2014
Date Data Arrived at EDR: 02/12/2014
Date Made Active in Reports: 03/17/2014
Number of Days to Update: 33

Source: City of El Segundo Fire Department
Telephone: 310-524-2236
Last EDR Contact: 04/21/2014
Next Scheduled EDR Contact: 08/04/2014
Data Release Frequency: Semi-Annually

City of Long Beach Underground Storage Tank
Underground storage tank sites located in the city of Long Beach.

Date of Government Version: 02/25/2014
Date Data Arrived at EDR: 02/27/2014
Date Made Active in Reports: 04/14/2014
Number of Days to Update: 46

Source: City of Long Beach Fire Department
Telephone: 562-570-2563
Last EDR Contact: 04/28/2014
Next Scheduled EDR Contact: 08/11/2014
Data Release Frequency: Annually

City of Torrance Underground Storage Tank
Underground storage tank sites located in the city of Torrance.

Date of Government Version: 07/15/2013
Date Data Arrived at EDR: 07/18/2013
Date Made Active in Reports: 08/20/2013
Number of Days to Update: 33

Source: City of Torrance Fire Department
Telephone: 310-618-2973
Last EDR Contact: 04/14/2014
Next Scheduled EDR Contact: 07/28/2014
Data Release Frequency: Semi-Annually

MADERA COUNTY:

CUPA Facility List

A listing of sites included in the county's Certified Unified Program Agency database. California's Secretary for Environmental Protection established the unified hazardous materials and hazardous waste regulatory program as required by chapter 6.11 of the California Health and Safety Code. The Unified Program consolidates the administration, permits, inspections, and enforcement activities.

Date of Government Version: 12/09/2013
Date Data Arrived at EDR: 12/10/2013
Date Made Active in Reports: 02/20/2014
Number of Days to Update: 72

Source: Madera County Environmental Health
Telephone: 559-675-7823
Last EDR Contact: 02/24/2014
Next Scheduled EDR Contact: 06/09/2014
Data Release Frequency: Varies

MARIN COUNTY:

Underground Storage Tank Sites

Currently permitted USTs in Marin County.

Date of Government Version: 01/03/2014
Date Data Arrived at EDR: 01/09/2014
Date Made Active in Reports: 02/12/2014
Number of Days to Update: 34

Source: Public Works Department Waste Management
Telephone: 415-499-6647
Last EDR Contact: 04/07/2014
Next Scheduled EDR Contact: 07/21/2014
Data Release Frequency: Semi-Annually

MERCED COUNTY:

CUPA Facility List

CUPA facility list.

Date of Government Version: 03/10/2014
Date Data Arrived at EDR: 03/11/2014
Date Made Active in Reports: 04/10/2014
Number of Days to Update: 30

Source: Merced County Environmental Health
Telephone: 209-381-1094
Last EDR Contact: 03/10/2014
Next Scheduled EDR Contact: 06/09/2014
Data Release Frequency: Varies

MONO COUNTY:

CUPA Facility List

CUPA Facility List

Date of Government Version: 03/03/2014
Date Data Arrived at EDR: 03/04/2014
Date Made Active in Reports: 04/01/2014
Number of Days to Update: 28

Source: Mono County Health Department
Telephone: 760-932-5580
Last EDR Contact: 03/03/2014
Next Scheduled EDR Contact: 06/16/2014
Data Release Frequency: Varies

MONTEREY COUNTY:

CUPA Facility Listing

CUPA Program listing from the Environmental Health Division.

Date of Government Version: 03/18/2014
Date Data Arrived at EDR: 03/20/2014
Date Made Active in Reports: 04/25/2014
Number of Days to Update: 36

Source: Monterey County Health Department
Telephone: 831-796-1297
Last EDR Contact: 02/24/2014
Next Scheduled EDR Contact: 06/09/2014
Data Release Frequency: Varies

NAPA COUNTY:

Sites With Reported Contamination
A listing of leaking underground storage tank sites located in Napa county.

Date of Government Version: 12/05/2011
Date Data Arrived at EDR: 12/06/2011
Date Made Active in Reports: 02/07/2012
Number of Days to Update: 63

Source: Napa County Department of Environmental Management
Telephone: 707-253-4269
Last EDR Contact: 03/03/2014
Next Scheduled EDR Contact: 06/06/2014
Data Release Frequency: No Update Planned

Closed and Operating Underground Storage Tank Sites
Underground storage tank sites located in Napa county.

Date of Government Version: 01/15/2008
Date Data Arrived at EDR: 01/16/2008
Date Made Active in Reports: 02/08/2008
Number of Days to Update: 23

Source: Napa County Department of Environmental Management
Telephone: 707-253-4269
Last EDR Contact: 03/03/2014
Next Scheduled EDR Contact: 06/16/2014
Data Release Frequency: No Update Planned

NEVADA COUNTY:

CUPA Facility List
CUPA facility list.

Date of Government Version: 11/06/2013
Date Data Arrived at EDR: 11/07/2013
Date Made Active in Reports: 12/04/2013
Number of Days to Update: 27

Source: Community Development Agency
Telephone: 530-265-1467
Last EDR Contact: 02/14/2014
Next Scheduled EDR Contact: 05/19/2014
Data Release Frequency: Varies

ORANGE COUNTY:

List of Industrial Site Cleanups
Petroleum and non-petroleum spills.

Date of Government Version: 02/01/2014
Date Data Arrived at EDR: 02/12/2014
Date Made Active in Reports: 03/17/2014
Number of Days to Update: 33

Source: Health Care Agency
Telephone: 714-834-3446
Last EDR Contact: 02/10/2014
Next Scheduled EDR Contact: 05/26/2014
Data Release Frequency: Annually

List of Underground Storage Tank Cleanups
Orange County Underground Storage Tank Cleanups (LUST).

Date of Government Version: 02/03/2014
Date Data Arrived at EDR: 02/13/2014
Date Made Active in Reports: 03/18/2014
Number of Days to Update: 33

Source: Health Care Agency
Telephone: 714-834-3446
Last EDR Contact: 02/10/2014
Next Scheduled EDR Contact: 05/26/2014
Data Release Frequency: Quarterly

List of Underground Storage Tank Facilities
Orange County Underground Storage Tank Facilities (UST).

Date of Government Version: 02/01/2014
Date Data Arrived at EDR: 02/12/2014
Date Made Active in Reports: 03/18/2014
Number of Days to Update: 34

Source: Health Care Agency
Telephone: 714-834-3446
Last EDR Contact: 02/10/2014
Next Scheduled EDR Contact: 05/26/2014
Data Release Frequency: Quarterly

PLACER COUNTY:

Master List of Facilities
List includes aboveground tanks, underground tanks and cleanup sites.

Date of Government Version: 03/10/2014
Date Data Arrived at EDR: 03/11/2014
Date Made Active in Reports: 04/10/2014
Number of Days to Update: 30

Source: Placer County Health and Human Services
Telephone: 530-745-2363
Last EDR Contact: 03/10/2014
Next Scheduled EDR Contact: 06/23/2014
Data Release Frequency: Semi-Annually

RIVERSIDE COUNTY:

Listing of Underground Tank Cleanup Sites
Riverside County Underground Storage Tank Cleanup Sites (LUST).

Date of Government Version: 04/15/2014
Date Data Arrived at EDR: 04/17/2014
Date Made Active in Reports: 04/24/2014
Number of Days to Update: 7

Source: Department of Environmental Health
Telephone: 951-358-5055
Last EDR Contact: 03/02/2014
Next Scheduled EDR Contact: 07/07/2014
Data Release Frequency: Quarterly

Underground Storage Tank Tank List
Underground storage tank sites located in Riverside county.

Date of Government Version: 01/14/2014
Date Data Arrived at EDR: 01/15/2014
Date Made Active in Reports: 02/12/2014
Number of Days to Update: 28

Source: Department of Environmental Health
Telephone: 951-358-5055
Last EDR Contact: 03/24/2014
Next Scheduled EDR Contact: 07/07/2014
Data Release Frequency: Quarterly

SACRAMENTO COUNTY:

Toxic Site Clean-Up List
List of sites where unauthorized releases of potentially hazardous materials have occurred.

Date of Government Version: 11/21/2013
Date Data Arrived at EDR: 01/09/2014
Date Made Active in Reports: 02/11/2014
Number of Days to Update: 33

Source: Sacramento County Environmental Management
Telephone: 916-875-8406
Last EDR Contact: 04/04/2014
Next Scheduled EDR Contact: 07/21/2014
Data Release Frequency: Quarterly

Master Hazardous Materials Facility List
Any business that has hazardous materials on site - hazardous material storage sites, underground storage tanks, waste generators.

Date of Government Version: 11/21/2013
Date Data Arrived at EDR: 01/09/2014
Date Made Active in Reports: 02/11/2014
Number of Days to Update: 33

Source: Sacramento County Environmental Management
Telephone: 916-875-8406
Last EDR Contact: 04/04/2014
Next Scheduled EDR Contact: 07/21/2014
Data Release Frequency: Quarterly

SAN BERNARDINO COUNTY:

Hazardous Material Permits
This listing includes underground storage tanks, medical waste handlers/generators, hazardous materials handlers, hazardous waste generators, and waste oil generators/handlers.

Date of Government Version: 03/18/2014
Date Data Arrived at EDR: 03/21/2014
Date Made Active in Reports: 04/25/2014
Number of Days to Update: 35

Source: San Bernardino County Fire Department Hazardous Materials Division
Telephone: 909-387-3041
Last EDR Contact: 02/10/2014
Next Scheduled EDR Contact: 05/26/2014
Data Release Frequency: Quarterly

SAN DIEGO COUNTY:

Hazardous Materials Management Division Database

The database includes: HE58 - This report contains the business name, site address, business phone number, establishment 'H' permit number, type of permit, and the business status. HE17 - In addition to providing the same information provided in the HE58 listing, HE17 provides inspection dates, violations received by the establishment, hazardous waste generated, the quantity, method of storage, treatment/disposal of waste and the hauler, and information on underground storage tanks. Unauthorized Release List - Includes a summary of environmental contamination cases in San Diego County (underground tank cases, non-tank cases, groundwater contamination, and soil contamination are included.)

Date of Government Version: 09/23/2013
Date Data Arrived at EDR: 09/24/2013
Date Made Active in Reports: 10/17/2013
Number of Days to Update: 23

Source: Hazardous Materials Management Division
Telephone: 619-338-2268
Last EDR Contact: 03/10/2014
Next Scheduled EDR Contact: 06/23/2014
Data Release Frequency: Quarterly

Solid Waste Facilities

San Diego County Solid Waste Facilities.

Date of Government Version: 10/31/2013
Date Data Arrived at EDR: 11/19/2013
Date Made Active in Reports: 12/31/2013
Number of Days to Update: 42

Source: Department of Health Services
Telephone: 619-338-2209
Last EDR Contact: 04/28/2014
Next Scheduled EDR Contact: 08/11/2014
Data Release Frequency: Varies

Environmental Case Listing

The listing contains all underground tank release cases and projects pertaining to properties contaminated with hazardous substances that are actively under review by the Site Assessment and Mitigation Program.

Date of Government Version: 03/23/2010
Date Data Arrived at EDR: 06/15/2010
Date Made Active in Reports: 07/09/2010
Number of Days to Update: 24

Source: San Diego County Department of Environmental Health
Telephone: 619-338-2371
Last EDR Contact: 03/10/2014
Next Scheduled EDR Contact: 06/23/2014
Data Release Frequency: No Update Planned

SAN FRANCISCO COUNTY:

Local Oversite Facilities

A listing of leaking underground storage tank sites located in San Francisco county.

Date of Government Version: 09/19/2008
Date Data Arrived at EDR: 09/19/2008
Date Made Active in Reports: 09/29/2008
Number of Days to Update: 10

Source: Department Of Public Health San Francisco County
Telephone: 415-252-3920
Last EDR Contact: 02/10/2014
Next Scheduled EDR Contact: 05/26/2014
Data Release Frequency: Quarterly

Underground Storage Tank Information

Underground storage tank sites located in San Francisco county.

Date of Government Version: 11/29/2010
Date Data Arrived at EDR: 03/10/2011
Date Made Active in Reports: 03/15/2011
Number of Days to Update: 5

Source: Department of Public Health
Telephone: 415-252-3920
Last EDR Contact: 02/10/2014
Next Scheduled EDR Contact: 05/26/2014
Data Release Frequency: Quarterly

SAN JOAQUIN COUNTY:

San Joaquin Co. UST
A listing of underground storage tank locations in San Joaquin county.

Date of Government Version: 12/18/2013
Date Data Arrived at EDR: 12/19/2013
Date Made Active in Reports: 01/08/2014
Number of Days to Update: 20

Source: Environmental Health Department
Telephone: N/A
Last EDR Contact: 04/07/2014
Next Scheduled EDR Contact: 07/07/2014
Data Release Frequency: Semi-Annually

SAN LUIS OBISPO COUNTY:

CUPA Facility List
Cupa Facility List.

Date of Government Version: 02/24/2014
Date Data Arrived at EDR: 02/26/2014
Date Made Active in Reports: 03/26/2014
Number of Days to Update: 28

Source: San Luis Obispo County Public Health Department
Telephone: 805-781-5596
Last EDR Contact: 02/24/2014
Next Scheduled EDR Contact: 06/09/2014
Data Release Frequency: Varies

SAN MATEO COUNTY:

Business Inventory
List includes Hazardous Materials Business Plan, hazardous waste generators, and underground storage tanks.

Date of Government Version: 01/13/2014
Date Data Arrived at EDR: 01/14/2014
Date Made Active in Reports: 02/11/2014
Number of Days to Update: 28

Source: San Mateo County Environmental Health Services Division
Telephone: 650-363-1921
Last EDR Contact: 03/17/2014
Next Scheduled EDR Contact: 06/30/2014
Data Release Frequency: Annually

Fuel Leak List
A listing of leaking underground storage tank sites located in San Mateo county.

Date of Government Version: 03/17/2014
Date Data Arrived at EDR: 03/18/2014
Date Made Active in Reports: 04/24/2014
Number of Days to Update: 37

Source: San Mateo County Environmental Health Services Division
Telephone: 650-363-1921
Last EDR Contact: 03/17/2014
Next Scheduled EDR Contact: 06/30/2014
Data Release Frequency: Semi-Annually

SANTA BARBARA COUNTY:

CUPA Facility Listing
CUPA Program Listing from the Environmental Health Services division.

Date of Government Version: 09/08/2011
Date Data Arrived at EDR: 09/09/2011
Date Made Active in Reports: 10/07/2011
Number of Days to Update: 28

Source: Santa Barbara County Public Health Department
Telephone: 805-686-8167
Last EDR Contact: 02/24/2014
Next Scheduled EDR Contact: 06/09/2014
Data Release Frequency: Varies

SANTA CLARA COUNTY:

Cupa Facility List
Cupa facility list

Date of Government Version: 03/04/2014
Date Data Arrived at EDR: 03/06/2014
Date Made Active in Reports: 03/20/2014
Number of Days to Update: 14

Source: Department of Environmental Health
Telephone: 408-918-1973
Last EDR Contact: 03/03/2014
Next Scheduled EDR Contact: 06/16/2014
Data Release Frequency: Varies

HIST LUST - Fuel Leak Site Activity Report

A listing of open and closed leaking underground storage tanks. This listing is no longer updated by the county. Leaking underground storage tanks are now handled by the Department of Environmental Health.

Date of Government Version: 03/29/2005
Date Data Arrived at EDR: 03/30/2005
Date Made Active in Reports: 04/21/2005
Number of Days to Update: 22

Source: Santa Clara Valley Water District
Telephone: 408-265-2600
Last EDR Contact: 03/23/2009
Next Scheduled EDR Contact: 06/22/2009
Data Release Frequency: No Update Planned

LOP Listing

A listing of leaking underground storage tanks located in Santa Clara county.

Date of Government Version: 03/03/2014
Date Data Arrived at EDR: 03/05/2014
Date Made Active in Reports: 03/18/2014
Number of Days to Update: 13

Source: Department of Environmental Health
Telephone: 408-918-3417
Last EDR Contact: 03/03/2014
Next Scheduled EDR Contact: 06/16/2014
Data Release Frequency: Annually

Hazardous Material Facilities

Hazardous material facilities, including underground storage tank sites.

Date of Government Version: 02/07/2014
Date Data Arrived at EDR: 02/11/2014
Date Made Active in Reports: 03/17/2014
Number of Days to Update: 34

Source: City of San Jose Fire Department
Telephone: 408-535-7694
Last EDR Contact: 02/10/2014
Next Scheduled EDR Contact: 05/26/2014
Data Release Frequency: Annually

SANTA CRUZ COUNTY:

CUPA Facility List

CUPA facility listing.

Date of Government Version: 02/24/2014
Date Data Arrived at EDR: 02/25/2014
Date Made Active in Reports: 03/20/2014
Number of Days to Update: 23

Source: Santa Cruz County Environmental Health
Telephone: 831-464-2761
Last EDR Contact: 02/24/2014
Next Scheduled EDR Contact: 06/09/2014
Data Release Frequency: Varies

SHASTA COUNTY:

CUPA Facility List

Cupa Facility List.

Date of Government Version: 03/17/2014
Date Data Arrived at EDR: 03/18/2014
Date Made Active in Reports: 04/24/2014
Number of Days to Update: 37

Source: Shasta County Department of Resource Management
Telephone: 530-225-5789
Last EDR Contact: 02/24/2014
Next Scheduled EDR Contact: 06/09/2014
Data Release Frequency: Varies

SOLANO COUNTY:

Leaking Underground Storage Tanks
A listing of leaking underground storage tank sites located in Solano county.

Date of Government Version: 12/16/2013
Date Data Arrived at EDR: 12/18/2013
Date Made Active in Reports: 01/08/2014
Number of Days to Update: 21

Source: Solano County Department of Environmental Management
Telephone: 707-784-6770
Last EDR Contact: 03/17/2014
Next Scheduled EDR Contact: 06/30/2014
Data Release Frequency: Quarterly

Underground Storage Tanks
Underground storage tank sites located in Solano county.

Date of Government Version: 12/16/2013
Date Data Arrived at EDR: 12/19/2013
Date Made Active in Reports: 01/08/2014
Number of Days to Update: 20

Source: Solano County Department of Environmental Management
Telephone: 707-784-6770
Last EDR Contact: 03/17/2014
Next Scheduled EDR Contact: 06/30/2014
Data Release Frequency: Quarterly

SONOMA COUNTY:

Cupa Facility List
Cupa Facility list

Date of Government Version: 12/31/2013
Date Data Arrived at EDR: 01/02/2014
Date Made Active in Reports: 02/11/2014
Number of Days to Update: 40

Source: County of Sonoma Fire & Emergency Services Department
Telephone: 707-565-1174
Last EDR Contact: 03/31/2014
Next Scheduled EDR Contact: 07/14/2014
Data Release Frequency: Varies

Leaking Underground Storage Tank Sites
A listing of leaking underground storage tank sites located in Sonoma county.

Date of Government Version: 01/03/2014
Date Data Arrived at EDR: 01/03/2014
Date Made Active in Reports: 02/11/2014
Number of Days to Update: 39

Source: Department of Health Services
Telephone: 707-565-6565
Last EDR Contact: 03/31/2014
Next Scheduled EDR Contact: 07/14/2014
Data Release Frequency: Quarterly

SUTTER COUNTY:

Underground Storage Tanks
Underground storage tank sites located in Sutter county.

Date of Government Version: 12/10/2013
Date Data Arrived at EDR: 12/11/2013
Date Made Active in Reports: 01/04/2014
Number of Days to Update: 24

Source: Sutter County Department of Agriculture
Telephone: 530-822-7500
Last EDR Contact: 03/24/2014
Next Scheduled EDR Contact: 06/23/2014
Data Release Frequency: Semi-Annually

TUOLUMNE COUNTY:

CUPA Facility List
Cupa facility list

Date of Government Version: 01/27/2014
Date Data Arrived at EDR: 01/28/2014
Date Made Active in Reports: 03/17/2014
Number of Days to Update: 48

Source: Divison of Environmental Health
Telephone: 209-533-5633
Last EDR Contact: 04/28/2014
Next Scheduled EDR Contact: 08/11/2014
Data Release Frequency: Varies

VENTURA COUNTY:

Business Plan, Hazardous Waste Producers, and Operating Underground Tanks

The BWT list indicates by site address whether the Environmental Health Division has Business Plan (B), Waste Producer (W), and/or Underground Tank (T) information.

Date of Government Version: 01/28/2014
Date Data Arrived at EDR: 02/25/2014
Date Made Active in Reports: 03/20/2014
Number of Days to Update: 23

Source: Ventura County Environmental Health Division
Telephone: 805-654-2813
Last EDR Contact: 02/18/2014
Next Scheduled EDR Contact: 06/02/2014
Data Release Frequency: Quarterly

Inventory of Illegal Abandoned and Inactive Sites

Ventura County Inventory of Closed, Illegal Abandoned, and Inactive Sites.

Date of Government Version: 12/01/2011
Date Data Arrived at EDR: 12/01/2011
Date Made Active in Reports: 01/19/2012
Number of Days to Update: 49

Source: Environmental Health Division
Telephone: 805-654-2813
Last EDR Contact: 04/04/2014
Next Scheduled EDR Contact: 07/21/2014
Data Release Frequency: Annually

Listing of Underground Tank Cleanup Sites

Ventura County Underground Storage Tank Cleanup Sites (LUST).

Date of Government Version: 05/29/2008
Date Data Arrived at EDR: 06/24/2008
Date Made Active in Reports: 07/31/2008
Number of Days to Update: 37

Source: Environmental Health Division
Telephone: 805-654-2813
Last EDR Contact: 02/17/2014
Next Scheduled EDR Contact: 06/02/2014
Data Release Frequency: Quarterly

Medical Waste Program List

To protect public health and safety and the environment from potential exposure to disease causing agents, the Environmental Health Division Medical Waste Program regulates the generation, handling, storage, treatment and disposal of medical waste throughout the County.

Date of Government Version: 10/02/2013
Date Data Arrived at EDR: 10/30/2013
Date Made Active in Reports: 11/27/2013
Number of Days to Update: 28

Source: Ventura County Resource Management Agency
Telephone: 805-654-2813
Last EDR Contact: 03/21/2014
Next Scheduled EDR Contact: 05/12/2014
Data Release Frequency: Quarterly

Underground Tank Closed Sites List

Ventura County Operating Underground Storage Tank Sites (UST)/Underground Tank Closed Sites List.

Date of Government Version: 11/26/2013
Date Data Arrived at EDR: 12/18/2013
Date Made Active in Reports: 01/08/2014
Number of Days to Update: 21

Source: Environmental Health Division
Telephone: 805-654-2813
Last EDR Contact: 03/17/2014
Next Scheduled EDR Contact: 06/30/2014
Data Release Frequency: Quarterly

YOLO COUNTY:

Underground Storage Tank Comprehensive Facility Report

Underground storage tank sites located in Yolo county.

Date of Government Version: 12/18/2013
Date Data Arrived at EDR: 12/24/2013
Date Made Active in Reports: 01/08/2014
Number of Days to Update: 15

Source: Yolo County Department of Health
Telephone: 530-666-8646
Last EDR Contact: 03/24/2014
Next Scheduled EDR Contact: 07/07/2014
Data Release Frequency: Annually

YUBA COUNTY:

CUPA Facility List
CUPA facility listing for Yuba County.

Date of Government Version: 02/11/2014
Date Data Arrived at EDR: 02/13/2014
Date Made Active in Reports: 03/17/2014
Number of Days to Update: 32

Source: Yuba County Environmental Health Department
Telephone: 530-749-7523
Last EDR Contact: 12/06/2013
Next Scheduled EDR Contact: 02/17/2014
Data Release Frequency: Varies

OTHER DATABASE(S)

Depending on the geographic area covered by this report, the data provided in these specialty databases may or may not be complete. For example, the existence of wetlands information data in a specific report does not mean that all wetlands in the area covered by the report are included. Moreover, the absence of any reported wetlands information does not necessarily mean that wetlands do not exist in the area covered by the report.

CT MANIFEST: Hazardous Waste Manifest Data
Facility and manifest data. Manifest is a document that lists and tracks hazardous waste from the generator through transporters to a tsd facility.

Date of Government Version: 07/30/2013
Date Data Arrived at EDR: 08/19/2013
Date Made Active in Reports: 10/03/2013
Number of Days to Update: 45

Source: Department of Energy & Environmental Protection
Telephone: 860-424-3375
Last EDR Contact: 02/21/2014
Next Scheduled EDR Contact: 06/02/2014
Data Release Frequency: Annually

NJ MANIFEST: Manifest Information
Hazardous waste manifest information.

Date of Government Version: 12/31/2011
Date Data Arrived at EDR: 07/19/2012
Date Made Active in Reports: 08/28/2012
Number of Days to Update: 40

Source: Department of Environmental Protection
Telephone: N/A
Last EDR Contact: 04/18/2014
Next Scheduled EDR Contact: 07/28/2014
Data Release Frequency: Annually

NY MANIFEST: Facility and Manifest Data
Manifest is a document that lists and tracks hazardous waste from the generator through transporters to a TSD facility.

Date of Government Version: 12/31/2013
Date Data Arrived at EDR: 02/07/2014
Date Made Active in Reports: 03/31/2014
Number of Days to Update: 52

Source: Department of Environmental Conservation
Telephone: 518-402-8651
Last EDR Contact: 03/12/2014
Next Scheduled EDR Contact: 05/19/2014
Data Release Frequency: Annually

PA MANIFEST: Manifest Information
Hazardous waste manifest information.

Date of Government Version: 12/31/2012
Date Data Arrived at EDR: 07/24/2013
Date Made Active in Reports: 08/19/2013
Number of Days to Update: 26

Source: Department of Environmental Protection
Telephone: 717-783-8990
Last EDR Contact: 04/21/2014
Next Scheduled EDR Contact: 08/04/2014
Data Release Frequency: Annually

RI MANIFEST: Manifest information
Hazardous waste manifest information

Date of Government Version: 12/31/2012
Date Data Arrived at EDR: 06/21/2013
Date Made Active in Reports: 08/05/2013
Number of Days to Update: 45

Source: Department of Environmental Management
Telephone: 401-222-2797
Last EDR Contact: 02/24/2014
Next Scheduled EDR Contact: 06/09/2014
Data Release Frequency: Annually

WI MANIFEST: Manifest Information
Hazardous waste manifest information.

Date of Government Version: 12/31/2012
Date Data Arrived at EDR: 08/09/2013
Date Made Active in Reports: 09/27/2013
Number of Days to Update: 49

Source: Department of Natural Resources
Telephone: N/A
Last EDR Contact: 03/17/2014
Next Scheduled EDR Contact: 06/30/2014
Data Release Frequency: Annually

Oil/Gas Pipelines: This data was obtained by EDR from the USGS in 1994. It is referred to by USGS as GeoData Digital Line Graphs from 1:100,000-Scale Maps. It was extracted from the transportation category including some oil, but primarily gas pipelines.

Electric Power Transmission Line Data
Source: Rextag Strategies Corp.
Telephone: (281) 769-2247
U.S. Electric Transmission and Power Plants Systems Digital GIS Data

Sensitive Receptors: There are individuals deemed sensitive receptors due to their fragile immune systems and special sensitivity to environmental discharges. These sensitive receptors typically include the elderly, the sick, and children. While the location of all sensitive receptors cannot be determined, EDR indicates those buildings and facilities - schools, daycares, hospitals, medical centers, and nursing homes - where individuals who are sensitive receptors are likely to be located.

AHA Hospitals:
Source: American Hospital Association, Inc.
Telephone: 312-280-5991
The database includes a listing of hospitals based on the American Hospital Association's annual survey of hospitals.

Medical Centers: Provider of Services Listing
Source: Centers for Medicare & Medicaid Services
Telephone: 410-786-3000
A listing of hospitals with Medicare provider number, produced by Centers of Medicare & Medicaid Services, a federal agency within the U.S. Department of Health and Human Services.

Nursing Homes
Source: National Institutes of Health
Telephone: 301-594-6248
Information on Medicare and Medicaid certified nursing homes in the United States.

Public Schools
Source: National Center for Education Statistics
Telephone: 202-502-7300
The National Center for Education Statistics' primary database on elementary and secondary public education in the United States. It is a comprehensive, annual, national statistical database of all public elementary and secondary schools and school districts, which contains data that are comparable across all states.

Private Schools
Source: National Center for Education Statistics
Telephone: 202-502-7300
The National Center for Education Statistics' primary database on private school locations in the United States.

Daycare Centers: Licensed Facilities
Source: Department of Social Services
Telephone: 916-657-4041

Flood Zone Data: This data, available in select counties across the country, was obtained by EDR in 2003 & 2011 from the Federal Emergency Management Agency (FEMA). Data depicts 100-year and 500-year flood zones as defined by FEMA.

NWI: National Wetlands Inventory. This data, available in select counties across the country, was obtained by EDR in 2002, 2005 and 2010 from the U.S. Fish and Wildlife Service.

Scanned Digital USGS 7.5' Topographic Map (DRG)
Source: United States Geologic Survey
A digital raster graphic (DRG) is a scanned image of a U.S. Geological Survey topographic map. The map images are made by scanning published paper maps on high-resolution scanners. The raster image is georeferenced and fit to the Universal Transverse Mercator (UTM) projection.

STREET AND ADDRESS INFORMATION

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GEOCHECK ®- PHYSICAL SETTING SOURCE ADDENDUM

TARGET PROPERTY ADDRESS

INDUSTRIAL DRIVE AND MERCHANDISE WAY
INDUSTRIAL DRIVE
DIAMOND SPRINGS, CA 95619

TARGET PROPERTY COORDINATES

Latitude (North):	38.6982 - 38˚ 41' 53.52''
Longitude (West):	120.83 - 120˚ 49' 48.00''
Universal Tranverse Mercator:	Zone 10
UTM X (Meters):	688714.5
UTM Y (Meters):	4285314.0
Elevation:	1772 ft. above sea level

USGS TOPOGRAPHIC MAP

Target Property Map:	38120-F7 PLACERVILLE, CA
Most Recent Revision:	1973

EDR's GeoCheck Physical Setting Source Addendum is provided to assist the environmental professional in forming an opinion about the impact of potential contaminant migration.

Assessment of the impact of contaminant migration generally has two principal investigative components:

1. Groundwater flow direction, and
2. Groundwater flow velocity.

Groundwater flow direction may be impacted by surface topography, hydrology, hydrogeology, characteristics of the soil, and nearby wells. Groundwater flow velocity is generally impacted by the nature of the geologic strata.

GEOCHECK® - PHYSICAL SETTING SOURCE SUMMARY

GROUNDWATER FLOW DIRECTION INFORMATION

Groundwater flow direction for a particular site is best determined by a qualified environmental professional using site-specific well data. If such data is not reasonably ascertainable, it may be necessary to rely on other sources of information, such as surface topographic information, hydrologic information, hydrogeologic data collected on nearby properties, and regional groundwater flow information (from deep aquifers).

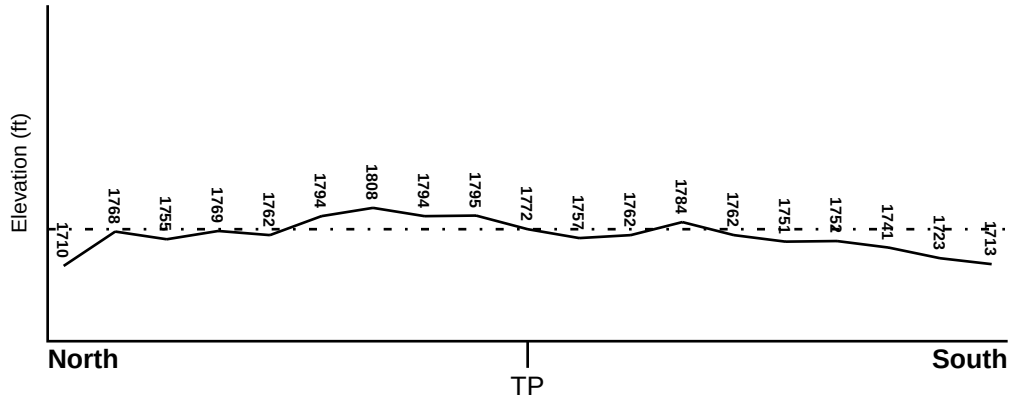
TOPOGRAPHIC INFORMATION

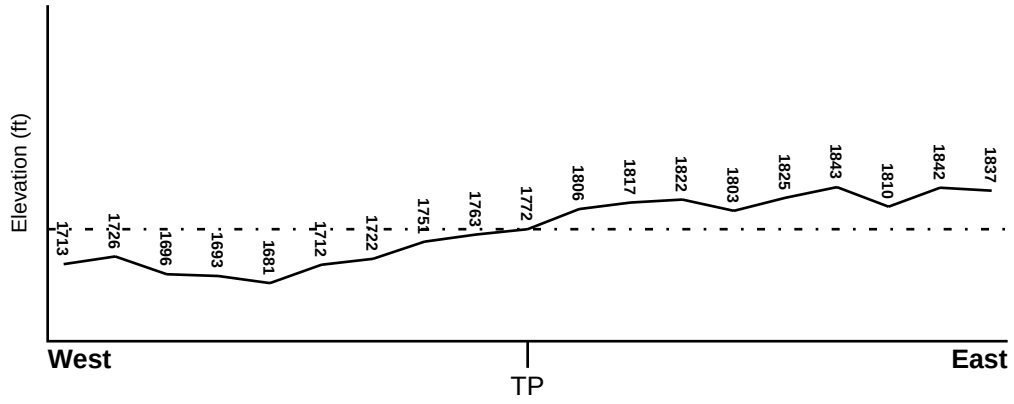
Surface topography may be indicative of the direction of surficial groundwater flow. This information can be used to assist the environmental professional in forming an opinion about the impact of nearby contaminated properties or, should contamination exist on the target property, what downgradient sites might be impacted.

TARGET PROPERTY TOPOGRAPHY

General Topographic Gradient: General WSW

SURROUNDING TOPOGRAPHY: ELEVATION PROFILES





Target Property Elevation: 1772 ft.

0 1/2 1 Miles

Source: Topography has been determined from the USGS 7.5' Digital Elevation Model and should be evaluated on a relative (not an absolute) basis. Relative elevation information between sites of close proximity should be field verified.

GEOCHECK® - PHYSICAL SETTING SOURCE SUMMARY

HYDROLOGIC INFORMATION

Surface water can act as a hydrologic barrier to groundwater flow. Such hydrologic information can be used to assist the environmental professional in forming an opinion about the impact of nearby contaminated properties or, should contamination exist on the target property, what downgradient sites might be impacted.

Refer to the Physical Setting Source Map following this summary for hydrologic information (major waterways and bodies of water).

FEMA FLOOD ZONE

Target Property County	FEMA Flood Electronic Data
EL DORADO, CA	YES - refer to the Overview Map and Detail Map

Flood Plain Panel at Target Property: 06017C - FEMA DFIRM Flood data

Additional Panels in search area: Not Reported

NATIONAL WETLAND INVENTORY

NWI Quad at Target Property	NWI Electronic Data Coverage
PLACERVILLE	YES - refer to the Overview Map and Detail Map

HYDROGEOLOGIC INFORMATION

Hydrogeologic information obtained by installation of wells on a specific site can often be an indicator of groundwater flow direction in the immediate area. Such hydrogeologic information can be used to assist the environmental professional in forming an opinion about the impact of nearby contaminated properties or, should contamination exist on the target property, what downgradient sites might be impacted.

Site-Specific Hydrogeological Data*:

Search Radius: 1.25 miles
Status: Not found

AQUIFLOW®

Search Radius: 1.000 Mile.

EDR has developed the AQUIFLOW Information System to provide data on the general direction of groundwater flow at specific points. EDR has reviewed reports submitted by environmental professionals to regulatory authorities at select sites and has extracted the date of the report, groundwater flow direction as determined hydrogeologically, and the depth to water table.

MAP ID	LOCATION FROM TP	GENERAL DIRECTION GROUNDWATER FLOW
Not Reported		

* ©1996 Site−specific hydrogeological data gathered by CERCLIS Alerts, Inc., Bainbridge Island, WA. All rights reserved. All of the information and opinions presented are those of the cited EPA report(s), which were completed under a Comprehensive Environmental Response Compensation and Liability Information System (CERCLIS) investigation.

GEOCHECK® - PHYSICAL SETTING SOURCE SUMMARY

GROUNDWATER FLOW VELOCITY INFORMATION

Groundwater flow velocity information for a particular site is best determined by a qualified environmental professional using site specific geologic and soil strata data. If such data are not reasonably ascertainable, it may be necessary to rely on other sources of information, including geologic age identification, rock stratigraphic unit and soil characteristics data collected on nearby properties and regional soil information. In general, contaminant plumes move more quickly through sandy-gravelly types of soils than silty-clayey types of soils.

GEOLOGIC INFORMATION IN GENERAL AREA OF TARGET PROPERTY

Geologic information can be used by the environmental professional in forming an opinion about the relative speed at which contaminant migration may be occurring.

ROCK STRATIGRAPHIC UNIT

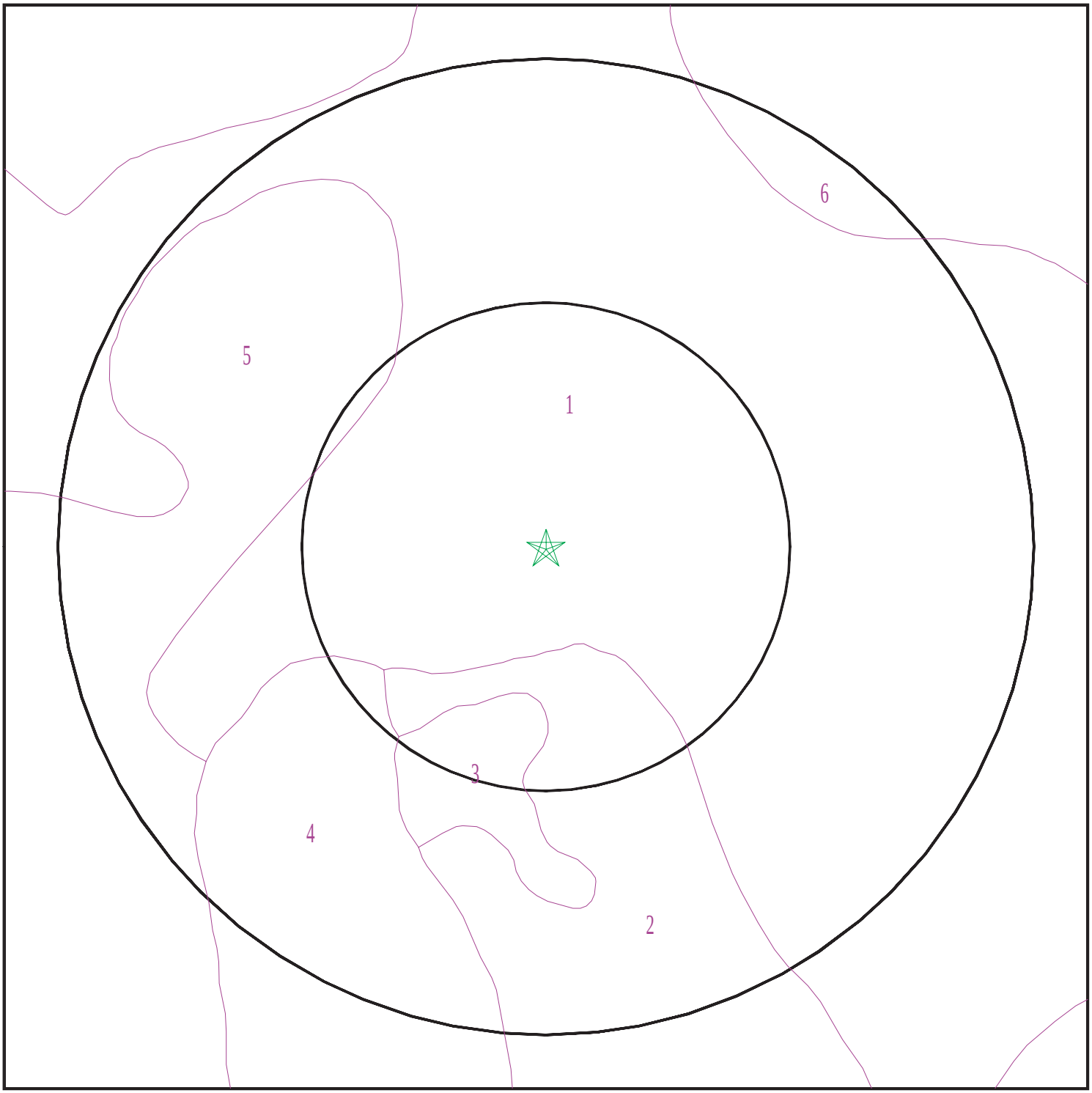
Era:	Mesozoic
System:	Lower Jurassic and Upper Triassic
Series:	Lower Mesozoic
Code:	lMze *(decoded above as Era, System & Series)*

GEOLOGIC AGE IDENTIFICATION

Category: Eugeosynclinal Deposits

Geologic Age and Rock Stratigraphic Unit Source: P.G. Schruben, R.E. Arndt and W.J. Bawiec, Geology of the Conterminous U.S. at 1:2,500,000 Scale - a digital representation of the 1974 P.B. King and H.M. Beikman Map, USGS Digital Data Series DDS - 11 (1994).

SSURGO SOIL MAP - 3925295.2s



Target Property
SSURGO Soil
Water

0 1/16 1/8 1/4 Miles

N

SITE NAME:	Industrial Drive and Merchandise Way	CLIENT:	Youngdahl Consulting Group
ADDRESS:	Industrial Drive Diamond Springs CA 95619	CONTACT:	Laurie Israel
		INQUIRY #:	3925295.2s
LAT/LONG:	38.6982 / 120.83	DATE:	April 28, 2014 4:55 pm

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GEOCHECK® - PHYSICAL SETTING SOURCE SUMMARY

DOMINANT SOIL COMPOSITION IN GENERAL AREA OF TARGET PROPERTY

The U.S. Department of Agriculture's (USDA) Soil Conservation Service (SCS) leads the National Cooperative Soil Survey (NCSS) and is responsible for collecting, storing, maintaining and distributing soil survey information for privately owned lands in the United States. A soil map in a soil survey is a representation of soil patterns in a landscape. The following information is based on Soil Conservation Service SSURGO data.

Soil Map ID: 1

Soil Component Name: PLACER DIGGINGS

Soil Surface Texture: fine sandy loam, cobbles

Hydrologic Group: Class A - High infiltration rates. Soils are deep, well drained to excessively drained sands and gravels.

Soil Drainage Class:
Hydric Status: Not hydric

Corrosion Potential - Uncoated Steel: Not Reported

Depth to Bedrock Min: > 0 inches

Depth to Watertable Min: > 0 inches

Soil Layer Information							
	Boundary			Classification		Saturated hydraulic conductivity micro m/sec	Soil Reaction (pH)
Layer	Upper	Lower	Soil Texture Class	AASHTO Group	Unified Soil		
1	0 inches	59 inches	fine sandy loam, cobbles	Not reported	COARSE-GRAINED SOILS, Gravels, Clean gravels, Poorly Graded Gravel.	Max: 141 Min: 42	Max: Min:

Soil Map ID: 2

Soil Component Name: DIAMOND SPRINGS

Soil Surface Texture: very fine sandy loam

Hydrologic Group: Class C - Slow infiltration rates. Soils with layers impeding downward movement of water, or soils with moderately fine or fine textures.

Soil Drainage Class: Well drained

GEOCHECK® - PHYSICAL SETTING SOURCE SUMMARY

Hydric Status: Not hydric

Corrosion Potential - Uncoated Steel: High

Depth to Bedrock Min: > 0 inches

Depth to Watertable Min: > 0 inches

Soil Layer Information							
	Boundary			Classification		Saturated hydraulic conductivity micro m/sec	Soil Reaction (pH)
Layer	Upper	Lower	Soil Texture Class	AASHTO Group	Unified Soil		
1	0 inches	9 inches	very fine sandy loam	Not reported	FINE-GRAINED SOILS, Silts and Clays (liquid limit less than 50%), silt.	Max: 14 Min: 4	Max: 6 Min: 4.5
2	9 inches	35 inches	clay loam	Not reported	FINE-GRAINED SOILS, Silts and Clays (liquid limit less than 50%), Lean Clay	Max: 4 Min: 1.4	Max: 5.5 Min: 4.5
3	35 inches	40 inches	sandy clay loam	Not reported	COARSE-GRAINED SOILS, Sands, Sands with fines, Clayey sand.	Max: 4 Min: 1.4	Max: 5.5 Min: 4.5
4	40 inches	44 inches	weathered bedrock	Not reported	Not reported	Max: Min:	Max: Min:

Soil Map ID: 3

Soil Component Name: Water

Soil Surface Texture: very fine sandy loam

Hydrologic Group: Class C - Slow infiltration rates. Soils with layers impeding downward movement of water, or soils with moderately fine or fine textures.

Soil Drainage Class:
Hydric Status: Not hydric

Corrosion Potential - Uncoated Steel: Not Reported

Depth to Bedrock Min: > 0 inches

Depth to Watertable Min: > 0 inches

No Layer Information available.

Soil Map ID: 4

Soil Component Name: DIAMOND SPRINGS

Soil Surface Texture: very fine sandy loam

Hydrologic Group: Class C - Slow infiltration rates. Soils with layers impeding downward movement of water, or soils with moderately fine or fine textures.

Soil Drainage Class: Well drained

Hydric Status: Not hydric

Corrosion Potential - Uncoated Steel: High

Depth to Bedrock Min: > 0 inches

Depth to Watertable Min: > 0 inches

Soil Layer Information							
	Boundary			Classification		Saturated hydraulic conductivity micro m/sec	Soil Reaction (pH)
Layer	Upper	Lower	Soil Texture Class	AASHTO Group	Unified Soil		
1	0 inches	9 inches	very fine sandy loam	Not reported	FINE-GRAINED SOILS, Silts and Clays (liquid limit less than 50%), silt.	Max: 14 Min: 4	Max: 6 Min: 4.5
2	9 inches	35 inches	clay loam	Not reported	FINE-GRAINED SOILS, Silts and Clays (liquid limit less than 50%), Lean Clay	Max: 4 Min: 1.4	Max: 5.5 Min: 4.5
3	35 inches	40 inches	sandy clay loam	Not reported	COARSE-GRAINED SOILS, Sands, Sands with fines, Clayey sand.	Max: 4 Min: 1.4	Max: 5.5 Min: 4.5
4	40 inches	44 inches	weathered bedrock	Not reported	Not reported	Max: Min:	Max: Min:

Soil Map ID: 5

Soil Component Name: BOOMER

Soil Surface Texture: gravelly loam

Hydrologic Group: Class B - Moderate infiltration rates. Deep and moderately deep, moderately well and well drained soils with moderately coarse textures.

Soil Drainage Class: Well drained

Hydric Status: Not hydric

Corrosion Potential - Uncoated Steel: Moderate

Depth to Bedrock Min: > 0 inches

Depth to Watertable Min: > 0 inches

Soil Layer Information							
	Boundary			Classification		Saturated hydraulic conductivity micro m/sec	Soil Reaction (pH)
Layer	Upper	Lower	Soil Texture Class	AASHTO Group	Unified Soil		
1	0 inches	12 inches	gravelly loam	Not reported	COARSE-GRAINED SOILS, Gravels, Gravels with fines, Silty Gravel	Max: 14 Min: 4	Max: 6.5 Min: 5.6
2	12 inches	51 inches	gravelly sandy clay loam	Not reported	COARSE-GRAINED SOILS, Gravels, Gravels with fines, Clayey Gravel	Max: 4 Min: 1.4	Max: 6.5 Min: 5.6
3	51 inches	55 inches	weathered bedrock	Not reported	Not reported	Max: Min:	Max: Min:

Soil Map ID: 6

Soil Component Name: TAILINGS

Soil Surface Texture: fragmental material

Hydrologic Group: Class A - High infiltration rates. Soils are deep, well drained to excessively drained sands and gravels.

Soil Drainage Class:
Hydric Status: Not hydric

Corrosion Potential - Uncoated Steel: Not Reported

Depth to Bedrock Min: > 0 inches

Depth to Watertable Min: > 0 inches

GEOCHECK® - PHYSICAL SETTING SOURCE SUMMARY

Soil Layer Information							
	Boundary			Classification		Saturated hydraulic conductivity micro m/sec	Soil Reaction (pH)
Layer	Upper	Lower	Soil Texture Class	AASHTO Group	Unified Soil		
1	0 inches	59 inches	fragmental material	Not reported	COARSE-GRAINED SOILS, Gravels, Clean gravels, Poorly Graded Gravel.	Max: 141 Min: 42	Max: Min:

LOCAL / REGIONAL WATER AGENCY RECORDS

EDR Local/Regional Water Agency records provide water well information to assist the environmental professional in assessing sources that may impact ground water flow direction, and in forming an opinion about the impact of contaminant migration on nearby drinking water wells.

WELL SEARCH DISTANCE INFORMATION

DATABASE	SEARCH DISTANCE (miles)
Federal USGS	1.000
Federal FRDS PWS	Nearest PWS within 1 mile
State Database	1.000

FEDERAL USGS WELL INFORMATION

MAP ID	WELL ID	LOCATION FROM TP
No Wells Found		

FEDERAL FRDS PUBLIC WATER SUPPLY SYSTEM INFORMATION

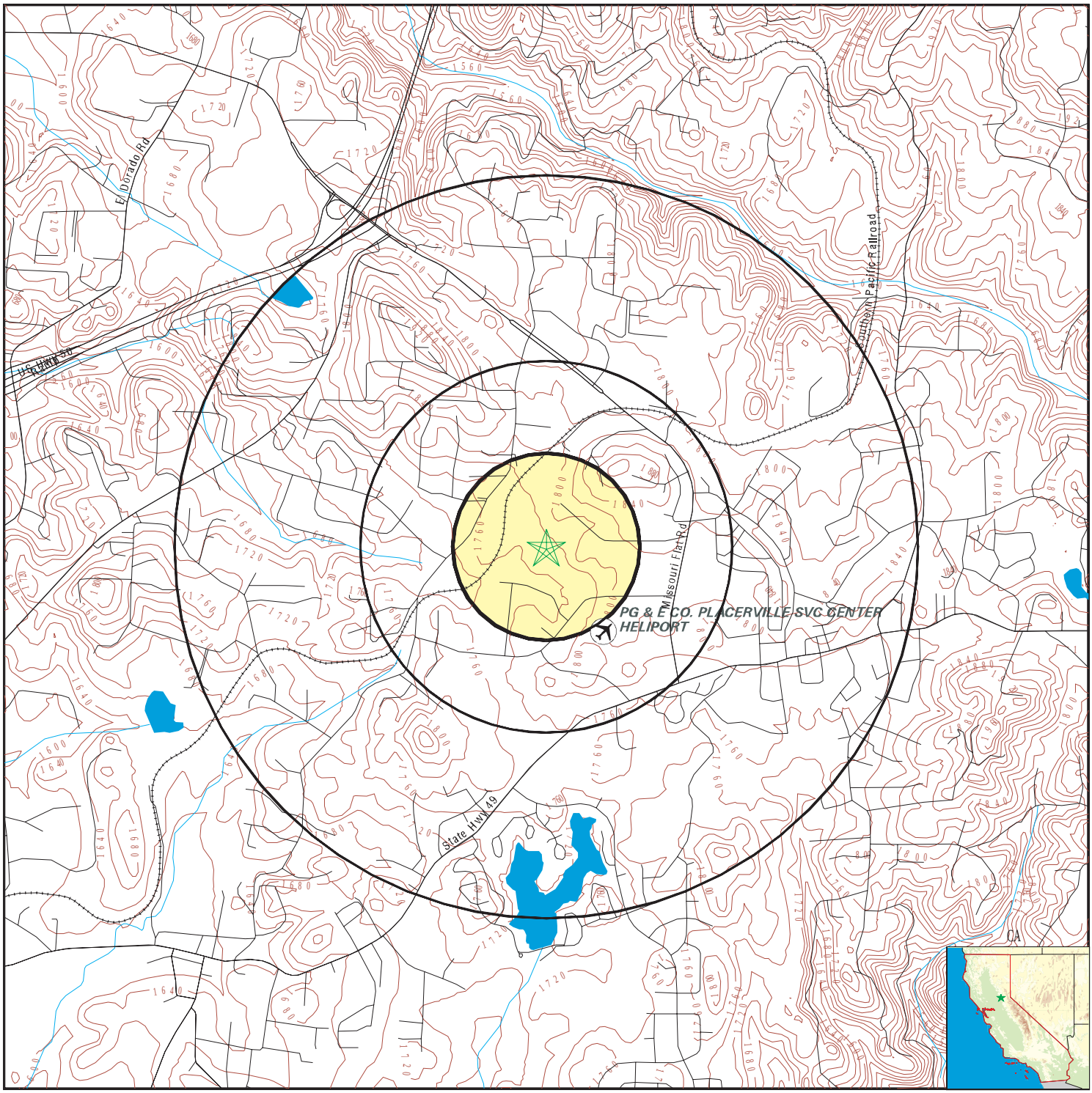
MAP ID	WELL ID	LOCATION FROM TP
No PWS System Found		

Note: PWS System location is not always the same as well location.

STATE DATABASE WELL INFORMATION

MAP ID	WELL ID	LOCATION FROM TP
No Wells Found		

PHYSICAL SETTING SOURCE MAP - 3925295.2s



0 1/4 1/2 1 Miles

- County Boundary
- Major Roads
- Contour Lines
- Earthquake Fault Lines
- Airports
- Earthquake epicenter, Richter 5 or greater
- Water Wells
- Public Water Supply Wells
- Cluster of Multiple Icons
- Groundwater Flow Direction
- GI Indeterminate Groundwater Flow at Location
- GV Groundwater Flow Varies at Location
- HD Closest Hydrogeological Data
- Oil, gas or related wells

N

SITE NAME:	Industrial Drive and Merchandise Way	CLIENT:	Youngdahl Consulting Group
ADDRESS:	Industrial Drive Diamond Springs CA 95619	CONTACT:	Laurie Israel
		INQUIRY #:	3925295.2s
LAT/LONG:	38.6982 / 120.83	DATE:	April 28, 2014 4:55 pm

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GEOCHECK® - PHYSICAL SETTING SOURCE MAP FINDINGS
RADON

AREA RADON INFORMATION

State Database: CA Radon

Radon Test Results

Zipcode	Num Tests	> 4 pCi/L
95667	61	13

Federal EPA Radon Zone for EL DORADO County: 2

Note: Zone 1 indoor average level > 4 pCi/L.
: Zone 2 indoor average level >= 2 pCi/L and <= 4 pCi/L.
: Zone 3 indoor average level < 2 pCi/L.

Federal Area Radon Information for Zip Code: 95667

Number of sites tested: 10

Area	Average Activity	% <4 pCi/L	% 4-20 pCi/L	% >20 pCi/L
Living Area - 1st Floor	0.850 pCi/L	100%	0%	0%
Living Area - 2nd Floor	Not Reported	Not Reported	Not Reported	Not Reported
Basement	5.700 pCi/L	0%	100%	0%

PHYSICAL SETTING SOURCE RECORDS SEARCHED

TOPOGRAPHIC INFORMATION

USGS 7.5' Digital Elevation Model (DEM)
Source: United States Geologic Survey
EDR acquired the USGS 7.5' Digital Elevation Model in 2002 and updated it in 2006. The 7.5 minute DEM corresponds to the USGS 1:24,000- and 1:25,000-scale topographic quadrangle maps. The DEM provides elevation data with consistent elevation units and projection.

Scanned Digital USGS 7.5' Topographic Map (DRG)
Source: United States Geologic Survey
A digital raster graphic (DRG) is a scanned image of a U.S. Geological Survey topographic map. The map images are made by scanning published paper maps on high-resolution scanners. The raster image is georeferenced and fit to the Universal Transverse Mercator (UTM) projection.

HYDROLOGIC INFORMATION

Flood Zone Data: This data, available in select counties across the country, was obtained by EDR in 2003 & 2011 from the Federal Emergency Management Agency (FEMA). Data depicts 100-year and 500-year flood zones as defined by FEMA.

NWI: National Wetlands Inventory. This data, available in select counties across the country, was obtained by EDR in 2002, 2005 and 2010 from the U.S. Fish and Wildlife Service.

HYDROGEOLOGIC INFORMATION

AQUIFLOW[R] Information System
Source: EDR proprietary database of groundwater flow information
EDR has developed the AQUIFLOW Information System (AIS) to provide data on the general direction of groundwater flow at specific points. EDR has reviewed reports submitted to regulatory authorities at select sites and has extracted the date of the report, hydrogeologically determined groundwater flow direction and depth to water table information.

GEOLOGIC INFORMATION

Geologic Age and Rock Stratigraphic Unit
Source: P.G. Schruben, R.E. Arndt and W.J. Bawiec, Geology of the Conterminous U.S. at 1:2,500,000 Scale - A digital representation of the 1974 P.B. King and H.M. Beikman Map, USGS Digital Data Series DDS - 11 (1994).

STATSGO: State Soil Geographic Database
Source: Department of Agriculture, Natural Resources Conservation Services
The U.S. Department of Agriculture's (USDA) Natural Resources Conservation Service (NRCS) leads the national Conservation Soil Survey (NCSS) and is responsible for collecting, storing, maintaining and distributing soil survey information for privately owned lands in the United States. A soil map in a soil survey is a representation of soil patterns in a landscape. Soil maps for STATSGO are compiled by generalizing more detailed (SSURGO) soil survey maps.

SSURGO: Soil Survey Geographic Database
Source: Department of Agriculture, Natural Resources Conservation Services (NRCS)
Telephone: 800-672-5559
SSURGO is the most detailed level of mapping done by the Natural Resources Conservation Services, mapping scales generally range from 1:12,000 to 1:63,360. Field mapping methods using national standards are used to construct the soil maps in the Soil Survey Geographic (SSURGO) database. SSURGO digitizing duplicates the original soil survey maps. This level of mapping is designed for use by landowners, townships and county natural resource planning and management.

PHYSICAL SETTING SOURCE RECORDS SEARCHED

LOCAL / REGIONAL WATER AGENCY RECORDS

FEDERAL WATER WELLS

PWS: Public Water Systems
Source: EPA/Office of Drinking Water
Telephone: 202-564-3750
Public Water System data from the Federal Reporting Data System. A PWS is any water system which provides water to at least 25 people for at least 60 days annually. PWSs provide water from wells, rivers and other sources.

PWS ENF: Public Water Systems Violation and Enforcement Data
Source: EPA/Office of Drinking Water
Telephone: 202-564-3750
Violation and Enforcement data for Public Water Systems from the Safe Drinking Water Information System (SDWIS) after August 1995. Prior to August 1995, the data came from the Federal Reporting Data System (FRDS).

USGS Water Wells: USGS National Water Inventory System (NWIS)
This database contains descriptive information on sites where the USGS collects or has collected data on surface water and/or groundwater. The groundwater data includes information on wells, springs, and other sources of groundwater.

STATE RECORDS

Water Well Database
Source: Department of Water Resources
Telephone: 916-651-9648

California Drinking Water Quality Database
Source: Department of Public Health
Telephone: 916-324-2319
The database includes all drinking water compliance and special studies monitoring for the state of California since 1984. It consists of over 3,200,000 individual analyses along with well and water system information.

OTHER STATE DATABASE INFORMATION

California Oil and Gas Well Locations
Source: Department of Conservation
Telephone: 916-323-1779
Oil and Gas well locations in the state.

RADON

State Database: CA Radon
Source: Department of Health Services
Telephone: 916-324-2208
Radon Database for California

Area Radon Information
Source: USGS
Telephone: 703-356-4020
The National Radon Database has been developed by the U.S. Environmental Protection Agency (USEPA) and is a compilation of the EPA/State Residential Radon Survey and the National Residential Radon Survey. The study covers the years 1986 - 1992. Where necessary data has been supplemented by information collected at private sources such as universities and research institutions.

EPA Radon Zones
Source: EPA
Telephone: 703-356-4020
Sections 307 & 309 of IRAA directed EPA to list and identify areas of U.S. with the potential for elevated indoor radon levels.

PHYSICAL SETTING SOURCE RECORDS SEARCHED

OTHER

Airport Landing Facilities: Private and public use landing facilities
Source: Federal Aviation Administration, 800-457-6656

Epicenters: World earthquake epicenters, Richter 5 or greater
Source: Department of Commerce, National Oceanic and Atmospheric Administration

California Earthquake Fault Lines: The fault lines displayed on EDR's Topographic map are digitized quaternary fault lines, prepared in 1975 by the United State Geological Survey. Additional information (also from 1975) regarding activity at specific fault lines comes from California's Preliminary Fault Activity Map prepared by the California Division of Mines and Geology.

STREET AND ADDRESS INFORMATION

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APPENDIX D

EDR Vapor Encroachment Screen

Industrial Drive and Merchandise Way
Industrial Drive
Diamond Springs, CA 95619

Inquiry Number: 4071273.1s
September 25, 2014

EDR Vapor Encroachment Screen

Prepared using EDR's Vapor Encroachment Worksheet

EDR® Environmental Data Resources Inc

440 Wheelers Farms Road
Milford, CT 06461
Toll Free: 800.352.0050
www.edrnet.com

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Secondary Map	**3**
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Thank you for your business.
Please contact EDR at 1-800-352-0050
with any questions or comments.

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EXECUTIVE SUMMARY

A search of available environmental records was conducted by Environmental Data Resources, Inc (EDR). The report was designed to assist parties seeking to meet the search requirements of the ASTM Standard Practice for Assessment of Vapor Encroachment into Structures on Property Involved in Real Estate Transactions (E 2600-10).

STANDARD ENVIRONMENTAL RECORDS	Maximum Search Distance*	Summary		
		property	1/10	1/10 - 1/3
Federal NPL	0.333	0	0	0
Federal CERCLIS	0.333	0	0	0
Federal RCRA CORRACTS facilities list	0.333	0	0	0
Federal RCRA TSD facilities list	0.333	0	0	0
Federal RCRA generators list	property	0	-	-
Federal institutional controls / engineering controls registries	0.333	0	0	0
Federal ERNS list	property	0	-	-
State and tribal - equivalent NPL	0.333	0	0	0
State and tribal - equivalent CERCLIS	0.333	0	1	2
State and tribal landfill / solid waste disposal	0.333	0	0	0
State and tribal leaking storage tank lists	0.333	0	1	1
State and tribal registered storage tank lists	property	0	-	-
State and tribal institutional control / engineering control registries	not searched	-	-	-
State and tribal voluntary cleanup sites	0.333	0	0	0
State and tribal Brownfields sites	not searched	-	-	-
Other Standard Environmental Records	0.333	0	2	2

HISTORICAL USE RECORDS				
Former manufactured Gas Plants	0.333	0	0	0
Historical Gas Stations	0.25	0	1	7
Historical Dry Cleaners	0.25	0	0	0
Exclusive Recovered Govt. Archives	property	0	-	-

*Each category may include several separate databases, each having a different search distance. For each category, the table reports the maximum search distance applied. See the section 'Record Sources and Currency' for information on individual databases.

EXECUTIVE SUMMARY

TARGET PROPERTY INFORMATION

ADDRESS

INDUSTRIAL DRIVE AND MERCHANDISE WAY
INDUSTRIAL DRIVE
DIAMOND SPRINGS, CA 95619

COORDINATES

Latitude (North):	38.6982 - 38° 41′ 53.520813″
Longitude (West):	120.83 - 120° 49′ 48.00659″
Elevation:	1772 ft. above sea level

EXECUTIVE SUMMARY

PHYSICAL SETTING INFORMATION

Flood Zone:	Available
NWI Wetlands:	Available

AQUIFLOW®

Search Radius: 0.333 Mile.

No Aquiflow sites reported.

DOMINANT SOIL COMPOSITION IN GENERAL AREA OF TARGET PROPERTY

The U.S. Department of Agriculture's (USDA) Soil Conservation Service (SCS) leads the National Cooperative Soil Survey (NCSS) and is responsible for collecting, storing, maintaining and distributing soil survey information for privately owned lands in the United States. A soil map in a soil survey is a representation of soil patterns in a landscape. The following information is based on Soil Conservation Service SSURGO data.

Soil Map ID: 1

Soil Component Name:	PLACER DIGGINGS
Soil Surface Texture:	fine sandy loam, cobbles
Hydrologic Group:	Class A - High infiltration rates. Soils are deep, well drained to excessively drained sands and gravels.
Soil Drainage Class:	
Hydric Status:	Not hydric
Corrosion Potential - Uncoated Steel:	Not Reported
Depth to Bedrock Min:	> 0 inches
Depth to Watertable Min:	> 0 inches

Soil Layer Information

	Boundary			Classification		Saturated hydraulic conductivity micro m/sec	Soil Reaction (pH)
Layer	Upper	Lower	Soil Texture Class	AASHTO Group	Unified Soil		
1	0 inches	59 inches	fine sandy loam, cobbles	Not reported	COARSE-GRAINED SOILS, Gravels, Clean gravels, Poorly Graded Gravel.	Max: 141 Min: 42	Max: Min:

Soil Map ID: 2

Soil Component Name: DIAMOND SPRINGS

Soil Surface Texture: very fine sandy loam

Hydrologic Group: Class C - Slow infiltration rates. Soils with layers impeding downward movement of water, or soils with moderately fine or fine textures.

Soil Drainage Class: Well drained

Hydric Status: Not hydric

Corrosion Potential - Uncoated Steel: High

Depth to Bedrock Min: > 0 inches

Depth to Watertable Min: > 0 inches

Soil Layer Information							
	Boundary			Classification		Saturated hydraulic conductivity micro m/sec	Soil Reaction (pH)
Layer	Upper	Lower	Soil Texture Class	AASHTO Group	Unified Soil		
1	0 inches	9 inches	very fine sandy loam	Not reported	FINE-GRAINED SOILS, Silts and Clays (liquid limit less than 50%), silt.	Max: 14 Min: 4	Max: 6 Min: 4.5
2	9 inches	35 inches	clay loam	Not reported	FINE-GRAINED SOILS, Silts and Clays (liquid limit less than 50%), Lean Clay	Max: 4 Min: 1.4	Max: 5.5 Min: 4.5
3	35 inches	40 inches	sandy clay loam	Not reported	COARSE-GRAINED SOILS, Sands, Sands with fines, Clayey sand.	Max: 4 Min: 1.4	Max: 5.5 Min: 4.5
4	40 inches	44 inches	weathered bedrock	Not reported	Not reported	Max: Min:	Max: Min:

Soil Map ID: 3

Soil Component Name: Water

Soil Surface Texture: very fine sandy loam

Hydrologic Group: Class C - Slow infiltration rates. Soils with layers impeding downward movement of water, or soils with moderately fine or fine textures.

Soil Drainage Class:

EXECUTIVE SUMMARY

Hydric Status: Not hydric

Corrosion Potential - Uncoated Steel: Not Reported

Depth to Bedrock Min: > 0 inches

Depth to Watertable Min: > 0 inches

No Layer Information available.

Soil Map ID: 4

Soil Component Name: DIAMOND SPRINGS

Soil Surface Texture: very fine sandy loam

Hydrologic Group: Class C - Slow infiltration rates. Soils with layers impeding downward movement of water, or soils with moderately fine or fine textures.

Soil Drainage Class: Well drained

Hydric Status: Not hydric

Corrosion Potential - Uncoated Steel: High

Depth to Bedrock Min: > 0 inches

Depth to Watertable Min: > 0 inches

Soil Layer Information							
	Boundary			Classification		Saturated hydraulic conductivity micro m/sec	Soil Reaction (pH)
Layer	Upper	Lower	Soil Texture Class	AASHTO Group	Unified Soil		
1	0 inches	9 inches	very fine sandy loam	Not reported	FINE-GRAINED SOILS, Silts and Clays (liquid limit less than 50%), silt.	Max: 14 Min: 4	Max: 6 Min: 4.5
2	9 inches	35 inches	clay loam	Not reported	FINE-GRAINED SOILS, Silts and Clays (liquid limit less than 50%), Lean Clay	Max: 4 Min: 1.4	Max: 5.5 Min: 4.5
3	35 inches	40 inches	sandy clay loam	Not reported	COARSE-GRAINED SOILS, Sands, Sands with fines, Clayey sand.	Max: 4 Min: 1.4	Max: 5.5 Min: 4.5

EXECUTIVE SUMMARY

Soil Layer Information							
	Boundary			Classification		Saturated hydraulic conductivity micro m/sec	Soil Reaction (pH)
Layer	Upper	Lower	Soil Texture Class	AASHTO Group	Unified Soil		
4	40 inches	44 inches	weathered bedrock	Not reported	Not reported	Max: Min:	Max: Min:

Soil Map ID: 5

Soil Component Name: BOOMER

Soil Surface Texture: gravelly loam

Hydrologic Group: Class B - Moderate infiltration rates. Deep and moderately deep, moderately well and well drained soils with moderately coarse textures.

Soil Drainage Class: Well drained

Hydric Status: Not hydric

Corrosion Potential - Uncoated Steel: Moderate

Depth to Bedrock Min: > 0 inches

Depth to Watertable Min: > 0 inches

Soil Layer Information							
	Boundary			Classification		Saturated hydraulic conductivity micro m/sec	Soil Reaction (pH)
Layer	Upper	Lower	Soil Texture Class	AASHTO Group	Unified Soil		
1	0 inches	12 inches	gravelly loam	Not reported	COARSE-GRAINED SOILS, Gravels, Gravels with fines, Silty Gravel	Max: 14 Min: 4	Max: 6.5 Min: 5.6
2	12 inches	51 inches	gravelly sandy clay loam	Not reported	COARSE-GRAINED SOILS, Gravels, Gravels with fines, Clayey Gravel	Max: 4 Min: 1.4	Max: 6.5 Min: 5.6
3	51 inches	55 inches	weathered bedrock	Not reported	Not reported	Max: Min:	Max: Min:

EXECUTIVE SUMMARY

Soil Map ID: 6

Soil Component Name: TAILINGS

Soil Surface Texture: fragmental material

Hydrologic Group: Class A - High infiltration rates. Soils are deep, well drained to excessively drained sands and gravels.

Soil Drainage Class:
Hydric Status: Not hydric

Corrosion Potential - Uncoated Steel: Not Reported

Depth to Bedrock Min: > 0 inches

Depth to Watertable Min: > 0 inches

Soil Layer Information							
	Boundary			Classification		Saturated hydraulic conductivity micro m/sec	Soil Reaction (pH)
Layer	Upper	Lower	Soil Texture Class	AASHTO Group	Unified Soil		
1	0 inches	59 inches	fragmental material	Not reported	COARSE-GRAINED SOILS, Gravels, Clean gravels, Poorly Graded Gravel.	Max: 141 Min: 42	Max: Min:

Soil Map ID: 7

Soil Component Name: AUBURN

Soil Surface Texture: silt loam

Hydrologic Group: Class D - Very slow infiltration rates. Soils are clayey, have a high water table, or are shallow to an impervious layer.

Soil Drainage Class: Well drained

Hydric Status: Not hydric

Corrosion Potential - Uncoated Steel: Moderate

Depth to Bedrock Min: > 48 inches

Depth to Watertable Min: > 0 inches

EXECUTIVE SUMMARY

Soil Layer Information							
	Boundary			Classification		Saturated hydraulic conductivity micro m/sec	Soil Reaction (pH)
Layer	Upper	Lower	Soil Texture Class	AASHTO Group	Unified Soil		
1	0 inches	14 inches	silt loam	Not reported	FINE-GRAINED SOILS, Silts and Clays (liquid limit less than 50%), Lean Clay. FINE-GRAINED SOILS, Silts and Clays (liquid limit less than 50%), silt.	Max: 14 Min: 4	Max: 7.3 Min: 6.1
2	14 inches	18 inches	unweathered bedrock	Not reported	Not reported	Max: Min:	Max: Min:

Soil Map ID: 8

Soil Component Name: BOOMER

Soil Surface Texture: gravelly loam

Hydrologic Group: Class B - Moderate infiltration rates. Deep and moderately deep, moderately well and well drained soils with moderately coarse textures.

Soil Drainage Class: Well drained

Hydric Status: Not hydric

Corrosion Potential - Uncoated Steel: Moderate

Depth to Bedrock Min: > 0 inches

Depth to Watertable Min: > 0 inches

Soil Layer Information							
	Boundary			Classification		Saturated hydraulic conductivity micro m/sec	Soil Reaction (pH)
Layer	Upper	Lower	Soil Texture Class	AASHTO Group	Unified Soil		
1	0 inches	12 inches	gravelly loam	Not reported	COARSE-GRAINED SOILS, Gravels, Gravels with fines, Silty Gravel	Max: 14 Min: 4	Max: 6.5 Min: 5.6

EXECUTIVE SUMMARY

Soil Layer Information							
	Boundary			Classification		Saturated hydraulic conductivity micro m/sec	Soil Reaction (pH)
Layer	Upper	Lower	Soil Texture Class	AASHTO Group	Unified Soil		
2	12 inches	51 inches	gravelly sandy clay loam	Not reported	COARSE-GRAINED SOILS, Gravels, Gravels with fines, Clayey Gravel	Max: 4 Min: 1.4	Max: 6.5 Min: 5.6
3	51 inches	55 inches	weathered bedrock	Not reported	Not reported	Max: Min:	Max: Min:

Soil Map ID: 9

Soil Component Name: AUBURN

Soil Surface Texture: silt loam

Hydrologic Group: Class D - Very slow infiltration rates. Soils are clayey, have a high water table, or are shallow to an impervious layer.

Soil Drainage Class: Well drained

Hydric Status: Not hydric

Corrosion Potential - Uncoated Steel: Moderate

Depth to Bedrock Min: > 48 inches

Depth to Watertable Min: > 0 inches

Soil Layer Information							
	Boundary			Classification		Saturated hydraulic conductivity micro m/sec	Soil Reaction (pH)
Layer	Upper	Lower	Soil Texture Class	AASHTO Group	Unified Soil		
1	0 inches	14 inches	silt loam	Not reported	FINE-GRAINED SOILS, Silts and Clays (liquid limit less than 50%), Lean Clay. FINE-GRAINED SOILS, Silts and Clays (liquid limit less than 50%), silt.	Max: 14 Min: 4	Max: 7.3 Min: 6.1

Soil Layer Information							
	Boundary			Classification		Saturated hydraulic conductivity micro m/sec	Soil Reaction (pH)
Layer	Upper	Lower	Soil Texture Class	AASHTO Group	Unified Soil		
2	14 inches	18 inches	unweathered bedrock	Not reported	Not reported	Max: Min:	Max: Min:

Soil Map ID: 10

Soil Component Name: LOAMY ALLUVIAL LAND

Soil Surface Texture: loam

Hydrologic Group: Class C - Slow infiltration rates. Soils with layers impeding downward movement of water, or soils with moderately fine or fine textures.

Soil Drainage Class: Moderately well drained

Hydric Status: Not hydric

Corrosion Potential - Uncoated Steel: Moderate

Depth to Bedrock Min: > 0 inches

Depth to Watertable Min: > 107 inches

Soil Layer Information							
	Boundary			Classification		Saturated hydraulic conductivity micro m/sec	Soil Reaction (pH)
Layer	Upper	Lower	Soil Texture Class	AASHTO Group	Unified Soil		
1	0 inches	48 inches	loam	Not reported	FINE-GRAINED SOILS, Silts and Clays (liquid limit less than 50%), silt.	Max: 14 Min: 4	Max: 6.5 Min: 5.6
2	48 inches	51 inches	weathered bedrock	Not reported	Not reported	Max: Min:	Max: Min:

Soil Map ID: 11

Soil Component Name: MIXED ALLUVIAL LAND

Soil Surface Texture: gravelly loam

Hydrologic Group: Class D - Very slow infiltration rates. Soils are clayey, have a high water table, or are shallow to an impervious layer.

Soil Drainage Class: Somewhat poorly drained

EXECUTIVE SUMMARY

Hydric Status: Not hydric

Corrosion Potential - Uncoated Steel: Moderate

Depth to Bedrock Min: > 0 inches

Depth to Watertable Min: > 84 inches

Soil Layer Information							
	Boundary			Classification		Saturated hydraulic conductivity micro m/sec	Soil Reaction (pH)
Layer	Upper	Lower	Soil Texture Class	AASHTO Group	Unified Soil		
1	0 inches	35 inches	gravelly loam	Not reported	COARSE-GRAINED SOILS, Sands, Sands with fines, Clayey sand. COARSE-GRAINED SOILS, Sands, Sands with fines, Silty Sand.	Max: 14 Min: 4	Max: 6.5 Min: 5.6
2	35 inches	40 inches	weathered bedrock	Not reported	Not reported	Max: Min:	Max: Min:

EXECUTIVE SUMMARY

SEARCH RESULTS

Unmappable (orphan) sites are not considered in the foregoing analysis.

STANDARD ENVIRONMENTAL RECORDS

Name	Address	Dist/Dir	Map ID	Page
SNOWLINE HOSPICE EMI: Other Standard Environmental Records CUPA Listings: Other Standard Environmental Records ENVIROSTOR: State and tribal - equivalent CERCLIS	180 INDUSTRIAL DR BLDG F	<1/10 ENE	▲ 1	18
PACIFIC BELL C/O ALLEN TB72R FINDS: Other Standard Environmental Records RCRA-SQG: Federal RCRA generators list SWEEPS UST: State and tribal registered storage tank lists LUST: State and tribal leaking storage tank lists CA FID UST: State and tribal registered storage tank lists CUPA Listings: Other Standard Environmental Records HIST CORTESE: Other Standard Environmental Records	281 INDUSTRIAL DR	<1/10 E	▲ 3	24
CELEBRITY PLATING CHMIRS: Other Standard Environmental Records ENVIROSTOR: State and tribal - equivalent CERCLIS	4502 MISSOURI FLAT ROAD	1/10 - 1/3 E	▲ G10	44
TETERS AUTO WRECKERS ENVIROSTOR: State and tribal - equivalent CERCLIS	4487 MISSOURI FLAT ROAD	1/10 - 1/3 ENE	▲ 12	49
SIERRA DOOR SWEEPS UST: State and tribal registered storage tank lists LUST: State and tribal leaking storage tank lists CA FID UST: State and tribal registered storage tank lists CUPA Listings: Other Standard Environmental Records HIST CORTESE: Other Standard Environmental Records	4415 MISSOURI FLAT RD	1/10 - 1/3 NE	▲ 13	51

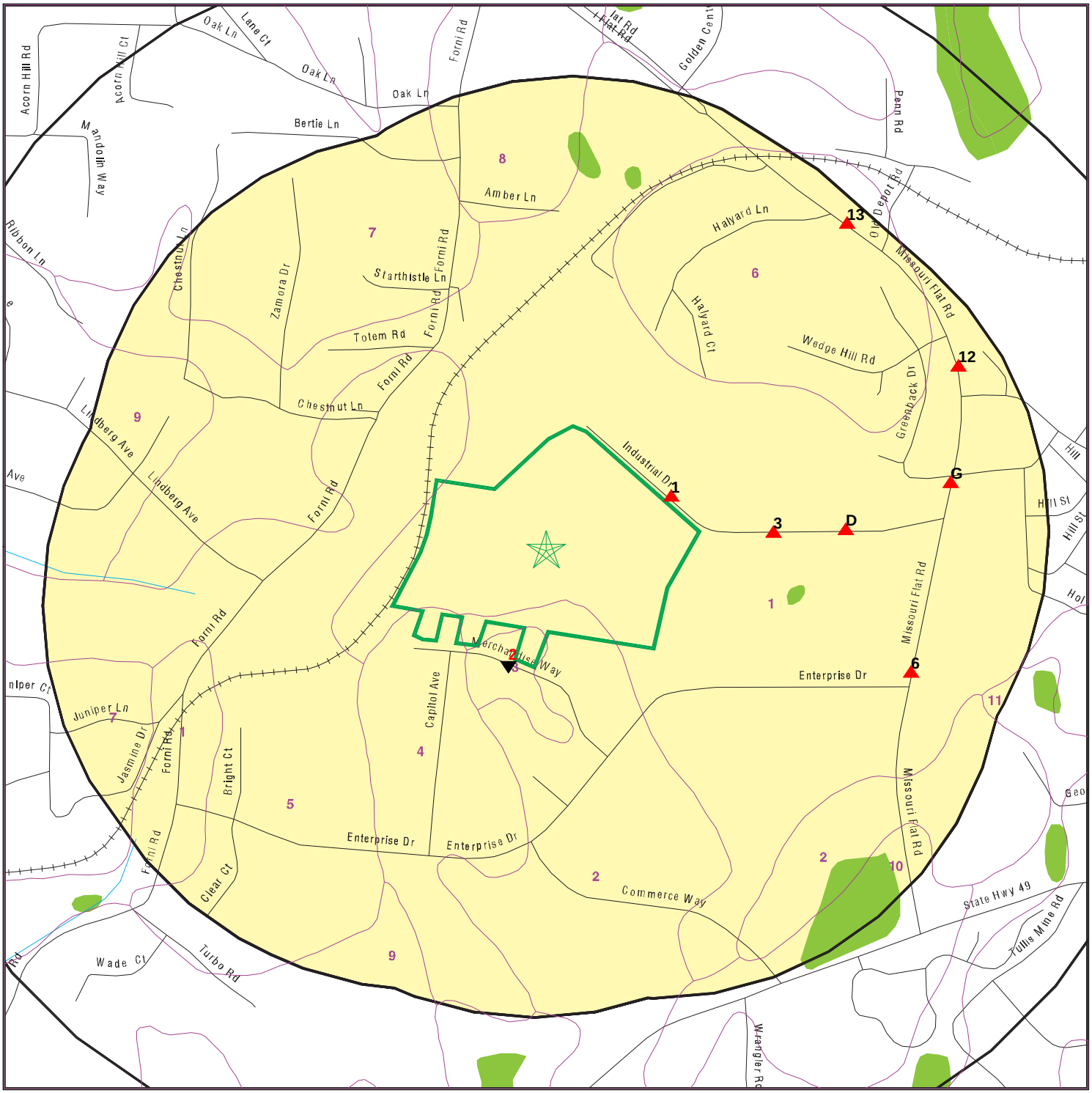
HISTORICAL USE RECORDS

Name	Address	Dist/Dir	Map ID	Page
6642 MERCHANDISE WAY EDR US Hist Auto Stat: Historical Gas Stations	6642 MERCHANDISE WAY	<1/10 SSW	▼ 2	23
329 INDUSTRIAL DR EDR US Hist Auto Stat: Historical Gas Stations	329 INDUSTRIAL DR	1/10 - 1/3 E	▲ D4	37
337 INDUSTRIAL DR EDR US Hist Auto Stat: Historical Gas Stations	337 INDUSTRIAL DR	1/10 - 1/3 E	▲ D5	38
4600 MISSOURI FLAT RD EDR US Hist Auto Stat: Historical Gas Stations	4600 MISSOURI FLAT RD	1/10 - 1/3 ESE	▲ 6	39
4510 MISSOURI FLAT RD EDR US Hist Auto Stat: Historical Gas Stations	4510 MISSOURI FLAT RD	1/10 - 1/3 E	▲ G7	40
4508 MISSOURI FLAT RD EDR US Hist Auto Stat: Historical Gas Stations	4508 MISSOURI FLAT RD	1/10 - 1/3 E	▲ G8	41

EXECUTIVE SUMMARY

Name	Address	Dist/Dir	Map ID	Page
4506 MISSOURI FLAT RD EDR US Hist Auto Stat: Historical Gas Stations	4506 MISSOURI FLAT RD	1/10 - 1/3 E	▲ G9	43
4500 MISSOURI FLAT RD EDR US Hist Auto Stat: Historical Gas Stations	4500 MISSOURI FLAT RD	1/10 - 1/3 E	▲ G11	48

PRIMARY MAP - 4071273.1S



0 300 1/3 1/2 Miles

Target Property

Sites at elevations higher than or equal to the target property

Sites at elevations lower than the target property

Manufactured Gas Plants

Sensitive Receptors

National Priority List Sites

Dept. Defense Sites

Indian Reservations BIA

Oil & Gas pipelines from USGS

100-year flood zone

500-year flood zone

National Wetland Inventory

Groundwater Flow Direction

GI Indeterminate Groundwater Flow at Location

GV Groundwater Flow Varies at Location

SSURGO Soil

Areas of Concern

SITE NAME: Industrial Drive and Merchandise Way	CLIENT: Youngdahl Consulting Group
ADDRESS: Industrial Drive Diamond Springs CA 95619	CONTACT: Laurie Israel INQUIRY #: 4071273.1s
LAT/LONG: 38.6982 / 120.83	DATE: September 23, 2014 5:23 am

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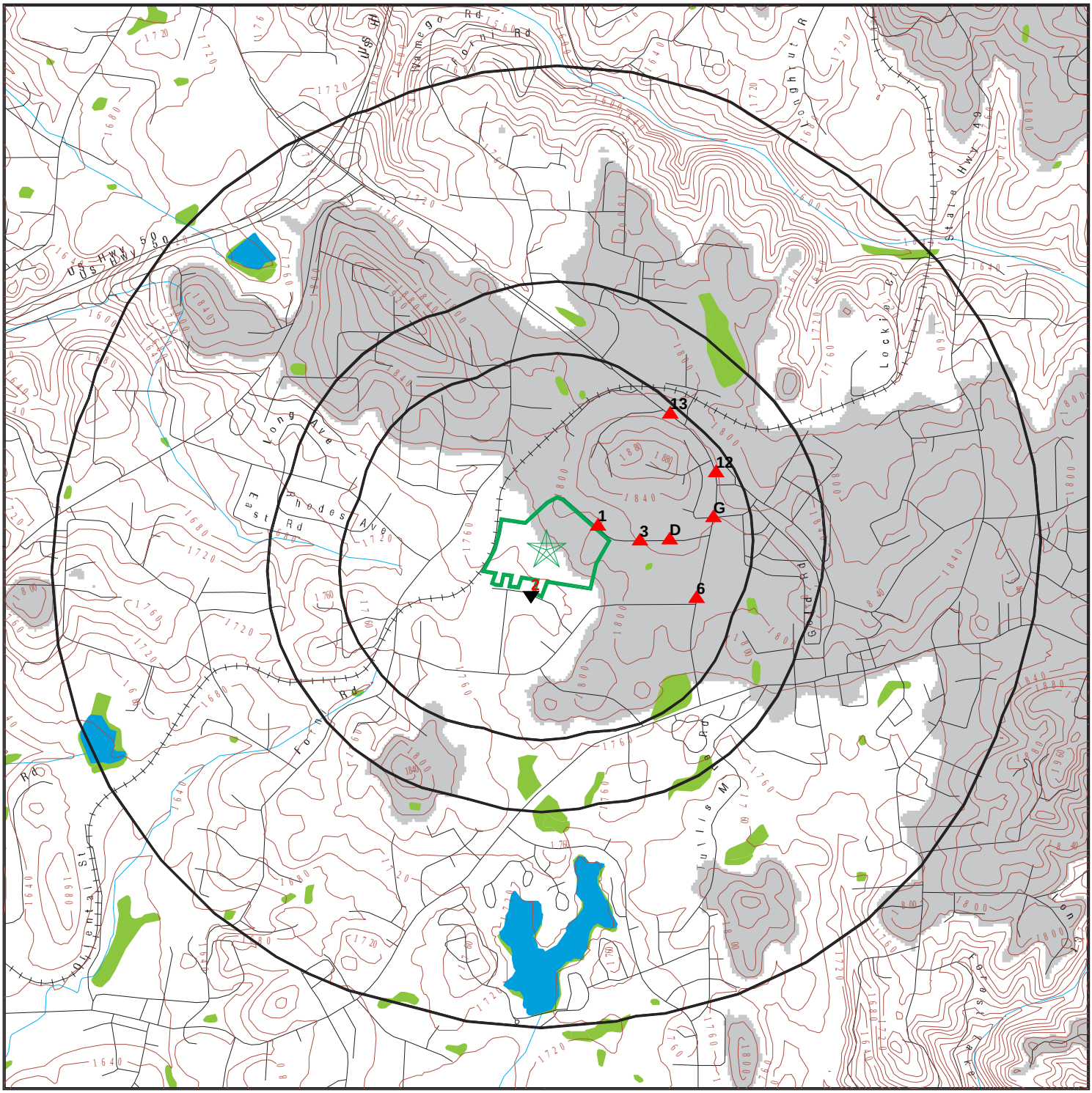
SECONDARY MAP - 4071273.1S



0 300 1/3 1 Miles

- Target Property
- Sites at elevations higher than or equal to the target property
- Sites at elevations lower than the target property
- Manufactured Gas Plants
- National Priority List Sites
- Dept. Defense Sites
- Indian Reservations BIA
- Contour Lines
- Oil & Gas pipelines from USGS
- 100-year flood zone
- 500-year flood zone
- National Wetland Inventory
- Upgradient Area
- Areas of Concern

SITE NAME:	Industrial Drive and Merchandise Way	CLIENT:	Youngdahl Consulting Group
ADDRESS:	Industrial Drive Diamond Springs CA 95619	CONTACT:	Laurie Israel
		INQUIRY #:	4071273.1s
LAT/LONG:	38.6982 / 120.83	DATE:	September 23, 2014 5:22 am

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AERIAL PHOTOGRAPHY - 4071273.1s

0 300 1/3 1/2 Miles

N

SITE NAME:	Industrial Drive and Merchandise Way	CLIENT:	Youngdahl Consulting Group
ADDRESS:	Industrial Drive Diamond Springs CA 95619	CONTACT:	Laurie Israel
		INQUIRY #:	4071273.1s
LAT/LONG:	38.6982 / 120.83	DATE:	September 23, 2014 5:24 am

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LEGEND

FACILITY NAME **FACILITY ADDRESS, CITY, ST, ZIP**			EDR SITE ID NUMBER
▼ MAP ID#	Direction Distance Range Relative Elevation	(Distance feet / miles) Feet Above Sea Level	ASTM 2600 Record Sources found in this report. Each database searched has been assigned to one or more categories. For detailed information about categorization, see the section of the report Records Searched and Currency.

Worksheet:

Comments:
Comments may be added on the online Vapor Encroachment Worksheet.

DATABASE ACRONYM: Applicable categories (A hoverbox with database description).

SNOWLINE HOSPICE 180 INDUSTRIAL DR BLDG F, DIAMOND SPRINGS, CA, 95619			S105939003
▲ 1	ENE <1/10	(34 ft. / 0.007 mi.)	State and tribal - equivalent CERCLIS Other Standard Environmental Records
	29 ft. Higher Elevation	1801 ft. Above Sea Level	

Worksheet:

Impact on Target Property: VEC Can Be Ruled Out
Groundwater Flow Gradient:

Upgradient or Indeterminate: YES

EMI: Other Standard Environmental Records

Year:	1990
County Code:	9
Air Basin:	MC
Facility ID:	22
Air District Name:	ED
SIC Code:	2421
Air District Name:	EL DORADO COUNTY APCD
Community Health Air Pollution Info System:	Not Reported
Consolidated Emission Reporting Rule:	Not Reported
Total Organic Hydrocarbon Gases Tons/Yr:	0
Reactive Organic Gases Tons/Yr:	0
Carbon Monoxide Emissions Tons/Yr:	0
NOX - Oxides of Nitrogen Tons/Yr:	0
SOX - Oxides of Sulphur Tons/Yr:	0
Particulate Matter Tons/Yr:	9
Part. Matter 10 Micrometers & Smllr Tons/Yr:	4
Year:	1995

SNOWLINE HOSPICE, 180 INDUSTRIAL DR BLDG F, DIAMOND SPRINGS, CA 95619 (Continued)

County Code:	9
Air Basin:	MC
Facility ID:	22
Air District Name:	ED
SIC Code:	2421
Air District Name:	EL DORADO COUNTY APCD
Community Health Air Pollution Info System:	Not Reported
Consolidated Emission Reporting Rule:	Not Reported
Total Organic Hydrocarbon Gases Tons/Yr:	0
Reactive Organic Gases Tons/Yr:	0
Carbon Monoxide Emissions Tons/Yr:	0
NOX - Oxides of Nitrogen Tons/Yr:	0
SOX - Oxides of Sulphur Tons/Yr:	0
Particulate Matter Tons/Yr:	9
Part. Matter 10 Micrometers & Smllr Tons/Yr:	4

Year:	1996
County Code:	9
Air Basin:	MC
Facility ID:	22
Air District Name:	ED
SIC Code:	2421
Air District Name:	EL DORADO COUNTY APCD
Community Health Air Pollution Info System:	Not Reported
Consolidated Emission Reporting Rule:	Not Reported
Total Organic Hydrocarbon Gases Tons/Yr:	0
Reactive Organic Gases Tons/Yr:	0
Carbon Monoxide Emissions Tons/Yr:	0
NOX - Oxides of Nitrogen Tons/Yr:	0
SOX - Oxides of Sulphur Tons/Yr:	0
Particulate Matter Tons/Yr:	9
Part. Matter 10 Micrometers & Smllr Tons/Yr:	4

Year:	1997
County Code:	9
Air Basin:	MC
Facility ID:	22
Air District Name:	ED
SIC Code:	2421
Air District Name:	EL DORADO COUNTY APCD
Community Health Air Pollution Info System:	Not Reported
Consolidated Emission Reporting Rule:	Not Reported
Total Organic Hydrocarbon Gases Tons/Yr:	0
Reactive Organic Gases Tons/Yr:	0

SNOWLINE HOSPICE, 180 INDUSTRIAL DR BLDG F, DIAMOND SPRINGS, CA 95619 (Continued)

Carbon Monoxide Emissions Tons/Yr:	0
NOX - Oxides of Nitrogen Tons/Yr:	0
SOX - Oxides of Sulphur Tons/Yr:	0
Particulate Matter Tons/Yr:	9
Part. Matter 10 Micrometers & Smllr Tons/Yr:	4

Year:	1998
County Code:	9
Air Basin:	MC
Facility ID:	22
Air District Name:	ED
SIC Code:	2421
Air District Name:	EL DORADO COUNTY APCD
Community Health Air Pollution Info System:	Not Reported
Consolidated Emission Reporting Rule:	Not Reported
Total Organic Hydrocarbon Gases Tons/Yr:	0
Reactive Organic Gases Tons/Yr:	0
Carbon Monoxide Emissions Tons/Yr:	0
NOX - Oxides of Nitrogen Tons/Yr:	0
SOX - Oxides of Sulphur Tons/Yr:	0
Particulate Matter Tons/Yr:	9
Part. Matter 10 Micrometers & Smllr Tons/Yr:	4

CUPA EL DORADO: Other Standard Environmental Records

PE:	BUSINESS PLANS/SMALL BUSINESS
Status:	Inactive, non-billable
Latitude:	Not Reported
Longitude:	Not Reported

PE:	SITE ASSESS-SOLID WASTE/GEOTECH/SEISMIC
Status:	Inactive, non-billable
Latitude:	Not Reported
Longitude:	Not Reported

PE:	BUSINESS PLANS/SMALL BUSINESS
Status:	Active, billable
Latitude:	38.7004
Longitude:	-120.8304

PE:	HAZARDOUS MATERIALS - STATE SURCHARGE
Status:	Active, billable
Latitude:	38.7004
Longitude:	-120.8304

ENVIROSTOR: State and tribal - equivalent CERCLIS

Facility ID:	09730001
Status:	No Further Action

SNOWLINE HOSPICE, 180 INDUSTRIAL DR BLDG F, DIAMOND SPRINGS, CA 95619 (Continued)

Status Date:	02/27/1989
Site Code:	Not Reported
Site Type:	Historical
Site Type Detailed:	* Historical
Acres:	1
NPL:	NO
Regulatory Agencies:	NONE SPECIFIED
Lead Agency:	NONE SPECIFIED
Program Manager:	Not Reported
Supervisor:	Steven Becker
Division Branch:	Cleanup Sacramento
Assembly:	05
Senate:	01
Special Program:	Not Reported
Restricted Use:	NO
Site Mgmt Req:	NONE SPECIFIED
Funding:	Not Reported
Latitude:	38.69855
Longitude:	-120.8284
APN:	32924051
Past Use:	MANUFACTURING - LUMBER/WOOD PRODUCTS
Potential COC:	Polychlorinated biphenyls (PCBs
Confirmed COC:	Polychlorinated biphenyls (PCBs
Potential Description:	SOIL
Alias Name:	PACIFIC SOUTHEAST FOREST PRODUCTS
Alias Type:	Alternate Name
Alias Name:	32924051
Alias Type:	APN
Alias Name:	CAD980637417
Alias Type:	EPA Identification Number
Alias Name:	09730001
Alias Type:	Envirostor ID Number

Completed Info:

Completed Area Name:	PROJECT WIDE
Completed Sub Area Name:	Not Reported
Completed Document Type:	* Discovery
Completed Date:	11/22/1983
Comments:	FACILITY IDENTIFIED ID FROM ERRIS

Completed Area Name:	PROJECT WIDE
Completed Sub Area Name:	Not Reported
Completed Document Type:	Site Screening
Completed Date:	10/02/1989
Comments:	SITE SCREENING DONE FURTHER ENVIRONMENTAL ASSESSMENT DONE BY DELTA ENVIRONMENTAL. STATE RECOMMENDS NFA FOR SITE BASED ON SITE INSPECTION

Completed Area Name:	PROJECT WIDE
Completed Sub Area Name:	Not Reported
Completed Document Type:	Site Screening
Completed Date:	02/27/1989

SNOWLINE HOSPICE, 180 INDUSTRIAL DR BLDG F, DIAMOND SPRINGS, CA 95619 (Continued)

Comments:	SITE SCREENING DONE
Completed Area Name:	PROJECT WIDE
Completed Sub Area Name:	Not Reported
Completed Document Type:	Site Screening
Completed Date:	06/28/1988
Comments:	DECEMBER 86 DHS COLLECTED 15 SOIL SAMPLES NO DETECABLE LEVELS OF PCBS OR PESTICIDES. SITE SCREENING DONE EPA RECOMMENDS NO FURTHER ACTION UNDER CERCLA, DHS WILL PERFORM SITE INSPECTION LOW PRIORITY
Completed Area Name:	PROJECT WIDE
Completed Sub Area Name:	Not Reported
Completed Document Type:	Preliminary Assessment Report
Completed Date:	11/30/1984
Comments:	Not Reported
Future Area Name:	Not Reported
Future Sub Area Name:	Not Reported
Future Document Type:	Not Reported
Future Due Date:	Not Reported
Schedule Area Name:	Not Reported
Schedule Sub Area Name:	Not Reported
Schedule Document Type:	Not Reported
Schedule Due Date:	Not Reported
Schedule Revised Date:	Not Reported

6642 MERCHANDISE WAY 6642 MERCHANDISE WAY, DIAMOND SPRINGS, CA, 95619			1015594860
▼ 2	SSW <1/10	(48 ft. / 0.009 mi.)	Historical Gas Stations
	18 ft. Lower Elevation	1754 ft. Above Sea Level	

Worksheet:

Impact on Target Property: VEC Can Be Ruled Out

Groundwater Flow Gradient:

Downgradient: YES

EDR Historical Auto Stations: Historical Gas Stations

Name:	QUICKSAND MOTORSPORTS
Year:	2012
Address:	6642 MERCHANDISE WAY

PACIFIC BELL C/O ALLEN TB72R 281 INDUSTRIAL DR, PLACERVILLE, CA, 95667			1000250712
▲ 3	E <1/10	(372 ft. / 0.071 mi.)	Federal RCRA generators list State and tribal leaking storage tank lists State and tribal registered storage tank lists Other Standard Environmental Records
	48 ft. Higher Elevation	1820 ft. Above Sea Level	

Worksheet:

Impact on Target Property: VEC Can Be Ruled Out

Groundwater Flow Gradient:

Upgradient or Indeterminate: YES

FINDS: Other Standard Environmental Records

Registry ID: 110002770225

Environmental Interest/Information System:

California Hazardous Waste Tracking System - Datamart (HWTS-DATAMART) provides California with information on hazardous waste shipments for generators, transporters, and treatment, storage, and disposal facilities.

RCRAInfo is a national information system that supports the Resource Conservation and Recovery Act (RCRA) program through the tracking of events and activities related to facilities that generate, transport, and treat, store, or dispose of hazardous waste. RCRAInfo allows RCRA program staff to track the notification, permit, compliance, and corrective action activities required under RCRA.

RCRA-SQG: Federal RCRA generators list

Date form received by agency:	09/01/1996
Facility name:	PACIFIC BELL C/O ALLEN TB72R
Facility address:	281 INDUSTRIAL DR PLACERVILLE, CA 95667
EPA ID:	CAD981994155
Mailing address:	2600 CAMINO RAMON RM 2E050 SAN RAMON, CA 94583
Contact:	Not Reported
Contact address:	Not Reported
Contact country:	Not Reported
Contact telephone:	Not Reported
Contact email:	Not Reported
EPA Region:	09
Classification:	Small Small Quantity Generator
Description:	Handler: generates more than 100 and less than 1000 kg of hazardous waste during any calendar month and accumulates less than 6000 kg of hazardous waste at any time; or generates 100 kg or less of hazardous waste during any calendar month, and accumulates more than 1000 kg of hazardous waste at any time

Owner/Operator Summary:

Owner/operator name:	PACIFIC BELL
Owner/operator address:	NOT REQUIRED NOT REQUIRED, ME 99999
Owner/operator country:	Not Reported

PACIFIC BELL C/O ALLEN TB72R, 281 INDUSTRIAL DR, PLACERVILLE, CA 95667 (Continued)

Owner/operator telephone:	(415) 555-1212
Legal status:	Private
Owner/Operator Type:	Owner
Owner/Op start date:	Not Reported
Owner/Op end date:	Not Reported
Owner/operator name:	NOT REQUIRED
Owner/operator address:	NOT REQUIRED
	NOT REQUIRED, ME 99999
Owner/operator country:	Not Reported
Owner/operator telephone:	(415) 555-1212
Legal status:	Private
Owner/Operator Type:	Operator
Owner/Op start date:	Not Reported
Owner/Op end date:	Not Reported

Handler Activities Summary:

U.S. importer of hazardous waste:	No
Mixed waste (haz. and radioactive):	No
Recycler of hazardous waste:	No
Transporter of hazardous waste:	No
Treater, storer or disposer of HW:	No
Underground injection activity:	No
On-site burner exemption:	No
Furnace exemption:	No
Used oil fuel burner:	No
Used oil processor:	No
User oil refiner:	No
Used oil fuel marketer to burner:	No
Used oil Specification marketer:	No
Used oil transfer facility:	No
Used oil transporter:	No

Historical Generators:

Date form received by agency:	04/09/1990
Site name:	PACIFIC BELL
Classification:	Large Quantity Generator
Date form received by agency:	03/19/1987
Site name:	PACIFIC BELL C/O ALLEN TB72R
Classification:	Large Quantity Generator
Violation Status:	No violations found

SWEEPS UST: State and tribal registered storage tank lists

Status:	Active
Comp Number:	16331
Number:	9
Board Of Equalization:	44-001027
Referral Date:	07-01-85

PACIFIC BELL C/O ALLEN TB72R, 281 INDUSTRIAL DR, PLACERVILLE, CA 95667 (Continued)

Action Date:	Not Reported
Created Date:	10-13-88
Owner Tank Id:	G-81-10K-0
SWRCB Tank Id:	09-000-016331-000001
Tank Status:	A
Capacity:	10000
Active Date:	07-01-85
Tank Use:	M.V. FUEL
STG:	P
Content:	DIESEL
Number Of Tanks:	3

Status:	Active
Comp Number:	16331
Number:	9
Board Of Equalization:	44-001027
Referral Date:	07-01-85
Action Date:	Not Reported
Created Date:	10-13-88
Owner Tank Id:	G-81-10K-0
SWRCB Tank Id:	09-000-016331-000002
Tank Status:	A
Capacity:	10000
Active Date:	07-01-85
Tank Use:	M.V. FUEL
STG:	P
Content:	REG UNLEADED
Number Of Tanks:	Not Reported

Status:	Active
Comp Number:	16331
Number:	9
Board Of Equalization:	44-001027
Referral Date:	07-01-85
Action Date:	Not Reported
Created Date:	10-13-88
Owner Tank Id:	W-81-1K
SWRCB Tank Id:	09-000-016331-000003
Tank Status:	A
Capacity:	1000
Active Date:	07-01-85
Tank Use:	OIL
STG:	W
Content:	WASTE OIL
Number Of Tanks:	Not Reported

LUST: State and tribal leaking storage tank lists

Region:	STATE
Global Id:	T0601700013
Latitude:	38.699660248

PACIFIC BELL C/O ALLEN TB72R, 281 INDUSTRIAL DR, PLACERVILLE, CA 95667 (Continued)

Longitude:	-120.825918353
Case Type:	LUST Cleanup Site
Status:	Completed - Case Closed
Status Date:	10/18/2011
Lead Agency:	EL DORADO COUNTY LOP
Case Worker:	RL
Local Agency:	EL DORADO COUNTY LOP
RB Case Number:	090021
LOC Case Number:	00013
File Location:	Local Agency
Potential Media Affect:	Aquifer used for drinking water supply
Potential Contaminants of Concern:	Gasoline
Site History:	In December 1986, 1,000 gallon waste oil UST was removed. In May 1997, one 10,000 gallon gas and one 10,000 gallon diesel UST were removed. In March 2005, one dual compartment gas/diesel 20,000 gallon UST was removed. Three groundwater monitoring wells installed In September 1997, four additional gw monitoring wells installed in September 1998. In September 1999, three more groundwater wells MW-8 through MW-10 installed. In September 2000, gw well MW-12 installed. In May 1998, cartridge socks of ORC installed in wells MW-1 through MW-3. In June 1998, separate phase hydrocarbons found ranging from 0.5 to 2.0 inches in thickness found in MW-1 through MW-3. Approximately 1,435 gallons of water and SPH removed over three days of pumping three wells. No free product noted in wells after pumping completed in July 1998. In September 1999 300 pounds of ORC slurry placed in bottom of former UST pit, ORC socks removed and replaced with passive SPH skimmers. In April and May 2000 two 4 days water/SPH pumping recovered approximately4,740 gallons of water and SPH. In September and October 2000 pumping recovered approximately 2,660 gallons of water/SPH. Groundwater recovery and re-injection of water with ozone saturation began operation in January 2003. Approximately 3.3 million gallons of groundwater pumped and processed from January 2003 to January 2005. A sparging (AS) and SVE system was installed and operational in August 2007. A Nutrient Addition Pilot Study was performed for 6 months ending in December 2007.
Click here to access the California GeoTracker records for this facility:	http://www.web.edrnet.com/ordering/switchboard/redirect.aspx?s=GRR_CA_LUST_ST&global_id=T0601700013

Contact:

Global Id:	T0601700013
Contact Type:	Local Agency Caseworker
Contact Name:	ROBERT LAURITZEN
Organization Name:	EL DORADO COUNTY LOP

PACIFIC BELL C/O ALLEN TB72R, 281 INDUSTRIAL DR, PLACERVILLE, CA 95667 (Continued)

Address:	2850 Fairlane Ct., Building C
City:	Placerville
Email:	robert.lauritzen@edcgov.us
Phone Number:	Not Reported

Global Id:	T0601700013
Contact Type:	Regional Board Caseworker
Contact Name:	PETER MINKEL
Organization Name:	CENTRAL VALLEY RWQCB (REGION 5S)
Address:	11020 SUN CENTER DRIVE #200
City:	RANCHO CORDOVA
Email:	pminkel@waterboards.ca.gov
Phone Number:	Not Reported

Status History:

Global Id:	T0601700013
Status:	Open - Site Assessment
Status Date:	11/02/1999

Global Id:	T0601700013
Status:	Open - Remediation
Status Date:	04/17/2001

Global Id:	T0601700013
Status:	Open - Remediation
Status Date:	08/04/2003

Global Id:	T0601700013
Status:	Open - Remediation
Status Date:	04/28/2004

Global Id:	T0601700013
Status:	Open - Remediation
Status Date:	06/02/2004

Global Id:	T0601700013
Status:	Open - Verification Monitoring
Status Date:	04/28/2005

Global Id:	T0601700013
Status:	Open - Remediation
Status Date:	09/29/2004

Global Id:	T0601700013
Status:	Completed - Case Closed
Status Date:	04/28/2005

Global Id:	T0601700013
Status:	Completed - Case Closed
Status Date:	10/18/2011

Global Id:	T0601700013
Status:	Open - Site Assessment
Status Date:	05/19/1997

PACIFIC BELL C/O ALLEN TB72R, 281 INDUSTRIAL DR, PLACERVILLE, CA 95667 (Continued)

Global Id:	T0601700013
Status:	Open - Case Begin Date
Status Date:	01/28/1987

Regulatory Activities:

Global Id:	T0601700013
Action Type:	RESPONSE
Date:	10/30/2004
Action:	Monitoring Report - Quarterly

Global Id:	T0601700013
Action Type:	Other
Date:	01/01/1950
Action:	Leak Discovery

Global Id:	T0601700013
Action Type:	ENFORCEMENT
Date:	06/19/2007
Action:	Staff Letter

Global Id:	T0601700013
Action Type:	RESPONSE
Date:	04/30/2004
Action:	Monitoring Report - Quarterly

Global Id:	T0601700013
Action Type:	RESPONSE
Date:	01/31/2007
Action:	Monitoring Report - Quarterly

Global Id:	T0601700013
Action Type:	ENFORCEMENT
Date:	06/07/2011
Action:	LOP Case Closure Summary to RB

Global Id:	T0601700013
Action Type:	RESPONSE
Date:	09/30/2003
Action:	Monitoring Report - Quarterly

Global Id:	T0601700013
Action Type:	RESPONSE
Date:	07/30/2005
Action:	Monitoring Report - Quarterly

Global Id:	T0601700013
Action Type:	RESPONSE
Date:	01/15/2005
Action:	Other Report / Document

Global Id:	T0601700013
Action Type:	RESPONSE
Date:	09/30/2004
Action:	Remedial Progress Report

PACIFIC BELL C/O ALLEN TB72R, 281 INDUSTRIAL DR, PLACERVILLE, CA 95667 (Continued)

Global Id:	T0601700013
Action Type:	Other
Date:	01/01/1950
Action:	Leak Reported
Global Id:	T0601700013
Action Type:	RESPONSE
Date:	10/31/2006
Action:	Monitoring Report - Quarterly
Global Id:	T0601700013
Action Type:	RESPONSE
Date:	07/31/2006
Action:	Monitoring Report - Quarterly
Global Id:	T0601700013
Action Type:	RESPONSE
Date:	04/30/2007
Action:	Monitoring Report - Quarterly
Global Id:	T0601700013
Action Type:	RESPONSE
Date:	01/31/2007
Action:	Well Installation Report
Global Id:	T0601700013
Action Type:	RESPONSE
Date:	10/30/2007
Action:	Other Report / Document
Global Id:	T0601700013
Action Type:	ENFORCEMENT
Date:	10/01/2008
Action:	Letter - Notice
Global Id:	T0601700013
Action Type:	RESPONSE
Date:	01/30/2005
Action:	Monitoring Report - Quarterly
Global Id:	T0601700013
Action Type:	ENFORCEMENT
Date:	10/18/2011
Action:	Closure/No Further Action Letter
Global Id:	T0601700013
Action Type:	REMEDIATION
Date:	01/01/1950
Action:	Ex Situ Physical/Chemical Treatment (other than P&T, SVE, or Excavation)
Global Id:	T0601700013
Action Type:	ENFORCEMENT
Date:	07/27/2009
Action:	Staff Letter

PACIFIC BELL C/O ALLEN TB72R, 281 INDUSTRIAL DR, PLACERVILLE, CA 95667 (Continued)

Global Id:	T0601700013
Action Type:	ENFORCEMENT
Date:	09/11/2000
Action:	Staff Letter
Global Id:	T0601700013
Action Type:	ENFORCEMENT
Date:	05/16/2001
Action:	Staff Letter
Global Id:	T0601700013
Action Type:	ENFORCEMENT
Date:	11/06/2009
Action:	Staff Letter
Global Id:	T0601700013
Action Type:	RESPONSE
Date:	07/30/2007
Action:	Other Report / Document
Global Id:	T0601700013
Action Type:	RESPONSE
Date:	12/30/2002
Action:	Monitoring Report - Quarterly
Global Id:	T0601700013
Action Type:	ENFORCEMENT
Date:	03/02/2006
Action:	Staff Letter
Global Id:	T0601700013
Action Type:	ENFORCEMENT
Date:	03/13/2007
Action:	* Verbal Communication
Global Id:	T0601700013
Action Type:	RESPONSE
Date:	01/31/2006
Action:	Monitoring Report - Quarterly
Global Id:	T0601700013
Action Type:	RESPONSE
Date:	04/30/2005
Action:	Monitoring Report - Quarterly
Global Id:	T0601700013
Action Type:	RESPONSE
Date:	05/30/2007
Action:	Other Workplan
Global Id:	T0601700013
Action Type:	RESPONSE
Date:	04/30/2008
Action:	Other Report / Document

PACIFIC BELL C/O ALLEN TB72R, 281 INDUSTRIAL DR, PLACERVILLE, CA 95667 (Continued)

Global Id:	T0601700013
Action Type:	REMEDIATION
Date:	01/01/1950
Action:	In Situ Physical/Chemical Treatment (other than SVE)
Global Id:	T0601700013
Action Type:	REMEDIATION
Date:	01/01/1950
Action:	Soil Vapor Extraction (SVE)
Global Id:	T0601700013
Action Type:	ENFORCEMENT
Date:	02/08/2006
Action:	* Verbal Communication
Global Id:	T0601700013
Action Type:	Other
Date:	01/01/1950
Action:	Leak Stopped
Global Id:	T0601700013
Action Type:	RESPONSE
Date:	01/30/2008
Action:	Other Report / Document
Global Id:	T0601700013
Action Type:	RESPONSE
Date:	10/31/2005
Action:	Monitoring Report - Quarterly
Global Id:	T0601700013
Action Type:	RESPONSE
Date:	07/31/2003
Action:	Remedial Progress Report
Global Id:	T0601700013
Action Type:	RESPONSE
Date:	01/31/2004
Action:	Remedial Progress Report
Global Id:	T0601700013
Action Type:	ENFORCEMENT
Date:	01/14/2005
Action:	Staff Letter
Global Id:	T0601700013
Action Type:	ENFORCEMENT
Date:	12/05/2000
Action:	Staff Letter
Global Id:	T0601700013
Action Type:	ENFORCEMENT
Date:	07/10/2000
Action:	Staff Letter

PACIFIC BELL C/O ALLEN TB72R, 281 INDUSTRIAL DR, PLACERVILLE, CA 95667 (Continued)

Global Id:	T0601700013
Action Type:	ENFORCEMENT
Date:	05/17/2001
Action:	Staff Letter
Global Id:	T0601700013
Action Type:	ENFORCEMENT
Date:	08/30/2000
Action:	Staff Letter
Global Id:	T0601700013
Action Type:	ENFORCEMENT
Date:	03/10/2011
Action:	Staff Letter
Global Id:	T0601700013
Action Type:	RESPONSE
Date:	07/30/2008
Action:	Monitoring Report - Quarterly
Global Id:	T0601700013
Action Type:	RESPONSE
Date:	03/31/2003
Action:	Monitoring Report - Quarterly
Global Id:	T0601700013
Action Type:	RESPONSE
Date:	01/30/2004
Action:	Monitoring Report - Quarterly
Global Id:	T0601700013
Action Type:	REMEDIATION
Date:	01/01/1950
Action:	In Situ Physical/Chemical Treatment (other than SVE)
Global Id:	T0601700013
Action Type:	Other
Date:	01/01/1950
Action:	Leak Began
Global Id:	T0601700013
Action Type:	REMEDIATION
Date:	01/01/1950
Action:	Excavation
Global Id:	T0601700013
Action Type:	REMEDIATION
Date:	01/01/1950
Action:	Excavation
Global Id:	T0601700013
Action Type:	REMEDIATION
Date:	01/01/1950
Action:	Soil Vapor Extraction (SVE)

PACIFIC BELL C/O ALLEN TB72R, 281 INDUSTRIAL DR, PLACERVILLE, CA 95667 (Continued)

Global Id:	T0601700013
Action Type:	REMEDIATION
Date:	01/01/1950
Action:	In Situ Physical/Chemical Treatment (other than SVE)
Global Id:	T0601700013
Action Type:	REMEDIATION
Date:	01/01/1950
Action:	Pump & Treat (P&T) Groundwater
Global Id:	T0601700013
Action Type:	REMEDIATION
Date:	01/01/1950
Action:	Pump & Treat (P&T) Groundwater
Global Id:	T0601700013
Action Type:	REMEDIATION
Date:	01/01/1950
Action:	Pump & Treat (P&T) Groundwater
Global Id:	T0601700013
Action Type:	REMEDIATION
Date:	01/01/1950
Action:	Monitored Natural Attenuation
Global Id:	T0601700013
Action Type:	ENFORCEMENT
Date:	08/28/2006
Action:	Staff Letter
Global Id:	T0601700013
Action Type:	RESPONSE
Date:	04/30/2006
Action:	Monitoring Report - Quarterly
Global Id:	T0601700013
Action Type:	RESPONSE
Date:	07/31/2004
Action:	Remedial Progress Report
Global Id:	T0601700013
Action Type:	RESPONSE
Date:	06/30/2003
Action:	Monitoring Report - Quarterly

LUST REG 5:

Region:	5
Status:	Post remedial action monitoring
Case Number:	090021
Case Type:	Drinking Water Aquifer affected
Substance:	GASOLINE
Staff Initials:	PGM
Lead Agency:	Regional

PACIFIC BELL C/O ALLEN TB72R, 281 INDUSTRIAL DR, PLACERVILLE, CA 95667 (Continued)

Program:	LUST
MTBE Code:	5

CA FID UST: State and tribal registered storage tank lists

Facility ID:	09000076
Regulated By:	UTNKA
Regulated ID:	00016331
Cortese Code:	Not Reported
SIC Code:	Not Reported
Facility Phone:	4155426758
Mail To:	Not Reported
Mailing Address:	370 003RD ST
Mailing Address 2:	Not Reported
Mailing City,St,Zip:	PLACERVILLE 95667
Contact:	Not Reported
Contact Phone:	Not Reported
DUNs Number:	Not Reported
NPDES Number:	Not Reported
EPA ID:	Not Reported
Comments:	Not Reported
Status:	Active

CUPA EL DORADO: Other Standard Environmental Records

PE:	BUSINESS PLANS/SMALL BUSINESS
Status:	Active, billable
Latitude:	38.6991
Longitude:	-120.8264

PE:	CONTAMINATED SITE/CLEAN-UP
Status:	Active, billable
Latitude:	38.6991
Longitude:	-120.8264

PE:	CUPA HW GENERAL
Status:	Active, exempt from billing
Latitude:	38.6991
Longitude:	-120.8264

PE:	HAZARDOUS MATERIALS - STATE SURCHARGE
Status:	Active, billable
Latitude:	38.6991
Longitude:	-120.8264

PE:	LOCAL OVERSITE PROGRAM (LOP) E5G073
Status:	Active, billable
Latitude:	38.6991
Longitude:	-120.8264

PE:	U.G.S.T. ANNUAL PERMIT
Status:	Inactive, non-billable
Latitude:	38.6991

PACIFIC BELL C/O ALLEN TB72R, 281 INDUSTRIAL DR, PLACERVILLE, CA 95667 (Continued)

Longitude:	-120.8264
PE:	UGST - STATE SURCHARGE
Status:	Inactive, non-billable
Latitude:	38.6991
Longitude:	-120.8264
PE:	BUSINESS PLANS/SMALL BUSINESS
Status:	Inactive, non-billable
Latitude:	Not Reported
Longitude:	Not Reported

HIST CORTESE: Other Standard Environmental Records

Region:	CORTESE
Facility County Code:	9
Reg By:	LTNKA
Reg Id:	090021

329 INDUSTRIAL DR 329 INDUSTRIAL DR, PLACERVILLE, CA, 95667			1015428544
▲ D4	E 1/10 - 1/3	(736 ft. / 0.139 mi.)	Historical Gas Stations
	53 ft. Higher Elevation	1825 ft. Above Sea Level	

Worksheet:

Impact on Target Property: VEC Can Be Ruled Out

Groundwater Flow Gradient:

Upgradient or Indeterminate: YES

EDR Historical Auto Stations: Historical Gas Stations

Name:	ALLIED AUTO REPAIR CLUB INC
Year:	2010
Address:	329 INDUSTRIAL DR

337 INDUSTRIAL DR 337 INDUSTRIAL DR, PLACERVILLE, CA, 95667			1015434568
▲ D5	E 1/10 - 1/3	(787 ft. / 0.149 mi.)	Historical Gas Stations
	54 ft. Higher Elevation	1826 ft. Above Sea Level	

Worksheet:

Impact on Target Property: VEC Can Be Ruled Out

Groundwater Flow Gradient:

Upgradient or Indeterminate: YES

EDR Historical Auto Stations: Historical Gas Stations

Name:	C N C ENGINEERING
Year:	2006
Address:	337 INDUSTRIAL DR

4600 MISSOURI FLAT RD 4600 MISSOURI FLAT RD, PLACERVILLE, CA, 95667			1015506383
▲ 6	ESE 1/10 - 1/3	(1278 ft. / 0.242 mi.)	Historical Gas Stations
	35 ft. Higher Elevation	1807 ft. Above Sea Level	

Worksheet:

Impact on Target Property: VEC Can Be Ruled Out

Groundwater Flow Gradient:

Upgradient or Indeterminate: YES

EDR Historical Auto Stations: Historical Gas Stations

Name: CURTISS AUTOMOTIVE BODY FENDER & FRAME
Year: 1999
Address: 4600 MISSOURI FLAT RD

Name: CURTISS AUTOMOTIVE BODY FENDER & FRAME
Year: 2000
Address: 4600 MISSOURI FLAT RD

Name: BOB CURTISS AUTOMOTIVE
Year: 2005
Address: 4600 MISSOURI FLAT RD

Name: CURTISS AUTO BODY
Year: 2008
Address: 4600 MISSOURI FLAT RD

Name: CURTISS AUTO BODY
Year: 2009
Address: 4600 MISSOURI FLAT RD

Name: BOB CURTISS AUTOMOTIVE
Year: 2010
Address: 4600 MISSOURI FLAT RD

Name: AUTOMOTIVE EXCELLENCE
Year: 2011
Address: 4600 MISSOURI FLAT RD

Name: AUTOMOTIVE EXCELLENCE
Year: 2012
Address: 4600 MISSOURI FLAT RD

4510 MISSOURI FLAT RD 4510 MISSOURI FLAT RD, PLACERVILLE, CA, 95667			1015502781
▲ G7	E 1/10 - 1/3	(1286 ft. / 0.244 mi.)	Historical Gas Stations
	49 ft. Higher Elevation	1821 ft. Above Sea Level	

Worksheet:

Impact on Target Property: VEC Can Be Ruled Out

Groundwater Flow Gradient:

Upgradient or Indeterminate: YES

EDR Historical Auto Stations: Historical Gas Stations

Name: KEVINS BODY WORKS
Year: 1999
Address: 4510 MISSOURI FLAT RD

Name: KEVINS BODY WORKS
Year: 2000
Address: 4510 MISSOURI FLAT RD

Name: KEVINS BODY WORKS
Year: 2003
Address: 4510 MISSOURI FLAT RD

Name: SIERRA BODY WORKS
Year: 2004
Address: 4510 MISSOURI FLAT RD

Name: SIERRA BODY WORKS
Year: 2005
Address: 4510 MISSOURI FLAT RD

Name: SIERRA BODY WORKS
Year: 2006
Address: 4510 MISSOURI FLAT RD

Name: SIERRA BODY WORKS
Year: 2009
Address: 4510 MISSOURI FLAT RD

Name: SIERRA BODY WORKS
Year: 2011
Address: 4510 MISSOURI FLAT RD

Name: SIERRA BODY WORKS
Year: 2012
Address: 4510 MISSOURI FLAT RD

4508 MISSOURI FLAT RD 4508 MISSOURI FLAT RD, PLACERVILLE, CA, 95667			1015502519
▲ G8	E 1/10 - 1/3	(1288 ft. / 0.244 mi.)	Historical Gas Stations
	49 ft. Higher Elevation	1821 ft. Above Sea Level	

Worksheet:

Impact on Target Property: VEC Can Be Ruled Out

Groundwater Flow Gradient:

Upgradient or Indeterminate: YES

EDR Historical Auto Stations: Historical Gas Stations

Name: GORE LARRY L SIERRA AUTO CENTER
Year: 1999
Address: 4508 MISSOURI FLAT RD

Name: SIERRA AUTO CENTER
Year: 2000
Address: 4508 MISSOURI FLAT RD

Name: SIERRA AUTO CTR
Year: 2002
Address: 4508 MISSOURI FLAT RD

Name: SIERRA AUTO CTR
Year: 2003
Address: 4508 MISSOURI FLAT RD

Name: SIERRA AUTO CTR
Year: 2004
Address: 4508 MISSOURI FLAT RD

Name: SIERRA AUTO CENTER
Year: 2005
Address: 4508 MISSOURI FLAT RD

Name: SIERRA AUTO CENTER
Year: 2006
Address: 4508 MISSOURI FLAT RD

Name: SIERRA AUTO CENTER
Year: 2007
Address: 4508 MISSOURI FLAT RD

Name: SIERRA AUTO CENTER
Year: 2008
Address: 4508 MISSOURI FLAT RD

Name: SIERRA AUTO CENTER
Year: 2009
Address: 4508 MISSOURI FLAT RD

Name: RIVER ROCK MOTORS
Year: 2012
Address: 4508 MISSOURI FLAT RD

4508 MISSOURI FLAT RD, 4508 MISSOURI FLAT RD, PLACERVILLE, CA 95667 (Continued)

4506 MISSOURI FLAT RD 4506 MISSOURI FLAT RD, PLACERVILLE, CA, 95667			1015502458
▲ G9	E 1/10 - 1/3	(1292 ft. / 0.245 mi.)	Historical Gas Stations
	49 ft. Higher Elevation	1821 ft. Above Sea Level	

Worksheet:

Impact on Target Property: VEC Can Be Ruled Out

Groundwater Flow Gradient:

Upgradient or Indeterminate: YES

EDR Historical Auto Stations: Historical Gas Stations

Name:	C & R MOTORSPORT
Year:	2008
Address:	4506 MISSOURI FLAT RD

CELEBRITY PLATING 4502 MISSOURI FLAT ROAD, PLACERVILLE, CA, 95667			S100216352
▲ G10	E 1/10 - 1/3	(1297 ft. / 0.246 mi.)	State and tribal - equivalent CERCLIS Other Standard Environmental Records
	50 ft. Higher Elevation	1822 ft. Above Sea Level	

Worksheet:

Impact on Target Property: VEC Can Be Ruled Out

Groundwater Flow Gradient:

Upgradient or Indeterminate: YES

CHMIRS: Other Standard Environmental Records

OES Incident Number:	8803168
OES notification:	Not Reported
OES Date:	Not Reported
OES Time:	Not Reported
Incident Date:	28-SEP-88
Date Completed:	**28-SEP-88**
Property Use:	700
Agency Id Number:	9806
Agency Incident Number:	0D1002
Time Notified:	1230
Time Completed:	1330
Surrounding Area:	500
Estimated Temperature:	80
Property Management:	P
More Than Two Substances Involved?:	N
Resp Agncy Personel # Of Decontaminated:	Not Reported
Responding Agency Personel # Of Injuries:	Not Reported
Responding Agency Personel # Of Fatalities:	Not Reported
Others Number Of Decontaminated:	Not Reported
Others Number Of Injuries:	Not Reported
Others Number Of Fatalities:	Not Reported
Vehicle Make/year:	Not Reported
Vehicle License Number:	Not Reported
Vehicle State:	Not Reported
Vehicle Id Number:	Not Reported
CA/DOT/PUC/ICC Number:	Not Reported
Company Name:	Not Reported
Reporting Officer Name/ID:	DAVID JOHNSTON
Report Date:	29-SEP-88
Comments:	Y
Facility Telephone:	916 626-0034
Waterway Involved:	Not Reported
Waterway:	Not Reported
Spill Site:	Not Reported
Cleanup By:	Not Reported

CELEBRITY PLATING, 4502 MISSOURI FLAT ROAD, PLACERVILLE, CA 95667 (Continued)

Containment:	Not Reported
What Happened:	Not Reported
Type:	Not Reported
Measure:	Not Reported
Other:	Not Reported
Date/Time:	Not Reported
Year:	88-92
Agency:	Not Reported
Incident Date:	Not Reported
Admin Agency:	Not Reported
Amount:	Not Reported
Contained:	Not Reported
Site Type:	Not Reported
E Date:	04-MAY-89
Substance:	Not Reported
Quantity Released:	Not Reported
BBLS:	Not Reported
Cups:	Not Reported
CUFT:	Not Reported
Gallons:	Not Reported
Grams:	Not Reported
Pounds:	Not Reported
Liters:	Not Reported
Ounces:	Not Reported
Pints:	Not Reported
Quarts:	Not Reported
Sheen:	Not Reported
Tons:	Not Reported
Unknown:	Not Reported
Evacuations:	Not Reported
Number of Injuries:	Not Reported
Number of Fatalities:	Not Reported
Description:	Not Reported

ENVIROSTOR: State and tribal - equivalent CERCLIS

Facility ID:	09340001
Status:	No Further Action
Status Date:	04/05/2010
Site Code:	101525
Site Type:	Corrective Action
Site Type Detailed:	Corrective Action
Acres:	10
NPL:	NO
Regulatory Agencies:	HWMP, EL DORADO COUNTY
Lead Agency:	HWMP
Program Manager:	Lance Mcmahan
Supervisor:	Noel Shrum
Division Branch:	Cleanup Sacramento
Assembly:	05

CELEBRITY PLATING, 4502 MISSOURI FLAT ROAD, PLACERVILLE, CA 95667 (Continued)

Senate:	01
Special Program:	EPA - PASI
Restricted Use:	NO
Site Mgmt Req:	NONE SPECIFIED
Funding:	Not Reported
Latitude:	38.69997
Longitude:	-120.8230
APN:	NONE SPECIFIED
Past Use:	HAZARDOUS WASTE TREATMENT, METAL PLATING - CHROME
Potential COC:	Chromium III Chromium VI Cyanide (free Nickel (soluble salts
Confirmed COC:	Chromium III 30153-NO Cyanide (free Nickel (soluble salts
Potential Description:	AQUI, SOIL
Alias Name:	CELEBRITY PLATING
Alias Type:	Alternate Name
Alias Name:	101525
Alias Type:	Project Code (Site Code)
Alias Name:	09340001
Alias Type:	Envirostor ID Number

Completed Info:

Completed Area Name:	PROJECT WIDE
Completed Sub Area Name:	Not Reported
Completed Document Type:	Consent Agreement
Completed Date:	07/07/2003
Comments:	Not Reported

Completed Area Name:	PROJECT WIDE
Completed Sub Area Name:	Not Reported
Completed Document Type:	No Further Action Letter
Completed Date:	03/29/2010
Comments:	DTSC has determined no further action is necessary at this time . In the event new information indicates activities have impacted the environment, DTSC reserves the right to require additional investigation. Further, in the event the property is converted to a sensitive use (e.g., daycare, school) or the concrete floor slab is removed, DTSC recommends the site be reevaluated to assure public health and safety.

Completed Area Name:	PROJECT WIDE
Completed Sub Area Name:	Not Reported
Completed Document Type:	Correspondence
Completed Date:	08/04/2010
Comments:	All Celebrity Plating correspondence is included in this deliverable.

Completed Area Name:	PROJECT WIDE
Completed Sub Area Name:	Not Reported
Completed Document Type:	Correspondence
Completed Date:	09/11/2001
Comments:	Received the final document from Youngdahl in 2010. No document

CELEBRITY PLATING, 4502 MISSOURI FLAT ROAD, PLACERVILLE, CA 95667 (Continued)

	review for modifications will occur. Document is part of the background materials needed to determine the status of the site as far as releases.
Future Area Name:	Not Reported
Future Sub Area Name:	Not Reported
Future Document Type:	Not Reported
Future Due Date:	Not Reported
Schedule Area Name:	Not Reported
Schedule Sub Area Name:	Not Reported
Schedule Document Type:	Not Reported
Schedule Due Date:	Not Reported
Schedule Revised Date:	Not Reported

4500 MISSOURI FLAT RD 4500 MISSOURI FLAT RD, PLACERVILLE, CA, 95667			1015502023
▲ G11	E 1/10 - 1/3	(1300 ft. / 0.246 mi.)	Historical Gas Stations
	50 ft. Higher Elevation	1822 ft. Above Sea Level	

Worksheet:

Impact on Target Property: VEC Can Be Ruled Out

Groundwater Flow Gradient:

Upgradient or Indeterminate: YES

EDR Historical Auto Stations: Historical Gas Stations

Name: CASPERS MUFFLER AND HITCH SERVICE
Year: 1999
Address: 4500 MISSOURI FLAT RD

Name: CASPERS MUFFLER AND HITCH SERVICE
Year: 2000
Address: 4500 MISSOURI FLAT RD

TETERS AUTO WRECKERS 4487 MISSOURI FLAT ROAD, PLACERVILLE, CA, 95667			S102860835
▲ 12	ENE 1/10 - 1/3	(1542 ft. / 0.292 mi.)	State and tribal - equivalent CERCLIS
	50 ft. Higher Elevation	1822 ft. Above Sea Level	

Worksheet:

Impact on Target Property: VEC Can Be Ruled Out

Groundwater Flow Gradient:

Upgradient or Indeterminate: YES

ENVIROSTOR: State and tribal - equivalent CERCLIS

Facility ID:	09500006
Status:	Refer: Other Agency
Status Date:	09/12/1995
Site Code:	Not Reported
Site Type:	Evaluation
Site Type Detailed:	Evaluation
Acres:	1
NPL:	NO
Regulatory Agencies:	NONE SPECIFIED
Lead Agency:	NONE SPECIFIED
Program Manager:	Not Reported
Supervisor:	Referred - Not Assigned
Division Branch:	Cleanup Sacramento
Assembly:	05
Senate:	01
Special Program:	* Rural County Survey Program
Restricted Use:	NO
Site Mgmt Req:	NONE SPECIFIED
Funding:	Not Reported
Latitude:	38.7
Longitude:	-120.8222
APN:	NONE SPECIFIED
Past Use:	NONE SPECIFIED
Potential COC:	* CONTAMINATED SOIL * UNSPECIFIED OIL CONTAINING WASTE * WASTE OIL & MIXED OIL Lead Polychlorinated biphenyls (PCBs
Confirmed COC:	NONE SPECIFIED
Potential Description:	NONE SPECIFIED
Alias Name:	09500006
Alias Type:	Envirostor ID Number

Completed Info:

Completed Area Name:	PROJECT WIDE
Completed Sub Area Name:	Not Reported
Completed Document Type:	* Discovery
Completed Date:	12/01/1987
Comments:	FACILITY IDENTIFIED VIA 1986 PHONE BOOK.
Completed Area Name:	PROJECT WIDE

TETERS AUTO WRECKERS, 4487 MISSOURI FLAT ROAD, PLACERVILLE, CA 95667 (Continued)

Completed Sub Area Name:	Not Reported
Completed Document Type:	Site Screening
Completed Date:	12/22/1987
Comments:	SITE SCREENING DONE. RECOMMEND PRELIMINARY ASSESSMENT (PA) LOW PRIORITY BASED ON BUSINESS TYPE AND DRIVEBY.
Future Area Name:	Not Reported
Future Sub Area Name:	Not Reported
Future Document Type:	Not Reported
Future Due Date:	Not Reported
Schedule Area Name:	Not Reported
Schedule Sub Area Name:	Not Reported
Schedule Document Type:	Not Reported
Schedule Due Date:	Not Reported
Schedule Revised Date:	Not Reported

SIERRA DOOR 4415 MISSOURI FLAT RD, PLACERVILLE, CA, 95667			S101581227
▲ 13	NE 1/10 - 1/3	(1648 ft. / 0.312 mi.)	State and tribal leaking storage tank lists State and tribal registered storage tank lists Other Standard Environmental Records
	36 ft. Higher Elevation	1808 ft. Above Sea Level	

Worksheet:

Impact on Target Property: VEC Can Be Ruled Out

Groundwater Flow Gradient:

Upgradient or Indeterminate: YES

SWEEPS UST: State and tribal registered storage tank lists

Status:	Not Reported
Comp Number:	464
Number:	Not Reported
Board Of Equalization:	Not Reported
Referral Date:	Not Reported
Action Date:	Not Reported
Created Date:	Not Reported
Owner Tank Id:	Not Reported
SWRCB Tank Id:	09-000-000464-000001
Tank Status:	Not Reported
Capacity:	550
Active Date:	Not Reported
Tank Use:	M.V. FUEL
STG:	PRODUCT
Content:	LEADED
Number Of Tanks:	2

Status:	Not Reported
Comp Number:	464
Number:	Not Reported
Board Of Equalization:	Not Reported
Referral Date:	Not Reported
Action Date:	Not Reported
Created Date:	Not Reported
Owner Tank Id:	Not Reported
SWRCB Tank Id:	09-000-000464-000002
Tank Status:	Not Reported
Capacity:	550
Active Date:	Not Reported
Tank Use:	M.V. FUEL
STG:	PRODUCT
Content:	DIESEL
Number Of Tanks:	Not Reported

LUST: State and tribal leaking storage tank lists

Region:	STATE
Global Id:	T0601700050
Latitude:	38.7019795

SIERRA DOOR, 4415 MISSOURI FLAT RD, PLACERVILLE, CA 95667 (Continued)

Longitude:	-120.823637
Case Type:	LUST Cleanup Site
Status:	Completed - Case Closed
Status Date:	03/25/2010
Lead Agency:	EL DORADO COUNTY LOP
Case Worker:	RL
Local Agency:	EL DORADO COUNTY LOP
RB Case Number:	090068
LOC Case Number:	Not Reported
File Location:	Local Agency
Potential Media Affect:	Aquifer used for drinking water supply
Potential Contaminants of Concern:	Gasoline
Site History:	Not Reported
Click here to access the California GeoTracker records for this facility:	http://www.web.edrnet.com/ordering/switchboard/redirect.aspx?s=GRR_CA_LUST_ST&global_id=T0601700050

Contact:

Global Id:	T0601700050
Contact Type:	Local Agency Caseworker
Contact Name:	ROBERT LAURITZEN
Organization Name:	EL DORADO COUNTY LOP
Address:	2850 Fairlane Ct., Building C
City:	Placerville
Email:	robert.lauritzen@edcgov.us
Phone Number:	Not Reported

Global Id:	T0601700050
Contact Type:	Regional Board Caseworker
Contact Name:	PETER MINKEL
Organization Name:	CENTRAL VALLEY RWQCB (REGION 5S)
Address:	11020 SUN CENTER DRIVE #200
City:	RANCHO CORDOVA
Email:	pminkel@waterboards.ca.gov
Phone Number:	Not Reported

Status History:

Global Id:	T0601700050
Status:	Open - Site Assessment
Status Date:	07/24/1992

Global Id:	T0601700050
Status:	Open - Site Assessment
Status Date:	06/23/2006

Global Id:	T0601700050
Status:	Open - Verification Monitoring
Status Date:	11/04/2009

Global Id:	T0601700050
Status:	Open - Case Begin Date
Status Date:	07/22/1992

SIERRA DOOR, 4415 MISSOURI FLAT RD, PLACERVILLE, CA 95667 (Continued)

Global Id:	T0601700050
Status:	Completed - Case Closed
Status Date:	03/25/2010

Regulatory Activities:

Global Id:	T0601700050
Action Type:	Other
Date:	01/01/1950
Action:	Leak Discovery

Global Id:	T0601700050
Action Type:	Other
Date:	01/01/1950
Action:	Leak Reported

Global Id:	T0601700050
Action Type:	ENFORCEMENT
Date:	06/29/2006
Action:	Staff Letter

Global Id:	T0601700050
Action Type:	ENFORCEMENT
Date:	08/26/2009
Action:	Notice to Comply

Global Id:	T0601700050
Action Type:	ENFORCEMENT
Date:	11/05/2009
Action:	Staff Letter

Global Id:	T0601700050
Action Type:	ENFORCEMENT
Date:	09/30/2009
Action:	Staff Letter

Global Id:	T0601700050
Action Type:	ENFORCEMENT
Date:	02/24/2010
Action:	Closure/No Further Action Letter

Global Id:	T0601700050
Action Type:	ENFORCEMENT
Date:	02/24/2010
Action:	LOP Case Closure Summary to RB

Global Id:	T0601700050
Action Type:	ENFORCEMENT
Date:	06/13/2006
Action:	Verbal Enforcement

Global Id:	T0601700050
Action Type:	ENFORCEMENT
Date:	05/03/2006
Action:	Staff Letter

SIERRA DOOR, 4415 MISSOURI FLAT RD, PLACERVILLE, CA 95667 (Continued)

Global Id:	T0601700050
Action Type:	ENFORCEMENT
Date:	03/25/2010
Action:	LOP Case Closure Summary to RB
Global Id:	T0601700050
Action Type:	ENFORCEMENT
Date:	03/25/2010
Action:	Closure/No Further Action Letter
Global Id:	T0601700050
Action Type:	ENFORCEMENT
Date:	10/01/2008
Action:	Letter - Notice
Global Id:	T0601700050
Action Type:	RESPONSE
Date:	06/23/2006
Action:	Soil and Water Investigation Workplan

LUST REG 5:

Region:	5
Status:	Pollution Characterization
Case Number:	090068
Case Type:	Drinking Water Aquifer affected
Substance:	GASOLINE
Staff Initials:	PGM
Lead Agency:	Regional
Program:	LUST
MTBE Code:	N/A

CA FID UST: State and tribal registered storage tank lists

Facility ID:	09000030
Regulated By:	UTNKI
Regulated ID:	Not Reported
Cortese Code:	Not Reported
SIC Code:	Not Reported
Facility Phone:	9166263500
Mail To:	Not Reported
Mailing Address:	466 OLIVE ORCHARD DR
Mailing Address 2:	Not Reported
Mailing City,St,Zip:	PLACERVILLE 95667
Contact:	Not Reported
Contact Phone:	Not Reported
DUNs Number:	Not Reported
NPDES Number:	Not Reported
EPA ID:	Not Reported
Comments:	Not Reported
Status:	Inactive

SIERRA DOOR, 4415 MISSOURI FLAT RD, PLACERVILLE, CA 95667 (Continued)

CUPA EL DORADO: Other Standard Environmental Records

PE:	BUSINESS PLANS/SMALL BUSINESS
Status:	Inactive, non-billable
Latitude:	Not Reported
Longitude:	Not Reported
PE:	CONTAMINATED SITE/CLEAN-UP
Status:	Inactive, non-billable
Latitude:	Not Reported
Longitude:	Not Reported
PE:	LOCAL OVERSITE PROGRAM (LOP) E5G073
Status:	Active, billable
Latitude:	Not Reported
Longitude:	Not Reported
PE:	UGST-GENERAL/PERMIT, TEMP. CLOSE, RENEW
Status:	Inactive, non-billable
Latitude:	Not Reported
Longitude:	Not Reported

HIST CORTESE: Other Standard Environmental Records

Region:	CORTESE
Facility County Code:	9
Reg By:	LTNKA
Reg Id:	090068

RECORD SOURCES AND CURRENCY

To maintain currency of the following databases, EDR contacts the appropriate agency on a monthly or quarterly basis, as required.

Number of Days to Update: Provides confirmation that EDR is reporting records that have been updated within 90 days from the date the government agency made the information available to the public.

STANDARD ENVIRONMENTAL RECORDS

PRP: Potentially Responsible Parties

Standard Environmental Record Source: Other Standard Environmental Records
Search Distance: Property

A listing of verified Potentially Responsible Parties

Date of Government Version: 04/15/2013
Number of Days to Update: 72
Last EDR Contact :07/01/2014

Source: EPA
Telephone: 202-564-6023

RMP: Risk Management Plans

Standard Environmental Record Source: Other Standard Environmental Records
Search Distance: Property

When Congress passed the Clean Air Act Amendments of 1990, it required EPA to publish regulations and guidance for chemical accident prevention at facilities using extremely hazardous substances. The Risk Management Program Rule (RMP Rule) was written to implement Section 112(r) of these amendments. The rule, which built upon existing industry codes and standards, requires companies of all sizes that use certain flammable and toxic substances to develop a Risk Management Program, which includes a(n): Hazard assessment that details the potential effects of an accidental release, an accident history of the last five years, and an evaluation of worst-case and alternative accidental releases; Prevention program that includes safety precautions and maintenance, monitoring, and employee training measures; and Emergency response program that spells out emergency health care, employee training measures and procedures for informing the public and response agencies (e.g the fire department) should an accident occur.

Date of Government Version: 04/01/2014
Number of Days to Update: 66
Last EDR Contact :07/22/2014

Source: Environmental Protection Agency
Telephone: 202-564-8600

ALAMEDA CO. UST: Underground Tanks

Standard Environmental Record Source: State and tribal registered storage tank lists
Underground storage tank sites located in Alameda county.

Date of Government Version: 07/25/2014
Number of Days to Update: 23
Last EDR Contact :06/30/2014

Source: Alameda County Environmental Health Services
Telephone: 510-567-6700

AST: Aboveground Petroleum Storage Tank Facilities

Standard Environmental Record Source: State and tribal registered storage tank lists
Search Distance: Property

A listing of aboveground storage tank petroleum storage tank locations.

Date of Government Version: 08/01/2009
Number of Days to Update: 21
Last EDR Contact :07/18/2014

Source: California Environmental Protection Agency
Telephone: 916-327-5092

Alameda County CS: Contaminated Sites

Standard Environmental Record Source: State and tribal leaking storage tank lists
Search Distance: 0.333 Mile

A listing of contaminated sites overseen by the Toxic Release Program (oil and groundwater contamination from chemical releases and spills) and the Leaking Underground Storage Tank Program (soil and ground water contamination from leaking petroleum USTs).

Date of Government Version: 07/25/2014
Number of Days to Update: 49
Last EDR Contact :06/30/2014

Source: Alameda County Environmental Health Services
Telephone: 510-567-6700

CA BOND EXP. PLAN: Bond Expenditure Plan

Standard Environmental Record Source: Other Standard Environmental Records

Search Distance: 0.333 Mile

Department of Health Services developed a site-specific expenditure plan as the basis for an appropriation of Hazardous Substance Cleanup Bond Act funds. It is not updated.

Date of Government Version: 01/01/1989
Number of Days to Update: 6
Last EDR Contact :05/31/1994

Source: Department of Health Services
Telephone: 916-255-2118

CA FID UST: Facility Inventory Database

Standard Environmental Record Source: State and tribal registered storage tank lists

Search Distance: Property

The Facility Inventory Database (FID) contains a historical listing of active and inactive underground storage tank locations from the State Water Resource Control Board. Refer to local/county source for current data.

Date of Government Version: 10/31/1994
Number of Days to Update: 24
Last EDR Contact :12/28/1998

Source: California Environmental Protection Agency
Telephone: 916-341-5851

CA LA LF: City of Los Angeles Landfills

Standard Environmental Record Source: State and tribal landfill / solid waste disposal

Landfills owned and maintained by the City of Los Angeles.

Date of Government Version: 03/05/2009
Number of Days to Update: 29
Last EDR Contact :08/14/2014

Source: Engineering & Construction Division
Telephone: 213-473-7869

CDL: Clandestine Drug Labs

Standard Environmental Record Source: Other Standard Environmental Records

Search Distance: Property

A listing of drug lab locations. Listing of a location in this database does not indicate that any illegal drug lab materials were or were not present there, and does not constitute a determination that the location either requires or does not require additional cleanup work.

Date of Government Version: 12/31/2013
Number of Days to Update: 20
Last EDR Contact :08/29/2014

Source: Department of Toxic Substances Control
Telephone: 916-255-6504

CHMIRS: California Hazardous Material Incident Report System

Standard Environmental Record Source: Other Standard Environmental Records

Search Distance: Property

California Hazardous Material Incident Reporting System. CHMIRS contains information on reported hazardous material incidents (accidental releases or spills).

Date of Government Version: 06/26/2014
Number of Days to Update: 49
Last EDR Contact :07/28/2014

Source: Office of Emergency Services
Telephone: 916-845-8400

CONTRA COSTA CO. SITE LIST: Site List
Standard Environmental Record Source: Other Standard Environmental Records
Search Distance: 0.25 Mile

List includes sites from the underground tank, hazardous waste generator and business plan/2185 programs.

Date of Government Version: 02/24/2014
Number of Days to Update: 21
Last EDR Contact :08/05/2014

Source: Contra Costa Health Services Department
Telephone: 925-646-2286

CORTESE: "Cortese" Hazardous Waste & Substances Sites List
Standard Environmental Record Source: Other Standard Environmental Records
Search Distance: 0.333 Mile

The sites for the list are designated by the State Water Resource Control Board (LUST), the Integrated Waste Board (SWF/LS), and the Department of Toxic Substances Control (Cal-Sites).

Date of Government Version: 06/30/2014
Number of Days to Update: 27
Last EDR Contact :07/01/2014

Source: CAL EPA/Office of Emergency Information
Telephone: 916-323-3400

CUPA AMADOR: CUPA Facility List
Standard Environmental Record Source: Other Standard Environmental Records
Cupa Facility List

Date of Government Version: 07/23/2014
Number of Days to Update: 29
Last EDR Contact :09/08/2014

Source: Amador County Environmental Health
Telephone: 209-223-6439

CUPA BUTTE: CUPA Facility Listing
Standard Environmental Record Source: Other Standard Environmental Records
Cupa facility list.

Date of Government Version: 08/01/2013
Number of Days to Update: 20
Last EDR Contact :07/08/2014

Source: Public Health Department
Telephone: 530-538-7149

CUPA CALVERAS: CUPA Facility Listing
Standard Environmental Record Source: Other Standard Environmental Records
Cupa Facility Listing

Date of Government Version: 07/02/2014
Number of Days to Update: 27
Last EDR Contact :06/26/2014

Source: Calveras County Environmental Health
Telephone: 209-754-6399

CUPA COLUSA: CUPA Facility List
Standard Environmental Record Source: Other Standard Environmental Records
Cupa facility list.

Date of Government Version: 06/11/2014
Number of Days to Update: 24

Source: Health & Human Services
Telephone: 530-458-0396

Last EDR Contact :08/08/2014

CUPA DEL NORTE: CUPA Facility List
Standard Environmental Record Source: Other Standard Environmental Records
Cupa Facility list

Date of Government Version: 05/05/2014
Number of Days to Update: 7
Last EDR Contact :07/30/2014
Source: Del Norte County Environmental Health Division
Telephone: 707-465-0426

CUPA EL DORADO: CUPA Facility List
Standard Environmental Record Source: Other Standard Environmental Records
CUPA facility list.

Date of Government Version: 05/29/2014
Number of Days to Update: 38
Last EDR Contact :08/05/2014
Source: El Dorado County Environmental Management Department
Telephone: 530-621-6623

CUPA FRESNO: CUPA Resources List
Standard Environmental Record Source: Other Standard Environmental Records
Certified Unified Program Agency. CUPA's are responsible for implementing a unified hazardous materials and hazardous waste management regulatory program. The agency provides oversight of businesses that deal with hazardous materials, operate underground storage tanks or aboveground storage tanks.

Date of Government Version: 06/30/2014
Number of Days to Update: 35
Last EDR Contact :07/11/2014
Source: Dept. of Community Health
Telephone: 559-445-3271

CUPA HUMBOLDT: CUPA Facility List
Standard Environmental Record Source: Other Standard Environmental Records
CUPA facility list.

Date of Government Version: 06/09/2014
Number of Days to Update: 26
Last EDR Contact :08/20/2014
Source: Humboldt County Environmental Health
Telephone: Not Reported

CUPA IMPERIAL: CUPA Facility List
Standard Environmental Record Source: Other Standard Environmental Records
Cupa facility list.

Date of Government Version: 07/28/2014
Number of Days to Update: 47
Last EDR Contact :07/25/2014
Source: San Diego Border Field Office
Telephone: 760-339-2777

CUPA INYO: CUPA Facility List
Standard Environmental Record Source: Other Standard Environmental Records
Cupa facility list.

Date of Government Version: 09/10/2013
Number of Days to Update: 33
Last EDR Contact :08/20/2014
Source: Inyo County Environmental Health Services
Telephone: 760-878-0238

CUPA KINGS: CUPA Facility List
Standard Environmental Record Source: Other Standard Environmental Records

RECORD SOURCES AND CURRENCY

A listing of sites included in the county's Certified Unified Program Agency database. California's Secretary for Environmental Protection established the unified hazardous materials and hazardous waste regulatory program as required by chapter 6.11 of the California Health and Safety Code. The Unified Program consolidates the administration, permits, inspections, and enforcement activities.

Date of Government Version: 05/28/2014
Number of Days to Update: 21
Last EDR Contact :08/20/2014

Source: Kings County Department of Public Health
Telephone: 559-584-1411

CUPA LAKE: CUPA Facility List

Standard Environmental Record Source: Other Standard Environmental Records

Cupa facility list

Date of Government Version: 07/23/2014
Number of Days to Update: 28
Last EDR Contact :07/18/2014

Source: Lake County Environmental Health
Telephone: 707-263-1164

CUPA MADERA: CUPA Facility List

Standard Environmental Record Source: Other Standard Environmental Records

A listing of sites included in the county's Certified Unified Program Agency database. California's Secretary for Environmental Protection established the unified hazardous materials and hazardous waste regulatory program as required by chapter 6.11 of the California Health and Safety Code. The Unified Program consolidates the administration, permits, inspections, and enforcement activities.

Date of Government Version: 06/09/2014
Number of Days to Update: 16
Last EDR Contact :08/26/2014

Source: Madera County Environmental Health
Telephone: 559-675-7823

CUPA MERCED: CUPA Facility List

Standard Environmental Record Source: Other Standard Environmental Records

CUPA facility list.

Date of Government Version: 05/27/2014
Number of Days to Update: 26
Last EDR Contact :08/20/2014

Source: Merced County Environmental Health
Telephone: 209-381-1094

CUPA MONO: CUPA Facility List

Standard Environmental Record Source: Other Standard Environmental Records

CUPA Facility List

Date of Government Version: 06/09/2014
Number of Days to Update: 14
Last EDR Contact :09/02/2014

Source: Mono County Health Department
Telephone: 760-932-5580

CUPA MONTEREY: CUPA Facility Listing

Standard Environmental Record Source: Other Standard Environmental Records

CUPA Program listing from the Environmental Health Division.

Date of Government Version: 06/09/2014
Number of Days to Update: 28
Last EDR Contact :08/26/2014

Source: Monterey County Health Department
Telephone: 831-796-1297

CUPA NEVADA: CUPA Facility List

Standard Environmental Record Source: Other Standard Environmental Records

CUPA facility list.

Date of Government Version: 11/06/2013
Number of Days to Update: 27
Last EDR Contact :09/16/2014

Source: Community Development Agency
Telephone: 530-265-1467

CUPA SAN LUIS OBISPO: CUPA Facility List
Standard Environmental Record Source: Other Standard Environmental Records
Cupa Facility List.

Date of Government Version: 06/11/2014
Number of Days to Update: 26
Last EDR Contact :08/20/2014

Source: San Luis Obispo County Public Health Department
Telephone: 805-781-5596

CUPA SANTA BARBARA: CUPA Facility Listing
Standard Environmental Record Source: Other Standard Environmental Records
CUPA Program Listing from the Environmental Health Services division.

Date of Government Version: 09/08/2011
Number of Days to Update: 28
Last EDR Contact :09/08/2014

Source: Santa Barbara County Public Health Department
Telephone: 805-686-8167

CUPA SANTA CLARA: Cupa Facility List
Standard Environmental Record Source: Other Standard Environmental Records
Cupa facility list

Date of Government Version: 06/02/2014
Number of Days to Update: 20
Last EDR Contact :08/22/2014

Source: Department of Environmental Health
Telephone: 408-918-1973

CUPA SANTA CRUZ: CUPA Facility List
Standard Environmental Record Source: Other Standard Environmental Records
CUPA facility listing.

Date of Government Version: 05/27/2014
Number of Days to Update: 23
Last EDR Contact :09/08/2014

Source: Santa Cruz County Environmental Health
Telephone: 831-464-2761

CUPA SHASTA: CUPA Facility List
Standard Environmental Record Source: Other Standard Environmental Records
Cupa Facility List.

Date of Government Version: 06/10/2014
Number of Days to Update: 8
Last EDR Contact :08/26/2014

Source: Shasta County Department of Resource Management
Telephone: 530-225-5789

CUPA SONOMA: Cupa Facility List
Standard Environmental Record Source: Other Standard Environmental Records
Cupa Facility list

Date of Government Version: 12/31/2013
Number of Days to Update: 40
Last EDR Contact :06/26/2014

Source: County of Sonoma Fire & Emergency Services Department
Telephone: 707-565-1174

RECORD SOURCES AND CURRENCY

CUPA TUOLUMNE: CUPA Facility List

Standard Environmental Record Source: Other Standard Environmental Records

Cupa facility list

Date of Government Version: 05/16/2014
Number of Days to Update: 28
Last EDR Contact :08/08/2014

Source: Divison of Environmental Health
Telephone: 209-533-5633

CUPA YUBA: CUPA Facility List

Standard Environmental Record Source: Other Standard Environmental Records

CUPA facility listing for Yuba County.

Date of Government Version: 05/19/2014
Number of Days to Update: 28
Last EDR Contact :07/31/2014

Source: Yuba County Environmental Health Department
Telephone: 530-749-7523

DEED: Deed Restriction Listing

Standard Environmental Record Source: Other Standard Environmental Records

Search Distance: 0.333 Mile

Site Mitigation and Brownfields Reuse Program Facility Sites with Deed Restrictions & Hazardous Waste Management Program Facility Sites with Deed / Land Use Restriction. The DTSC Site Mitigation and Brownfields Reuse Program (SMBRP) list includes sites cleaned up under the program's oversight and generally does not include current or former hazardous waste facilities that required a hazardous waste facility permit. The list represents deed restrictions that are active. Some sites have multiple deed restrictions. The DTSC Hazardous Waste Management Program (HWMP) has developed a list of current or former hazardous waste facilities that have a recorded land use restriction at the local county recorder's office. The land use restrictions on this list were required by the DTSC HWMP as a result of the presence of hazardous substances that remain on site after the facility (or part of the facility) has been closed or cleaned up. The types of land use restriction include deed notice, deed restriction, or a land use restriction that binds current and future owners.

Date of Government Version: 06/09/2014
Number of Days to Update: 28
Last EDR Contact :09/10/2014

Source: DTSC and SWRCB
Telephone: 916-323-3400

DRYCLEANERS: Cleaner Facilities

Standard Environmental Record Source: Other Standard Environmental Records

Search Distance: 0.25 Mile

A list of drycleaner related facilities that have EPA ID numbers. These are facilities with certain SIC codes: power laundries, family and commercial; garment pressing and cleaner's agents; linen supply; coin-operated laundries and cleaning; drycleaning plants, except rugs; carpet and upholster cleaning; industrial launderers; laundry and garment services.

Date of Government Version: 06/28/2014
Number of Days to Update: 49
Last EDR Contact :09/08/2014

Source: Department of Toxic Substance Control
Telephone: 916-327-4498

EL SEGUNDO UST: City of El Segundo Underground Storage Tank

Standard Environmental Record Source: State and tribal registered storage tank lists

Underground storage tank sites located in El Segundo city.

Date of Government Version: 07/23/2014
Number of Days to Update: 23
Last EDR Contact :07/18/2014

Source: City of El Segundo Fire Department
Telephone: 310-524-2236

EMI: Emissions Inventory Data

Standard Environmental Record Source: Other Standard Environmental Records

Search Distance: Property

Toxics and criteria pollutant emissions data collected by the ARB and local air pollution agencies.

Date of Government Version: 12/31/2012
Number of Days to Update: 34
Last EDR Contact :06/26/2014

Source: California Air Resources Board
Telephone: 916-322-2990

ENF: Enforcement Action Listing

Standard Environmental Record Source: Other Standard Environmental Records

Search Distance: Property

A listing of Water Board Enforcement Actions. Formal is everything except Oral/Verbal Communication, Notice of Violation, Expedited Payment Letter, and Staff Enforcement Letter.

Date of Government Version: 05/30/2014
Number of Days to Update: 38
Last EDR Contact :08/08/2014

Source: State Water Resoruces Control Board
Telephone: 916-445-9379

ENVIROSTOR: EnviroStor Database

Standard Environmental Record Source: State and tribal - equivalent CERCLIS

Search Distance: 0.333 Mile

The Department of Toxic Substances Control's (DTSC's) Site Mitigation and Brownfields Reuse Program's (SMBRP's) EnviroStor database identifes sites that have known contamination or sites for which there may be reasons to investigate further. The database includes the following site types: Federal Superfund sites (National Priorities List (NPL)); State Response, including Military Facilities and State Superfund; Voluntary Cleanup; and School sites. EnviroStor provides similar information to the information that was available in CalSites, and provides additional site information, including, but not limited to, identification of formerly-contaminated properties that have been released for reuse, properties where environmental deed restrictions have been recorded to prevent inappropriate land uses, and risk characterization information that is used to assess potential impacts to public health and the environment at contaminated sites.

Date of Government Version: 06/05/2014
Number of Days to Update: 33
Last EDR Contact :08/06/2014

Source: Department of Toxic Substances Control
Telephone: 916-323-3400

HAULERS: Registered Waste Tire Haulers Listing

Standard Environmental Record Source: Other Standard Environmental Records

Search Distance: Property

A listing of registered waste tire haulers.

Date of Government Version: 02/18/2014
Number of Days to Update: 35
Last EDR Contact :08/14/2014

Source: Integrated Waste Management Board
Telephone: 916-341-6422

HAZNET: Facility and Manifest Data

Standard Environmental Record Source: Other Standard Environmental Records

Search Distance: Property

Facility and Manifest Data. The data is extracted from the copies of hazardous waste manifests received each year by the DTSC. The annual volume of manifests is typically 700,000 - 1,000,000 annually, representing approximately 350,000 - 500,000 shipments. Data are from the manifests submitted without correction, and therefore many contain some invalid values for data elements such as generator ID, TSD ID, waste category, and disposal method.

Date of Government Version: 12/31/2012
Number of Days to Update: 41
Last EDR Contact :07/18/2014

Source: California Environmental Protection Agency
Telephone: 916-255-1136

HIST CAL-SITES: Calsites Database

Standard Environmental Record Source: State and tribal - equivalent CERCLIS

Search Distance: 0.333 Mile

The Calsites database contains potential or confirmed hazardous substance release properties. In 1996, California EPA reevaluated and significantly reduced the number of sites in the Calsites database. No longer updated by the state agency. It has been replaced by ENVIROSTOR.

Date of Government Version: 08/08/2005
Number of Days to Update: 21
Last EDR Contact :02/23/2009

Source: Department of Toxic Substance Control
Telephone: 916-323-3400

HIST CORTESE: Hazardous Waste & Substance Site List

Standard Environmental Record Source: Other Standard Environmental Records

Search Distance: 0.333 Mile

The sites for the list are designated by the State Water Resource Control Board [LUST], the Integrated Waste Board [SWF/LS], and the Department of Toxic Substances Control [CALSITES]. This listing is no longer updated by the state agency.

Date of Government Version: 04/01/2001
Number of Days to Update: 76
Last EDR Contact :01/22/2009

Source: Department of Toxic Substances Control
Telephone: 916-323-3400

HIST LUST SANTA CLARA: HIST LUST - Fuel Leak Site Activity Report

Standard Environmental Record Source: State and tribal leaking storage tank lists

Search Distance: 0.333 Mile

A listing of open and closed leaking underground storage tanks. This listing is no longer updated by the county. Leaking underground storage tanks are now handled by the Department of Environmental Health.

Date of Government Version: 03/29/2005
Number of Days to Update: 22
Last EDR Contact :03/23/2009

Source: Santa Clara Valley Water District
Telephone: 408-265-2600

HIST UST: Hazardous Substance Storage Container Database

Standard Environmental Record Source: State and tribal registered storage tank lists

Search Distance: Property

The Hazardous Substance Storage Container Database is a historical listing of UST sites. Refer to local/county source for current data.

Date of Government Version: 10/15/1990
Number of Days to Update: 18
Last EDR Contact :07/26/2001

Source: State Water Resources Control Board
Telephone: 916-341-5851

HWP: EnviroStor Permitted Facilities Listing

Standard Environmental Record Source: Other Standard Environmental Records

Search Distance: 0.333 Mile

Detailed information on permitted hazardous waste facilities and corrective action ("cleanups") tracked in EnviroStor.

Date of Government Version: 05/27/2014
Number of Days to Update: 40
Last EDR Contact :08/26/2014

Source: Department of Toxic Substances Control
Telephone: 916-323-3400

HWT: Registered Hazardous Waste Transporter Database

Standard Environmental Record Source: Other Standard Environmental Records

Search Distance: Property

A listing of hazardous waste transporters. In California, unless specifically exempted, it is unlawful for any person to transport hazardous wastes unless the person holds a valid registration issued by DTSC. A hazardous waste transporter registration is valid for one year and is assigned a unique registration number.

Date of Government Version: 07/14/2014
Number of Days to Update: 13
Last EDR Contact :07/15/2014

Source: Department of Toxic Substances Control
Telephone: 916-440-7145

KERN CO. UST: Underground Storage Tank Sites & Tank Listing
Standard Environmental Record Source: State and tribal registered storage tank lists
Kern County Sites and Tanks Listing.

Date of Government Version: 08/31/2010
Number of Days to Update: 29
Last EDR Contact :08/08/2014

Source: Kern County Environment Health Services Department
Telephone: 661-862-8700

LA Co. Site Mitigation: Site Mitigation List
Standard Environmental Record Source: Other Standard Environmental Records
Search Distance: Property

Industrial sites that have had some sort of spill or complaint.

Date of Government Version: 01/07/2014
Number of Days to Update: 28
Last EDR Contact :07/16/2014

Source: Community Health Services
Telephone: 323-890-7806

LDS: Land Disposal Sites Listing
Standard Environmental Record Source: Other Standard Environmental Records
Search Distance: Property

The Land Disposal program regulates of waste discharge to land for treatment, storage and disposal in waste management units.

Date of Government Version: 07/30/2014
Number of Days to Update: 22
Last EDR Contact :09/17/2014

Source: State Water Qualilty Control Board
Telephone: 866-480-1028

LIENS: Environmental Liens Listing
Standard Environmental Record Source: Other Standard Environmental Records
Search Distance: Property

A listing of property locations with environmental liens for California where DTSC is a lien holder.

Date of Government Version: 05/05/2014
Number of Days to Update: 13
Last EDR Contact :09/08/2014

Source: Department of Toxic Substances Control
Telephone: 916-323-3400

LONG BEACH UST: City of Long Beach Underground Storage Tank
Standard Environmental Record Source: State and tribal registered storage tank lists
Underground storage tank sites located in the city of Long Beach.

Date of Government Version: 07/28/2014
Number of Days to Update: 23
Last EDR Contact :07/25/2014

Source: City of Long Beach Fire Department
Telephone: 562-570-2563

LOS ANGELES CO. HMS: HMS: Street Number List

RECORD SOURCES AND CURRENCY

Standard Environmental Record Source: Other Standard Environmental Records
Search Distance: Property

Industrial Waste and Underground Storage Tank Sites.

Date of Government Version: 03/31/2014
Number of Days to Update: 41
Last EDR Contact :07/21/2014

Source: Department of Public Works
Telephone: 626-458-3517

LOS ANGELES CO. LF: List of Solid Waste Facilities
Standard Environmental Record Source: State and tribal landfill / solid waste disposal
Solid Waste Facilities in Los Angeles County.

Date of Government Version: 07/21/2014
Number of Days to Update: 29
Last EDR Contact :07/21/2014

Source: La County Department of Public Works
Telephone: 818-458-5185

LUST: Geotracker's Leaking Underground Fuel Tank Report
Standard Environmental Record Source: State and tribal leaking storage tank lists
Search Distance: 0.333 Mile

Leaking Underground Storage Tank Incident Reports. LUST records contain an inventory of reported leaking underground storage tank incidents. Not all states maintain these records, and the information stored varies by state. For more information on a particular leaking underground storage tank sites, please contact the appropriate regulatory agency.

Date of Government Version: 07/30/2014
Number of Days to Update: 22
Last EDR Contact :09/17/2014

Source: State Water Resources Control Board
Telephone: see region list

LUST REG 1: Active Toxic Site Investigation
Standard Environmental Record Source: State and tribal leaking storage tank lists
Del Norte, Humboldt, Lake, Mendocino, Modoc, Siskiyou, Sonoma, Trinity counties. For more current information, please refer to the State Water Resources Control Board's LUST database.

Date of Government Version: 02/01/2001
Number of Days to Update: 29
Last EDR Contact :08/01/2011

Source: California Regional Water Quality Control Board North Coast (1)
Telephone: 707-570-3769

LUST REG 2: Fuel Leak List
Standard Environmental Record Source: State and tribal leaking storage tank lists
Leaking Underground Storage Tank locations. Alameda, Contra Costa, Marin, Napa, San Francisco, San Mateo, Santa Clara, Solano, Sonoma counties.

Date of Government Version: 09/30/2004
Number of Days to Update: 30
Last EDR Contact :09/19/2011

Source: California Regional Water Quality Control Board San Francisco Bay Region (2)
Telephone: 510-622-2433

LUST REG 3: Leaking Underground Storage Tank Database
Standard Environmental Record Source: State and tribal leaking storage tank lists
Leaking Underground Storage Tank locations. Monterey, San Benito, San Luis Obispo, Santa Barbara, Santa Cruz counties.

Date of Government Version: 05/19/2003
Number of Days to Update: 14

Source: California Regional Water Quality Control Board Central Coast Region (3)
Telephone: 805-542-4786

Last EDR Contact :07/18/2011

LUST REG 4: Underground Storage Tank Leak List

Standard Environmental Record Source: State and tribal leaking storage tank lists

Los Angeles, Ventura counties. For more current information, please refer to the State Water Resources Control Board's LUST database.

Date of Government Version: 09/07/2004
Source: California Regional Water Quality Control Board Los Angeles Region (4)
Number of Days to Update: 35
Telephone: 213-576-6710
Last EDR Contact :09/06/2011

LUST REG 5: Leaking Underground Storage Tank Database

Standard Environmental Record Source: State and tribal leaking storage tank lists

Leaking Underground Storage Tank locations. Alameda, Alpine, Amador, Butte, Colusa, Contra Costa, Calveras, El Dorado, Fresno, Glenn, Kern, Kings, Lake, Lassen, Madera, Mariposa, Merced, Modoc, Napa, Nevada, Placer, Plumas, Sacramento, San Joaquin, Shasta, Solano, Stanislaus, Sutter, Tehama, Tulare, Tuolumne, Yolo, Yuba counties.

Date of Government Version: 07/01/2008
Source: California Regional Water Quality Control Board Central Valley Region (5)
Number of Days to Update: 9
Telephone: 916-464-4834
Last EDR Contact :07/01/2011

LUST REG 6L: Leaking Underground Storage Tank Case Listing

Standard Environmental Record Source: State and tribal leaking storage tank lists

For more current information, please refer to the State Water Resources Control Board's LUST database.

Date of Government Version: 09/09/2003
Source: California Regional Water Quality Control Board Lahontan Region (6)
Number of Days to Update: 27
Telephone: 530-542-5572
Last EDR Contact :09/12/2011

LUST REG 6V: Leaking Underground Storage Tank Case Listing

Standard Environmental Record Source: State and tribal leaking storage tank lists

Leaking Underground Storage Tank locations. Inyo, Kern, Los Angeles, Mono, San Bernardino counties.

Date of Government Version: 06/07/2005
Source: California Regional Water Quality Control Board Victorville Branch Office (6)
Number of Days to Update: 22
Telephone: 760-241-7365
Last EDR Contact :09/12/2011

LUST REG 7: Leaking Underground Storage Tank Case Listing

Standard Environmental Record Source: State and tribal leaking storage tank lists

Leaking Underground Storage Tank locations. Imperial, Riverside, San Diego, Santa Barbara counties.

Date of Government Version: 02/26/2004
Source: California Regional Water Quality Control Board Colorado River Basin Region (7)
Number of Days to Update: 27
Telephone: 760-776-8943
Last EDR Contact :08/01/2011

LUST REG 8: Leaking Underground Storage Tanks

Standard Environmental Record Source: State and tribal leaking storage tank lists

California Regional Water Quality Control Board Santa Ana Region (8). For more current information, please refer to the State Water Resources Control Board's LUST database.

Date of Government Version: 02/14/2005
Source: California Regional Water Quality Control Board Santa Ana Region (8)

Number of Days to Update: 41
Last EDR Contact :08/15/2011
Telephone: 909-782-4496

LUST REG 9: Leaking Underground Storage Tank Report

Standard Environmental Record Source: State and tribal leaking storage tank lists

Orange, Riverside, San Diego counties. For more current information, please refer to the State Water Resources Control Board's LUST database.

Date of Government Version: 03/01/2001
Source: California Regional Water Quality Control Board San Diego Region (9)
Number of Days to Update: 28
Telephone: 858-637-5595
Last EDR Contact :09/26/2011

LUST SANTA CLARA: LOP Listing

Standard Environmental Record Source: State and tribal leaking storage tank lists

A listing of leaking underground storage tanks located in Santa Clara county.

Date of Government Version: 03/03/2014
Source: Department of Environmental Health
Number of Days to Update: 13
Telephone: 408-918-3417
Last EDR Contact :09/02/2014

MARIN CO. UST: Underground Storage Tank Sites

Standard Environmental Record Source: State and tribal registered storage tank lists

Currently permitted USTs in Marin County.

Date of Government Version: 07/02/2014
Source: Public Works Department Waste Management
Number of Days to Update: 42
Telephone: 415-499-6647
Last EDR Contact :07/02/2014

MCS: Military Cleanup Sites Listing

Standard Environmental Record Source: Other Standard Environmental Records

Search Distance: Property

The State Water Resources Control Board and nine Regional Water Quality Control Boards partner with the Department of Defense (DoD) through the Defense and State Memorandum of Agreement (DSMOA) to oversee the investigation and remediation of water quality issues at military facilities.

Date of Government Version: 07/30/2014
Source: State Water Resources Control Board
Number of Days to Update: 25
Telephone: 866-480-1028
Last EDR Contact :09/17/2014

MED WASTE VENTURA: Medical Waste Program List

Standard Environmental Record Source: Other Standard Environmental Records

Search Distance: Property

To protect public health and safety and the environment from potential exposure to disease causing agents, the Environmental Health Division Medical Waste Program regulates the generation, handling, storage, treatment and disposal of medical waste throughout the County.

Date of Government Version: 06/26/2014
Source: Ventura County Resource Management Agency
Number of Days to Update: 46
Telephone: 805-654-2813
Last EDR Contact :07/28/2014

MWMP: Medical Waste Management Program Listing

Standard Environmental Record Source: Other Standard Environmental Records

Search Distance: Property

The Medical Waste Management Program (MWMP) ensures the proper handling and disposal of medical waste by permitting and inspecting medical waste Offsite Treatment Facilities (PDF) and Transfer Stations (PDF) throughout the state. MWMP also oversees all Medical Waste Transporters.

Date of Government Version: 05/23/2014
Number of Days to Update: 26
Last EDR Contact :09/10/2014
Source: Department of Public Health
Telephone: 916-558-1784

NAPA CO. LUST: Sites With Reported Contamination
Standard Environmental Record Source: State and tribal leaking storage tank lists
A listing of leaking underground storage tank sites located in Napa county.

Date of Government Version: 12/05/2011
Number of Days to Update: 63
Last EDR Contact :08/28/2014
Source: Napa County Department of Environmental Management
Telephone: 707-253-4269

NAPA CO. UST: Closed and Operating Underground Storage Tank Sites
Standard Environmental Record Source: State and tribal registered storage tank lists
Underground storage tank sites located in Napa county.

Date of Government Version: 01/15/2008
Number of Days to Update: 23
Last EDR Contact :08/28/2014
Source: Napa County Department of Environmental Management
Telephone: 707-253-4269

NOTIFY 65: Proposition 65 Records
Standard Environmental Record Source: Other Standard Environmental Records
Search Distance: Property

Listings of all Proposition 65 incidents reported to counties by the State Water Resources Control Board and the Regional Water Quality Control Board. This database is no longer updated by the reporting agency.

Date of Government Version: 10/21/1993
Number of Days to Update: 18
Last EDR Contact :06/17/2014
Source: State Water Resources Control Board
Telephone: 916-445-3846

NPDES: NPDES Permits Listing
Standard Environmental Record Source: Other Standard Environmental Records
Search Distance: Property

A listing of NPDES permits, including stormwater.

Date of Government Version: 05/19/2014
Number of Days to Update: 8
Last EDR Contact :08/18/2014
Source: State Water Resources Control Board
Telephone: 916-445-9379

ORANGE CO. LUST: List of Underground Storage Tank Cleanups
Standard Environmental Record Source: State and tribal leaking storage tank lists
Orange County Underground Storage Tank Cleanups (LUST).

Date of Government Version: 05/01/2014
Number of Days to Update: 13
Last EDR Contact :08/07/2014
Source: Health Care Agency
Telephone: 714-834-3446

ORANGE CO. UST: List of Underground Storage Tank Facilities
Standard Environmental Record Source: State and tribal registered storage tank lists

Orange County Underground Storage Tank Facilities (UST).

Date of Government Version: 08/01/2014 Source: Health Care Agency
Number of Days to Update: 8 Telephone: 714-834-3446
Last EDR Contact :08/07/2014

Orange Co. Industrial Site: List of Industrial Site Cleanups
Standard Environmental Record Source: Other Standard Environmental Records
Search Distance: Property

Petroleum and non-petroleum spills.

Date of Government Version: 05/01/2014 Source: Health Care Agency
Number of Days to Update: 7 Telephone: 714-834-3446
Last EDR Contact :08/07/2014

PLACER CO. MS: Master List of Facilities
Standard Environmental Record Source: Other Standard Environmental Records
Search Distance: 0.25 Mile

List includes aboveground tanks, underground tanks and cleanup sites.

Date of Government Version: 06/09/2014 Source: Placer County Health and Human Services
Number of Days to Update: 29 Telephone: 530-745-2363
Last EDR Contact :09/08/2014

PROC: Certified Processors Database
Standard Environmental Record Source: Other Standard Environmental Records
Search Distance: 0.333 Mile

A listing of certified processors.

Date of Government Version: 06/16/2014 Source: Department of Conservation
Number of Days to Update: 23 Telephone: 916-323-3836
Last EDR Contact :09/17/2014

RESPONSE: State Response Sites
Standard Environmental Record Source: State and tribal - equivalent NPL
Search Distance: 0.333 Mile

Identifies confirmed release sites where DTSC is involved in remediation, either in a lead or oversight capacity. These confirmed release sites are generally high-priority and high potential risk.

Date of Government Version: 06/05/2014 Source: Department of Toxic Substances Control
Number of Days to Update: 33 Telephone: 916-323-3400
Last EDR Contact :08/06/2014

RIVERSIDE CO. LUST: Listing of Underground Tank Cleanup Sites
Standard Environmental Record Source: State and tribal leaking storage tank lists
Riverside County Underground Storage Tank Cleanup Sites (LUST).

Date of Government Version: 07/08/2014 Source: Department of Environmental Health
Number of Days to Update: 17 Telephone: 951-358-5055
Last EDR Contact :06/23/2014

RIVERSIDE CO. UST: Underground Storage Tank Tank List

Standard Environmental Record Source: State and tribal registered storage tank lists
Underground storage tank sites located in Riverside county.

Date of Government Version: 07/08/2014
Number of Days to Update: 38
Last EDR Contact :06/23/2014

Source: Department of Environmental Health
Telephone: 951-358-5055

SAN DIEGO CO. HMMD: Hazardous Materials Management Division Database
Standard Environmental Record Source: Other Standard Environmental Records
Search Distance: Property

The database includes: HE58 - This report contains the business name, site address, business phone number, establishment 'H' permit number, type of permit, and the business status. HE17 - In addition to providing the same information provided in the HE58 listing, HE17 provides inspection dates, violations received by the establishment, hazardous waste generated, the quantity, method of storage, treatment/disposal of waste and the hauler, and information on underground storage tanks. Unauthorized Release List - Includes a summary of environmental contamination cases in San Diego County (underground tank cases, non-tank cases, groundwater contamination, and soil contamination are included.)

Date of Government Version: 09/23/2013
Number of Days to Update: 23
Last EDR Contact :09/08/2014

Source: Hazardous Materials Management Division
Telephone: 619-338-2268

SAN DIEGO CO. LF: Solid Waste Facilities
Standard Environmental Record Source: State and tribal landfill / solid waste disposal
San Diego County Solid Waste Facilities.

Date of Government Version: 10/31/2013
Number of Days to Update: 42
Last EDR Contact :07/22/2014

Source: Department of Health Services
Telephone: 619-338-2209

SAN DIEGO CO. SAM: Environmental Case Listing
Standard Environmental Record Source: State and tribal leaking storage tank lists
Search Distance: 0.333 Mile

The listing contains all underground tank release cases and projects pertaining to properties contaminated with hazardous substances that are actively under review by the Site Assessment and Mitigation Program.

Date of Government Version: 03/23/2010
Number of Days to Update: 24
Last EDR Contact :09/08/2014

Source: San Diego County Department of Environmental Health
Telephone: 619-338-2371

SAN FRANCISCO CO. LUST: Local Oversite Facilities
Standard Environmental Record Source: State and tribal leaking storage tank lists
A listing of leaking underground storage tank sites located in San Francisco county.

Date of Government Version: 09/19/2008
Number of Days to Update: 10
Last EDR Contact :08/07/2014

Source: Department Of Public Health San Francisco County
Telephone: 415-252-3920

SAN FRANCISCO CO. UST: Underground Storage Tank Information
Standard Environmental Record Source: State and tribal registered storage tank lists
Underground storage tank sites located in San Francisco county.

Date of Government Version: 11/29/2010
Number of Days to Update: 5

Source: Department of Public Health
Telephone: 415-252-3920

Last EDR Contact :08/07/2014

SAN JOSE HAZMAT: Hazardous Material Facilities

Standard Environmental Record Source: Other Standard Environmental Records

Search Distance: Property

Hazardous material facilities, including underground storage tank sites.

Date of Government Version: 05/12/2014
Number of Days to Update: 9
Last EDR Contact :08/08/2014

Source: City of San Jose Fire Department
Telephone: 408-535-7694

SAN MATEO CO. LUST: Fuel Leak List

Standard Environmental Record Source: State and tribal leaking storage tank lists

A listing of leaking underground storage tank sites located in San Mateo county.

Date of Government Version: 06/16/2014
Number of Days to Update: 21
Last EDR Contact :09/15/2014

Source: San Mateo County Environmental Health Services Division
Telephone: 650-363-1921

SCH: School Property Evaluation Program

Standard Environmental Record Source: Other Standard Environmental Records

Search Distance: Property

This category contains proposed and existing school sites that are being evaluated by DTSC for possible hazardous materials contamination. In some cases, these properties may be listed in the CalSites category depending on the level of threat to public health and safety or the environment they pose.

Date of Government Version: 06/05/2014
Number of Days to Update: 33
Last EDR Contact :08/06/2014

Source: Department of Toxic Substances Control
Telephone: 916-323-3400

SLIC: Statewide SLIC Cases

Standard Environmental Record Source: State and tribal leaking storage tank lists

Search Distance: 0.333 Mile

The SLIC (Spills, Leaks, Investigations and Cleanup) program is designed to protect and restore water quality from spills, leaks, and similar discharges.

Date of Government Version: 07/30/2014
Number of Days to Update: 25
Last EDR Contact :09/17/2014

Source: State Water Resources Control Board
Telephone: 866-480-1028

SLIC REG 1: Active Toxic Site Investigations

Standard Environmental Record Source: State and tribal leaking storage tank lists

The SLIC (Spills, Leaks, Investigations and Cleanup) program is designed to protect and restore water quality from spills, leaks, and similar discharges.

Date of Government Version: 04/03/2003
Number of Days to Update: 18
Last EDR Contact :08/01/2011

Source: California Regional Water Quality Control Board, North Coast Region (1)
Telephone: 707-576-2220

SLIC REG 2: Spills, Leaks, Investigation & Cleanup Cost Recovery Listing

Standard Environmental Record Source: State and tribal leaking storage tank lists

The SLIC (Spills, Leaks, Investigations and Cleanup) program is designed to protect and restore water quality from spills, leaks, and similar discharges.

Date of Government Version: 09/30/2004
Source: Regional Water Quality Control Board San Francisco Bay Region (2)
Number of Days to Update: 30
Telephone: 510-286-0457
Last EDR Contact :09/19/2011

SLIC REG 3: Spills, Leaks, Investigation & Cleanup Cost Recovery Listing

Standard Environmental Record Source: State and tribal leaking storage tank lists

The SLIC (Spills, Leaks, Investigations and Cleanup) program is designed to protect and restore water quality from spills, leaks, and similar discharges.

Date of Government Version: 05/18/2006
Source: California Regional Water Quality Control Board Central Coast Region (3)
Number of Days to Update: 28
Telephone: 805-549-3147
Last EDR Contact :07/18/2011

SLIC REG 4: Spills, Leaks, Investigation & Cleanup Cost Recovery Listing

Standard Environmental Record Source: State and tribal leaking storage tank lists

The SLIC (Spills, Leaks, Investigations and Cleanup) program is designed to protect and restore water quality from spills, leaks, and similar discharges.

Date of Government Version: 11/17/2004
Source: Region Water Quality Control Board Los Angeles Region (4)
Number of Days to Update: 47
Telephone: 213-576-6600
Last EDR Contact :07/01/2011

SLIC REG 5: Spills, Leaks, Investigation & Cleanup Cost Recovery Listing

Standard Environmental Record Source: State and tribal leaking storage tank lists

The SLIC (Spills, Leaks, Investigations and Cleanup) program is designed to protect and restore water quality from spills, leaks, and similar discharges.

Date of Government Version: 04/01/2005
Source: Regional Water Quality Control Board Central Valley Region (5)
Number of Days to Update: 16
Telephone: 916-464-3291
Last EDR Contact :09/12/2011

SLIC REG 6L: SLIC Sites

Standard Environmental Record Source: State and tribal leaking storage tank lists

The SLIC (Spills, Leaks, Investigations and Cleanup) program is designed to protect and restore water quality from spills, leaks, and similar discharges.

Date of Government Version: 09/07/2004
Source: California Regional Water Quality Control Board, Lahontan Region
Number of Days to Update: 35
Telephone: 530-542-5574
Last EDR Contact :08/15/2011

SLIC REG 6V: Spills, Leaks, Investigation & Cleanup Cost Recovery Listing

Standard Environmental Record Source: State and tribal leaking storage tank lists

The SLIC (Spills, Leaks, Investigations and Cleanup) program is designed to protect and restore water quality from spills, leaks, and similar discharges.

Date of Government Version: 05/24/2005
Source: Regional Water Quality Control Board, Victorville Branch
Number of Days to Update: 22
Telephone: 619-241-6583
Last EDR Contact :08/15/2011

SLIC REG 7: SLIC List

Standard Environmental Record Source: State and tribal leaking storage tank lists

The SLIC (Spills, Leaks, Investigations and Cleanup) program is designed to protect and restore water quality from spills, leaks, and similar discharges.

Date of Government Version: 11/24/2004
Source: California Regional Quality Control Board, Colorado River Basin Region
Number of Days to Update: 36
Telephone: 760-346-7491
Last EDR Contact :08/01/2011

SLIC REG 8: Spills, Leaks, Investigation & Cleanup Cost Recovery Listing

Standard Environmental Record Source: State and tribal leaking storage tank lists

The SLIC (Spills, Leaks, Investigations and Cleanup) program is designed to protect and restore water quality from spills, leaks, and similar discharges.

Date of Government Version: 04/03/2008
Source: California Region Water Quality Control Board Santa Ana Region (8)
Number of Days to Update: 11
Telephone: 951-782-3298
Last EDR Contact :09/12/2011

SLIC REG 9: Spills, Leaks, Investigation & Cleanup Cost Recovery Listing

Standard Environmental Record Source: State and tribal leaking storage tank lists

The SLIC (Spills, Leaks, Investigations and Cleanup) program is designed to protect and restore water quality from spills, leaks, and similar discharges.

Date of Government Version: 09/10/2007
Source: California Regional Water Quality Control Board San Diego Region (9)
Number of Days to Update: 17
Telephone: 858-467-2980
Last EDR Contact :08/08/2011

SOLANO CO. LUST: Leaking Underground Storage Tanks

Standard Environmental Record Source: State and tribal leaking storage tank lists

A listing of leaking underground storage tank sites located in Solano county.

Date of Government Version: 06/19/2014
Source: Solano County Department of Environmental Management
Number of Days to Update: 29
Telephone: 707-784-6770
Last EDR Contact :09/15/2014

SOLANO CO. UST: Underground Storage Tanks

Standard Environmental Record Source: State and tribal registered storage tank lists

Underground storage tank sites located in Solano county.

Date of Government Version: 06/19/2014
Source: Solano County Department of Environmental Management
Number of Days to Update: 29
Telephone: 707-784-6770
Last EDR Contact :09/15/2014

SONOMA CO. LUST: Leaking Underground Storage Tank Sites

Standard Environmental Record Source: State and tribal leaking storage tank lists

A listing of leaking underground storage tank sites located in Sonoma county.

Date of Government Version: 07/01/2014
Source: Department of Health Services
Number of Days to Update: 25
Telephone: 707-565-6565
Last EDR Contact :06/26/2014

SUTTER CO. UST: Underground Storage Tanks

Standard Environmental Record Source: State and tribal registered storage tank lists
Underground storage tank sites located in Sutter county.

Date of Government Version: 06/09/2014
Number of Days to Update: 36
Last EDR Contact :09/08/2014

Source: Sutter County Department of Agriculture
Telephone: 530-822-7500

SWEEPS UST: SWEEPS UST Listing
Standard Environmental Record Source: State and tribal registered storage tank lists
Search Distance: Property

Statewide Environmental Evaluation and Planning System. This underground storage tank listing was updated and maintained by a company contacted by the SWRCB in the early 1990's. The listing is no longer updated or maintained. The local agency is the contact for more information on a site on the SWEEPS list.

Date of Government Version: 06/01/1994
Number of Days to Update: 35
Last EDR Contact :06/03/2005

Source: State Water Resources Control Board
Telephone: Not Reported

SWF/LF (SWIS): Solid Waste Information System
Standard Environmental Record Source: State and tribal landfill / solid waste disposal
Search Distance: 0.333 Mile

Active, Closed and Inactive Landfills.SWF/LF records typically contain an inventory of solid waste disposal facilities or landfills.These may be active or inactive facilities or open dumps that failed to meet RCRA Section 4004 criteriafor solid waste landfills or disposal sites.

Date of Government Version: 05/19/2014
Number of Days to Update: 2
Last EDR Contact :08/18/2014

Source: Department of Resources Recycling and Recovery
Telephone: 916-341-6320

SWRCY: Recycler Database
Standard Environmental Record Source: State and tribal landfill / solid waste disposal
Search Distance: 0.333 Mile

A listing of recycling facilities in California.

Date of Government Version: 06/16/2014
Number of Days to Update: 24
Last EDR Contact :09/17/2014

Source: Department of Conservation
Telephone: 916-323-3836

Sacramento Co. CS: Toxic Site Clean-Up List
Standard Environmental Record Source: State and tribal leaking storage tank lists
Search Distance: 0.333 Mile

List of sites where unauthorized releases of potentially hazardous materials have occurred.

Date of Government Version: 02/06/2014
Number of Days to Update: 21
Last EDR Contact :07/11/2014

Source: Sacramento County Environmental Management
Telephone: 916-875-8406

Sacramento Co. ML: Master Hazardous Materials Facility List
Standard Environmental Record Source: Other Standard Environmental Records
Search Distance: 0.25 Mile

Any business that has hazardous materials on site - hazardous material storage sites, underground storage tanks, waste generators.

Date of Government Version: 05/05/2014
Number of Days to Update: 11
Last EDR Contact :07/08/2014

Source: Sacramento County Environmental Management
Telephone: 916-875-8406

San Bern. Co. Permit: Hazardous Material Permits
Standard Environmental Record Source: Other Standard Environmental Records
Search Distance: 0.25 Mile

This listing includes underground storage tanks, medical waste handlers/generators, hazardous materials handlers, hazardous waste generators, and waste oil generators/handlers.

Date of Government Version: 05/30/2014
Number of Days to Update: 38
Last EDR Contact :08/07/2014

Source: San Bernardino County Fire Department Hazardous Materials Division
Telephone: 909-387-3041

San Mateo Co. BI: Business Inventory
Standard Environmental Record Source: Other Standard Environmental Records
Search Distance: 0.25 Mile

List includes Hazardous Materials Business Plan, hazardous waste generators, and underground storage tanks.

Date of Government Version: 04/03/2014
Number of Days to Update: 27
Last EDR Contact :09/15/2014

Source: San Mateo County Environmental Health Services Division
Telephone: 650-363-1921

TORRANCE UST: City of Torrance Underground Storage Tank
Standard Environmental Record Source: State and tribal registered storage tank lists
Underground storage tank sites located in the city of Torrance.

Date of Government Version: 01/13/2014
Number of Days to Update: 32
Last EDR Contact :07/25/2014

Source: City of Torrance Fire Department
Telephone: 310-618-2973

TOXIC PITS: Toxic Pits Cleanup Act Sites
Standard Environmental Record Source: Other Standard Environmental Records
Search Distance: 0.333 Mile

Toxic PITS Cleanup Act Sites. TOXIC PITS identifies sites suspected of containing hazardous substances where cleanup has not yet been completed.

Date of Government Version: 07/01/1995
Number of Days to Update: 27
Last EDR Contact :01/26/2009

Source: State Water Resources Control Board
Telephone: 916-227-4364

UIC: UIC Listing
Standard Environmental Record Source: Other Standard Environmental Records
Search Distance: Property

A listing of wells identified as underground injection wells, in the California Oil and Gas Wells database.

Date of Government Version: 01/15/2014
Number of Days to Update: 37

Source: Deaprtment of Conservation
Telephone: 916-445-2408

Last EDR Contact :09/17/2014

UST: Active UST Facilities
Standard Environmental Record Source: State and tribal registered storage tank lists
Search Distance: Property

Active UST facilities gathered from the local regulatory agencies

Date of Government Version: 07/30/2014 Source: SWRCB
Number of Days to Update: 20 Telephone: 916-341-5851
Last EDR Contact :09/19/2014

UST MENDOCINO: Mendocino County UST Database
Standard Environmental Record Source: State and tribal registered storage tank lists
A listing of underground storage tank locations in Mendocino County.

Date of Government Version: 09/23/2009 Source: Department of Public Health
Number of Days to Update: 8 Telephone: 707-463-4466
Last EDR Contact :08/28/2014

UST SAN JOAQUIN: San Joaquin Co. UST
Standard Environmental Record Source: State and tribal registered storage tank lists
A listing of underground storage tank locations in San Joaquin county.

Date of Government Version: 06/20/2014 Source: Environmental Health Department
Number of Days to Update: 18 Telephone: Not Reported
Last EDR Contact :06/19/2014

VCP: Voluntary Cleanup Program Properties
Standard Environmental Record Source: State and tribal voluntary cleanup sites
Search Distance: 0.333 Mile

Contains low threat level properties with either confirmed or unconfirmed releases and the project proponents have request that DTSC oversee investigation and/or cleanup activities and have agreed to provide coverage for DTSC's costs.

Date of Government Version: 06/05/2014 Source: Department of Toxic Substances Control
Number of Days to Update: 33 Telephone: 916-323-3400
Last EDR Contact :08/06/2014

VENTURA CO. BWT: Business Plan, Hazardous Waste Producers, and Operating Underground Tanks
Standard Environmental Record Source: Other Standard Environmental Records
Search Distance: Property

The BWT list indicates by site address whether the Environmental Health Division has Business Plan (B), Waste Producer (W), and/or Underground Tank (T) information.

Date of Government Version: 04/28/2014 Source: Ventura County Environmental Health Division
Number of Days to Update: 7 Telephone: 805-654-2813
Last EDR Contact :08/14/2014

VENTURA CO. LF: Inventory of Illegal Abandoned and Inactive Sites
Standard Environmental Record Source: State and tribal landfill / solid waste disposal
Ventura County Inventory of Closed, Illegal Abandoned, and Inactive Sites.

Date of Government Version: 12/01/2011 Source: Environmental Health Division
Number of Days to Update: 49 Telephone: 805-654-2813

Last EDR Contact :07/01/2014

VENTURA CO. LUST: Listing of Underground Tank Cleanup Sites
Standard Environmental Record Source: State and tribal leaking storage tank lists
Ventura County Underground Storage Tank Cleanup Sites (LUST).

Date of Government Version: 05/29/2008
Number of Days to Update: 37
Last EDR Contact :08/13/2014
Source: Environmental Health Division
Telephone: 805-654-2813

VENTURA CO. UST: Underground Tank Closed Sites List
Standard Environmental Record Source: State and tribal registered storage tank lists
Ventura County Operating Underground Storage Tank Sites (UST)/Underground Tank Closed Sites List.

Date of Government Version: 05/27/2014
Number of Days to Update: 24
Last EDR Contact :09/17/2014
Source: Environmental Health Division
Telephone: 805-654-2813

WDS: Waste Discharge System
Standard Environmental Record Source: Other Standard Environmental Records
Search Distance: Property

Sites which have been issued waste discharge requirements.

Date of Government Version: 06/19/2007
Number of Days to Update: 9
Last EDR Contact :08/19/2014
Source: State Water Resources Control Board
Telephone: 916-341-5227

WIP: Well Investigation Program Case List
Standard Environmental Record Source: Other Standard Environmental Records
Search Distance: 0.25 Mile

Well Investigation Program case in the San Gabriel and San Fernando Valley area.

Date of Government Version: 07/03/2009
Number of Days to Update: 13
Last EDR Contact :06/25/2014
Source: Los Angeles Water Quality Control Board
Telephone: 213-576-6726

WMUDS/SWAT: Waste Management Unit Database
Standard Environmental Record Source: Other Standard Environmental Records
Search Distance: 0.333 Mile

Waste Management Unit Database System. WMUDS is used by the State Water Resources Control Board staff and the Regional Water Quality Control Boards for program tracking and inventory of waste management units. WMUDS is composed of the following databases: Facility Information, Scheduled Inspections Information, Waste Management Unit Information, SWAT Program Information, SWAT Report Summary Information, SWAT Report Summary Data, Chapter 15 (formerly Subchapter 15) Information, Chapter 15 Monitoring Parameters, TPCA Program Information, RCRA Program Information, Closure Information, and Interested Parties Information.

Date of Government Version: 04/01/2000
Number of Days to Update: 30
Last EDR Contact :08/07/2014
Source: State Water Resources Control Board
Telephone: 916-227-4448

YOLO CO. UST: Underground Storage Tank Comprehensive Facility Report
Standard Environmental Record Source: State and tribal registered storage tank lists
Underground storage tank sites located in Yolo county.

Date of Government Version: 06/30/2014
Number of Days to Update: 42
Last EDR Contact :06/19/2014

Source: Yolo County Department of Health
Telephone: 530-666-8646

2020 COR ACTION: 2020 Corrective Action Program List

Standard Environmental Record Source: Other Standard Environmental Records

Search Distance: 0.25 Mile

The EPA has set ambitious goals for the RCRA Corrective Action program by creating the 2020 Corrective Action Universe. This RCRA cleanup baseline includes facilities expected to need corrective action. The 2020 universe contains a wide variety of sites. Some properties are heavily contaminated while others were contaminated but have since been cleaned up. Still others have not been fully investigated yet, and may require little or no remediation. Inclusion in the 2020 Universe does not necessarily imply failure on the part of a facility to meet its RCRA obligations.

Date of Government Version: 11/11/2011
Number of Days to Update: 7
Last EDR Contact :08/15/2014

Source: Environmental Protection Agency
Telephone: 703-308-4044

CERCLIS: Comprehensive Environmental Response, Compensation, and Liability Information System

Standard Environmental Record Source: Federal CERCLIS

Search Distance: 0.333 Mile

CERCLIS contains data on potentially hazardous waste sites that have been reported to the USEPA by states, municipalities, private companies and private persons, pursuant to Section 103 of the Comprehensive Environmental Response, Compensation, and Liability Act (CERCLA). CERCLIS contains sites which are either proposed to or on the National Priorities List (NPL) and sites which are in the screening and assessment phase for possible inclusion on the NPL.

Date of Government Version: 10/25/2013
Number of Days to Update: 94
Last EDR Contact :08/28/2014

Source: EPA
Telephone: 703-412-9810

CERCLIS-NFRAP: CERCLIS No Further Remedial Action Planned

Standard Environmental Record Source: Other Standard Environmental Records

Search Distance: 0.333 Mile

Archived sites are sites that have been removed and archived from the inventory of CERCLIS sites. Archived status indicates that, to the best of EPA's knowledge, assessment at a site has been completed and that EPA has determined no further steps will be taken to list this site on the National Priorities List (NPL), unless information indicates this decision was not appropriate or other considerations require a recommendation for listing at a later time. This decision does not necessarily mean that there is no hazard associated with a given site; it only means that, based upon available information, the location is not judged to be a potential NPL site.

Date of Government Version: 10/25/2013
Number of Days to Update: 94
Last EDR Contact :08/28/2014

Source: EPA
Telephone: 703-412-9810

COAL ASH DOE: Sleam-Electric Plan Operation Data

Standard Environmental Record Source: Other Standard Environmental Records

Search Distance: Property

A listing of power plants that store ash in surface ponds.

Date of Government Version: 12/31/2005
Number of Days to Update: 76
Last EDR Contact :07/18/2014

Source: Department of Energy
Telephone: 202-586-8719

COAL ASH EPA: Coal Combustion Residues Surface Impoundments List

Standard Environmental Record Source: Other Standard Environmental Records

Search Distance: 0.333 Mile

A listing of coal combustion residues surface impoundments with high hazard potential ratings.

Date of Government Version: 03/14/2014
Number of Days to Update: 47
Last EDR Contact :09/10/2014

Source: Environmental Protection Agency
Telephone: Not Reported

CONSENT: Superfund (CERCLA) Consent Decrees
Standard Environmental Record Source: Federal NPL
Search Distance: 0.333 Mile

Major legal settlements that establish responsibility and standards for cleanup at NPL (Superfund) sites. Released periodically by United States District Courts after settlement by parties to litigation matters.

Date of Government Version: 12/31/2013
Number of Days to Update: 31
Last EDR Contact :06/30/2014

Source: Department of Justice, Consent Decree Library
Telephone: Varies

CORRACTS: Corrective Action Report
Standard Environmental Record Source: Federal RCRA CORRACTS facilities list
Search Distance: 0.333 Mile

CORRACTS identifies hazardous waste handlers with RCRA corrective action activity.

Date of Government Version: 06/10/2014
Number of Days to Update: 78
Last EDR Contact :07/02/2014

Source: EPA
Telephone: 800-424-9346

DEBRIS REGION 9: Torres Martinez Reservation Illegal Dump Site Locations
Standard Environmental Record Source: State and tribal landfill / solid waste disposal
Search Distance: 0.333 Mile

A listing of illegal dump sites location on the Torres Martinez Indian Reservation located in eastern Riverside County and northern Imperial County, California.

Date of Government Version: 01/12/2009
Number of Days to Update: 137
Last EDR Contact :07/25/2014

Source: EPA, Region 9
Telephone: 415-947-4219

DELISTED NPL: National Priority List Deletions
Standard Environmental Record Source: Other Standard Environmental Records
Search Distance: 0.333 Mile

The National Oil and Hazardous Substances Pollution Contingency Plan (NCP) establishes the criteria that the EPA uses to delete sites from the NPL. In accordance with 40 CFR 300.425.(e), sites may be deleted from the NPL where no further response is appropriate.

Date of Government Version: 10/25/2013
Number of Days to Update: 78
Last EDR Contact :09/19/2014

Source: EPA
Telephone: Not Reported

DOT OPS: Incident and Accident Data
Standard Environmental Record Source: Other Standard Environmental Records
Search Distance: Property

Department of Transporation, Office of Pipeline Safety Incident and Accident data.

Date of Government Version: 07/31/2012

Source: Department of Transporation, Office of Pipeline Safety

Number of Days to Update: 42 Telephone: 202-366-4595
Last EDR Contact :08/06/2014

EPA WATCH LIST: EPA WATCH LIST
Standard Environmental Record Source: Other Standard Environmental Records
Search Distance: Property

EPA maintains a "Watch List" to facilitate dialogue between EPA, state and local environmental agencies on enforcement matters relating to facilities with alleged violations identified as either significant or high priority. Being on the Watch List does not mean that the facility has actually violated the law only that an investigation by EPA or a state or local environmental agency has led those organizations to allege that an unproven violation has in fact occurred. Being on the Watch List does not represent a higher level of concern regarding the alleged violations that were detected, but instead indicates cases requiring additional dialogue between EPA, state and local agencies - primarily because of the length of time the alleged violation has gone unaddressed or unresolved.

Date of Government Version: 08/30/2013 Source: Environmental Protection Agency
Number of Days to Update: 88 Telephone: 617-520-3000
Last EDR Contact :08/15/2014

ERNS: Emergency Response Notification System
Standard Environmental Record Source: Federal ERNS list
Search Distance: Property

Emergency Response Notification System. ERNS records and stores information on reported releases of oil and hazardous substances.

Date of Government Version: 09/30/2013 Source: National Response Center, United States Coast Guard
Number of Days to Update: 66 Telephone: 202-267-2180
Last EDR Contact :07/03/2014

FEMA UST: Underground Storage Tank Listing
Standard Environmental Record Source: State and tribal registered storage tank lists
Search Distance: Property

A listing of all FEMA owned underground storage tanks.

Date of Government Version: 01/01/2010 Source: FEMA
Number of Days to Update: 55 Telephone: 202-646-5797
Last EDR Contact :07/08/2014

FINDS: Facility Index System/Facility Registry System
Standard Environmental Record Source: Other Standard Environmental Records
Search Distance: Property

Facility Index System. FINDS contains both facility information and 'pointers' to other sources that contain more detail. EDR includes the following FINDS databases in this report: PCS (Permit Compliance System), AIRS (Aerometric Information Retrieval System), DOCKET (Enforcement Docket used to manage and track information on civil judicial enforcement cases for all environmental statutes), FURS (Federal Underground Injection Control), C-DOCKET (Criminal Docket System used to track criminal enforcement actions for all environmental statutes), FFIS (Federal Facilities Information System), STATE (State Environmental Laws and Statutes), and PADS (PCB Activity Data System).

Date of Government Version: 11/18/2013 Source: EPA
Number of Days to Update: 13 Telephone: Not Reported
Last EDR Contact :09/10/2014

FTTS: FIFRA/ TSCA Tracking System - FIFRA (Federal Insecticide, Fungicide, & Rodenticide Act)/TSCA (Toxic Substances Control Act)
Standard Environmental Record Source: Other Standard Environmental Records
Search Distance: Property

FTTS tracks administrative cases and pesticide enforcement actions and compliance activities related to FIFRA, TSCA and EPCRA (Emergency Planning and Community Right-to-Know Act). To maintain currency, EDR contacts the Agency on a quarterly basis.

Date of Government Version: 04/09/2009
Number of Days to Update: 25
Last EDR Contact :08/19/2014
Source: EPA/Office of Prevention, Pesticides and Toxic Substances
Telephone: 202-566-1667

FTTS INSP: FIFRA/ TSCA Tracking System - FIFRA (Federal Insecticide, Fungicide, & Rodenticide Act)/TSCA (Toxic Substances Control Act)

Standard Environmental Record Source: Other Standard Environmental Records

A listing of FIFRA/TSCA Tracking System (FTTS) inspections and enforcements.

Date of Government Version: 04/09/2009
Number of Days to Update: 25
Last EDR Contact :08/19/2014
Source: EPA
Telephone: 202-566-1667

FUDS: Formerly Used Defense Sites

Standard Environmental Record Source: Other Standard Environmental Records

Search Distance: 0.333 Mile

The listing includes locations of Formerly Used Defense Sites properties where the US Army Corps of Engineers is actively working or will take necessary cleanup actions.

Date of Government Version: 06/06/2014
Number of Days to Update: 8
Last EDR Contact :09/10/2014
Source: U.S. Army Corps of Engineers
Telephone: 202-528-4285

HIST FTTS: FIFRA/TSCA Tracking System Administrative Case Listing

Standard Environmental Record Source: Other Standard Environmental Records

Search Distance: Property

A complete administrative case listing from the FIFRA/TSCA Tracking System (FTTS) for all ten EPA regions. The information was obtained from the National Compliance Database (NCDB). NCDB supports the implementation of FIFRA (Federal Insecticide, Fungicide, and Rodenticide Act) and TSCA (Toxic Substances Control Act). Some EPA regions are now closing out records. Because of that, and the fact that some EPA regions are not providing EPA Headquarters with updated records, it was decided to create a HIST FTTS database. It included records that may not be included in the newer FTTS database updates. This database is no longer updated.

Date of Government Version: 10/19/2006
Number of Days to Update: 40
Last EDR Contact :12/17/2007
Source: Environmental Protection Agency
Telephone: 202-564-2501

HMIRS: Hazardous Materials Information Reporting System

Standard Environmental Record Source: Other Standard Environmental Records

Search Distance: Property

Hazardous Materials Incident Report System. HMIRS contains hazardous material spill incidents reported to DOT.

Date of Government Version: 06/30/2014
Number of Days to Update: 79
Last EDR Contact :07/01/2014
Source: U.S. Department of Transportation
Telephone: 202-366-4555

ICIS: Integrated Compliance Information System

Standard Environmental Record Source: Other Standard Environmental Records

Search Distance: Property

RECORD SOURCES AND CURRENCY

The Integrated Compliance Information System (ICIS) supports the information needs of the national enforcement and compliance program as well as the unique needs of the National Pollutant Discharge Elimination System (NPDES) program.

Date of Government Version: 05/06/2014 Source: Environmental Protection Agency
Number of Days to Update: 32 Telephone: 202-564-5088
Last EDR Contact :10/09/2014

INDIAN LUST R1: Leaking Underground Storage Tanks on Indian Land
Standard Environmental Record Source: State and tribal leaking storage tank lists
Search Distance: 0.333 Mile

A listing of leaking underground storage tank locations on Indian Land.

Date of Government Version: 02/01/2013 Source: EPA Region 1
Number of Days to Update: 184 Telephone: 617-918-1313
Last EDR Contact :08/01/2014

INDIAN LUST R10: Leaking Underground Storage Tanks on Indian Land
Standard Environmental Record Source: State and tribal leaking storage tank lists
LUSTs on Indian land in Alaska, Idaho, Oregon and Washington.

Date of Government Version: 05/20/2014 Source: EPA Region 10
Number of Days to Update: 73 Telephone: 206-553-2857
Last EDR Contact :04/28/2014

INDIAN LUST R4: Leaking Underground Storage Tanks on Indian Land
Standard Environmental Record Source: State and tribal leaking storage tank lists
LUSTs on Indian land in Florida, Mississippi and North Carolina.

Date of Government Version: 07/30/2014 Source: EPA Region 4
Number of Days to Update: 10 Telephone: 404-562-8677
Last EDR Contact :04/22/2014

INDIAN LUST R5: Leaking Underground Storage Tanks on Indian Land
Standard Environmental Record Source: State and tribal leaking storage tank lists
Leaking underground storage tanks located on Indian Land in Michigan, Minnesota and Wisconsin.

Date of Government Version: 08/04/2014 Source: EPA, Region 5
Number of Days to Update: 17 Telephone: 312-886-7439
Last EDR Contact :04/28/2014

INDIAN LUST R6: Leaking Underground Storage Tanks on Indian Land
Standard Environmental Record Source: State and tribal leaking storage tank lists
LUSTs on Indian land in New Mexico and Oklahoma.

Date of Government Version: 05/14/2014 Source: EPA Region 6
Number of Days to Update: 61 Telephone: 214-665-6597
Last EDR Contact :07/22/2014

INDIAN LUST R7: Leaking Underground Storage Tanks on Indian Land
Standard Environmental Record Source: State and tribal leaking storage tank lists
LUSTs on Indian land in Iowa, Kansas, and Nebraska

Date of Government Version: 05/22/2014 Source: EPA Region 7

Number of Days to Update: 27 Telephone: 913-551-7003
Last EDR Contact :04/28/2014

INDIAN LUST R8: Leaking Underground Storage Tanks on Indian Land
Standard Environmental Record Source: State and tribal leaking storage tank lists
LUSTs on Indian land in Colorado, Montana, North Dakota, South Dakota, Utah and Wyoming.

Date of Government Version: 08/13/2014 Source: EPA Region 8
Number of Days to Update: 7 Telephone: 303-312-6271
Last EDR Contact :07/22/2014

INDIAN LUST R9: Leaking Underground Storage Tanks on Indian Land
Standard Environmental Record Source: State and tribal leaking storage tank lists
LUSTs on Indian land in Arizona, California, New Mexico and Nevada

Date of Government Version: 03/01/2013 Source: Environmental Protection Agency
Number of Days to Update: 42 Telephone: 415-972-3372
Last EDR Contact :07/22/2014

INDIAN ODI: Report on the Status of Open Dumps on Indian Lands
Standard Environmental Record Source: Other Standard Environmental Records
Search Distance: 0.333 Mile

Location of open dumps on Indian land.

Date of Government Version: 12/31/1998 Source: Environmental Protection Agency
Number of Days to Update: 52 Telephone: 703-308-8245
Last EDR Contact :08/01/2014

INDIAN UST R1: Underground Storage Tanks on Indian Land
Standard Environmental Record Source: State and tribal registered storage tank lists
Search Distance: Property

The Indian Underground Storage Tank (UST) database provides information about underground storage tanks on Indian land in EPA Region 1 (Connecticut, Maine, Massachusetts, New Hampshire, Rhode Island, Vermont and ten Tribal Nations).

Date of Government Version: 02/01/2013 Source: EPA, Region 1
Number of Days to Update: 271 Telephone: 617-918-1313
Last EDR Contact :08/01/2014

INDIAN UST R10: Underground Storage Tanks on Indian Land
Standard Environmental Record Source: State and tribal registered storage tank lists
The Indian Underground Storage Tank (UST) database provides information about underground storage tanks on Indian land in EPA Region 10 (Alaska, Idaho, Oregon, Washington, and Tribal Nations).

Date of Government Version: 05/20/2014 Source: EPA Region 10
Number of Days to Update: 66 Telephone: 206-553-2857
Last EDR Contact :07/22/2014

INDIAN UST R4: Underground Storage Tanks on Indian Land
Standard Environmental Record Source: State and tribal registered storage tank lists
The Indian Underground Storage Tank (UST) database provides information about underground storage tanks on Indian land in EPA Region 4 (Alabama, Florida, Georgia, Kentucky, Mississippi, North Carolina, South Carolina, Tennessee and Tribal Nations)

Date of Government Version: 07/30/2014 Source: EPA Region 4

Number of Days to Update: 10 Telephone: 404-562-9424
Last EDR Contact :04/22/2014

INDIAN UST R5: Underground Storage Tanks on Indian Land

Standard Environmental Record Source: State and tribal registered storage tank lists

The Indian Underground Storage Tank (UST) database provides information about underground storage tanks on Indian land in EPA Region 5 (Michigan, Minnesota and Wisconsin and Tribal Nations).

Date of Government Version: 08/04/2014 Source: EPA Region 5
Number of Days to Update: 17 Telephone: 312-886-6136
Last EDR Contact :04/28/2014

INDIAN UST R6: Underground Storage Tanks on Indian Land

Standard Environmental Record Source: State and tribal registered storage tank lists

The Indian Underground Storage Tank (UST) database provides information about underground storage tanks on Indian land in EPA Region 6 (Louisiana, Arkansas, Oklahoma, New Mexico, Texas and 65 Tribes).

Date of Government Version: 07/25/2014 Source: EPA Region 6
Number of Days to Update: 25 Telephone: 214-665-7591
Last EDR Contact :07/22/2014

INDIAN UST R7: Underground Storage Tanks on Indian Land

Standard Environmental Record Source: State and tribal registered storage tank lists

The Indian Underground Storage Tank (UST) database provides information about underground storage tanks on Indian land in EPA Region 7 (Iowa, Kansas, Missouri, Nebraska, and 9 Tribal Nations).

Date of Government Version: 08/20/2014 Source: EPA Region 7
Number of Days to Update: 27 Telephone: 913-551-7003
Last EDR Contact :04/28/2014

INDIAN UST R8: Underground Storage Tanks on Indian Land

Standard Environmental Record Source: State and tribal registered storage tank lists

The Indian Underground Storage Tank (UST) database provides information about underground storage tanks on Indian land in EPA Region 8 (Colorado, Montana, North Dakota, South Dakota, Utah, Wyoming and 27 Tribal Nations).

Date of Government Version: 08/13/2014 Source: EPA Region 8
Number of Days to Update: 7 Telephone: 303-312-6137
Last EDR Contact :07/22/2014

INDIAN UST R9: Underground Storage Tanks on Indian Land

Standard Environmental Record Source: State and tribal registered storage tank lists

The Indian Underground Storage Tank (UST) database provides information about underground storage tanks on Indian land in EPA Region 9 (Arizona, California, Hawaii, Nevada, the Pacific Islands, and Tribal Nations).

Date of Government Version: 08/14/2014 Source: EPA Region 9
Number of Days to Update: 7 Telephone: 415-972-3368
Last EDR Contact :07/22/2014

INDIAN VCP R1: Voluntary Cleanup Priority Listing

Standard Environmental Record Source: State and tribal voluntary cleanup sites

Search Distance: 0.333 Mile

A listing of voluntary cleanup priority sites located on Indian Land located in Region 1.

Date of Government Version: 05/30/2014 Source: EPA, Region 1
Number of Days to Update: 45 Telephone: 617-918-1102

Last EDR Contact :07/01/2014

INDIAN VCP R7: Voluntary Cleanup Priority Lisitng

Standard Environmental Record Source: State and tribal voluntary cleanup sites

A listing of voluntary cleanup priority sites located on Indian Land located in Region 7.

Date of Government Version: 03/20/2008
Number of Days to Update: 27
Last EDR Contact :04/20/2009

Source: EPA, Region 7
Telephone: 913-551-7365

LEAD SMELTER 1: Lead Smelter Sites

Standard Environmental Record Source: Other Standard Environmental Records

Search Distance: Property

A listing of former lead smelter site locations.

Date of Government Version: 06/04/2014
Number of Days to Update: 46
Last EDR Contact :07/01/2014

Source: Environmental Protection Agency
Telephone: 703-603-8787

LEAD SMELTER 2: Lead Smelter Sites

Standard Environmental Record Source: Other Standard Environmental Records

A list of several hundred sites in the U.S. where secondary lead smelting was done from 1931and 1964. These sites may pose a threat to public health through ingestion or inhalation of contaminated soil or dust

Date of Government Version: 04/05/2001
Number of Days to Update: 36
Last EDR Contact :12/02/2009

Source: American Journal of Public Health
Telephone: 703-305-6451

LIENS 2: CERCLA Lien Information

Standard Environmental Record Source: Federal CERCLIS

Search Distance: Property

A Federal CERCLA ('Superfund') lien can exist by operation of law at any site or property at which EPA has spent Superfund monies. These monies are spent to investigate and address releases and threatened releases of contamination. CERCLIS provides information as to the identity of these sites and properties.

Date of Government Version: 02/18/2014
Number of Days to Update: 37
Last EDR Contact :07/22/2014

Source: Environmental Protection Agency
Telephone: 202-564-6023

LUCIS: Land Use Control Information System

Standard Environmental Record Source: Federal institutional controls / engineering controls registries

Search Distance: 0.333 Mile

LUCIS contains records of land use control information pertaining to the former Navy Base Realignment and Closure properties.

Date of Government Version: 05/28/2014
Number of Days to Update: 18
Last EDR Contact :08/14/2014

Source: Department of the Navy
Telephone: 843-820-7326

MLTS: Material Licensing Tracking System

Standard Environmental Record Source: Other Standard Environmental Records

Search Distance: Property

MLTS is maintained by the Nuclear Regulatory Commission and contains a list of approximately 8,100 sites which possess or use radioactive materials and which are subject to NRC licensing requirements. To maintain currency, EDR contacts the Agency on a quarterly basis.

Date of Government Version: 07/22/2013
Number of Days to Update: 91
Last EDR Contact :09/08/2014

Source: Nuclear Regulatory Commission
Telephone: 301-415-7169

NPL: National Priority List

Standard Environmental Record Source: Federal NPL

Search Distance: 0.333 Mile

National Priorities List (Superfund). The NPL is a subset of CERCLIS and identifies over 1,200 sites for priority cleanup under the Superfund Program. NPL sites may encompass relatively large areas. As such, EDR provides polygon coverage for over 1,000 NPL site boundaries produced by EPA's Environmental Photographic Interpretation Center (EPIC) and regional EPA offices.

Date of Government Version: 10/25/2013
Number of Days to Update: 78
Last EDR Contact :09/19/2014

Source: EPA
Telephone: Not Reported

NPL Site Boundaries

Sources:

EPA"s Environmental Photographic Interpretation Center (EPIC)
Telephone: 202-566-0690

EPA Region 1
Telephone: 617-918-1102

EPA Region 2
Telephone: 212-637-4293

EPA Region 3
Telephone: 215-814-5418

EPA Region 4
Telephone: 404-562-8681

EPA Region 5
Telephone: 312-353-1063

EPA Region 6
Telephone: 214-655-6659

EPA Region 7
Telephone: 913-551-7247

EPA Region 8
Telephone: 303-312-6118

EPA Region 9
Telephone: 415-947-4579

EPA Region 10
Telephone: 206-553-4479

NPL LIENS: Federal Superfund Liens

Standard Environmental Record Source: Federal NPL

Search Distance: Property

Federal Superfund Liens. Under the authority granted the USEPA by CERCLA of 1980, the USEPA has the authority to file liens against real property in order to recover remedial action expenditures or when the property owner received notification of potential liability. USEPA compiles a listing of filed notices of Superfund Liens.

Date of Government Version: 10/15/1991
Number of Days to Update: 56

Source: EPA
Telephone: 202-564-4267

Last EDR Contact :08/15/2011

ODI: Open Dump Inventory

Standard Environmental Record Source: Other Standard Environmental Records

Search Distance: 0.333 Mile

An open dump is defined as a disposal facility that does not comply with one or more of the Part 257 or Part 258 Subtitle D Criteria.

Date of Government Version: 06/30/1985 Source: Environmental Protection Agency

Number of Days to Update: 39 Telephone: 800-424-9346

Last EDR Contact :06/09/2004

PADS: PCB Activity Database System

Standard Environmental Record Source: Other Standard Environmental Records

Search Distance: Property

PCB Activity Database. PADS Identifies generators, transporters, commercial storers and/or brokers and disposers of PCB's who are required to notify the EPA of such activities.

Date of Government Version: 06/01/2013 Source: EPA

Number of Days to Update: 107 Telephone: 202-566-0500

Last EDR Contact :07/18/2014

PCB TRANSFORMER: PCB Transformer Registration Database

Standard Environmental Record Source: Other Standard Environmental Records

Search Distance: Property

The database of PCB transformer registrations that includes all PCB registration submittals.

Date of Government Version: 02/01/2011 Source: Environmental Protection Agency

Number of Days to Update: 83 Telephone: 202-566-0517

Last EDR Contact :08/01/2014

Proposed NPL: Proposed National Priority List Sites

Standard Environmental Record Source: Federal NPL

Search Distance: 0.333 Mile

A site that has been proposed for listing on the NationalPriorities List through the issuance of a proposed rule in the Federal Register.EPA then accepts public comments on the site, responds to the comments,and places on the NPL those sites that continue to meet therequirements for listing.

Date of Government Version: 10/25/2013 Source: EPA

Number of Days to Update: 78 Telephone: Not Reported

Last EDR Contact :09/19/2014

RAATS: RCRA Administrative Action Tracking System

Standard Environmental Record Source: Other Standard Environmental Records

Search Distance: Property

RCRA Administration Action Tracking System. RAATS contains records based on enforcement actions issued under RCRA pertaining to major violators and includes administrative and civil actions brought by the EPA. For administration actions after September 30, 1995, data entry in the RAATS database was discontinued. EPA will retain a copy of the database for historical records. It was necessary to terminate RAATS because a decrease in agency resources made it impossible to continue to update the information contained in the database.

Date of Government Version: 04/17/1995 Source: EPA

Number of Days to Update: 35 Telephone: 202-564-4104

Last EDR Contact :06/02/2008

RADINFO: Radiation Information Database

Standard Environmental Record Source: Other Standard Environmental Records

Search Distance: Property

The Radiation Information Database (RADINFO) contains information about facilities that are regulated by U.S. Environmental Protection Agency (EPA) regulations for radiation and radioactivity.

Date of Government Version: 07/07/2014 Source: Environmental Protection Agency

Number of Days to Update: 18 Telephone: 202-343-9775

Last EDR Contact :07/10/2014

RCRA NonGen / NLR: RCRA - Non Generators

Standard Environmental Record Source: Other Standard Environmental Records

Search Distance: Property

RCRAInfo is EPA's comprehensive information system, providing access to data supporting the Resource Conservation and Recovery Act (RCRA) of 1976 and the Hazardous and Solid Waste Amendments (HSWA) of 1984. The database includes selective information on sites which generate, transport, store, treat and/or dispose of hazardous waste as defined by the Resource Conservation and Recovery Act (RCRA). Non-Generators do not presently generate hazardous waste.

Date of Government Version: 06/10/2014 Source: Environmental Protection Agency

Number of Days to Update: 78 Telephone: 703-308-8895

Last EDR Contact :07/02/2014

RCRA-CESQG: RCRA - Conditionally Exempt Small Quantity Generators

Standard Environmental Record Source: Federal RCRA generators list

Search Distance: Property

RCRAInfo is EPA's comprehensive information system, providing access to data supporting the Resource Conservation and Recovery Act (RCRA) of 1976 and the Hazardous and Solid Waste Amendments (HSWA) of 1984. The database includes selective information on sites which generate, transport, store, treat and/or dispose of hazardous waste as defined by the Resource Conservation and Recovery Act (RCRA). Conditionally exempt small quantity generators (CESQGs) generate less than 100 kg of hazardous waste, or less than 1 kg of acutely hazardous waste per month.

Date of Government Version: 06/10/2014 Source: Environmental Protection Agency

Number of Days to Update: 78 Telephone: 703-308-8895

Last EDR Contact :07/02/2014

RCRA-LQG: RCRA - Large Quantity Generators

Standard Environmental Record Source: Federal RCRA generators list

Search Distance: Property

RCRAInfo is EPA's comprehensive information system, providing access to data supporting the Resource Conservation and Recovery Act (RCRA) of 1976 and the Hazardous and Solid Waste Amendments (HSWA) of 1984. The database includes selective information on sites which generate, transport, store, treat and/or dispose of hazardous waste as defined by the Resource Conservation and Recovery Act (RCRA). Large quantity generators (LQGs) generate over 1,000 kilograms (kg) of hazardous waste, or over 1 kg of acutely hazardous waste per month.

Date of Government Version: 06/10/2014 Source: Environmental Protection Agency

Number of Days to Update: 78 Telephone: 703-308-8895

Last EDR Contact :07/02/2014

RCRA-SQG: RCRA - Small Quantity Generators

Standard Environmental Record Source: Federal RCRA generators list

Search Distance: Property

RECORD SOURCES AND CURRENCY

RCRAInfo is EPA's comprehensive information system, providing access to data supporting the Resource Conservation and Recovery Act (RCRA) of 1976 and the Hazardous and Solid Waste Amendments (HSWA) of 1984. The database includes selective information on sites which generate, transport, store, treat and/or dispose of hazardous waste as defined by the Resource Conservation and Recovery Act (RCRA). Small quantity generators (SQGs) generate between 100 kg and 1,000 kg of hazardous waste per month.

Date of Government Version: 06/10/2014
Number of Days to Update: 78
Last EDR Contact :07/02/2014

Source: Environmental Protection Agency
Telephone: 703-308-8895

RCRA-TSDF: RCRA - Treatment, Storage and Disposal

Standard Environmental Record Source: Federal RCRA TSD facilities list

Search Distance: 0.333 Mile

RCRAInfo is EPA's comprehensive information system, providing access to data supporting the Resource Conservation and Recovery Act (RCRA) of 1976 and the Hazardous and Solid Waste Amendments (HSWA) of 1984. The database includes selective information on sites which generate, transport, store, treat and/or dispose of hazardous waste as defined by the Resource Conservation and Recovery Act (RCRA). Transporters are individuals or entities that move hazardous waste from the generator offsite to a facility that can recycle, treat, store, or dispose of the waste. TSDFs treat, store, or dispose of the waste.

Date of Government Version: 06/10/2014
Number of Days to Update: 78
Last EDR Contact :07/02/2014

Source: Environmental Protection Agency
Telephone: 703-308-8895

ROD: Records Of Decision

Standard Environmental Record Source: Federal NPL

Search Distance: 0.333 Mile

Record of Decision. ROD documents mandate a permanent remedy at an NPL (Superfund) site containing technical and health information to aid in the cleanup.

Date of Government Version: 11/25/2013
Number of Days to Update: 74
Last EDR Contact :09/09/2014

Source: EPA
Telephone: 703-416-0223

SCRD DRYCLEANERS: State Coalition for Remediation of Drycleaners Listing

Standard Environmental Record Source: Other Standard Environmental Records

Search Distance: 0.333 Mile

The State Coalition for Remediation of Drycleaners was established in 1998, with support from the U.S. EPA Office of Superfund Remediation and Technology Innovation. It is comprised of representatives of states with established drycleaner remediation programs. Currently the member states are Alabama, Connecticut, Florida, Illinois, Kansas, Minnesota, Missouri, North Carolina, Oregon, South Carolina, Tennessee, Texas, and Wisconsin.

Date of Government Version: 03/07/2011
Number of Days to Update: 54
Last EDR Contact :07/25/2014

Source: Environmental Protection Agency
Telephone: 615-532-8599

SSTS: Section 7 Tracking Systems

Standard Environmental Record Source: Other Standard Environmental Records

Search Distance: Property

Section 7 of the Federal Insecticide, Fungicide and Rodenticide Act, as amended (92 Stat. 829) requires all registered pesticide-producing establishments to submit a report to the Environmental Protection Agency by March 1st each year. Each establishment must report the types and amounts of pesticides, active ingredients and devices being produced, and those having been produced and sold or distributed in the past year.

Date of Government Version: 12/31/2009
Number of Days to Update: 77

Source: EPA
Telephone: 202-564-4203

Last EDR Contact :07/22/2014

TRIS: Toxic Chemical Release Inventory System

Standard Environmental Record Source: Other Standard Environmental Records

Search Distance: Property

Toxic Release Inventory System. TRIS identifies facilities which release toxic chemicals to the air, water and land in reportable quantities under SARA Title III Section 313.

Date of Government Version: 12/31/2011 Source: EPA

Number of Days to Update: 44 Telephone: 202-566-0250

Last EDR Contact :08/29/2014

TSCA: Toxic Substances Control Act

Standard Environmental Record Source: Other Standard Environmental Records

Search Distance: Property

Toxic Substances Control Act. TSCA identifies manufacturers and importers of chemical substances included on the TSCA Chemical Substance Inventory list. It includes data on the production volume of these substances by plant site.

Date of Government Version: 12/31/2006 Source: EPA

Number of Days to Update: 64 Telephone: 202-260-5521

Last EDR Contact :06/25/2014

UMTRA: Uranium Mill Tailings Sites

Standard Environmental Record Source: Other Standard Environmental Records

Search Distance: 0.333 Mile

Uranium ore was mined by private companies for federal government use in national defense programs. When the mills shut down, large piles of the sand-like material (mill tailings) remain after uranium has been extracted from the ore. Levels of human exposure to radioactive materials from the piles are low; however, in some cases tailings were used as construction materials before the potential health hazards of the tailings were recognized.

Date of Government Version: 09/14/2010 Source: Department of Energy

Number of Days to Update: 146 Telephone: 505-845-0011

Last EDR Contact :08/20/2014

US AIRS (AFS): Aerometric Information Retrieval System Facility Subsystem (AFS)

Standard Environmental Record Source: Other Standard Environmental Records

Search Distance: Property

The database is a sub-system of Aerometric Information Retrieval System (AIRS). AFS contains compliance data on air pollution point sources regulated by the U.S. EPA and/or state and local air regulatory agencies. This information comes from source reports by various stationary sources of air pollution, such as electric power plants, steel mills, factories, and universities, and provides information about the air pollutants they produce. Action, air program, air program pollutant, and general level plant data. It is used to track emissions and compliance data from industrial plants.

Date of Government Version: 10/23/2013 Source: EPA

Number of Days to Update: 30 Telephone: 202-564-2496

Last EDR Contact :06/25/2014

US AIRS MINOR: Air Facility System Data

Standard Environmental Record Source: Other Standard Environmental Records

A listing of minor source facilities.

Date of Government Version: 10/23/2013 Source: EPA

Number of Days to Update: 30 Telephone: 202-564-2496

Last EDR Contact :06/25/2014

US BROWNFIELDS: A Listing of Brownfields Sites

Standard Environmental Record Source: Other Standard Environmental Records

Search Distance: 0.333 Mile

Brownfields are real property, the expansion, redevelopment, or reuse of which may be complicated by the presence or potential presence of a hazardous substance, pollutant, or contaminant. Cleaning up and reinvesting in these properties takes development pressures off of undeveloped, open land, and both improves and protects the environment. Assessment, Cleanup and Redevelopment Exchange System (ACRES) stores information reported by EPA Brownfields grant recipients on brownfields properties assessed or cleaned up with grant funding as well as information on Targeted Brownfields Assessments performed by EPA Regions. A listing of ACRES Brownfield sites is obtained from Cleanups in My Community. Cleanups in My Community provides information on Brownfields properties for which information is reported back to EPA, as well as areas served by Brownfields grant programs.

Date of Government Version: 07/01/2014 Source: Environmental Protection Agency

Number of Days to Update: 25 Telephone: 202-566-2777

Last EDR Contact :07/03/2014

US CDL: Clandestine Drug Labs

Standard Environmental Record Source: Other Standard Environmental Records

Search Distance: Property

A listing of clandestine drug lab locations. The U.S. Department of Justice ("the Department") provides this web site as a public service. It contains addresses of some locations where law enforcement agencies reported they found chemicals or other items that indicated the presence of either clandestine drug laboratories or dumpsites. In most cases, the source of the entries is not the Department, and the Department has not verified the entry and does not guarantee its accuracy. Members of the public must verify the accuracy of all entries by, for example, contacting local law enforcement and local health departments.

Date of Government Version: 05/28/2014 Source: Drug Enforcement Administration

Number of Days to Update: 25 Telephone: 202-307-1000

Last EDR Contact :09/03/2014

US ENG CONTROLS: Engineering Controls Sites List

Standard Environmental Record Source: Federal institutional controls / engineering controls registries

Search Distance: Property

A listing of sites with engineering controls in place. Engineering controls include various forms of caps, building foundations, liners, and treatment methods to create pathway elimination for regulated substances to enter environmental media or effect human health.

Date of Government Version: 06/23/2014 Source: Environmental Protection Agency

Number of Days to Update: 65 Telephone: 703-603-0695

Last EDR Contact :09/08/2014

US FIN ASSUR: Financial Assurance Information

Standard Environmental Record Source: Other Standard Environmental Records

Search Distance: Property

All owners and operators of facilities that treat, store, or dispose of hazardous waste are required to provide proof that they will have sufficient funds to pay for the clean up, closure, and post-closure care of their facilities.

Date of Government Version: 06/19/2014 Source: Environmental Protection Agency

Number of Days to Update: 38 Telephone: 202-566-1917

Last EDR Contact :08/14/2014

US HIST CDL: National Clandestine Laboratory Register

Standard Environmental Record Source: Other Standard Environmental Records

Search Distance: Property

A listing of clandestine drug lab locations. The U.S. Department of Justice ("the Department") provides this web site as a public service. It contains addresses of some locations where law enforcement agencies reported they found chemicals or other items that indicated the presence of either clandestine drug laboratories or dumpsites. In most cases, the source of the entries is not the Department, and the Department has not verified the entry and does not guarantee its accuracy. Members of the public must verify the accuracy of all entries by, for example, contacting local law enforcement and local health departments.

Date of Government Version: 05/28/2014
Number of Days to Update: 25
Last EDR Contact :09/03/2014

Source: Drug Enforcement Administration
Telephone: 202-307-1000

US INST CONTROL: Sites with Institutional Controls

Standard Environmental Record Source: Federal institutional controls / engineering controls registries

Search Distance: Property

A listing of sites with institutional controls in place. Institutional controls include administrative measures, such as groundwater use restrictions, construction restrictions, property use restrictions, and post remediation care requirements intended to prevent exposure to contaminants remaining on site. Deed restrictions are generally required as part of the institutional controls.

Date of Government Version: 06/23/2014
Number of Days to Update: 65
Last EDR Contact :09/08/2014

Source: Environmental Protection Agency
Telephone: 703-603-0695

US MINES: Mines Master Index File

Standard Environmental Record Source: Other Standard Environmental Records

Search Distance: Property

Contains all mine identification numbers issued for mines active or opened since 1971. The data also includes violation information.

Date of Government Version: 01/30/2014
Number of Days to Update: 132
Last EDR Contact :09/04/2014

Source: Department of Labor, Mine Safety and Health Administration
Telephone: 303-231-5959

AOCONCERN: San Gabriel Valley Areas of Concern

Standard Environmental Record Source: State and tribal - equivalent CERCLIS

Search Distance: 0.333 Mile

San Gabriel Valley areas where VOC contamination is at or above the MCL as designated by region 9 EPA office.

Date of Government Version: 03/30/2009
Number of Days to Update: 206
Last EDR Contact :06/19/2014

Source: EPA Region 9
Telephone: 415-972-3178

DOD: Department of Defense Sites

Standard Environmental Record Source: Other Standard Environmental Records

Search Distance: 0.333 Mile

This data set consists of federally owned or administered lands, administered by the Department of Defense, that have any area equal to or greater than 640 acres of the United States, Puerto Rico, and the U.S. Virgin Islands.

Date of Government Version: 12/31/2005
Number of Days to Update: 62
Last EDR Contact :07/18/2014

Source: USGS
Telephone: 888-275-8747

INDIAN RESERV: Indian Reservations

Standard Environmental Record Source: Other Standard Environmental Records

Search Distance: Property

RECORD SOURCES AND CURRENCY

This map layer portrays Indian administered lands of the United States that have any area equal to or greater than 640 acres.

Date of Government Version: 12/31/2005
Number of Days to Update: 34
Last EDR Contact :07/18/2014

Source: USGS
Telephone: 202-208-3710

PWS: Public Water System Data

Standard Environmental Record Source: Other Standard Environmental Records

Search Distance: Property

This Safe Drinking Water Information System (SDWIS) file contains public water systems name and address, population served and the primary source of water

Date of Government Version: 04/12/2007
Number of Days to Update: N/A
Last EDR Contact :09/08/2014

Source: EPA
Telephone: Not Reported

RECORD SOURCES AND CURRENCY

HISTORICAL USE RECORDS

RGA LF: Recovered Government Archive Solid Waste Facilities List

Standard Environmental Record Source: Exclusive Recovered Govt. Archives

Search Distance: Property

The EDR Recovered Government Archive Landfill database provides a list of landfills derived from historical databases and includes many records that no longer appear in current government lists. Compiled from Records formerly available from the Department of Resources Recycling and Recovery in California.

Date of Government Version: Not Reported
Number of Days to Update: 196
Last EDR Contact :06/01/2012

Source: Department of Resources Recycling and Recovery
Telephone: Not Reported

RGA LUST: Recovered Government Archive Leaking Underground Storage Tank

Standard Environmental Record Source: Exclusive Recovered Govt. Archives

Search Distance: Property

The EDR Recovered Government Archive Leaking Underground Storage Tank database provides a list of LUST incidents derived from historical databases and includes many records that no longer appear in current government lists. Compiled from Records formerly available from the State Water Resources Control Board in California.

Date of Government Version: Not Reported
Number of Days to Update: 182
Last EDR Contact :06/01/2012

Source: State Water Resources Control Board
Telephone: Not Reported

EDR MGP: EDR Proprietary Manufactured Gas Plants

Standard Environmental Record Source: Former manufactured Gas Plants

Search Distance: 0.333 Mile

The EDR Proprietary Manufactured Gas Plant Database includes records of coal gas plants (manufactured gas plants) compiled by EDR's researchers. Manufactured gas sites were used in the United States from the 1800's to 1950's to produce a gas that could be distributed and used as fuel. These plants used whale oil, rosin, coal, or a mixture of coal, oil, and water that also produced a significant amount of waste. Many of the byproducts of the gas production, such as coal tar (oily waste containing volatile and non-volatile chemicals), sludges, oils and other compounds are potentially hazardous to human health and the environment. The byproduct from this process was frequently disposed of directly at the plant site and can remain or spread slowly, serving as a continuous source of soil and groundwater contamination.

Date of Government Version: 08/28/2009
Number of Days to Update: 55
Last EDR Contact :11/30/2012

Source: EDR, Inc.
Telephone: Not Reported

EDR US Hist Auto Stat: EDR Exclusive Historic Gas Stations

Standard Environmental Record Source: Historical Gas Stations

Search Distance: 0.25 Mile

EDR has searched selected national collections of business directories and has collected listings of potential gas station/filling station/service station sites that were available to EDR researchers. EDR's review was limited to those categories of sources that might, in EDR's opinion, include gas station/filling station/service station establishments. The categories reviewed included, but were not limited to gas, gas station, gasoline station, filling station, auto, automobile repair, auto service station, service station, etc. This database falls within a category of information EDR classifies as "High Risk Historical Records", or HRHR. EDR's HRHR effort presents unique and sometimes proprietary data about past sites and operations that typically create environmental concerns, but may not show up in current government records searches.

Date of Government Version: 02/20/2007
Number of Days to Update: 42
Last EDR Contact :02/21/2007

Source: EDR, Inc.
Telephone: Not Reported

EDR US Hist Cleaners: EDR Exclusive Historic Dry Cleaners

Standard Environmental Record Source: Historical Dry Cleaners

RECORD SOURCES AND CURRENCY

Search Distance: 0.25 Mile

EDR has searched selected national collections of business directories and has collected listings of potential dry cleaner sites that were available to EDR researchers. EDR's review was limited to those categories of sources that might, in EDR's opinion, include dry cleaning establishments. The categories reviewed included, but were not limited to dry cleaners, cleaners, laundry, laundromat, cleaning/laundry, wash & dry etc. This database falls within a category of information EDR classifies as "High Risk Historical Records", or HRHR. EDR's HRHR effort presents unique and sometimes proprietary data about past sites and operations that typically create environmental concerns, but may not show up in current government records searches.

Date of Government Version: 02/20/2007
Number of Days to Update: 42
Last EDR Contact :02/21/2007

Source: EDR, Inc.
Telephone: Not Reported

RECORD SOURCES AND CURRENCY

TOPOGRAPHIC INFORMATION

USGS 7.5' Digital Elevation Model (DEM)

Source: United States Geologic Survey

EDR acquired the USGS 7.5' Digital Elevation Model in 2002 and updated it in 2006. The 7.5' minute DEM corresponds to the USGS 1:24,000- and 1:25,000-scale topographic quadrangle maps. The DEM provides elevation data with consistent elevation units and projection.

HYDROLOGIC INFORMATION

Flood Zone Data: This data, available in select counties across the country, was obtained by EDR in 1999 from the Federal Emergency Management Agency (FEMA). Data depicts 100-year and 500-year flood zones as defined by FEMA.

NWI: National Wetlands Inventory. This data, available in select counties across the country, was obtained by EDR in 2002 and 2005 from the U.S. Fish and Wildlife Service.

HYDROGEOLOGIC INFORMATION

AQUIFLOW® Information System

Source: EDR proprietary database of groundwater flow information

EDR has developed the AQUIFLOW® Information System (AIS) to provide data on the general direction of groundwater flow at specific points. EDR has reviewed reports submitted to regulatory authorities at select sites and has extracted the date of the report, hydrogeologically determined groundwater flow direction and depth to water table information.

GEOLOGIC INFORMATION

STATSGO: State Soil Geographic Database

Source: Department of Agriculture, Natural Resources Conservation Services. The U.S. Department of Agriculture's (USDA) Natural Resources Conservation Service (NRCS) leads the national Conservation Soil Survey (NCSS) and is responsible for collecting, storing, maintaining and distributing soil survey information for privately owned lands in the United States. A soil map in a soil survey is a representation of soil patterns in a landscape. Soil maps for STATSGO are compiled by generalizing more detailed (SSURGO) soil survey maps.

SSURGO: Soil Survey Geographic Database

Source: Department of Agriculture, Natural Resources Conservation Services (NRCS)

Telephone: 800-672-5559

SSURGO is the most detailed level of mapping done by the Natural Resources Conservation Services, mapping scales generally range from 1:12,000 to 1:63,360. Field mapping methods using national standards are used to construct the soil maps in the Soil Survey Geographic (SSURGO) database. SSURGO digitizing duplicates the original soil survey maps. This level of mapping is designed for use by landowners, townships and county natural resource planning and management.

STREET AND ADDRESS INFORMATION

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APPENDIX H

POLYCHLORINATED BIPHENYLS (PCBS) SOIL SAMPLING REPORT
El DORADO COUNTY SHERIFF'S HEADQUARTERS PROJECT
PLAN, SITE "C", OPTION 2 (11 ACRES) INDUSTRIAL DRIVE
EL DORADO COUNTY APN 329-240-55, CALIFORNIA
EL DORADO COUNTY WORK ORDER AUTHORIZATION AGMT # 245-S1410

Prepared For

County of El Dorado Facilities
3000 Fairlane Court, Suite 1
Placerville, California 95667

Prepared By

Youngdahl Consulting Group, Inc.
1234 Glenhaven Court
El Dorado Hills, California 95762

Project No. E13310.006
January 2015

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30 YEARS

Project No. E13310.006
30 January 2015

County of El Dorado Facilities
Attention: Mr. Brent Collins
3000 Fairlane Court, Suite 1
Placerville, CA 95667

Subject: **POLYCHLORINATED BIPHENYLS (PCBS) SOIL SAMPLING REPORT**
EI DORADO COUNTY SHERIFF'S HEADQUARTERS PROJECT
SITE "C", OPTION 2 (11 ACRES), INDUSTRIAL DRIVE, EL DORADO COUNTY
APN 329-240-55, CALIFORNIA
EL DORADO COUNTY WORK ORDER AUTHORIZATION AGMT #245-S1410

Dear Mr. Collins:

At the request of the El Dorado County Facilities, Youngdahl Consulting Group, Inc. has prepared this Polychlorinated Biphenyls (PCBs) Soil Sampling Report for the El Dorado County Sheriff's Headquarters (HQ) Project, Site "C", Option 2 (11 Acres) on Industrial Drive in El Dorado County, California. In accordance with El Dorado County Facilities Work Order Authorization AGMT #245-S1410, Project 140404, Youngdahl Consulting Group, Inc. has performed environmental engineering services for the subject project. The project area is located south of Industrial Drive in El Dorado County, California. The accompanying report summarizes the services performed, including the collection of 11 near-surface soil samples for PCBs and laboratory testing.

There were no detectable concentrations at or above the reporting limit of 20 µg/kg for the PCBs Aroclor 1016, 1221, 1232, 1242, 1248, 1254, 1260, and 1268. No further investigation is recommended.

Very truly yours,
Youngdahl Consulting Group, Inc.

Laurie B. Israel
Senior Environmental Scientist

David C. Sederquist, C.E.G., C.HG.
Senior Engineering Geologist/Hydrogeologist

Distribution: 1 Electronic copy to Mr. Brent Collins, EDC Facilities
1 Electronic copy to Mr. Robert Lauritzen, EDC Environmental Health Department

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FIGURE

Figure 1 Site Plan, Polychlorinated Biphenyls (PCBs) Sample Locations

APPENDICES

Appendix A Laboratory Reports and Chain-of-custody Documentation

POLYCHLORINATED BIPHENYLS (PCBS) SOIL SAMPLING REPORT
EI DORADO COUNTY SHERIFF'S HEADQUARTERS PROJECT
PLAN, SITE "C", OPTION 2 (11 ACRES) INDUSTRIAL DRIVE
EL DORADO COUNTY APN 329-240-55, CALIFORNIA
EL DORADO COUNTY WORK ORDER AUTHORIZATION AGMT # 245-S1410

1.0 INTRODUCTION

This Polychlorinated Biphenyls (PCBs) Soil Sampling Report for the El Dorado County Sheriff's Headquarters (HQ) on Industrial Drive in El Dorado County, California was prepared by Youngdahl Consulting Group, Inc. under County of El Dorado Facilities Work Order Authorization AGMT #245-S1410, Project 140404, and effective 18 December 2014. There were no detectable concentrations at or above the reporting limit of 20 µg/kg for the PCBs Aroclor 1016, 1221, 1232, 1242, 1248, 1254, 1260, and 1268. No further investigation is recommended.

1.1 Project Description and Background

The proposed Sheriff's Headquarters Project is located on a portion of Parcel 329-240-55, a 30.36-acre industrial site that was formerly part of the Old Caldor Lumber Company property. Parcel 329-240-55 was formerly a lumber storage yard for the Old Caldor Lumber Company and a transformer storage area for Sacramento Municipal Utility District (SMUD). The PCBs Sample Locations are shown on Figure 1, Site Plan.

Reportedly, approximately 8,000 gallons of possible polychlorinated biphenyls (PCBs)-containing oil from a damaged transformer was used for dust control on the yard and nearby roads. In December 1986, soil testing by California Department of Health Services revealed no evidence of PCBs or pesticide contamination. The U.S. Environmental Protection Agency (EPA) signed off on the site in February 1988 and indicated no further action was necessary under CERCLA. No additional investigation was recommended for the subject property.

1.2 General Objectives

The purpose of this investigation was to evaluate if the near-surface soil contains PCBs due to the reported application of PCBs-containing oil from a damaged transformer for dust control on the Sheriff's HQ site in 1986.

1.3 Hazardous Waste Determination Criteria

Regulatory criteria to classify a waste as "California hazardous" for handling and disposal purposes are contained in the *CCR*, Title 22, Division 4.5, Chapter 11, Article 3, § 66261.24. Criteria to classify a waste as "Resource, Conservation, and Recovery Act (RCRA) hazardous" are contained in Chapter 40 of the Code of Federal Regulations (40 CFR), Section 261. For waste containing PCBs, the waste is classified as California hazardous when: 1) the total PCB content exceeds the Total Threshold Limit Concentration (TTLC); or 2) the soluble PCB content exceeds the Soluble Threshold Limit Concentration (STLC) based on the standard Waste Extraction Test (WET). A waste may have the potential of exceeding the STLC when the waste's total PCB content is greater than or equal to ten times the respective STLC value, since the WET uses a 1:10 dilution ratio. Hence, PCBs are detected at a concentration greater than or equal to ten times the respective STLC, and assuming that 100 percent of the PCBs are soluble, soluble PCB analysis is required. The TTLC value for PCBs is 50 mg/kg or 50,000 µg/kg. The STLC value for PCBs is 5.0 milligrams per liter (mg/L).

2.0 SCOPE OF SERVICES

The following scope of services was performed as requested by El Dorado Facilities Work Order Authorization AGMT #245-S1410.

2.1 Pre-field Activities

- A Sampling and Analysis Plan and Application for Site Assessment/Remediation permit was submitted to the El Dorado County Environmental Management Department for review and approval.

2.2 Field Activities

The field activities consisted of the collection of soil samples and analysis of soil for PCBs in the near surface soils, approximately 0-1 foot below ground surface (bgs) at the Sheriff's Headquarters Project Site "C"; Site Option 2 (11 acres) to verify that PCBs are not present on the project site. We collected one sample per acre (1 – 11) and one duplicate sample for quality assurance/quality control. Figure 1, Site Plan shows the project area divided in to 11 approximately 1-acre pieces and each sample location.

Each soil sample was placed into pre-cleaned 4 ounce glass jars, labeled, placed into a re-sealable plastic bag, placed on ice, and then transported to California Laboratory Services, Inc. (ELAP No. 1233) by courier under standard chain-of-custody procedures. Quality assurance/quality control field procedures included the cleaning and decontamination of sampling equipment between sample collection points by cleaning with pre-moistened wipes.

The soil sample locations were semi-randomly selected. The latitude and longitude coordinates of each sampling location were determined using a hand-held differential global positioning system (GPS). The GPS was used during field activities to locate the horizontal position of each location. The latitude and longitude of the sampling locations are summarized in Table 1.

Table 1 – Sample Latitude and Longitude Values

Sample ID	Latitude	Longitude
EDC HQ-1	N38.69876°	W120.82850°
EDC HQ-2	N38.69851°	W120.82813°
EDC HQ-2 DUP	N38.69851°	W120.82813°
EDC HQ-3	N38.69816°	W120.82780°
EDC HQ-4	N38.69822°	W120.82926°
EDC HQ-5	N38.69798°	W120.82877°
EDC HQ-6	N38.69771°	W120.82828°
EDC HQ-7	N38.69797°	W120.82998°
EDC HQ-8	N38.69741°	W120.82948°
EDC HQ-9	N38.69724°	W120.82896°
EDC HQ-10	N38.69712°	W120.82838°
EDC HQ-11	N38.69726°	W120.83047°

2.3 Laboratory Analyses

The soil samples were submitted to California Laboratory Services Inc. for the following analyses under a five-day turn-around-time.

All 12 soil samples were analyzed for PCBs by the United States Environmental Protection Agency (EPA) Test Method 8080. There were no detectable concentrations at or above the reporting limit

of 20 µg/kg for the PCBs Aroclor 1016, 1221, 1232, 1242, 1248, 1254, 1260, and 1268. No further investigation is recommended

Quality assurance/quality control (QA/QC) procedures were performed for each method of analysis with specificity for each analyte listed in the test method's QA/QC. The laboratory QA/QC procedures included the following:

- One method blank for PCBs for every ten soil samples, batch of samples or type of matrix, whichever is more frequent.
- One sample analyzed in duplicate for PCBs every ten soil samples, batch of samples or type of matrix, whichever is more frequent.
- One spiked sample for every ten samples, batch of samples or type of matrix, whichever is more frequent, with the spike made at ten times the detection limit or at the analyte level.
- Prior to submitting the soil samples to the laboratory, the chain-of-custody documentation was reviewed for accuracy and completeness.

2.4 Analytical Results

A summary of the soil analytical results are present below in Table 2. The laboratory reports and chain-of –title custody documentation are presented in Appendix A.

Table 2 – PCBs Analytical Results

Sample	PCBs (µg/kg)
EDC HQ-1	ND (20 µg/kg)
EDC HQ-2	ND (20 µg/kg)
EDC HQ-2 DUP	ND (20 µg/kg)
EDC HQ-3	ND (20 µg/kg)
EDC HQ-4	ND (20 µg/kg)
EDC HQ-5	ND (20 µg/kg)
EDC HQ-6	ND (20 µg/kg)
EDC HQ-7	ND (20 µg/kg)
EDC HQ-8	ND (20 µg/kg)
EDC HQ-9	ND (20 µg/kg)
EDC HQ-10	ND (20 µg/kg)
EDC HQ-11	ND (20 µg/kg)
TTLC	50,000 µg/kg
STLC	5,000 µg/L
RSL – Residential Soil Range	240 – 7,000 µg/kg
CHHSLs – Residential Soil	89 µg/kg

Legend
ND (20) = Not Detected above the Reporting Limit of 20 µg/kg
TTLC = Total Threshold Level Concentration
STLC = Soluble Threshold Level Concentration, required analysis only when the measured TTLC value is more than 10 times the STLC regulatory threshold
RSL = Regional Screening Level, Region 9 U.S.E.P.A.
CHHSLs = California Human Health Screening Levels

2.5 Laboratory Quality Assurance/Quality Control

We reviewed the laboratory quality assurance/quality control (QA/QC) provided with the laboratory report. The data show non-detect results for the method blanks. The surrogate recovery for sample QS-4 is outside of established control limits due to a sample matrix effect. The spike recovery was outside acceptance limits for the matrix spike (MS) and/or matrix spike duplicated (MSD) due to matrix interference. The laboratory control sample (LCS) and laboratory control sample duplicate (LCSD) were within acceptance limits showing that the laboratory is in control and the data is acceptable.

3.0 CONCLUSIONS AND RECOMENDATIONS

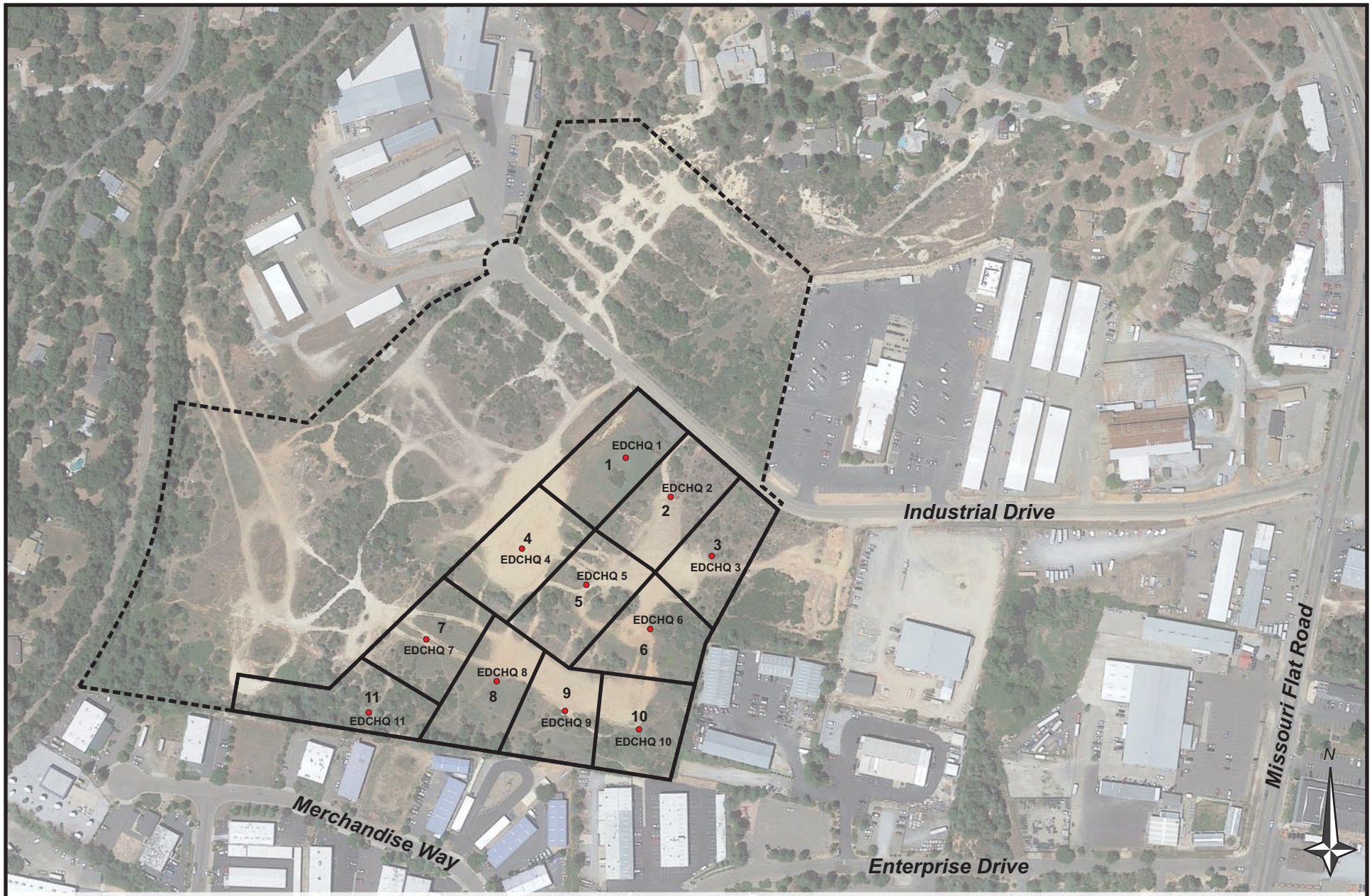
There were no detectable concentrations of PCBs over the reporting limit of 20 µg/kg for Aroclor 1016, 1221, 1232, 1242, 1248, 1254, 1260, and 1268. No further investigation is recommended.

4.0 LIMITATIONS

1. This report has been prepared for the exclusive use of the El Dorado County Facilities for specific application to the El Dorado County Sheriff's Headquarters Project. Youngdahl Consulting Group, Inc. has endeavored to comply with generally accepted environmental geology practice common to the local area. Youngdahl Consulting Group, Inc. makes no other warranty, express or implied.

2. As of the present date, the findings of this report are valid for the property studied. With the passage of time, changes in the conditions of a property can occur whether they are due to natural processes or to the works of man on this or adjacent properties. Legislation or the broadening of knowledge may result in changes in applicable standards. Changes outside of our control may cause this report to be invalid, wholly or partially. Therefore, this report should not be relied upon after a period of three years without our review nor should it be used or is it applicable for any properties other than those studied.

3. The analyses and recommendations contained in this report are based on limited windows into the subsurface conditions and data obtained from subsurface exploration. The methods used indicate subsurface conditions only at the specific locations where samples were obtained, only at the time they were obtained, and only to the depths penetrated. Samples cannot be relied on to accurately reflect the strata variations that usually exist between sampling locations.



BASE MAP REFERENCE: *Google Earth, Aerial Data Dated 5-26-2014*

EDCHQ 11 = Approximate Sample Locations

0 150 300 600

Approximate Scale: 1" = 300'

YOUNGDAHL CONSULTING GROUP, INC.
GEOTECHNICAL ▪ ENVIRONMENTAL ▪ MATERIALS TESTING

Project No.: E13310.006

January 2015

SITE PLAN

El Dorado County Sheriff's HQ - Site 'C'; Option 2 (11 acres) PCB Investigation

El Dorado County, California

FIGURE 1

Appendix A
Laboratory Reports Laboratory Reports and Chain-of-Custody Documentation

CALIFORNIA LABORATORY SERVICES

3249 Fitzgerald Road Rancho Cordova, CA 95742

January 28, 2015

CLS Work Order #: CYA0829
COC #: 158175

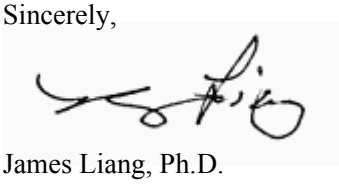
Laurie Israel
Youngdahl & Associates
1234 Glenhaven Court
El Dorado Hills, CA 95762

Project Name: EDC Sheriffs HQ Phase 2

Enclosed are the results of analyses for samples received by the laboratory on 01/21/15 14:00. Samples were analyzed pursuant to client request utilizing EPA or other ELAP approved methodologies. I certify that the results are in compliance both technically and for completeness.

Analytical results are attached to this letter. Please call if we can provide additional assistance.

Sincerely,



James Liang, Ph.D.
Laboratory Director

CA DOHS ELAP Accreditation/Registration number 1233

CALIFORNIA LABORATORY SERVICES

 01/28/15 13:42

Youngdahl & Associates	Project: EDC Sheriffs HQ Phase 2	
1234 Glenhaven Court	Project Number: E13310.006	**CLS Work Order #: CYA0829**
El Dorado Hills, CA 95762	Project Manager: Laurie Israel	COC #: 158175

CLS - Labs CHAIN OF CUSTODY CLS ID No.: CYA0829 LOG NO. 158175

REPORT TO:
NAME AND ADDRESS: Youngdahl, 1234 Glenhaven Ct, El Dorado Hills 95762
PROJECT MANAGER: Laurie Israel PHONE#: 916 9330633
PROJECT NAME: EDC Sheriff's HQ Phase 2
SAMPLED BY: Laurie Israel
JOB DESCRIPTION: Industrial Drive - PCBs in Soil
SITE LOCATION: Placerville, CA

CLIENT JOB NUMBER: E13310.006
DESTINATION LABORATORY: [X] CLS (916) 638-7301, 3249 FITZGERALD RD. RANCHO CORDOVA, CA. 95742 [ ] OTHER

PRESERVATIVES: PCBs only (608/8082)

ANALYSIS REQUESTED

GEOTRACKER: EDF REPORT [ ] YES [X] NO
GLOBAL ID:
COMPOSITE:
FIELD CONDITIONS: Sunny, Cool

TURN AROUND TIME: 1 DAY, 2 DAY, 3 DAY, 5 DAY
SPECIAL INSTRUCTIONS OR ALT. ID:

DATE	TIME	SAMPLE IDENTIFICATION	MATRIX	CONTAINER NO.	CONTAINER TYPE	PCBs only (608/8082)	5 DAY
1/21/15	1040	EDCHQ-4	SOIL	1	JAR	X	X
	1050	EDCHQ-5				X	
	1055	EDCHQ-2				X	
	1055	EDCHQ-2 Dup				X	
	1110	EDCHQ-6				X	
	1120	EDCHQ-8				X	
	1130	EDCHQ-1				X	
	1150	EDCHQ-11				X	
	1200	EDCHQ-7				X	
	1210	EDCHQ-8				X	
	1215	EDCHQ-9				X	
	1220	EDCHQ-10				X	

INVOICE TO:
P.O. #
QUOTE #

SUSPECTED CONSTITUENTS

PRESERVATIVES: (1) HCL (2) HNO_3 (3) = COLD (4) = NaOH (5) = H_2SO_4 (6) = $Na_2S_2O_3$ (7) =

RELINQUISHED BY (SIGN)	PRINT NAME / COMPANY	DATE / TIME	RECEIVED BY (SIGN)	PRINT NAME / COMPANY
Laurie Israel	Laurie Israel / YCG	1/21/15 1:55		

REC'D AT LAB BY: DATE / TIME: 1-21-15 1400 (4.3) CONDITIONS / COMMENTS:
SHIPPED BY: [ ] FED X [ ] UPS [ ] OTHER AIR BILL #

CALIFORNIA LABORATORY SERVICES

 01/28/15 13:42

Youngdahl & Associates	Project: EDC Sheriffs HQ Phase 2	
1234 Glenhaven Court	Project Number: E13310.006	**CLS Work Order #: CYA0829**
El Dorado Hills, CA 95762	Project Manager: Laurie Israel	COC #: 158175

CLS LABS
SAMPLE RECEIVING EXCEPTION REPORTS

CLS Labs Job # CYA0829

Problem discovered by: Devon **Date:** 1/21/15

Nature of problem

Sample #6 labeled as EDC HQ-8 on C.O.C. is missing But ~~[illegible]~~ have a sample labeled EDC HQ-3 for same date and time

Client contacted? Yes X **No** ____ **Spoke With:** Left a voicemail

By whom: ____ **Date:** 1/21/15 **Time:** 1415 **HRS**

Client instructions:

Client returned call says C.O.C. was incorrect.

Resolution of problem:

logged sample as HQ-3

H:\WillOrellana\SampleException.Doc

CALIFORNIA LABORATORY SERVICES

 01/28/15 13:42

Youngdahl & Associates	Project: EDC Sheriffs HQ Phase 2	
1234 Glenhaven Court	Project Number: E13310.006	**CLS Work Order #: CYA0829**
El Dorado Hills, CA 95762	Project Manager: Laurie Israel	COC #: 158175

Polychlorinated Biphenyls by EPA Method 8082A

Analyte	Result	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
EDC HQ-4 (CYA0829-01) Soil Sampled: 01/21/15 10:40 Received: 01/21/15 14:00									
Aroclor 1016	ND	20	µg/kg	1	CY00466	01/22/15	01/26/15	EPA 8082A	
Aroclor 1221	ND	20	"	"	"	"	"	"	
Aroclor 1232	ND	20	"	"	"	"	"	"	
Aroclor 1242	ND	20	"	"	"	"	"	"	
Aroclor 1248	ND	20	"	"	"	"	"	"	
Aroclor 1254	ND	20	"	"	"	"	"	"	
Aroclor 1260	ND	20	"	"	"	"	"	"	
Aroclor 1268	ND	20	"	"	"	"	"	"	
Surrogate: Decachlorobiphenyl		*3 %*	*50-150*		*"*	*"*	*"*	*"*	*QS-4*
EDC HQ-5 (CYA0829-02) Soil Sampled: 01/21/15 10:50 Received: 01/21/15 14:00									
Aroclor 1016	ND	20	µg/kg	1	CY00466	01/22/15	01/26/15	EPA 8082A	
Aroclor 1221	ND	20	"	"	"	"	"	"	
Aroclor 1232	ND	20	"	"	"	"	"	"	
Aroclor 1242	ND	20	"	"	"	"	"	"	
Aroclor 1248	ND	20	"	"	"	"	"	"	
Aroclor 1254	ND	20	"	"	"	"	"	"	
Aroclor 1260	ND	20	"	"	"	"	"	"	
Aroclor 1268	ND	20	"	"	"	"	"	"	
Surrogate: Decachlorobiphenyl		*3 %*	*50-150*		*"*	*"*	*"*	*"*	*QS-4*
EDC HQ-2 (CYA0829-03) Soil Sampled: 01/21/15 10:55 Received: 01/21/15 14:00									
Aroclor 1016	ND	20	µg/kg	1	CY00466	01/22/15	01/26/15	EPA 8082A	
Aroclor 1221	ND	20	"	"	"	"	"	"	
Aroclor 1232	ND	20	"	"	"	"	"	"	
Aroclor 1242	ND	20	"	"	"	"	"	"	
Aroclor 1248	ND	20	"	"	"	"	"	"	
Aroclor 1254	ND	20	"	"	"	"	"	"	
Aroclor 1260	ND	20	"	"	"	"	"	"	

CALIFORNIA LABORATORY SERVICES

 01/28/15 13:42

Youngdahl & Associates	Project: EDC Sheriffs HQ Phase 2	
1234 Glenhaven Court	Project Number: E13310.006	**CLS Work Order #: CYA0829**
El Dorado Hills, CA 95762	Project Manager: Laurie Israel	COC #: 158175

Polychlorinated Biphenyls by EPA Method 8082A

Analyte	Result	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
EDC HQ-2 (CYA0829-03) Soil Sampled: 01/21/15 10:55 Received: 01/21/15 14:00									
Aroclor 1268	ND	20	µg/kg	1	CY00466	"	01/26/15	EPA 8082A	
Surrogate: Decachlorobiphenyl		*6 %*		*50-150*		"	"	"	*QS-4*
EDC HQ-2 Dup (CYA0829-04) Soil Sampled: 01/21/15 10:55 Received: 01/21/15 14:00									
Aroclor 1016	ND	20	µg/kg	1	CY00466	01/22/15	01/26/15	EPA 8082A	
Aroclor 1221	ND	20	"	"	"	"	"	"	
Aroclor 1232	ND	20	"	"	"	"	"	"	
Aroclor 1242	ND	20	"	"	"	"	"	"	
Aroclor 1248	ND	20	"	"	"	"	"	"	
Aroclor 1254	ND	20	"	"	"	"	"	"	
Aroclor 1260	ND	20	"	"	"	"	"	"	
Aroclor 1268	ND	20	"	"	"	"	"	"	
Surrogate: Decachlorobiphenyl		*5 %*		*50-150*		"	"	"	*QS-4*
EDC HQ-6 (CYA0829-05) Soil Sampled: 01/21/15 11:10 Received: 01/21/15 14:00									
Aroclor 1016	ND	20	µg/kg	1	CY00466	01/22/15	01/26/15	EPA 8082A	
Aroclor 1221	ND	20	"	"	"	"	"	"	
Aroclor 1232	ND	20	"	"	"	"	"	"	
Aroclor 1242	ND	20	"	"	"	"	"	"	
Aroclor 1248	ND	20	"	"	"	"	"	"	
Aroclor 1254	ND	20	"	"	"	"	"	"	
Aroclor 1260	ND	20	"	"	"	"	"	"	
Aroclor 1268	ND	20	"	"	"	"	"	"	
Surrogate: Decachlorobiphenyl		*6 %*		*50-150*		"	"	"	*QS-4*

CALIFORNIA LABORATORY SERVICES

 01/28/15 13:42

Youngdahl & Associates	Project: EDC Sheriffs HQ Phase 2	
1234 Glenhaven Court	Project Number: E13310.006	**CLS Work Order #: CYA0829**
El Dorado Hills, CA 95762	Project Manager: Laurie Israel	COC #: 158175

Polychlorinated Biphenyls by EPA Method 8082A

Analyte	Result	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
EDC HQ-3 (CYA0829-06) Soil Sampled: 01/21/15 11:20 Received: 01/21/15 14:00									
Aroclor 1016	ND	20	µg/kg	1	CY00466	01/22/15	01/26/15	EPA 8082A	
Aroclor 1221	ND	20	"	"	"	"	"	"	
Aroclor 1232	ND	20	"	"	"	"	"	"	
Aroclor 1242	ND	20	"	"	"	"	"	"	
Aroclor 1248	ND	20	"	"	"	"	"	"	
Aroclor 1254	ND	20	"	"	"	"	"	"	
Aroclor 1260	ND	20	"	"	"	"	"	"	
Aroclor 1268	ND	20	"	"	"	"	"	"	
Surrogate: Decachlorobiphenyl		*5 %*		*50-150*	"	"	"	"	*QS-4*
EDC HQ-1 (CYA0829-07) Soil Sampled: 01/21/15 11:30 Received: 01/21/15 14:00									
Aroclor 1016	ND	20	µg/kg	1	CY00466	01/22/15	01/26/15	EPA 8082A	
Aroclor 1221	ND	20	"	"	"	"	"	"	
Aroclor 1232	ND	20	"	"	"	"	"	"	
Aroclor 1242	ND	20	"	"	"	"	"	"	
Aroclor 1248	ND	20	"	"	"	"	"	"	
Aroclor 1254	ND	20	"	"	"	"	"	"	
Aroclor 1260	ND	20	"	"	"	"	"	"	
Aroclor 1268	ND	20	"	"	"	"	"	"	
Surrogate: Decachlorobiphenyl		*35 %*		*50-150*	"	"	"	"	*QS-4*
EDC HQ-11 (CYA0829-08) Soil Sampled: 01/21/15 11:50 Received: 01/21/15 14:00									
Aroclor 1016	ND	20	µg/kg	1	CY00466	01/22/15	01/26/15	EPA 8082A	
Aroclor 1221	ND	20	"	"	"	"	"	"	
Aroclor 1232	ND	20	"	"	"	"	"	"	
Aroclor 1242	ND	20	"	"	"	"	"	"	
Aroclor 1248	ND	20	"	"	"	"	"	"	
Aroclor 1254	ND	20	"	"	"	"	"	"	
Aroclor 1260	ND	20	"	"	"	"	"	"	

CALIFORNIA LABORATORY SERVICES

 01/28/15 13:42

Youngdahl & Associates	Project: EDC Sheriffs HQ Phase 2	
1234 Glenhaven Court	Project Number: E13310.006	**CLS Work Order #: CYA0829**
El Dorado Hills, CA 95762	Project Manager: Laurie Israel	COC #: 158175

Polychlorinated Biphenyls by EPA Method 8082A

Analyte	Result	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
EDC HQ-11 (CYA0829-08) Soil Sampled: 01/21/15 11:50 Received: 01/21/15 14:00									
Aroclor 1268	ND	20	µg/kg	1	CY00466	"	01/26/15	EPA 8082A	
Surrogate: Decachlorobiphenyl		*19 %*		*50-150*		"	"	"	*QS-4*
EDC HQ-7 (CYA0829-09) Soil Sampled: 01/21/15 12:00 Received: 01/21/15 14:00									
Aroclor 1016	ND	20	µg/kg	1	CY00466	01/22/15	01/26/15	EPA 8082A	
Aroclor 1221	ND	20	"	"	"	"	"	"	
Aroclor 1232	ND	20	"	"	"	"	"	"	
Aroclor 1242	ND	20	"	"	"	"	"	"	
Aroclor 1248	ND	20	"	"	"	"	"	"	
Aroclor 1254	ND	20	"	"	"	"	"	"	
Aroclor 1260	ND	20	"	"	"	"	"	"	
Aroclor 1268	ND	20	"	"	"	"	"	"	
Surrogate: Decachlorobiphenyl		*23 %*		*50-150*		"	"	"	*QS-4*
EDC HQ-8 (CYA0829-10) Soil Sampled: 01/21/15 12:10 Received: 01/21/15 14:00									
Aroclor 1016	ND	20	µg/kg	1	CY00466	01/22/15	01/26/15	EPA 8082A	
Aroclor 1221	ND	20	"	"	"	"	"	"	
Aroclor 1232	ND	20	"	"	"	"	"	"	
Aroclor 1242	ND	20	"	"	"	"	"	"	
Aroclor 1248	ND	20	"	"	"	"	"	"	
Aroclor 1254	ND	20	"	"	"	"	"	"	
Aroclor 1260	ND	20	"	"	"	"	"	"	
Aroclor 1268	ND	20	"	"	"	"	"	"	
Surrogate: Decachlorobiphenyl		*30 %*		*50-150*		"	"	"	*QS-4*

CALIFORNIA LABORATORY SERVICES

 01/28/15 13:42

Youngdahl & Associates	Project: EDC Sheriffs HQ Phase 2	
1234 Glenhaven Court	Project Number: E13310.006	**CLS Work Order #: CYA0829**
El Dorado Hills, CA 95762	Project Manager: Laurie Israel	COC #: 158175

Polychlorinated Biphenyls by EPA Method 8082A

Analyte	Result	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
EDC HQ-9 (CYA0829-11) Soil Sampled: 01/21/15 12:15 Received: 01/21/15 14:00									
Aroclor 1016	ND	20	µg/kg	1	CY00466	01/22/15	01/26/15	EPA 8082A	
Aroclor 1221	ND	20	"	"	"	"	"	"	
Aroclor 1232	ND	20	"	"	"	"	"	"	
Aroclor 1242	ND	20	"	"	"	"	"	"	
Aroclor 1248	ND	20	"	"	"	"	"	"	
Aroclor 1254	ND	20	"	"	"	"	"	"	
Aroclor 1260	ND	20	"	"	"	"	"	"	
Aroclor 1268	ND	20	"	"	"	"	"	"	
Surrogate: Decachlorobiphenyl		*31 %*	*50-150*		*"*	*"*	*"*	*"*	*QS-4*
EDC HQ-10 (CYA0829-12) Soil Sampled: 01/21/15 12:20 Received: 01/21/15 14:00									
Aroclor 1016	ND	20	µg/kg	1	CY00466	01/22/15	01/26/15	EPA 8082A	
Aroclor 1221	ND	20	"	"	"	"	"	"	
Aroclor 1232	ND	20	"	"	"	"	"	"	
Aroclor 1242	ND	20	"	"	"	"	"	"	
Aroclor 1248	ND	20	"	"	"	"	"	"	
Aroclor 1254	ND	20	"	"	"	"	"	"	
Aroclor 1260	ND	20	"	"	"	"	"	"	
Aroclor 1268	ND	20	"	"	"	"	"	"	
Surrogate: Decachlorobiphenyl		*36 %*	*50-150*		*"*	*"*	*"*	*"*	*QS-4*

CALIFORNIA LABORATORY SERVICES

 01/28/15 13:42

Youngdahl & Associates	Project: EDC Sheriffs HQ Phase 2	
1234 Glenhaven Court	Project Number: E13310.006	**CLS Work Order #: CYA0829**
El Dorado Hills, CA 95762	Project Manager: Laurie Israel	COC #: 158175

Polychlorinated Biphenyls by EPA Method 8082A - Quality Control

Analyte	Result	Reporting Limit	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Notes
Batch CY00466 - LUFT-DHS GCNV										
Blank (CY00466-BLK1)				Prepared: 01/22/15 Analyzed: 01/26/15						
Aroclor 1016	ND	20	µg/kg							
Aroclor 1221	ND	20	"							
Aroclor 1232	ND	20	"							
Aroclor 1242	ND	20	"							
Aroclor 1248	ND	20	"							
Aroclor 1254	ND	20	"							
Aroclor 1260	ND	20	"							
Aroclor 1268	ND	20	"							
Surrogate: Decachlorobiphenyl	*6.93*		*"*	*8.33*		*83*	*50-150*			
LCS (CY00466-BS1)				Prepared: 01/22/15 Analyzed: 01/26/15						
Aroclor 1260	67.2	20	µg/kg	83.3		81	29-131			
Surrogate: Decachlorobiphenyl	*6.97*		*"*	*8.33*		*84*	*50-150*			
LCS Dup (CY00466-BSD1)				Prepared: 01/22/15 Analyzed: 01/26/15						
Aroclor 1260	67.6	20	µg/kg	83.3		81	29-131	0.6	30	
Surrogate: Decachlorobiphenyl	*6.88*		*"*	*8.33*		*83*	*50-150*			
Matrix Spike (CY00466-MS1)		**Source: CYA0829-01**		Prepared: 01/22/15 Analyzed: 01/26/15						
Aroclor 1260	39.4	20	µg/kg	83.3	ND	47	29-131			
Surrogate: Decachlorobiphenyl	*0.310*		*"*	*8.33*		*4*	*50-150*			*QS-4*
Matrix Spike Dup (CY00466-MSD1)		**Source: CYA0829-01**		Prepared: 01/22/15 Analyzed: 01/26/15						
Aroclor 1260	4.48	20	µg/kg	83.3	ND	5	29-131	159	30	QM-5
Surrogate: Decachlorobiphenyl	*0.352*		*"*	*8.33*		*4*	*50-150*			*QS-4*

Youngdahl & Associates	Project: EDC Sheriffs HQ Phase 2	
1234 Glenhaven Court	Project Number: E13310.006	**CLS Work Order #: CYA0829**
El Dorado Hills, CA 95762	Project Manager: Laurie Israel	COC #: 158175

Notes and Definitions

QS-4	The surrogate recovery for this sample is outside of established control limits due to a sample matrix effect.
QM-5	The spike recovery was outside acceptance limits for the MS and/or MSD due to matrix interference. The LCS and/or LCSD were within acceptance limits showing that the laboratory is in control and the data is acceptable.
DET	Analyte DETECTED
ND	Analyte NOT DETECTED at or above the reporting limit (or method detection limit when specified)
NR	Not Reported
dry	Sample results reported on a dry weight basis
RPD	Relative Percent Difference

APPENDIX I

PRELIMINARY DRAINAGE REPORT

for

EDC – SHERIFF HEADQUARTERS

6625 Merchandise Way / Industrial Drive
Diamond Springs, CA
(APN 329-240-55 Main parcel & APN 329-391-10 Secondary access)

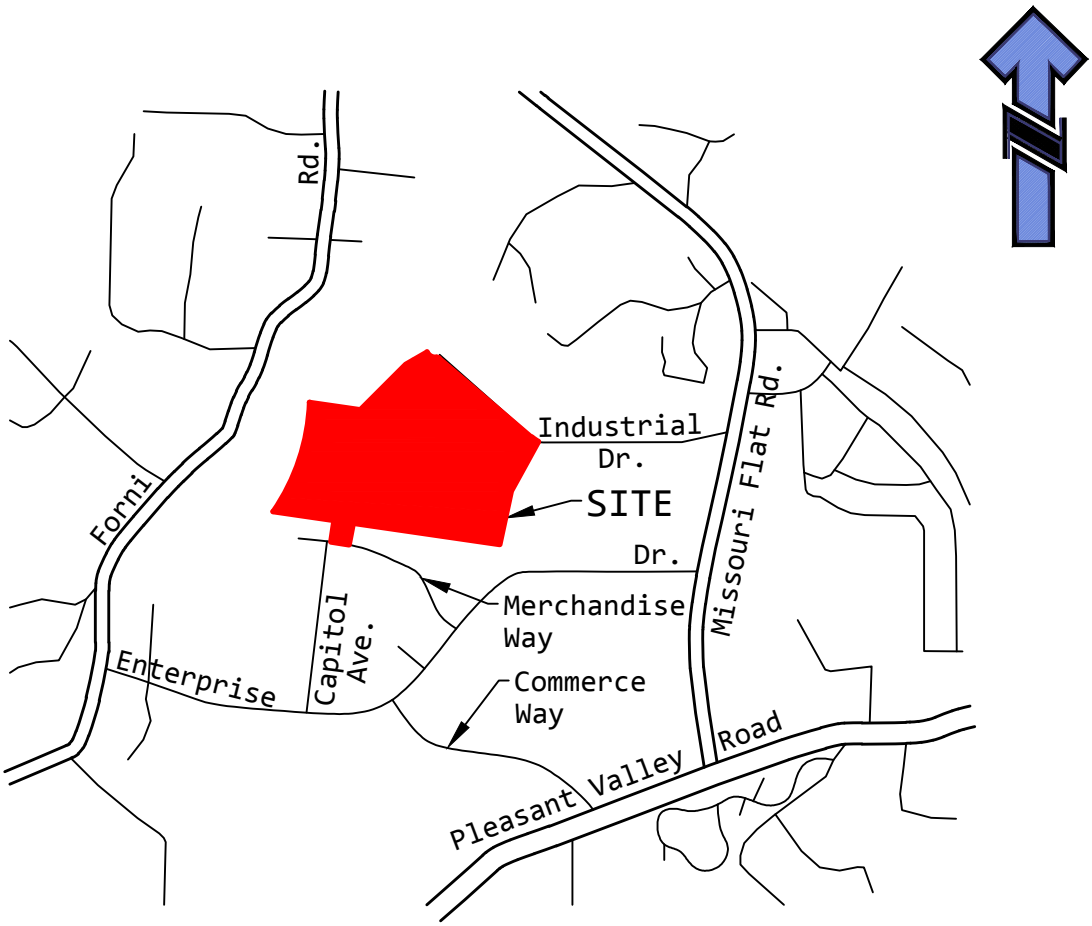
LEBECK · YOUNG
ENGINEERING, INC.

3430 Robin Lane, Bldg.#2, Cameron Park, CA 95682
(530) 677-4080; Fax (530) 677-4096
e-mail: bobbie@lebeckyoung.com

By: B. Lebeck, P.E.
7/14/2015

El Dorado County
Sheriff's Headquarters

Industrial Drive (Main site) & Merchandise Way (Secondary Access)
APNs: 329-240-55 & 329-391-10

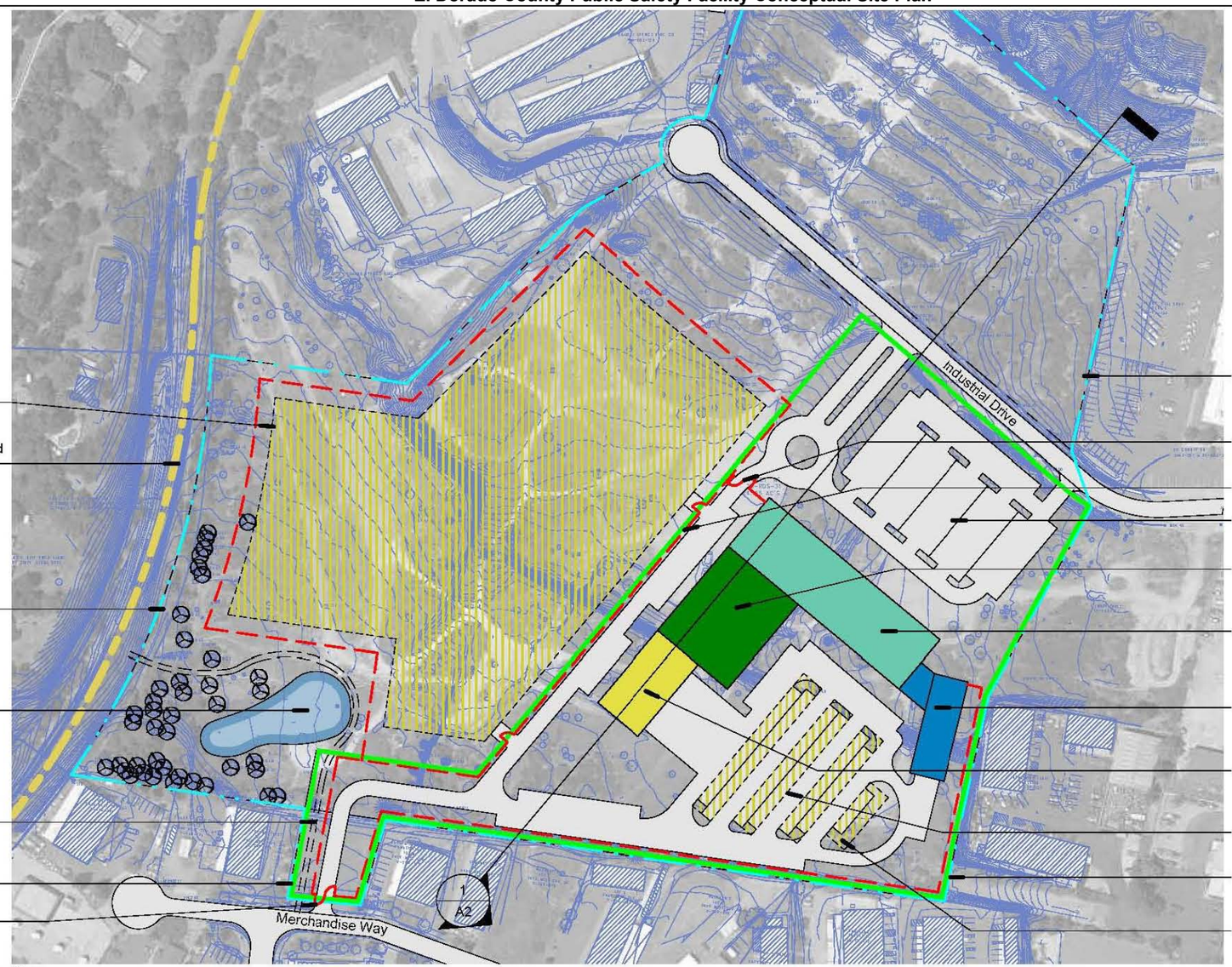


VICINITY MAP - EDC SHERIFF'S FACILITY

NOT TO SCALE

LEBECK ▪ YOUNG
ENGINEERING, INC.
3430 ROBIN LANE, BLDG. #2
CAMERON PARK, CA 95682
Ph. (530) 677-4080 Fax. (530) 677-4096

El Dorado County Public Safety Facility Conceptual Site Plan



Sheet No. **A1**

Conceptual Site Plan

1" = 160'-0"

0 160 320 480

Solar Farm
(Approximate Area:
7 Acres (304,920 SF))

Sacramento-Placerville
Transportation Corridor and
El Dorado Trail

Sheriff's Headquarters Property
24.185 Acres

Detention Basin

Bike Trail
Connection to the
El Dorado Trail

Connecting Property
Lot #10, G-SUB-140
.365 Acres

Gated Entrance

6.157 Acres

Gated Entrance

Perimeter Fence (Red)

Parking
~170 Parking Spaces

Training Building
1 Story
24,000 SF

Sheriff Administration Building
2 Stories
59,331 SF (Total)

County Morgue
1 Story
12,000 SF

SWAT, Search and Rescue, Radio Shop
1 Story
11,000 SF

Secure Parking
~200 Parking Spaces

Sheriff's Headquarters Development Area
(Green) 11.3 Acres

Solar Parking Canopy, (typ.)
(Approximate Area:
.6 Acres (26,136 SF))

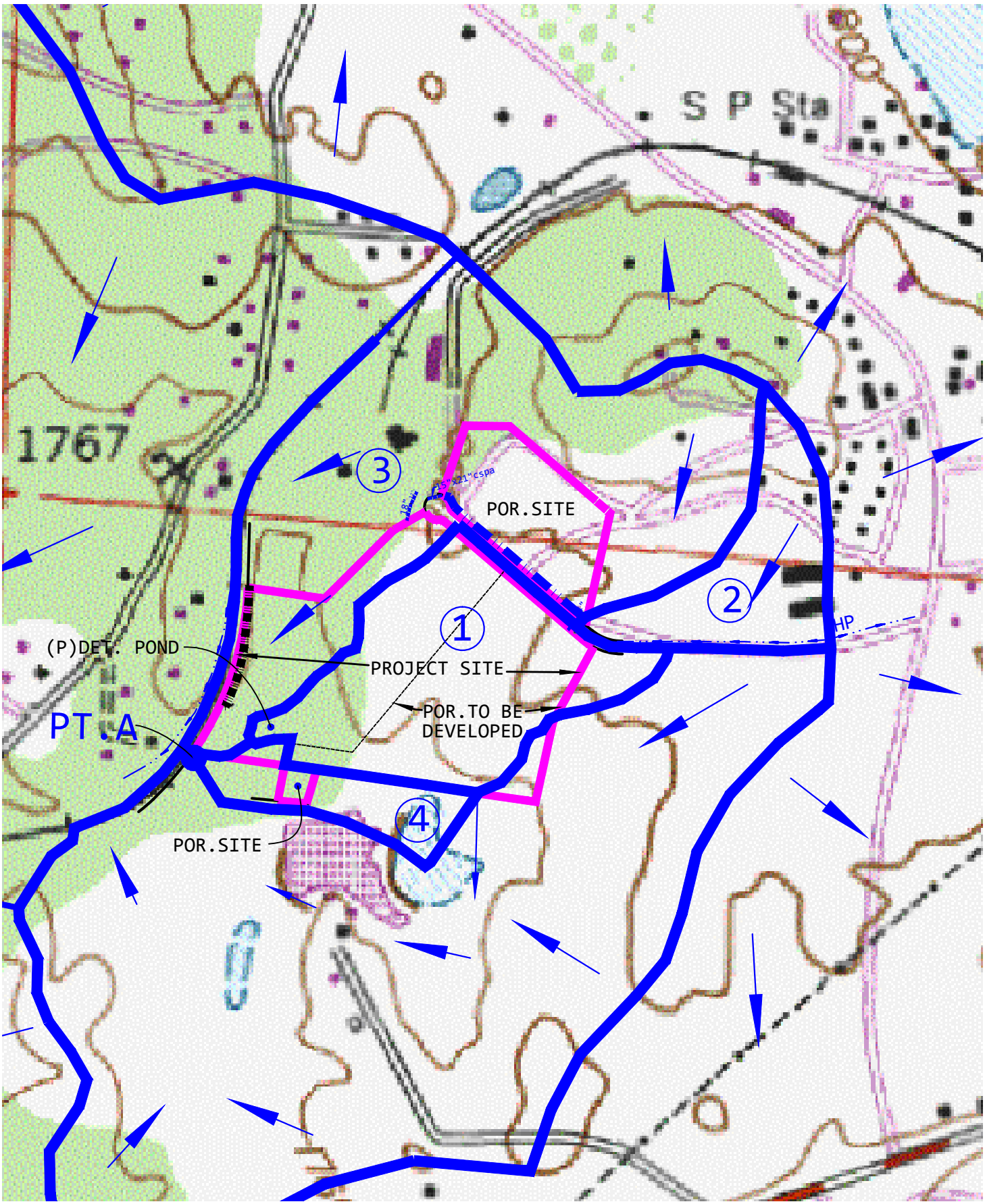
1 Conceptual Site Plan
1" = 160'-0"

Public Safety Facility
El Dorado County

Conceptual Site Plan
Industrial Drive, APN 329-240-55

VANIR Construction Management, Inc.

4540 Duckhorn Drive, Suite 300
Sacramento, CA 95834
TEL 916-575-8888
FAX 916-575-8887



OFF-SITE WATERSHEDS EXHIBIT MAP

USGS "PLACERVILLE" SCALE: 1"=500'

Preliminary Drainage Report for
El Dorado County – Sheriff's Headquarters
Industrial Drive, Placerville, CA:

INTRODUCTION AND BACKGROUND

This property is located in Placerville, California, approximately 1-1/2 miles south of Highway 50 from the Missouri Flat Road Exit. It is located in the Diamond Springs Industrial Park on the north and south sides of Industrial Drive. The property consists of 30.34 acres (APN 329-240-55 which is split by Industrial Drive with 6.16 acres lying on the north side of the road and the remaining 24.19 acres lying to the south. Additionally, a second parcel contiguous to the south (APN 329-391-10, 0.365 acres) is part of the project and connects the property to Merchandise Way which provides a secondary access point. The secondary access parcel lies within Park West Subdivision, Unit No. 2.

The site is currently vacant with many dirt trails traversing through it. There are some grasses, brush, and oak trees in patches throughout. The drainage in the area flows from the northeast and north through the property to the southwest. There are existing drainage pipes near the southwest property corner that convey the existing flows to an existing drainage channel along the east side of the railroad tracks. The storm water then drains under the railroad tracks via an existing 42" culvert with a concrete headwall located at the County's new animal shelter facility which lies approximately 300 feet to the south from the southwest corner of this site. Once the drainage crosses the railroad tracks, it enters an existing (un-named) intermittent drainage swale that flows to the west, then northwest into Indian Creek.

It should be noted that while the property contains 30.71 acres (both parcels), only an 11.3 acre portion of it, along with the 0.37 acre secondary access parcel is proposed to be developed. Additionally, an approximate 7 acres of the site to the west of the proposed development will be used as a solar farm. The solar farm area will be above ground and should not create any additional impervious ground surfaces. Therefore, this portion of the site should not generate any increased runoff over existing conditions. The remaining portions of the property will remain vacant.

The purpose of the report is to ensure that there will be no increased runoff from the development of this property and to discuss water quality standards that will be implemented as part of the project.

HYDROLOGY

- **Methods**

The site was analyzed using peak runoff rates and volumes as determined by the U.S. Army Corp of Engineers Hydraulic Engineering Circular, HEC-HMS program. The HEC-HMS 4.0 program was used in coordination with the Soil Conservation Service (SCS) Dimensionless Unit Hydrograph Method and the El Dorado County Drainage Manual, adopted March 15, 1995, in order to determine the peak runoff rates for both pre-development and post-development scenarios. The HEC-HMS program is the up-dated program from HEC-1.

The input data for the HEC-HMS program consists of watershed areas, curve numbers, lag time, channel dimensions, and detention pond data (where applicable). Watershed areas were determined by utilizing Google Earth Pro with USGS map overlays in combination with ACAD to determine on-site & off-site watershed areas. See "Off-site Watersheds Exhibit Map" for watershed areas.

Curve numbers were developed using hydrological soil group data obtained from the 1974 USDA Soils Conservation Service and Forest Service "Soil Survey of El Dorado Area, California" and Exhibit A-1 of the TR-55 manual. Soils are rated as Type A, having high infiltration rates, through Type D, having the lowest infiltration rate. The Soil Survey Map (in the Appendix) was overlaid onto the watershed maps in order to determine the amounts of each soil type present within each watershed area. Curve numbers were then determined using the SCS Worksheet 2 and Tables 2-2a and 2-2c.

Lag time is estimated to be 0.6 times the time of concentration for each sub-basin. The time of concentration for each sub-basin was determined using the SCS method of sheet flow, shallow concentrated flow, and channel flow.

Per Section 2.4 of the EDC Drainage Manual:

- Sheet Flow (L < 300 ft.):

$$T_t = \frac{0.007\,(nL)^{0.8}}{(P_2)^{0.5}\,S^{0.4}}$$

; L = length of longest watercourse (ft)
P_2 = 2-yr, 24-hour rainfall depth (in-in)
S = land slope (ft/ft)
Tt = sheet flow travel time (hrs)
n = overland roughness coefficient (per Table 2.4.3 See Appendix)

-

- Shallow Concentrated Flow:

  V = 16.1345 So^0.5 (unpaved); V = shallow-concentrated flow velocity (ft./s)

  So = slope (ft/ft)

  V = 20.3283So^0.5 (paved);

  Tt = L/V ; Travel time is the flow path length divided by the velocity.

- Channel Flow:

  Velocity is estimated by Manning's Equation, assuming discharge equal the average annual value (2-yr event). The channel flow travel time is the channel length divided by the velocity.

See attached Drainage Calculations Charts for Tt of each drainage area. A minimum time of concentration of 10 minutes was used. The lag time and composite curve number used for each sub-basin is shown on the Drainage Calculations Charts. The composite curve number calculations are in the Appendix.

The HEC-HMS program for detention ponds utilizes the elevation of the bottom of the pond, surface areas of the pond at various elevations, outlet hydraulic calculations, and spillway dimensions and data in order to create a rating curve for the pond. The pond design was checked for 10-year and 100-year storms. The detention pond data used for analyses is summarized in the "Detention Pond Hydraulic Calculations" section of this report. The HEC-HMS results for all scenarios can be found in the "HEC-HMS RUNS" section of this report.

- **Precipitation**

The mean annual precipitation for the area is 36 inches. The 10-year and 100-year 24-hour precipitation depth input for the HEC-HMS was determined from page 2-37 and 2-40 of the El Dorado County Drainage Manual.

The project area lies above elevation 1640 feet & is therefore within SCS Type IA rainfall distribution. Cumulative precipitation distribution data from TR-20 for a 24-hour SCS Type IA storm was used.

WATER QUALITY

This project will be designed utilizing water quality standards developed by the State of California www.centralcoastlili.org and www.californialid.org. These agencies have developed low impact development (LID) and bio-retention standards, some of which can be found in the "Water Quality" section of this report. The overall concept is to try and manage runoff from small storms on-site by constructing bio-retention areas in planters that will slow and infiltrate the storm water. In this way the water can be filtered and put back into the ground in much the same way as what may have occurred on the site prior to it being developed.

There are special plants and soil materials required in various zones within the planters/bio-retention areas. Proper installation and maintenance will be required. For more information and design standards, see the "Water Quality" section of this report.

SUMMARY AND CONCLUSIONS:

The drainage for the site flows from the northeast to the southwest. There is an existing v-ditch and 10 ft wide drainage easement along the adjacent lots to the south. This v-ditch flows into an existing 24" culvert near the southwest property corner. The 24" culvert drains into an existing 48" diameter OCP within the drainage easement at the southwest corner. From the OCP, there is an existing 48"SD that drains the water from the OCP to the south, also in an existing drainage easement. Additionally, there's a swale that drains down east of the railroad tracks (along the westerly boundary of the site) that drains into the OCP. However, it appears as though this swale ponds up in this southwest corner based upon the huge amount of thick vegetation there. For the proposed project, we will be constructing a detention pond in the southwesterly portion of the property, while avoiding the southwestern-most corner where most of the vegetation and oak trees are located.

The detention pond has been sized at approximately 1.3 ac-ft. It will have a 15" diameter low-flow outlet, and a 24" diameter riser. From the riser, a 36" diameter storm drain will be constructed that will tie-in with a structure to the existing storm drain in the southerly drainage easement. Even though we are reducing our flows to below pre-development levels, my calculations show that this existing 24" culvert is under-sized and should be a 36" culvert. Therefore, as part of this project we will be up-sizing the approximately 153 lineal feet of storm drain to a 36" diameter culvert.

In addition to the proposed 11.7-acre (11.3-acre portion of the site, plus 0.37 acre secondary access parcel) portion of the development, we performed calculations to determine if future development were to occur on the remaining 19± acres, if the detention pond would provide enough detention for that to occur. Results showed that

increased runoff would be only approximately 3 to 4.5 cfs (10-yr and 100-yr) above pre-development levels since the detention pond reduces the peak flows to less than pre-development levels. However, most of the remaining site does not drain into the detention pond. So if future development were ever to occur, routing some of the westerly &/or northerly portions of the site into the detention pond should be able to reduce peak runoff to at or below pre-development levels. Some modifications to the pond may be required at that time.

The results for the proposed project are as follows:

	10-yr Pre-Development (cfs)	**10-yr Post-Development (w-Det. Pond) (cfs)**	**100-yr Pre-Development (cfs)**	**100-yr Post-Development w-Det. Pond) (cfs)**
Discharge Pt 'A' (SW prop corner)	**40.7**	**33.8**	**73.2**	**68.2**

These results show that with the construction of the detention pond, we will be reducing the 10-year peak discharge by approximately 17% and the 100-year peak discharge by approximately 7% below pre-development levels.

DRAINAGE CALCULATION CHART - 10 YEAR

Water Shed No.	Area (Ac.)	Area (sq.mi.)	Curve No.	Sheet Flow L (ft)	H2-H1 (ft)	S (ft/ft)	n	P2 (in in)	Tt (min)	Shallow Conc. Flow L (ft)	H2-H1 (ft)	S (ft/ft)	V (ft/s)	Tt (min)	Total Tt (min)	T (lag) Tt * 0.6 (min)	I 10-yr (in/hr)	C (10 yr)	Q 10-YR (cfs)
Pre-development																			
1	18.9	0.0295	74	300	12	0.04	0.13	3.20	16	1073	32	0.03	2.8	6	20	12	1.611	0.34	10.4
2	9.4	0.0147	86	300	45	0.15	0.13	3.20	9	1068	33	0.03	2.8	6	15	9	1.780	0.50	8.4
3	44.7	0.0698	77	300	40	0.13	0.40	3.20	24	2030	79	0.04	3.2	11	30	18	1.273	0.48	27.3
4	5.0	0.0078	86										Use 10 min.		10	6	2.165	0.42	4.5
Post-Development																			
1	18.9	0.0295	85										Use	15	15	9	1.780	0.49	16.5
2	9.4	0.0147	86	300	45	0.15	0.13	3.20	9	1068	33	0.03	2.8	6	15	9	1.780	0.50	8.4
3	44.7	0.0698	77	300	40	0.13	0.40	3.20	24	2030	79	0.04	3.2	11	30	18	1.273	0.48	27.3
4	5.0	0.0078	86										Use 10 min.		10	6	2.165	0.42	4.5
Total	78.0																		
Future-Development																			
1	18.9	0.0295	92										Use	15	15	9	1.780	0.58	19.5
2	9.4	0.0147	86	300	45	0.15	0.13	3.20	9	1068	33	0.03	2.8	6	15	9	1.780	0.50	8.4
3	44.7	0.0698	82	300	40	0.13	0.40	3.20	24	2030	79	0.04	3.2	11	30	18	1.273	0.55	31.3
4	5.0	0.0078	86										Use 10 min.		10	6	2.165	0.46	5.0

DRAINAGE CALCULATION CHART - 100 YEAR

Water Shed No.	Area (Ac.)	Area (sq.mi.)	Curve No.	Sheet Flow L (ft)	Sheet Flow H2-H1 (ft)	Sheet Flow S (ft/ft)	Sheet Flow n	Sheet Flow P2 (in in)	Sheet Flow Tt (min)	Shallow Conc. Flow L (ft)	Shallow Conc. Flow H2-H1 (ft)	Shallow Conc. Flow S (ft/ft)	Shallow Conc. Flow V (ft/s)	Shallow Conc. Flow Tt (min)	Total Tt (min)	T (lag) Tt * 0.6 (min.)	I 100-yr (in/hr)	C (100yr)	Q 100-YR (cfs)
Pre-development																			
1	18.9	0.0295	74	300	12	0.04	0.13	3.20	16	1073	32	0.03	2.8	6	20	12	2.284	0.43	18.6
2	9.4	0.0147	86	300	45	0.15	0.13	3.20	9	1068	33	0.03	2.8	6	15	9	2.523	0.54	12.8
3	44.7	0.0698	77	300	40	0.13	0.40	3.20	24	2030	79	0.04	3.2	11	30	18	1.805	0.58	46.8
4	5.0	0.0078	86										Use 10 min.		10	6	3.069	0.46	7.1
Post-Development																			
1	18.9	0.0295	85										Use	15	15	9	2.523	0.55	26.2
2	9.4	0.0147	86	300	45	0.15	0.13	3.20	9	1068	33	0.03	2.8	6	15	9	2.523	0.54	12.8
3	44.7	0.0698	77	300	40	0.13	0.40	3.20	24	2030	79	0.04	3.2	11	30	18	1.805	0.58	46.8
4	5.0	0.0078	86										Use 10 min.		10	6	3.069	0.46	7.1
Total	78.0																		
Future-Development																			
1	18.9	0.0295	92										Use	15	15	9	2.523	0.60	28.6
2	9.4	0.0147	86	300	45	0.15	0.13	3.20	9	1068	33	0.03	2.8	6	15	9	2.523	0.54	12.8
3	44.7	0.0698	82	300	40	0.13	0.40	3.20	24	2030	79	0.04	3.2	11	30	18	1.805	0.65	52.4
4	5.0	0.0078	86										Use 10 min.		10	6	3.069	0.46	7.1

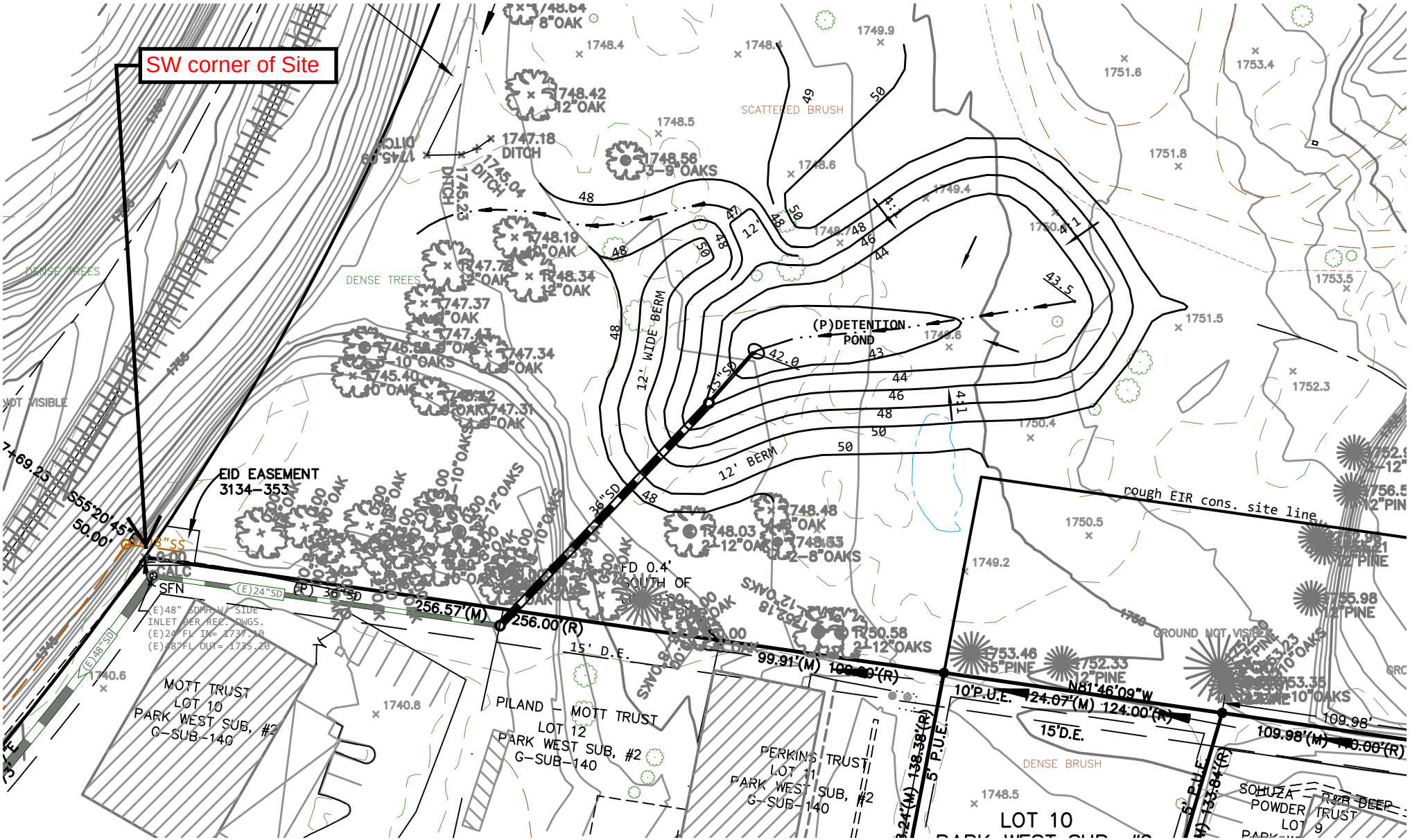
Combined Areas Chart - 10 year

WTRSHD NO.	AREA (acres)	C (10 yr)	C*A	SUM C*A	SUM A (acres)	COMBINED AREAS	C (avg) (10 yr)	I (10yr) (in/hr)	Q = C I A 10yr (cfs)	REMARKS	PIPE SIZE (csp)
Pre-Development:											
2	9.4	0.50	4.70		9.4	2	0.50	1.780	8.4	(E) 24" SD @ Ind. Dr.	(E)24"
1	18.9	0.34	6.43		18.9	1	0.34	1.611	10.4	-	-
				11.13	28.3	1+2	0.39	1.611	17.9	Area Trib. To Det. Pond	-
3	44.7	0.48	21.46		44.7	3	0.48	1.273	27.3	ex. swale near westerly PL	-
4	5.0	0.42	2.10		5.0	4	0.42	2.165	4.5	(E) V-ditch @ S. PL	-
				34.68	78.0	1+2+3+4	0.44	1.273	44.2	Total Trib. To Pt. A	(E)48"SD w-OCP
Post-Development:											
2	9.4	0.50	4.70		9.4	2	0.50	1.780	8.4	(E) 24" SD @ Ind. Dr.	(E)24"
1	18.9	0.49	9.26		18.9	1	0.49	1.780	16.5	-	-
				13.96	28.3	1+2	0.49	1.780	24.9	Area Trib. To Det. Pond	-
3	44.7	0.48	21.46		44.7	3	0.48	1.273	27.3	ex. swale near westerly PL	-
4	5.0	0.42	2.10		5.0	4	0.42	2.165	4.5	(E) V-ditch @ S. PL	-
				37.52	78.0	1+2+3+4	0.48	1.273	47.8	Trib. To Pt. A w-out pond	(E)48"SD w-OCP
Poss. Future-Development Check:											
2	9.4	0.50	4.70		9.4	2	0.50	1.780	8.4	(E) 24" SD @ Ind. Dr.	(E)24"
1	18.9	0.58	10.96		18.9	1	0.58	1.780	19.5	-	-
				15.66	28.3	1+2	0.55	1.780	27.9	Area Trib. To Det. Pond	-
3	44.7	0.55	24.59		44.7	3	0.55	1.273	31.3	ex. swale near westerly PL	-
4	5.0	0.46	2.30		5.0	4	0.46	2.165	5.0	(E) V-ditch @ S. PL	-
				42.55	78.0	1+2+3+4	0.55	1.273	54.2	Trib. To Pt. A w-out pond	(E)48"SD w-OCP

Combined Areas Chart - 100 year

WTRSHD NO.	AREA (acres)	C (100 yr)	C*A	SUM C*A	SUM A (acres)	COMBINED AREAS	C (avg) (100 yr)	I (100yr) (in/hr)	Q = C I A 100yr (cfs)	REMARKS	PIPE SIZE (csp)
Pre-Development:											
2	9.4	0.54	5.08		9.4	2	0.54	2.523	12.8	(E) 24" SD @ Ind. Dr.	(E)24"
1	18.9	0.43	8.13		18.9	1	0.43	2.284	18.6	-	-
				13.20	28.3	1+2	0.47	2.284	30.2	Area Trib. To Det. Pond	-
3	44.7	0.58	25.93		44.7	3	0.58	1.805	46.8	ex. swale near westerly PL	-
4	5.0	0.46	2.30		5.0	4	0.46	3.069	7.1	(E) V-ditch @ S. PL	-
				41.43	78.0	1+2+3+4	0.53	1.805	74.8	Total Trib. To Pt. A	(E)48"SD w-OCP
Post-Development:											
2	9.4	0.54	5.08		9.4	2	0.54	2.523	12.8	(E) 24" SD @ Ind. Dr.	(E)24"
1	18.9	0.55	10.40		18.9	1	0.55	2.523	26.2	-	-
				15.47	28.3	1+2	0.55	2.523	39.0	Area Trib. To Det. Pond	-
3	44.7	0.58	25.93		44.7	3	0.58	1.805	46.8	ex. swale near westerly PL	-
4	5.0	0.46	2.30		5.0	4	0.46	1.805	4.2	(E) V-ditch @ S. PL	-
				43.70	78.0	1+2+3+4	0.56	1.805	78.9	Trib. To Pt. A w-out pond	(E)48"SD w-OCP
Poss. Future-Development Check:											
2	9.4	0.54	5.08		9.4	2	0.54	2.523	12.8	(E) 24" SD @ Ind. Dr.	(E)24"
1	18.9	0.60	11.34		18.9	1	0.6	2.523	28.6	-	-
				16.42	28.3	1+2	0.58	2.523	41.4	Area Trib. To Det. Pond	-
3	44.7	0.65	29.06		44.7	3	0.65	1.805	52.4	ex. swale near westerly PL	-
4	5.0	0.46	2.30		5.0	4	0.46	3.069	7.1	(E) V-ditch @ S. PL	-
				47.77	78.0	1+2+3+4	0.61	1.805	86.2	Trib. To Pt. A w-out pond	(E)48"SD w-OCP

DETENTION POND
HYDRAULIC CALCULATIONS


SW corner of Site
EID EASEMENT
3134-353
S55°20'45"E
50.00'
(P)DETENTION POND
12' WIDE BERM
12' BERM
4:1
36"SD
15"SD
(P) 36"SD
(E)24"SD
(E)48" SDMH W/ SIDE INLET PER REC. DWGS.
(E)24" FL IN= 1737.40
(E)48"FL OUT= 1735.20
256.57'(M) 256.00'(R)
99.91'(M) 100.00'(R)
124.07'(M) 124.00'(R)
109.98'(M) 110.00'(R)
N81°46'09"W
10'P.U.E.
15'D.E.
5' P.U.E.
FD 0.4' SOUTH OF
rough EIR cons. site line
SCATTERED BRUSH
DENSE TREES
DENSE BRUSH
GROUND NOT VISIBLE
DITCH
MOTT TRUST
LOT 10
PARK WEST SUB, #2
G-SUB-140
PILAND - MOTT TRUST
LOT 12
PARK WEST SUB, #2
G-SUB-140
PERKINS TRUST
LOT 11
PARK WEST SUB, #2
G-SUB-140
LOT 10
SOHUZA POWDER TRUST
LOT 9

HYDRAULIC CALCULATIONS

	# OF PIPES		CULVERT DIA. (IN.)	TYPE						
Low-level	1		15	CSP						
Outlet										
ORIFICE EQ'N: Q=CA(2GH)^½				WEIR EQ'N: Q=CLH^1.5						
	C	0.6		C		2.6				
	A	1.23		L		3.93				
	80%A	0.98		80%L		3.14				
							S (pipe slope)		Manning's	
Part-full low-level outlet uses Manning's Equation							in (ft/ft)	0.0100	n =	0.013
ELEV.	H	HW/D	ORIFICE EQ'I Q (1 PIPE)	WEIR EQ'N Q (1 PIPE)	Lowest Q to Use	Q (2 PIPES)	Part-full Pipe	80% * R Hydr.Rad.	80% * A (area water)	Q (part-full)
1742	0	0	0	0	0.0	0	yes	20% blockage assumed		0
	0.5	0.40	-	-	1.5	-	yes	0.215	0.367	1.5
1743	1	0.80	-	-	4.4	-	yes	0.304	0.842	4.4
	1.5	1.20	5.8	15.0	5.8	-	no			
1744	2	1.60	6.7	23.1	6.7	-	no			
	2.5	2.00	7.5	32.3	7.5	-	no			
1745	3	2.40	8.2	42.4	8.2	-	no			
	3.5	2.80	8.8	53.5	8.8	-	no			
1746	4	3.20	9.5	65.3	9.5	-	no			
	4.5	3.60	10.0	78.0	10.0	-	no			
1747	5	4.00	10.6	91.3	10.6	-	no			
	5.5	4.40	11.1	105.4	11.1	-	no			
1748	6	4.80	11.6	120.0	11.6	-	no			
	6.5	5.20	12.1	135.4	12.1	-	no			
1749	7	5.60	12.5	151.3	12.5	-	no			
	7.5	6.00	12.9	167.8	12.9	-	no			
1750	8	6.40	13.4	184.8	13.4	-	no			

HYDRAULIC CALCULATIONS

Rating Curve for Pond Outlet(s)

Elevation	*Q Low-level (cfs)*	*Q Riser (cfs)*	*Q min (cfs)*
1742	0.0	0	0.0
1742.5	1.5	0	1.5
1743	4.4	0	4.4
1743.5	5.8	0	5.8
1744	6.7	0	6.7
1745	8.2	0	8.2
1746	9.5	0.0	9.5
1747	10.6	12.1	22.7
1748	11.6	17.1	28.7
1749	12.5	21.0	33.5
1750	13.4	24.2	37.6

Q 100 yr = 35.4 cfs

Going the Pond for 100-

HYDRAULIC CALCULATIONS

	# OF PIPES		CULVERT DIA. (IN.)	TYPE	
Riser	1		24	OCP	
ORIFICE EQ'N: Q=CA(2GH)^½				WEIR EQ'N: Q=CLH^1.5	
	C	0.6		C	2.6
	A	3.14		L	6.28
	80%A	2.51		80%L	5.03

ELEV.	H	HW/D	ORIFICE EQ'N Q (1 PIPE)	WEIR EQ'N Q (1 PIPE)	Lowest Q Riser
1746	0	0	0	0	0
	0.5	0.25	8.6	4.6	4.6
1747	1	0.50	12.1	13.1	12.1
	1.5	0.75	14.8	24.0	14.8
1748	2	1.00	17.1	37.0	17.1
	2.5	1.25	19.1	51.7	19.1
1749	3	1.50	21.0	67.9	21.0
	3.5	1.75	22.6	85.6	22.6
1750	4	2.00	24.2	104.6	24.2
	4.5	2.25	25.7	124.8	25.7
	5	2.50	27.1	146.1	27.1
	5.5	2.75	28.4	168.6	28.4

HYDRAULIC CALCULATIONS

WEIR FLOW OVER TRAP. CHANNEL - Overflow Spillway
Rate as Broad-crested Weir

Q = (C L H ^1.5) + (Triangular Segments)

Q = (C * L * H ^1.5) + { 2 * [(C * Z)/ 2.5) * H^2.5] }

Z = 4 side slopes, 4:1

Q = (C * L * H ^1.5) + (3.2 * C * H^2.5)

C = 2.65

Q = (15.9 * H ^1.5) + (8.48 * H^2.5) for L = 6'

Weir spillway elev. = 1747.5

HGL	L =	12		L =	15
Elev.	H (ft)	Q (cfs)		H (ft)	Q (cfs)
1747.5	0	0		0	0
1748	0.5	12.7		0.5	15.6
1748.5	1	40.3		1	48.2
1749	1.5	81.8		1.5	96.4
1749.5	2	137.9		2	160.4
1750	2.5	209.5		2.5	240.9
1750.5	3	297.4		3	338.7

HEC-HMS RUNS

Project: EDC-CAO Sheriffs Simulation Run: 10-yr Pre

Start of Run: 01Jan2015, 00:00 Basin Model: Sheriffs Pre
End of Run: 02Jan2015, 00:10 Meteorologic Model: 10 Yr
Compute Time: 12Jul2015, 14:51:24 Control Specifications:Pre-Devel

Hydrologic Element	Drainage Area (MI2)	Peak Discharge (CFS)	Time of Peak	Volume (IN)
Subbasin-1	0.0295	8.6	01Jan2015, 08:05	2.13
Subbasin-2	0.0147	7.6	01Jan2015, 08:01	3.19
Subbasin-3	0.0698	21.8	01Jan2015, 08:10	2.37
Subbasin-4	0.0078	4.1	01Jan2015, 07:59	3.20
Discharge Pt A	0.1218	40.7	01Jan2015, 08:05	2.46

Project: EDC-CAO Sheriffs Simulation Run: 10-yr Post

Start of Run: 01Jan2015, 00:00 Basin Model: Sheriff Post
End of Run: 02Jan2015, 00:10 Meteorologic Model: 10 Yr
Compute Time: 12Jul2015, 16:16:55 Control Specifications: Post-Devel

Hydrologic Element	Drainage Area (MI2)	Peak Discharge (CFS)	Time of Peak	Volume (IN)
Subbasin-1	0.0295	14.3	01Jan2015, 08:04	3.09
Subbasin-2	0.0147	7.6	01Jan2015, 08:01	3.19
Det Pond	0.0442	11.1	01Jan2015, 08:30	3.12
Subbasin-3	0.0698	21.8	01Jan2015, 08:10	2.37
Subbasin-4	0.0078	4.1	01Jan2015, 07:59	3.20
Discharge Pt A	0.1218	33.8	01Jan2015, 08:09	2.69

Project: EDC-CAO Sheriffs Simulation Run: 10-yr Post
Reservoir: Det Pond

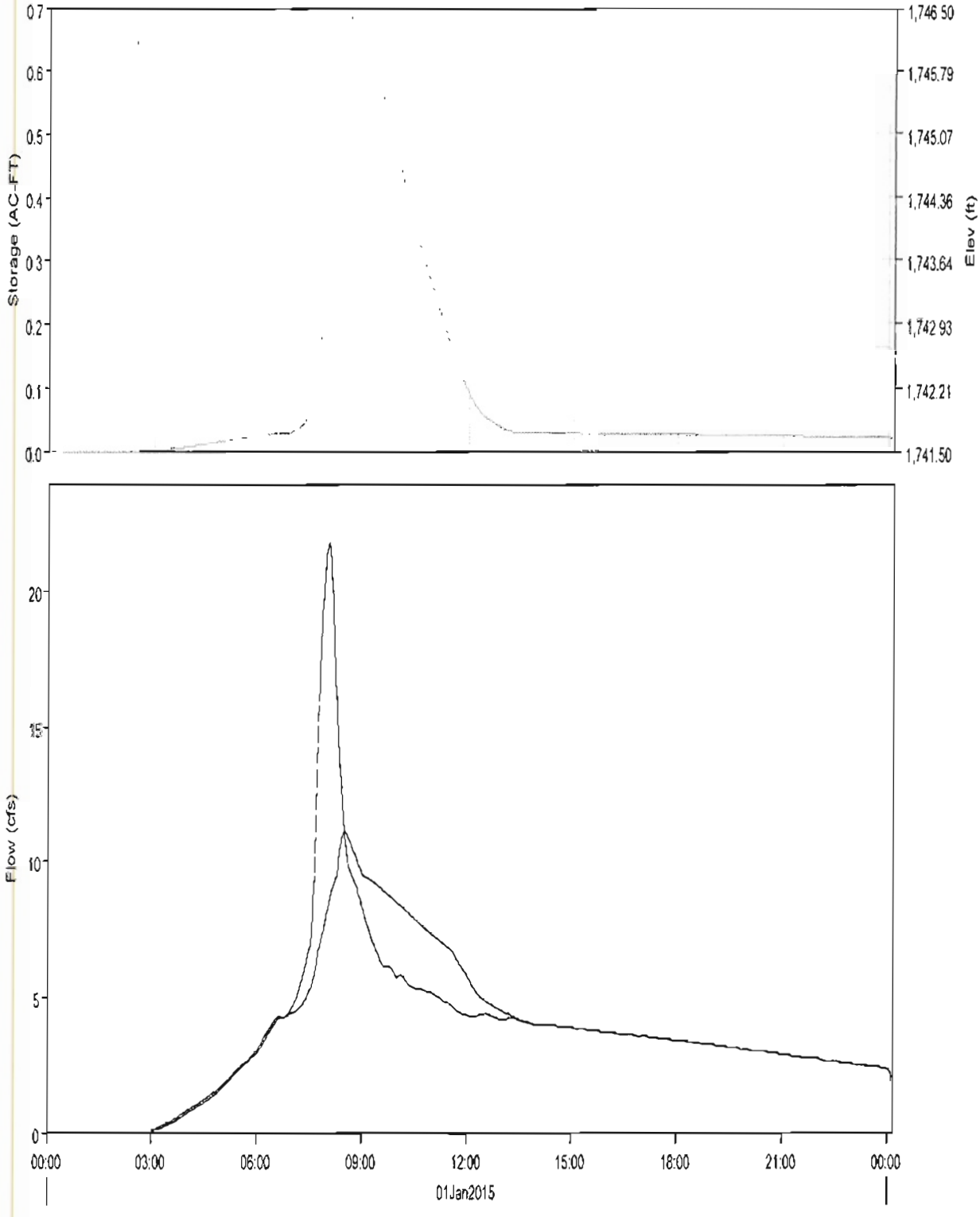
Start of Run:	01Jan2015, 00:00	Basin Model:	Sheriff Post
End of Run:	02Jan2015, 00:10	Meteorologic Model:	10 Yr
Compute Time:	12Jul2015, 16:16:55	Control Specifications:	Post-Devel

Volume Units:IN

Computed Results

Peak Inflow:	21.8 (CFS)	Date/Time of Peak Inflow:	01Jan2015, 08:03
Peak Discharge:	11.1 (CFS)	Date/Time of Peak Discharge:	01Jan2015, 08:30
Inflow Volume:	3.13 (IN)	Peak Storage:	0.7 (AC-FT)
Discharge Volume:	3.12 (IN)	Peak Elevation:	1746.1 (FT)

Reservoir "Det Pond" Results for Run "10-yr Post"



Run:10-yr Post Element:Det Pond Result:Storage
Run:10-yr Post Element:Det Pond Result:Pool Elevation
Run:10-yr Post Element:Det Pond Result:Outflow
Run:10-yr Post Element:Det Pond Result:Combined Flow

Project: EDC-CAO Sheriffs Simulation Run: 100-yr Pre

Start of Run: 01Jan2015, 00:00 Basin Model: Sheriffs Pre
End of Run: 02Jan2015, 00:10 Meteorologic Model: 100 yr
Compute Time: 12Jul2015, 14:52:34 Control Specifications:Pre-Devel

Hydrologic Element	Drainage Area (MI2)	Peak Discharge (CFS)	Time of Peak	Volume (IN)
Subbasin-1	0.0295	16.5	01Jan2015, 08:04	3.75
Subbasin-2	0.0147	12.2	01Jan2015, 08:01	5.05
Subbasin-3	0.0698	40.1	01Jan2015, 08:09	4.05
Subbasin-4	0.0078	6.6	01Jan2015, 07:59	5.05
Discharge Pt A	0.1218	73.2	01Jan2015, 08:05	4.16

Project: EDC-CAO Sheriffs Simulation Run: 100-yr Post

Start of Run: 01Jan2015, 00:00 Basin Model: Sheriff Post
End of Run: 02Jan2015, 00:10 Meteorologic Model: 100 yr
Compute Time: 12Jul2015, 16:15:32 Control Specifications:Post-Devel

Hydrologic Element	Drainage Area (MI2)	Peak Discharge (CFS)	Time of Peak	Volume (IN)
Subbasin-1	0.0295	23.2	01Jan2015, 08:03	4.93
Subbasin-2	0.0147	12.2	01Jan2015, 08:01	5.05
Det Pond	0.0442	24.3	01Jan2015, 08:18	4.96
Subbasin-3	0.0698	40.1	01Jan2015, 08:09	4.05
Subbasin-4	0.0078	6.6	01Jan2015, 07:59	5.05
Discharge Pt A	0.1218	68.2	01Jan2015, 08:09	4.45

Project: EDC-CAO Sheriffs Simulation Run: 100-yr Post
Reservoir: Det Pond

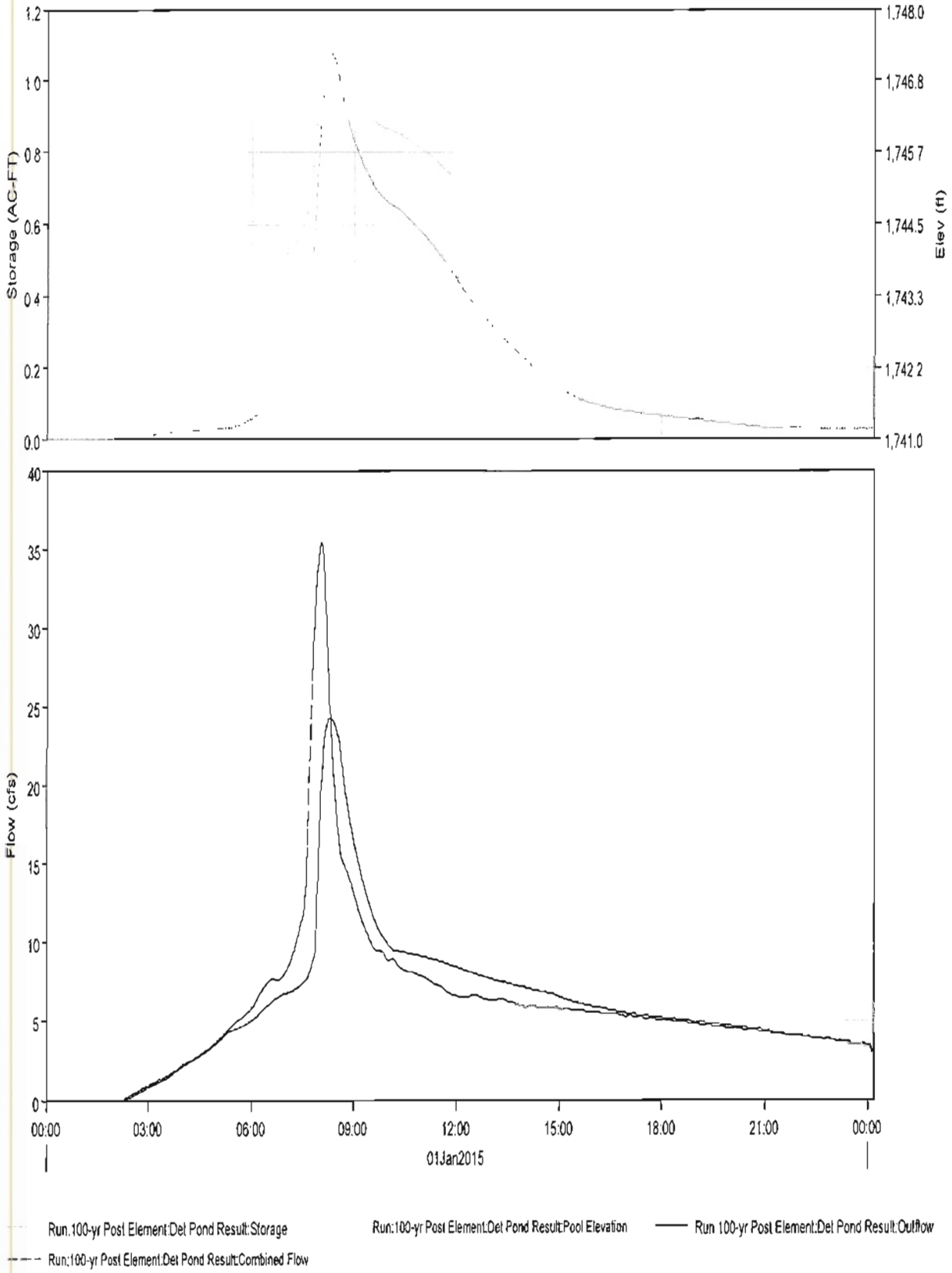
Start of Run:	01Jan2015, 00:00	Basin Model:	Sheriff Post
End of Run:	02Jan2015, 00:10	Meteorologic Model:	100 yr
Compute Time:	12Jul2015, 16:15:32	Control Specifications:	Post-Devel

Volume Units:IN

Computed Results

Peak Inflow:	35.4 (CFS)	Date/Time of Peak Inflow:	01Jan2015, 08:02
Peak Discharge:	24.3 (CFS)	Date/Time of Peak Discharge:	01Jan2015, 08:18
Inflow Volume:	4.97 (IN)	Peak Storage:	1.1 (AC-FT)
Discharge Volume:	4.96 (IN)	Peak Elevation:	1747.3 (FT)

Reservoir "Det Pond" Results for Run "100-yr Post"



Project: EDC-CAO Sheriffs Simulation Run: 10-yr Future

Start of Run: 01Jan2015, 00:00 Basin Model: Sheriffs Future
End of Run: 02Jan2015, 00:10 Meteorologic Model: 10 Yr
Compute Time: 12Jul2015, 16:18:09 Control Specifications: Future-Devel

Hydrologic Element	Drainage Area (MI2)	Peak Discharge (CFS)	Time of Peak	Volume (IN)
Subbasin-1	0.0295	18.0	01Jan2015, 08:03	3.80
Subbasin-2	0.0147	7.6	01Jan2015, 08:01	3.19
Det Pond	0.0442	15.6	01Jan2015, 08:22	3.59
Subbasin-4	0.0078	4.1	01Jan2015, 07:59	3.20
Subbasin-3	0.0698	27.6	01Jan2015, 08:10	2.80
Discharge Pt A	0.1218	43.9	01Jan2015, 08:13	3.11

Project: EDC-CAO Sheriffs Simulation Run: 10-yr Future
Reservoir: Det Pond

Start of Run:	01Jan2015, 00:00	Basin Model:	Sheriffs Future
End of Run:	02Jan2015, 00:10	Meteorologic Model:	10 Yr
Compute Time:	12Jul2015, 16:18:09	Control Specifications:	Future-Devel

Volume Units:IN

Computed Results

Peak Inflow:	25.6 (CFS)	Date/Time of Peak Inflow:	01Jan2015, 08:02
Peak Discharge:	15.6 (CFS)	Date/Time of Peak Discharge:	01Jan2015, 08:22
Inflow Volume:	3.60 (IN)	Peak Storage:	0.8 (AC-FT)
Discharge Volume:	3.59 (IN)	Peak Elevation:	1746.5 (FT)

Project: EDC-CAO Sheriffs Simulation Run: 100-yr Future

Start of Run: 01Jan2015, 00:00 Basin Model: Sheriffs Future
End of Run: 02Jan2015, 00:10 Meteorologic Model: 100 yr
Compute Time: 12Jul2015, 16:14:11 Control Specifications: Future-Devel

Hydrologic Element	Drainage Area (MI2)	Peak Discharge (CFS)	Time of Peak	Volume (IN)
Subbasin-1	0.0295	27.0	01Jan2015, 08:03	5.72
Subbasin-2	0.0147	12.2	01Jan2015, 08:01	5.05
Det Pond	0.0442	27.0	01Jan2015, 08:17	5.49
Subbasin-4	0.0078	6.6	01Jan2015, 07:59	5.05
Subbasin-3	0.0698	46.9	01Jan2015, 08:09	4.59
Discharge Pt A	0.1218	77.7	01Jan2015, 08:09	4.95

Project: EDC-CAO Sheriffs Simulation Run: 100-yr Future
Reservoir: Det Pond

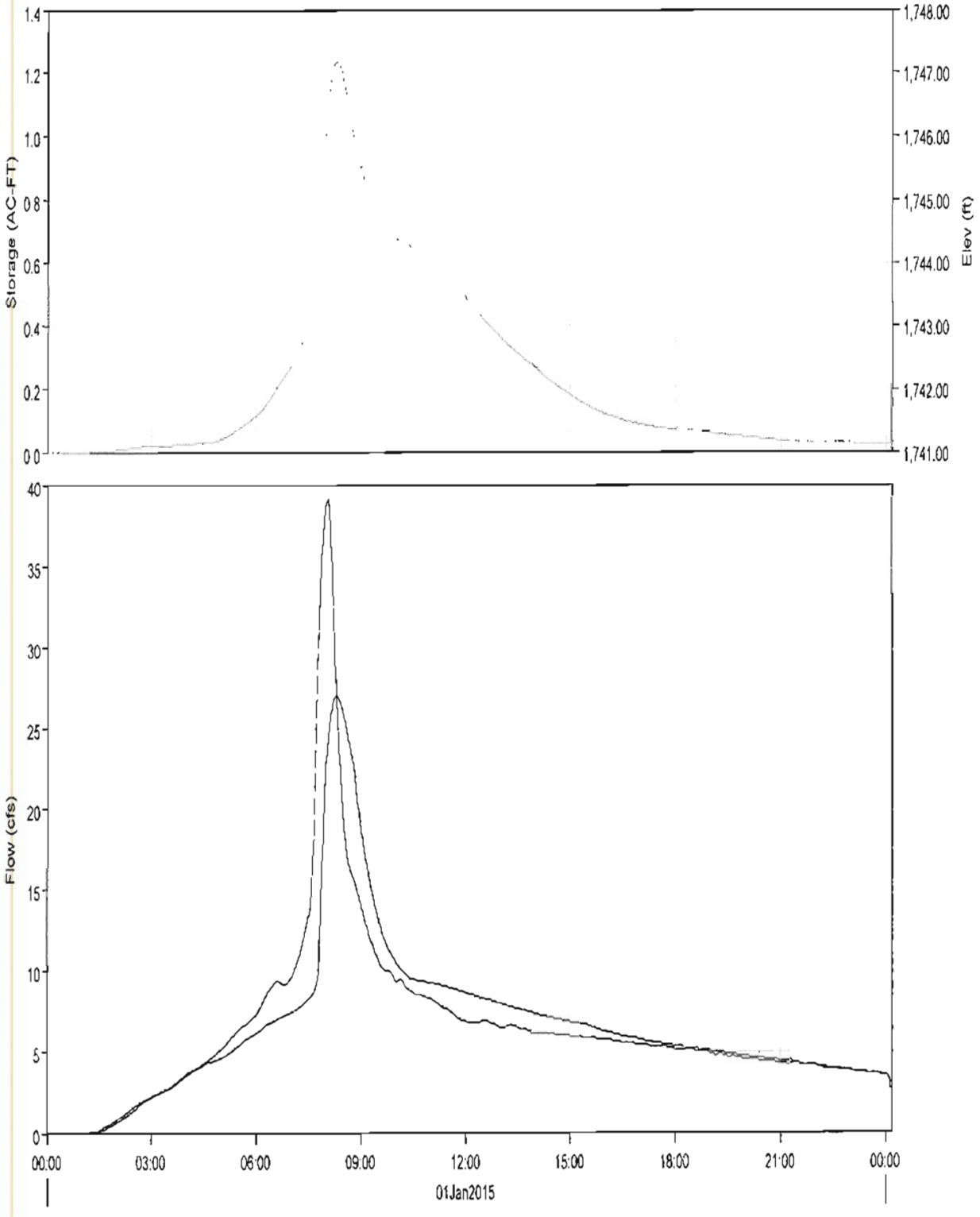
Start of Run:	01Jan2015, 00:00	Basin Model:	Sheriffs Future
End of Run:	02Jan2015, 00:10	Meteorologic Model:	100 yr
Compute Time:	12Jul2015, 16:14:11	Control Specifications:	Future-Devel

Volume Units:IN

Computed Results

Peak Inflow:	39.1 (CFS)	Date/Time of Peak Inflow:	01Jan2015, 08:02
Peak Discharge:	27.0 (CFS)	Date/Time of Peak Discharge:	01Jan2015, 08:17
Inflow Volume:	5.50 (IN)	Peak Storage:	1.2 (AC-FT)
Discharge Volume:	5.49 (IN)	Peak Elevation:	1747.7 (FT)

Reservoir "Det Pond" Results for Run "100-yr Future"



WATER QUALITY

LOW IMPACT DEVELOPMENT (LID) AND BIORETENTION STANDARDS
TO BE UTILIZED IN PROJECT DESIGN

Central California Coast
Technical Assistance Memo

LID Parking Lots

Low Impact Development

slow flow
reduce runoff
improve water quality

Before the Central Coast was developed, the natural landscape, vegetation, and soils were virtually undisturbed. Under these pre-development conditions, as much as 50% of rainwater was infiltrated into the soil replenishing groundwater supplies, contributing to stream flows and sustaining vegetation, another 40% was released into the atmosphere through evapotranspiration. Only about 10% of rainwater contributed to stormwater runoff (rainwater that flows over the land surface). Today, our urban landscape has more impervious surfaces (hard surfaces that do not allow water to pass through) such as roofs, streets, sidewalks and parking areas. The increase in impervious surfaces has caused the amount and rate of stormwater runoff to be greater than pre-development conditions. These increased stormwater flows can cause flooding, road damage and erosion to natural streams and rivers. Runoff also carries pollutants from the surrounding watershed such as pesticides, bacteria, oils, metals and sediments that can make waters unsafe for recreational use and wildlife.

Source: City of Paso Robles, Salinas River Aerial

One of the ways to reduce the negative impacts of stormwater runoff is to change the way we approach development. The use of Low Impact Development (LID) strategies can help to protect and enhance the environmental quality of our rivers, creeks and watersheds. LID is a site design approach that uses techniques to slow and infiltrate stormwater, mimicking the natural, pre-development hydrology. LID design strategies can be applied to most new or redevelopment projects to meet stormwater regulations, reduce downstream flooding and protect natural resources

This Technical Assistance Memo (TAM) provides guidance for designing LID or "green" parking lots. The amount of impervious surface and heavy automobile use associated with parking lots makes them a significant source of stormwater runoff and pollutants. Incorporating LID strategies into new or retrofit parking lots supports our community and environment.

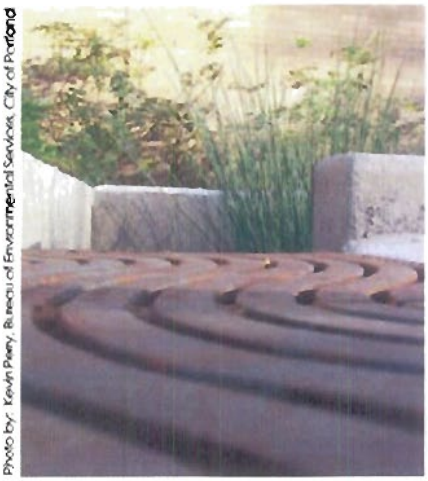
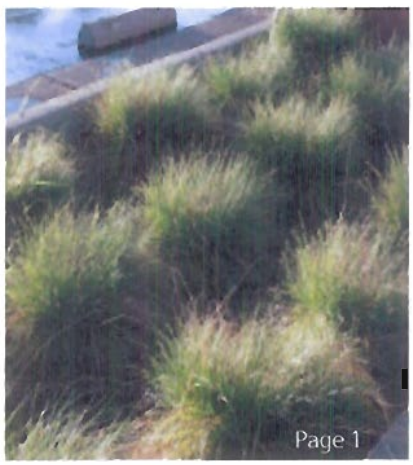


Photo by: Kevin Perry, Bureau of Environmental Services, City of Portland



Design Strategy: Structural Controls

Bioretention and pervious pavements are the most common LID features utilized for parking lot stormwater management. Bioretention facilities can be configured in nearly any shape and pervious pavements come in a variety of styles, colors and finishes making them flexible ways to achieve the desired performance.

Bioretention

Bioretention systems: Planted areas designed to filter, store and infiltrate stormwater, utilizing mulch, soil and plant root systems, to retain, degrade and absorb pollutants. The use of an engineered soil mix and appropriate vegetation is crucial to performance. Generally, three feet of separation is required between the lowest elevation of the bioretention system and the seasonal high groundwater elevation. Where infiltration into underlying native soils is not appropriate, a perforated underdrain can convey treated runoff to a storm drain or surface drainage. Note that systems using perforated underdrains provide limited flow control. Bioretention areas may be stand-alone features, or linked in a treatment train.

Photo Source: Franco Associates Architects, Dr. Roberto Cruz Alum Rock Branch, San Jose Library

Bioretention swales and rain gardens: Shallow bioretention areas with sloped sides. Bioretention swales are long and narrow with a gradual longitudinal slope that conveys stormwater. Rain gardens have a flat bottom with sloped sides and can be designed in many shapes and sizes.

Bioretention or stormwater planters: Small, contained bioretention areas where treated stormwater is infiltrated into the ground (Infiltration Planter) or, discharged to a traditional stormwater drainage system (Flow-Through Planter). Bioretention planters are flat bottomed with consistent soil depth and inundation across the planter. They are often used where space is limited.

Pervious Paving

Pervious pavement systems: Pavement comprised of a permeable surface with an underlying aggregate base course. Stormwater infiltrates through the surface and is either stored, or infiltrates where soils permit. For example, a 4-inch deep base course provides approximately 1.6 inches of rainfall storage. Pervious pavements installed over clay soils may require a deeper aggregate base and an underdrain system.

Pervious concrete: A mixture of course aggregate, portland cement, water and little to no sand results in concrete pavement with 15% to 25% void spaces, allowing stormwater to infiltrate at a rate of 200 – 400 inches/hour, depending upon fines included in the mix. The texture looks courser than conventional concrete.

Photo Source: SVR Design

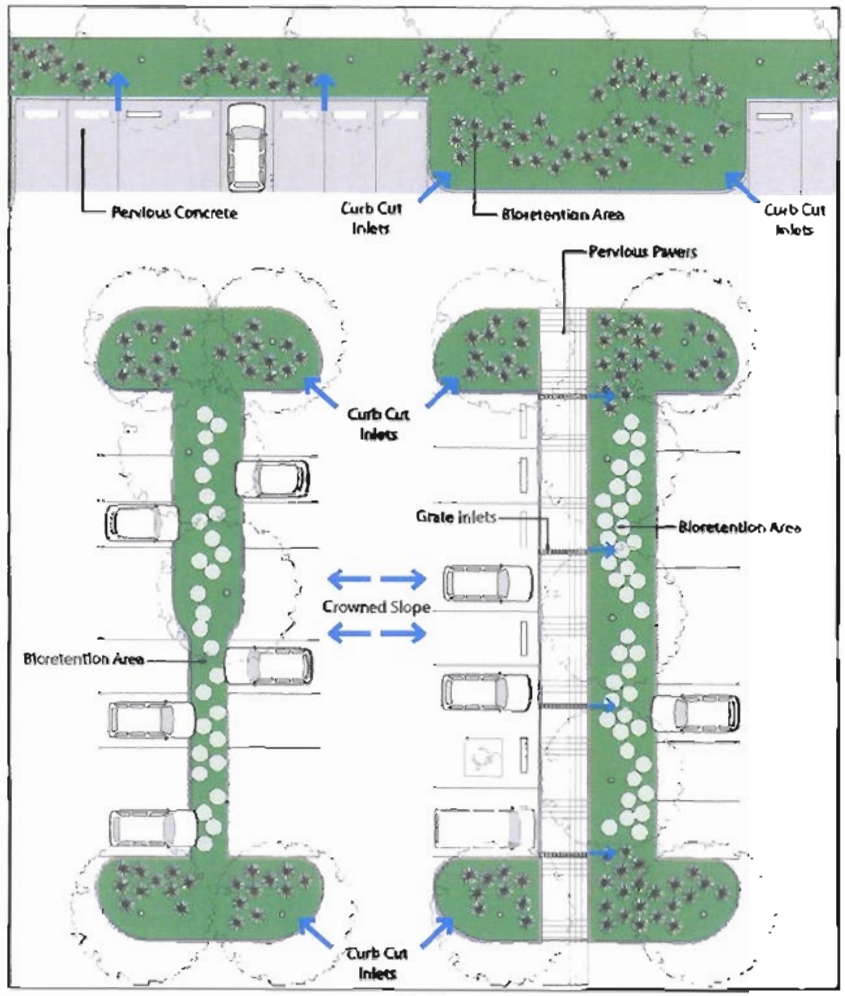
Pervious asphalt: An open graded asphalt concrete poured over a free draining aggregate base. It looks like traditional asphalt, but the fine grains have been screened and removed to achieve a void space of approximately 16%, allowing for stormwater infiltration.

Photo Source: Friends of Five Creeks

Pervious pavers: Unit pavers that lock together to form a durable and stable driving surface. When installed over free draining bedding material, the sub-surface allows for water quality treatment, stormwater storage and infiltration, where soils permit.

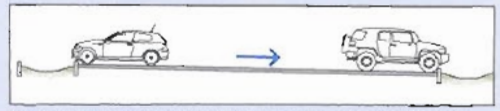
Anatomy of a LID Parking Lot

The design of a LID parking lot begins with a thorough site analysis taking into consideration existing conditions such as soils, site grades and mature trees. Using this information, LID parking lot design emphasizes an efficient layout to minimize impervious surfaces and uses site grading to direct runoff to landscaped areas where LID strategies can be utilized. It is important to integrate LID early in the project planning process to achieve the most cost effective design. Also, applicants should coordinate with their city planning staff to integrate the LID design with a project's development application. After project construction, regular maintenance of LID features is crucial for long-term performance and aesthetics. For further information related LID design and maintenance requirements, see the Resources section on the back page of this TAM.

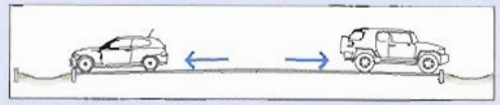


Design Strategy: Site Design

Grading and drainage for LID parking lots directs runoff to bioretention and pervious pavement areas. When designing large parking lots, it is best to break up and direct flows to multiple LID features. During the grading process, care should be taken to avoid compaction of areas identified for bioretention areas.



Continuous cross slope conveys the full aisle to an adjacent swale.



Crowned slope conveys half of each aisle to the adjacent swale.

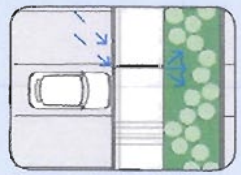
Inlets and outlets direct runoff into, and out of, bioretention areas. Proper placement of inlets helps to spread runoff over the bioretention planting areas, which slows the flow and reduces erosion. Outlet, including overflow, structures direct excess runoff to the storm drain system or street. During construction, avoid placing overflow structures flush with the soil, which prevents the desired retention of stormwater in the bioretention area.

Source: Illinois Environmental Protection

A curb cut inlet directs stormwater runoff into a biofiltration planter.

Source: Bill DePolo

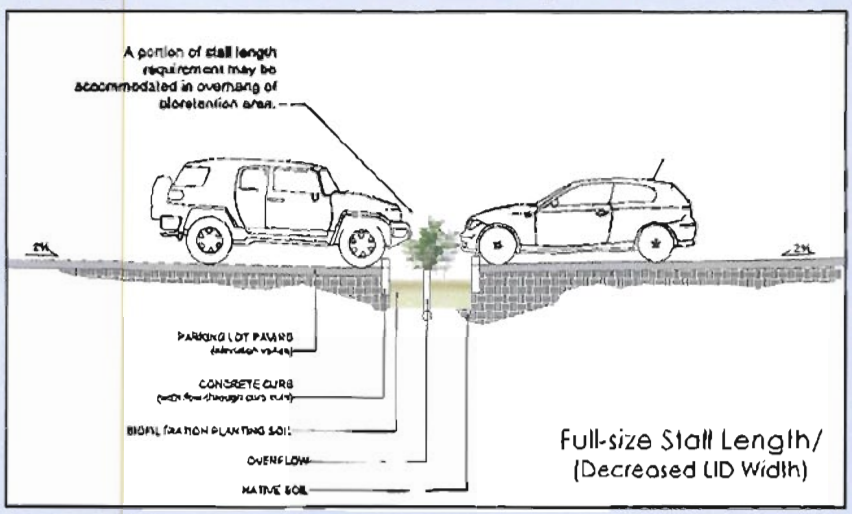
An overflow outlet conveys runoff that exceeds the bioretention area capacity.



A patterned steel grate inlet conveys flow under a pedestrian walkway.

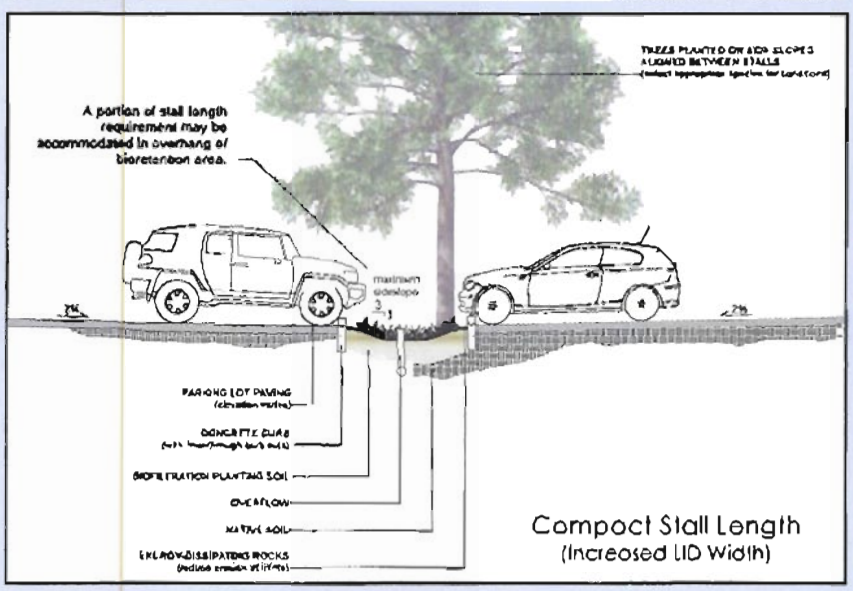
Photo Source: Kevin Perry, Bureau of Environmental Services, City of Portland

Parking Configurations for LID parking lots can include the elimination of unneeded parking stalls and careful sizing and layout of planned stalls. Parking configurations can be adapted to meet both parking and stormwater mangement needs by sizing bioretention swales to fit with compact and full-sized parking stalls.



In this retrofit example, a narrow bioretention planting strip replaces pavement under the vehicle overhang space, accommodating full-size parking stalls. Some bioretention planting strips may be too narrow to include trees.

Source: SvR Design



Considerations for tree placement in bioretention areas:

- Locate trees on side slopes, above areas that pond.
- Select trees that will tolerate seasonally wet soils.
- Do not specify trees with invasive roots.

Source: SvR Design

This parking lot has both full and compact length stalls. The width of the bioretention area increases where parking stall size is decreased to compact.

Additional Resources

There is a wealth of information available on-line related to LID. The references below are good starting points for LID site planning and design.

- The Low Impact Development Manual for Southern California: Technical Guidance and Site Planning Strategies
  http://www.casqa.org/LID/tabid/186/Default.aspx
- The California Stormwater Quality Association (CASQA) BMP Handbook for New Development and Redevelopment
  http://www.cabmphandbooks.com/
- Contra Costa Clean Water Program (C3 Guidebook)
  http://www.cccleanwater.org/c3.html
- City of Santa Barbara. Storm Water BMP Guidance Manual
  http://www.santabarbaraca.gov/Resident/Major_Planning_Efforts/Storm_Water_Management_Program/

UC Davis LID Initiative

skeo

LEGAL DISCLAIMER: This Technical Assistance Memo (TAM) is intended as guidance only and should not be used as a substitute for site specific design and engineering. Applicants are responsible for compliance with all code and rule requirements, whether or not described in this TAM.

Central California Coast
Technical Assistance Memo (TAM)

LID Plant Guidance for Bioretention

Low Impact Development

This Technical Assistance Memo (TAM) provides plant selection guidance for the most common bioretention features, such as bioretention swales, stormwater planters and rain gardens. Bioretention systems are low impact development (LID) features that use landscaped areas to slow, treat, retain and infiltrate stormwater runoff, mimicking the natural, pre-development hydrology of a site.

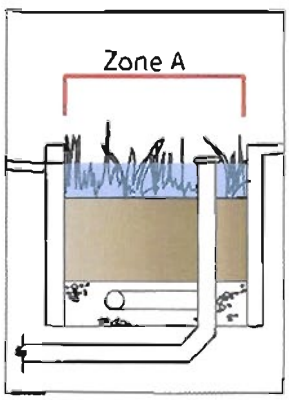
The intent of this TAM is to offer designers, municipalities, developers and homeowners with guidelines for selecting plants for bioretention areas, including a list of appropriate species for the Central Coast. Bioretention systems look like regular landscaped areas, but are designed (engineered) to manage stormwater runoff created by urbanization. Specifying the appropriate plants and soil mix for a bioretention system is critical to its function.

This step-by-step guidance is specific to LID landscapes and will take you from plant selection and layout to installation and on-going maintenance. This guidance is intended to accompany standard landscape methods and point out areas where LID methods may differ.

Step 1: LID Type and Plant Selection

Surface grade and **ponding area** of a bioretention structure are the first factors to consider when choosing which plants to specify. Is the soil surface of the structure sloped or uniform? Stormwater planters and some rain gardens have uniform surface grades. In these designs, ponding will be equal across the structure and all plants will have the same conditions (Zone A). In bioretention swales and some rain gardens, soil surface is sloped, resulting in differing planting conditions across the structure (Zones A and B). Plants located at the bottom where ponding occurs, will have different requirements than those placed on the sideslopes, which receive runoff, but not ponding. A third planting area may occur outside of Zones A and B, on the upper edges of rain gardens and bioswales. This area is not a functional component of the bioretention area, and therefore can be treated as a traditional landscape area.

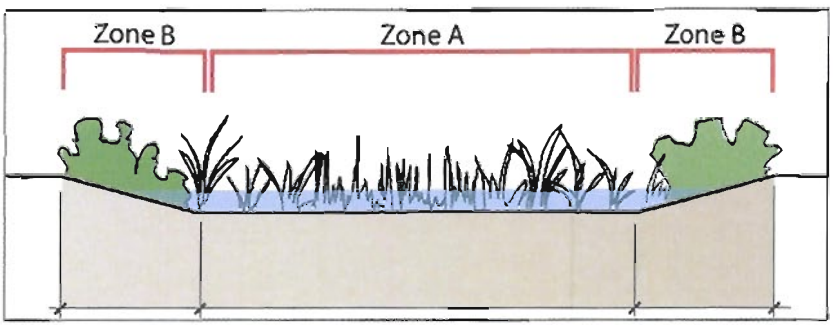
Source: AHBE Landscape Architects



Uniform surface grade: This stormwater planter has a flat bottom with consistent depth of ponding across the structure. All of the plants selected for this design must be tolerant of periodic inundation (Zone A).

Varying slope and ponding levels: Varying slope and ponding levels: This bioretention planting area has sloped edges. Plants in the bottom area will be inundated during storms (Zone A). Those planted on the sideslopes are above the level of ponding, but will experience seasonally wet conditions (Zone B).

Source: Rama Creek



Step 2: Plant Species Selection

Once the plant zones are identified (Zone A only or both Zone A and Zone B) for a structure, the plants may be selected. This TAM includes a plant list for bioretention areas (Table 1). There exist other LID plant lists for California and the Central Coast, but this "short list" was refined based on the following criteria: 1) Tolerant of varied moisture conditions (wet and dry), 2) tolerant of varied soil types and growing conditions, 3) available in Central Coast plant nurseries, 4) low maintenance requirements, 5) are not invasive weeds, 6) do not have aggressive/invasive root systems, and 6) exhibit an attractive appearance. When selecting plants from a list, additional site-specific information, such as tolerance to high and low temperatures, coastal conditions and prevailing winds should be considered. In addition, project specific aspects of the design, for example right-of-way vegetation height limits, approved street and parking lot tree lists and fire hazard landscape requirements may further influence selection. Although this plant list includes some non natives, using native plants is highly recommended because of the wide range of benefits they offer (food and forage for native wildlife, adaptation to local climate, low/no water use once established). Knowledge of invasive species is constantly evolving. To avoid specifying noxious plants on a project, check the California inventory at www.cal-ipc.org. Local agencies may also track potential invasives for your area.

Leymus condensatus 'Canyon Prince': This selection grows to 3' and is tolerant of a wide range of conditions, including drought, seasonal wet conditions, poor soils and some shade.

Achillea millefollum: A native perennial that attracts pollinators and is tolerant of poor soils, seasonal flooding and deer. Available in many flower colors.

Source: Native Sons Nursery

Muhlenbergia rigens: A native grass with dense bright, grey-green, evergreen foliage. It tolerates a range of soils, sun to part-shade, seasonal flooding and drought

Source unless noted: Los Pilitas Nursery

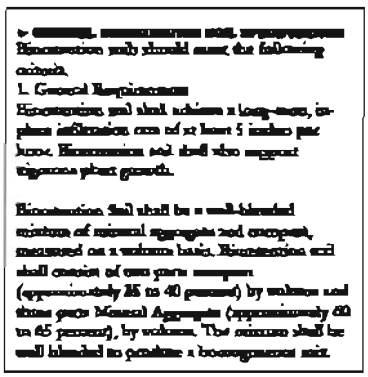
Juncus patens: An easy to grow native rush. It tolerates poor drainage, flooding, drought and shade. A strong performer in bioretention areas, more drought tolerant than J. effusus

Step 3: Soil Specification for Biofiltration

Specifying the correct soils for bioretention areas is critical in order to achieve stormwater objectives and plant health. Soils must balance three primary design objectives: 1) High enough infiltration rates to meet surface water draw down requirements, 2) infiltration rates that are not so high that they preclude pollutant removal function of soils and 3) soil composition that supports plant establishment and long-term health.

Landscape design documents for LID projects must include a bioretention soil specification that specifies the exact materials to be used in the mix (aggregates and compost), the percent of each material included in the mix, how they are to be placed (i.e. in 8" to 12" lifts) and the soil mix depth. Sample bioretention soil specifications and detailed information on BMP design and construction may be found in the LID documents listed under Additional Resources in this TAM.

Organic Compost: A main ingredient of biofiltration soil mixes, compost is the product of natural decomposition of organic wastes by bacteria, fungi, worms and other beneficial organisms. Compost increases the soil's water holding capacity and improves soil structure, nutrient levels and biology, all of which support plant health.



[redacted]

1. General Requirements

[redacted]

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Bioretention Soil Mix: Construction documents for any LID project should include specifications for the bioretention soil mix that define the ratio of materials in the mix, and the content, gradation, quality analysis and other requirements for each of the materials. Specifications will also provide guidelines for blending and placement of the soil mix.

Table 1. Plants for Bioretention Areas[1]

Zone A: Periodic inundation, area ponds following storm events (24 - 72 hours).

Zone B: Above area of ponding, side slope areas receive runoff, but are never inundated.

Common Name	Scientific Name	Zone(s)	Height/ Width	Light	Notes:	Climate Zones[2]
Trees						
Western Redbud	*Cercis occidentalis*	B	20'/20'	sun	small tree or large shrub. tolerates clay, winter wet, drought. flowers stronger with sun	all but coastal
Desert Willow	*Chilopsis linearis*	B	25'/30'	sun	tolerates alkaline soil, sand, clay, seasonal flooding and drought. not coastal condition	all, but 1A-3A
Western Sycamore	*Platanus racemosa*	B	40'-80'/40'-70'	sun	tolerates sand and clay soils. seasonal flooding, needs space to grow, avoid underground water/sewer pipes	all, but 1A-3A
Coast Live Oak	*Quercus agrifolia*	B	25'-60'/40'-70'	sun - shade	tolerates drought and winter wet conditions. mature trees produce significant litter limiting understory plantings. need space to grow	all, but 1A-3A
Large Shrubs						
Toyon, Christmas Berry	*Heteromeles arbutifolia*	B	8'-20'/8'-20'	sun-pt shade	tolerates sand, clay and serpentine soils. seasonal water with good drainage	all, but 1A-3A
Pacific Wax Myrtle	*Myrica californica*	B	10'-30'/10'-30'	sun-pt shade	large shrub or small tree. tolerates coastal conditions, sand, clay and seasonal inundation	all, but 1A-3A
Western Elderberry	*Sambucus mexicana*	B	10'-30'/8'-20'	sun-pt shade	large shrub to tree. tolerates clay, seasonal flooding and drought, good wildlife food source	all, but 1A-3A
Shrubs and Subshrubs						
Coyote Brush	*Baccharis pilularis*	B	wide variation	sun	adaptable evergreen shrub, provides quick cover and bank stabilization, tolerant of coastal conditions, alkaline soil, sand, clay and seasonal wet	all, but 1A-3A
California Wild Rose	*Rosa californica*	A,B	3'-6'/spreads	sun-pt shade	tolerates a wide variety of soils, seasonal flooding and some drought, spreads aggressively, avoid edges of walkways because of thorns	all
Perennials						
Yarrow	*Achillea millefolium*	B	1'-3'/2'	sun-pt shade	tolerates alkaline soil, sand, clay, seasonal wet conditions, foot traffic and deer, will self sow	all
Beach Strawberry	*Fragaria chiloensis*	B	2-4'/spreads	sun-pt shade	vigorous spreading groundcover, tolerates sand, clay, wet conditions, prefers good drainage	all, but 1A-3A
Douglas Iris	*Iris douglasiana*	B	1.5-3'/spreads	sun - shade	tolerates sand, clay and serpentine soils, seasonal wet (but not soggy) soils and drought	all, but 1A-3A
Hummingbird Sage	*Salvia spathacea*	B	1'-3'/4'-5'	pt sun-pt shade	low growing perennial, tolerates clay, winter wet, summer drought, prefers light shade, provides nectar for birds and insects, does well under oaks	all, but 1A-3A
Bog Sage	*Salvia uliginosa**	B	3'-4'/spreads	sun	quick growing, spreading perennial, tolerates wet to dry, cut back winter, divide rhizomes	all, but 1A-3A
Blue-eyed Grass	*Sisyrinchium bellum*	B	6"-1'/6"-1'	sun	a semi-evergreen perennial, tolerates sand, clay, seasonal wet soils and deer, dormant in summer, but can be delayed with supplemental irrigation	all, but 1A-3A
California Goldenrod	*Solidago californica*	B	1'-4'/1'-4'	sun-pt shade	tolerates poor soils, seasonal wet and drought, can spread aggressively if over irrigated	all, but 2A
Grasses and Grass-like Plants						
Berkeley Sedge, Grey Sedge	*Carex divulsa**	A,B	12"-18"/12"-18"	sun-pt shade	tolerates foot traffic, some drought and boggy soils	all, but 1A-3A
California Meadow Sedge	*Carex pansa*	A,B	6"-12"/spreads	sun - shade	good lawn substitute, tolerates wide range of growing conditions, seasonal inundation, drought, foot traffic and mowing	all, but 1A-3A
Clustered Field Sedge	*Carex praegracilis*	A	1'/spreads	sun-pt shade	useful lawn substitute and bank stabilizer, good planted in masses, tolerates wide range of growing conditions, foot traffic and mowing, may look weedy when mixed with other plants	all, but 1A-3A
San Diego Sedge	*Carex spissa*	A	3'-6'/2'-5'	pt sun-shade	a large grass, tolerates alkaline soil, clay, serpentine, seasonal inundation, and deer	all, but 1A-3A
Small Cape Rush	*Chondropetalum tectorum**	A,B	2'-3'/3'-4'	sun-pt shade	A tough, attractive reed-like plant, tolerates boggy or clay soils and drought once established, Chondropetalum elephantinum is a much larger species	all but 1A, 2A, 3A, 7
Molate Red Fescue	*Festuca rubra 'Molate'*	A,B	8"-12"/spreads	pt sun-shade	a tufted, spreading bunchgrass, good lawn substitute, provides erosion control, tolerates wet conditions, but looks best with regular water, tolerates drought once established	all
Soft Rush	*Juncus effusus*	A	2-3'/2-3'	sun-pt shade	tolerates poor drainage, heavy soils, needs more supplemental water than Juncus patens	all
Wire Grass, Blue Rush	*Juncus patens*	A	1'-2'/1'-2'	sun - shade	strong performance in bioretention area, tolerates poor drainage, seasonal inundation, drought, shade	all, but 1A-3A
Canyon Prince Wild Rye	*Leymus condensatus 'Canyon Prince'*	B	2'-3'/spreads	sun-pt shade	tolerates drought, wet, but not soggy soils, looks best with supplemental irrigation, spreads by rhizomes	all, but 1A-3A
Deer Grass	*Muhlenbergia rigens*	B	4'-5'/4'-6'	sun-pt shade	a large grass, tolerates sandy and clay soils, seasonal inundation, best when cut back annually to remove old thatch	all, but 1A-3A

[1] See: www.centralcoastlid.org for a photo gallery of the plants in this list.

[2] Refers to Sunset Western Garden Book Climate Zones. The Central Coast includes Zones 1A, 2A, 3A, 7, 9, and 14-24. www.sunset.com/garden/climate-zones

* Indicates non native species. Non natives are only recommended for use in urbanized settings and should not be used on sites in proximity to natural areas

Step 4: Plant Establishment and Care

Like traditional landscapes, LID planting areas require care and ongoing maintenance for optimal health. Due to the functional nature of LID landscapes and their connectivity to natural receiving water bodies, there are some differences between conventional landscape maintenance and LID maintenance.

Irrigation is an important aspect of any landscape establishment. Typically new plantings need two to three years of irrigation to become established. After that period, native plants will need little to no supplemental irrigation to survive. Plants may enter a dry season dormancy, which affects their appearance. Where this "dry look" is not desired, summer irrigation may be utilized. Systems should include a weather-based controller to avoid watering

during wet weather. Because bioretention soils are formulated to infiltrate, irrigation application rates must be properly designed to avoid overwatering and prevent potential discharges via underdrains.

Compost Mulch (1" - 2") should be applied to bioretention areas to retain moisture, prevent erosion and suppress weed growth. Reapply annually as the mulch breaks down. Use a specified compost mulch and avoid bark mulches that can float during storm events.

Fertilizer should not be used in bioretention areas. Instead, a compost top dressing or application of compost tea can be used to introduce nutrients and beneficial microorganisms to the soil. Apply compost mulch once per year in spring or fall or spray apply compost tea once per year between March and June.

Synthetic herbicides and pesticides should not be used in bioretention areas because of their potential toxicity risk to aquatic organisms. There are a variety of natural methods and products that can be used to control weeds and pests. See the technical manuals included under Additional Resources.

Plant Establishment and Care (cont.)

Source: SvR Design Company

Provide extra support to trees planted in bioretention areas, especially in high wind areas. They should be securely staked during establishment and inspected once or twice a year and following storm events. Stakes should be removed as soon as they are no longer needed to stabilize the tree (between one and two years).

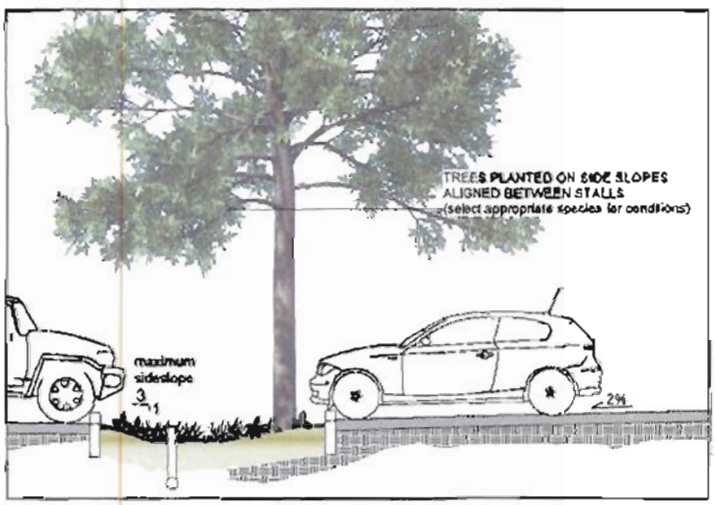
Weeds compete with plants for nutrients, water and sunlight. They should be regularly removed, with their roots, by hand pulling or with manual pincer-type weeding tools. Care should be given to avoid unnecessary compaction of soils while weeding.

Replace plants that die due to unsuitable plant conditions, disease, underwatering or other unforeseen issues. Dead and dying plants must be removed and replaced to avoid spreading disease, establishment of weeds in bare areas and reduced LID function. Before replacing with the same species, determine if another species may be better suited to the conditions.

Tree Placement Guidance

Including trees in bioretention areas provides additional aesthetic and performance benefits. Following these guidelines will maximize their success and survival:

- Provide sufficient landscape width (a rule of thumb is 8' min.)
- Locate trees on the side slopes (Zone B), not in areas that pond (Zone A). Trees improperly located, in narrow planters that pond, are unlikely to thrive and may eventually fail.
- Select trees that will tolerate seasonally wet soils
- Do not specify trees with invasive roots.



Guidelines for Municipalities

Project managers who are preparing RFPs or bid packages for public projects that include bioretention systems should clearly define expectations for the following:

- Bioretention soil mix specification
- Guidance for plant species selection
- Appropriate plant zone placement
- Operations and maintenance protocols

To assist in defining vegetative requirements for LID projects, Central Coast municipalities may use this TAM as a reference or attachment to their project description.

Plant Nurseries

This is a partial list of Central Coast nurseries who regularly stock the plants included in this TAM.

Source: Las Pilitas Nursery

- Central Coast Wilds, Santa Cruz
  831-459-0656
  www.centralcoastwilds.com
- Las Pilitas, Santa Margarita
  805-438-5992
  www.laspilitas.com
- Native Sons, Arroyo Grande
  805-481-5996
  www.nativesonsnursery.com
- Rana Creek, Carmel Valley
  831-659-3820
  www.ranacreeknursery.com
- San Marcos Growers, Santa Barbara
  805-683-1561
  www.sanmarcosgrowers.com
- Santa Barbara Natives, Santa Barbara
  805-698-4994
  www.sbnatives.com

Additional Resources

- The Low Impact Development Manual for Southern California: Technical Guidance and Site Planning Strategies
  http://www.casqa.org/LID/tabid/186/Default.aspx
- The California Stormwater Quality Association (CASQA) BMP Handbook for New Development and Redevelopment
  http://www.cabmphandbooks.com/
- Contra Costa Clean Water Program (C3 Guidebook)
  http://www.cccleanwater.org/c3.html
- City of Santa Barbara: Storm Water BMP Guidance Manual
  http://www.santabarbaraca.gov/Resident/Major_Planning_Efforts/Storm_Water_Management_Program/

For additional resources on bioretention plant guidance:

www.centralcoastlidi.org

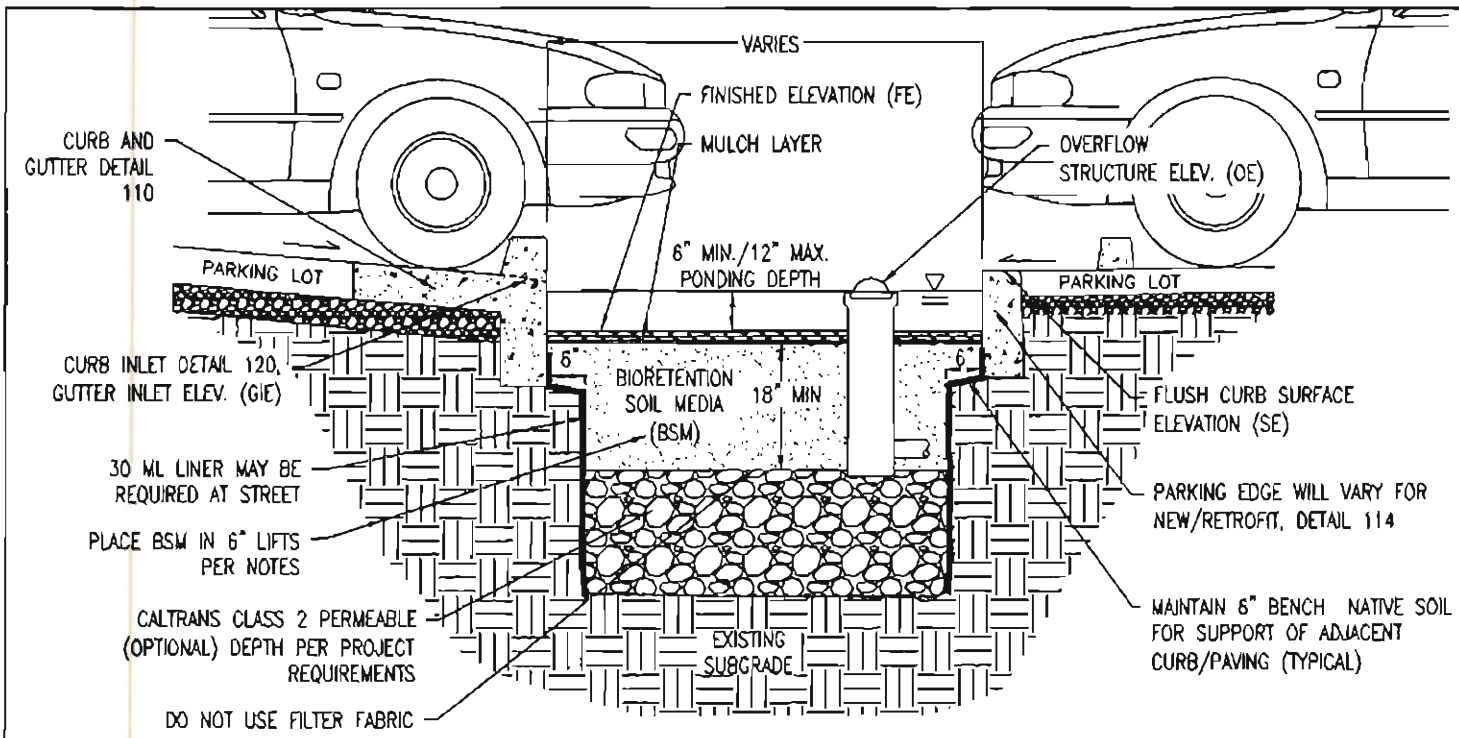
For questions or to contact the
Central Coast Low Impact Development Initiative:

info@centralcoastlidi.org

Central Coast Water Board

UC Davis LID Initiative

LEGAL DISCLAIMER: This Technical Assistance Memo (TAM) is intended as guidance only and should not be used as a substitute for site specific design and engineering. Applicants are responsible for compliance with all code and rule requirements, whether or not described in this TAM.



DESIGN NOTES

1. ADDITIONAL DESIGN GUIDANCE PROVIDED IN BIORETENTION TECHNICAL SPECIFICATIONS DOCUMENT.
2. OVERFLOW STRUCTURE REQUIRED FOR IN-LINE SYSTEMS WITHOUT OVERFLOW BYPASS, DETAIL 140.
3. PROVIDE SPOT ELEVATIONS AT INLETS ON CIVIL PLANS (FE, OE, GIE, SE). SEE DETAIL 120.
4. EDGE CONDITION WILL VARY FOR PARKING LOT PROJECTS. SEE PARKING LOT EDGE OPTIONS DETAILS, 114. CURB AND FLUSH EDGE DETAILS MAY BE MODIFIED FOR PROJECT BY CIVIL AND GEOTECHNICAL ENGINEERS.
5. IF CHECK DAMS ARE NEEDED, SEE CONCRETE CHECK DAM DETAIL 131.
6. PROVIDE MONITORING WELL IN EACH FACILITY, PER BIORETENTION TECHNICAL SPECIFICATIONS.
7. IF CALTRANS CLASS 2 PERMEABLE IS NOT AVAILABLE, SUBSTITUTE CLASS 3 PERMEABLE WITH AN OVERLYING 3" DEEP LAYER OF 3/4" (NO. 4) OPEN-GRADED AGGREGATE.
8. BIORETENTION SOIL MEDIA (BSM) SPECIFICATION PER BIORETENTION TECHNICAL SPECIFICATIONS.
9. PLANTING DESIGN AND IRRIGATION PER BIORETENTION TECHNICAL SPECIFICATIONS.
10. MULCH (OPTIONAL) PER BIORETENTION TECHNICAL SPECIFICATIONS.
11. LOCATE ENERGY DISSIPATION COBBLE ONLY AS SPECIFIED IN INLET DETAILS – AVOID DECORATIVE USE.

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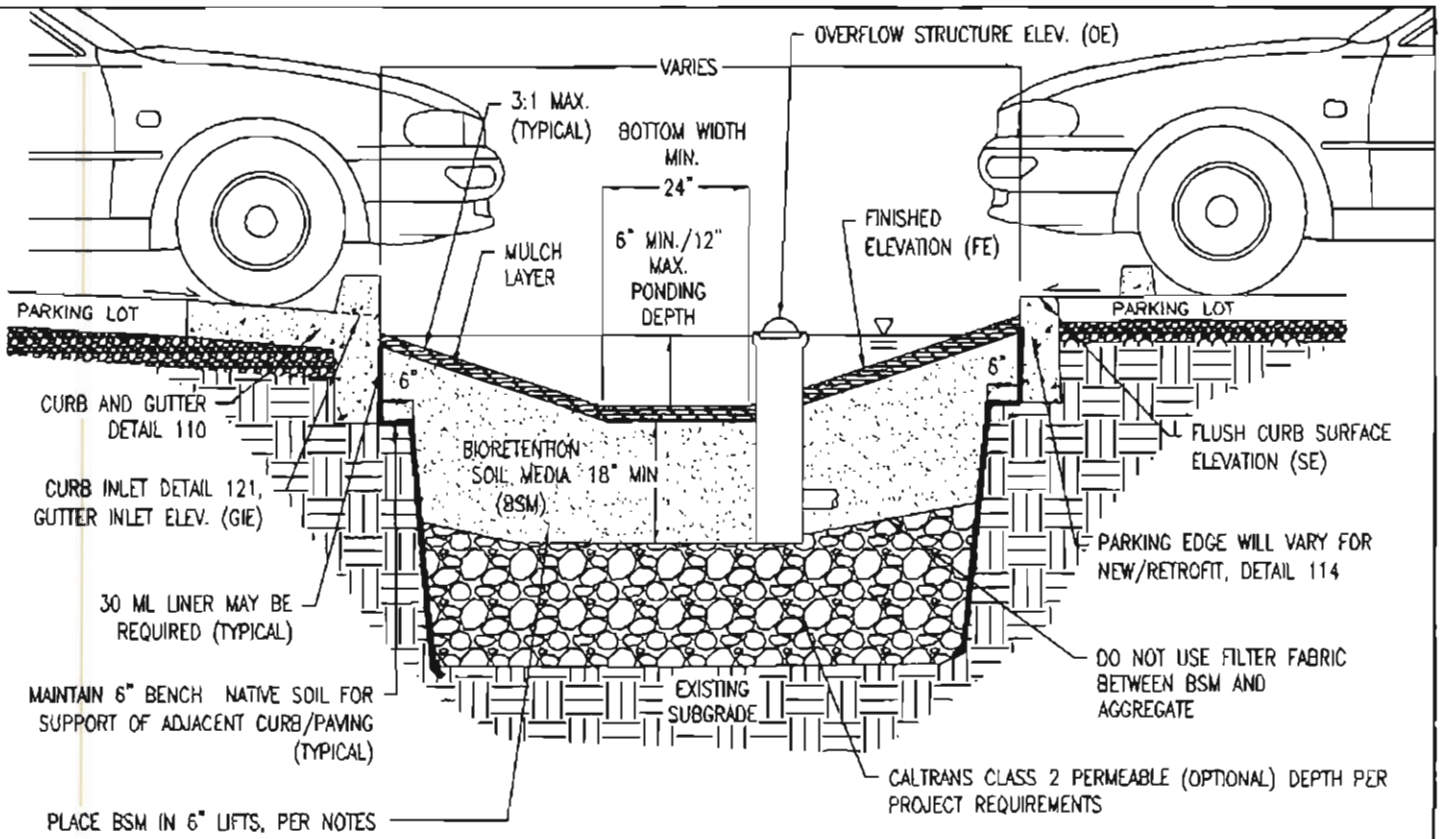
4. DO NOT WORK WITHIN BIORETENTION AREA DURING RAIN OR UNDER WET CONDITIONS.
5. KEEP HEAVY MACHINERY OUTSIDE BIORETENTION AREA LIMITS.

Parking Lot Bioretention Facility

(flat/planter, without underdrain)

104

Municipality
Department Name



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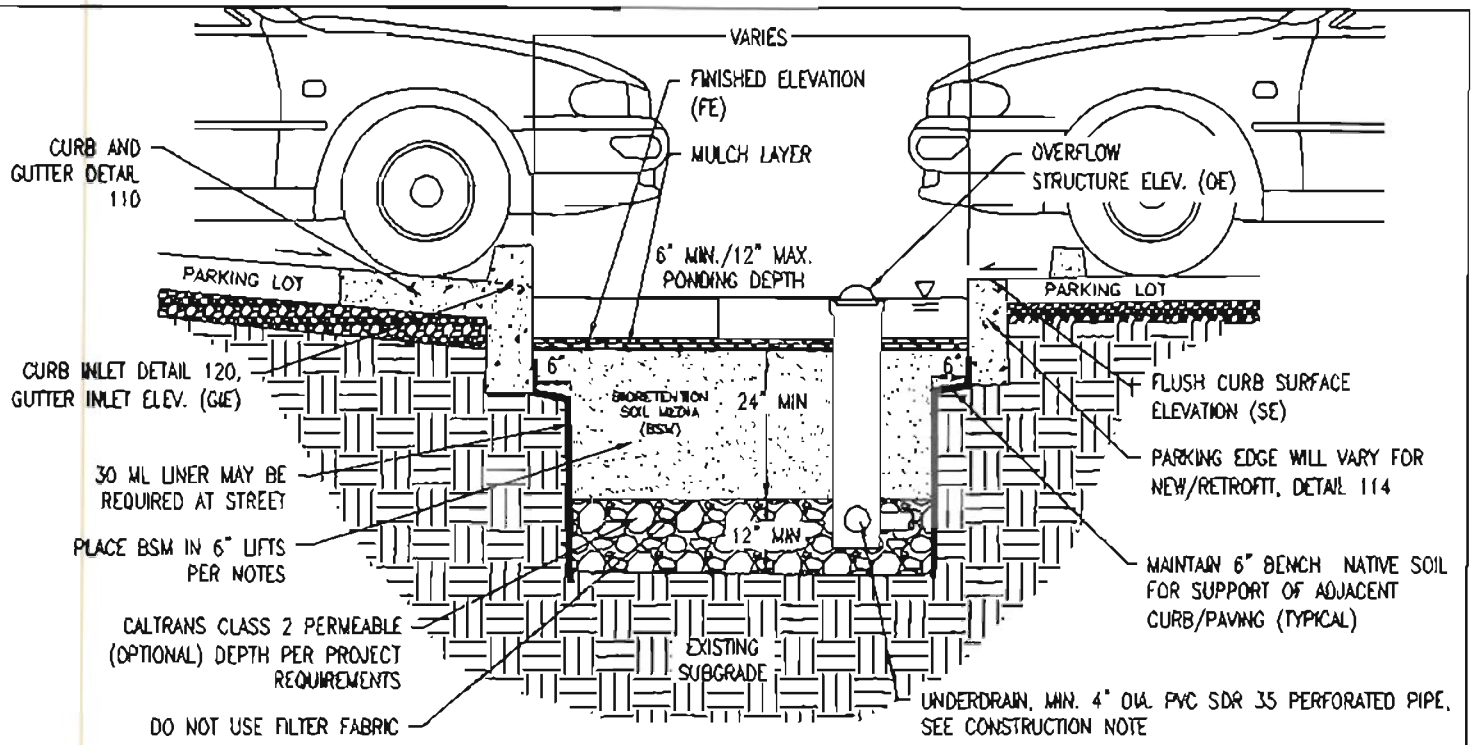
Parking Lot Bioretention Facility

(sloped sided, without underdrain)

Municipality
Department Name

detail number

105



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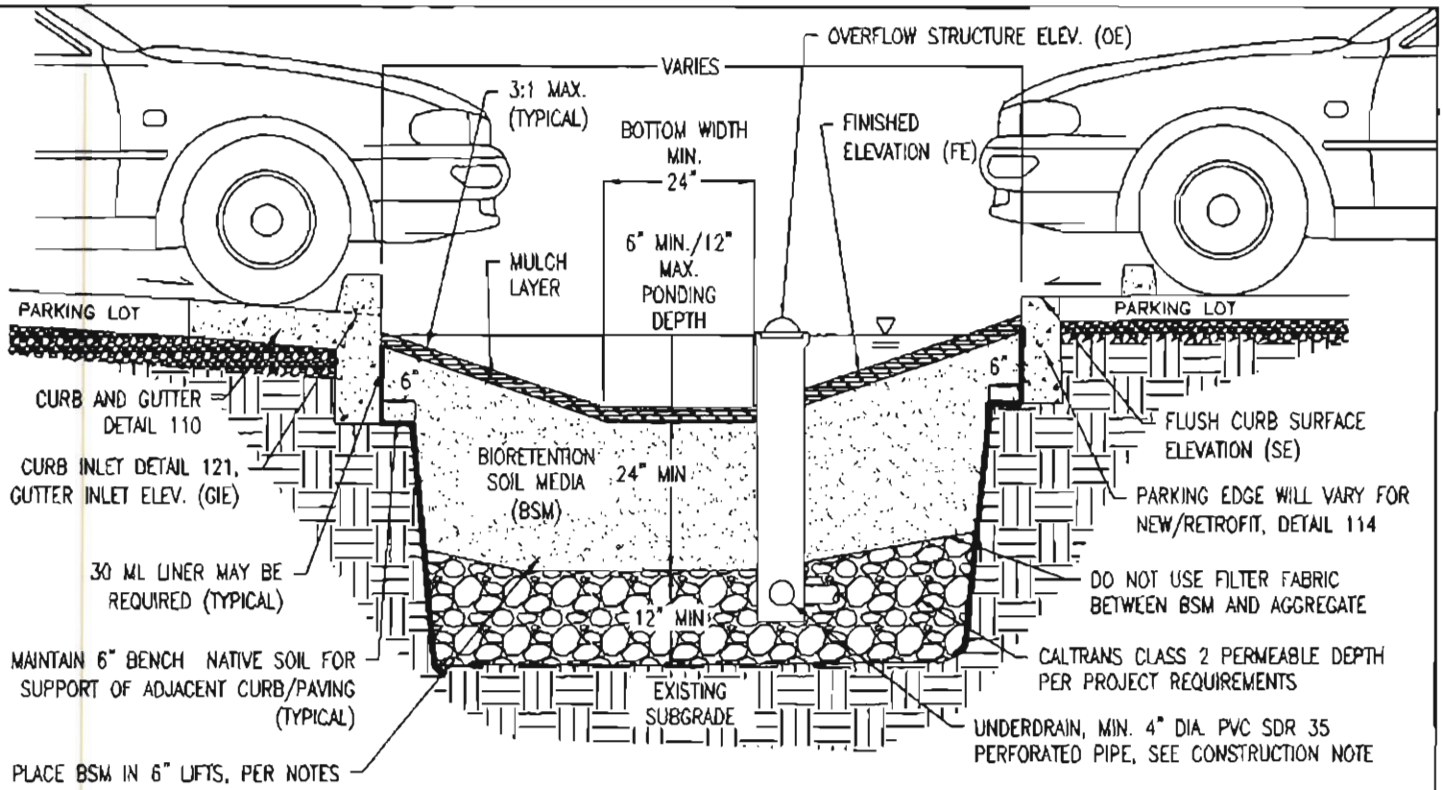
detail number

Parking Lot Bioretention Facility

(flat/planter, with underdrain)

204

Municipality
Department Name



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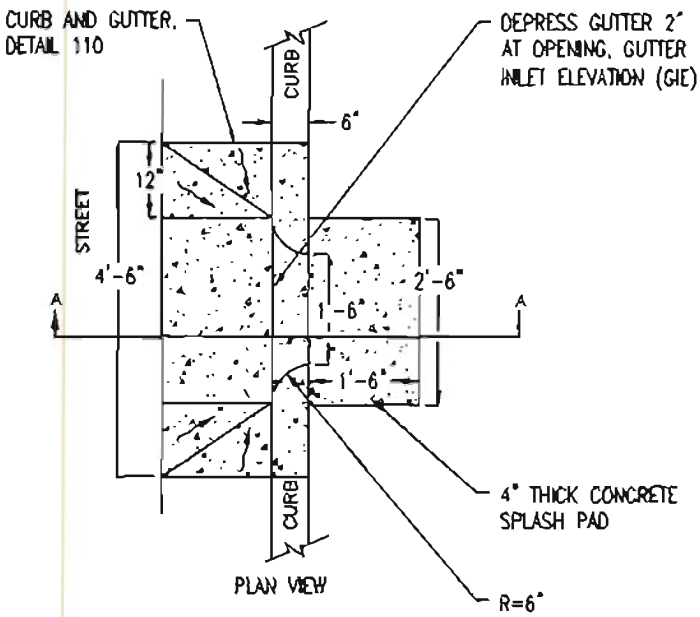
Parking Lot Bioretention Facility

(sloped sided, with underdrain)

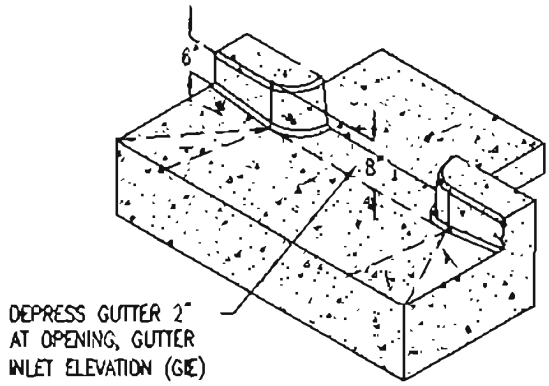
detail number

205

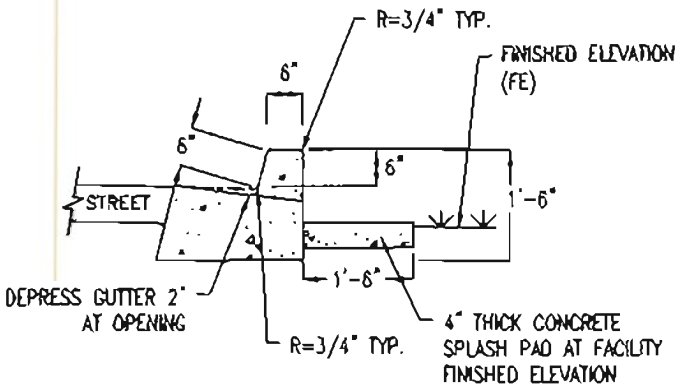
Municipality
Department Name



PLAN VIEW



PERSPECTIVE VIEW



SECTION A–A

BIORETENTION DESIGN NOTES

1. FOR USE WITH STORMWATER FACILITIES WITH FLAT BOTTOMS.
2. PROVIDE SPOT ELEVATIONS ON PLANS (FE, OE, GIE, IE). SEE DETAIL 100.
3. CURB AND WALL DETAILS MAY BE MODIFIED BY CIVIL AND GEOTECHNICAL ENGINEERS.
4. CURB HEIGHT MAY BE REDUCED TO 4-INCHES WHERE ADJACENT TO A SIDEWALK. SEE DETAILS 110 & 111.

CONSTRUCTION NOTES

1. AFTER CONSTRUCTION PLACE SAND BAGS AT GUTTER OPENINGS TO KEEP STORM FLOWS FROM ENTERING FACILITY UNTIL VEGETATION IS ESTABLISHED.

CURB CUT TYPE 1 — 120

N.T.S.

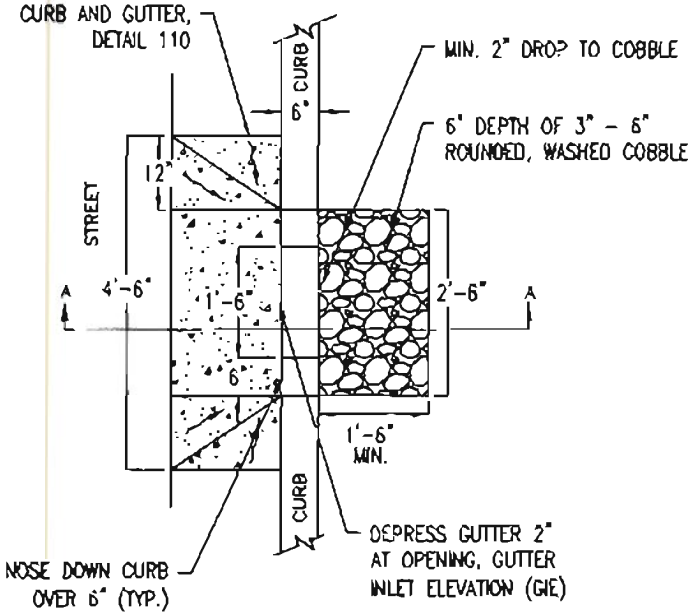
LOW IMPACT DEVELOPMENT STORMWATER MANAGEMENT STANDARD DETAILS VERSION: 3/6/2013

detail number

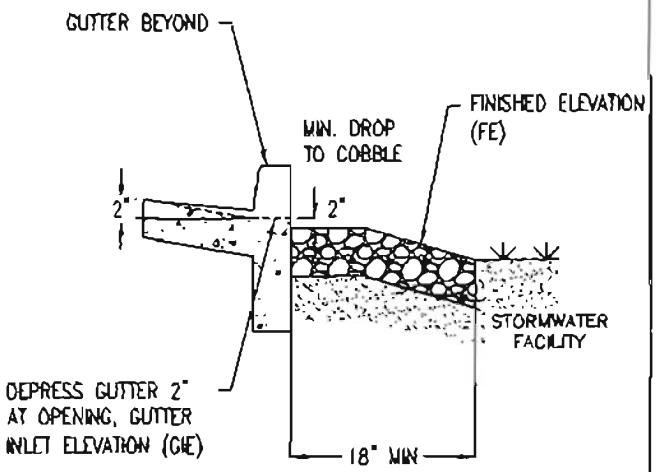
Curb Cut Inlet for Planters

120

Municipality
Department Name



PLAN VIEW



SECTION A-A

BIORETENTION DESIGN NOTES

1. FOR USE WITH STORMWATER FACILITIES WITH SLOPED SIDES OR FLAT BOTTOMS.
2. PROVIDE SPOT ELEVATIONS ON PLANS (FE, CE, GIE, IE). SEE DETAILS 100, 101.
3. DROP FROM INLET TO AGGREGATE PAD WILL BE GREATER FOR PLANTERS.
3. CURB AND WALL DETAILS MAY BE MODIFIED BY CIVIL AND GEOTECHNICAL ENGINEERS.
4. WHERE INLET FLOW VELOCITY IS HIGH, EXTEND COBBLE INTO FACILITY, BUT AVOID EXCESSIVE USE.

CONSTRUCTION NOTES

1. AFTER CONSTRUCTION PLACE SAND BAGS AT GUTTER OPENINGS TO KEEP STORM FLOWS FROM ENTERING FACILITY UNTIL VEGETATION IS ESTABLISHED.

CURB CUT TYPE 3 — 122

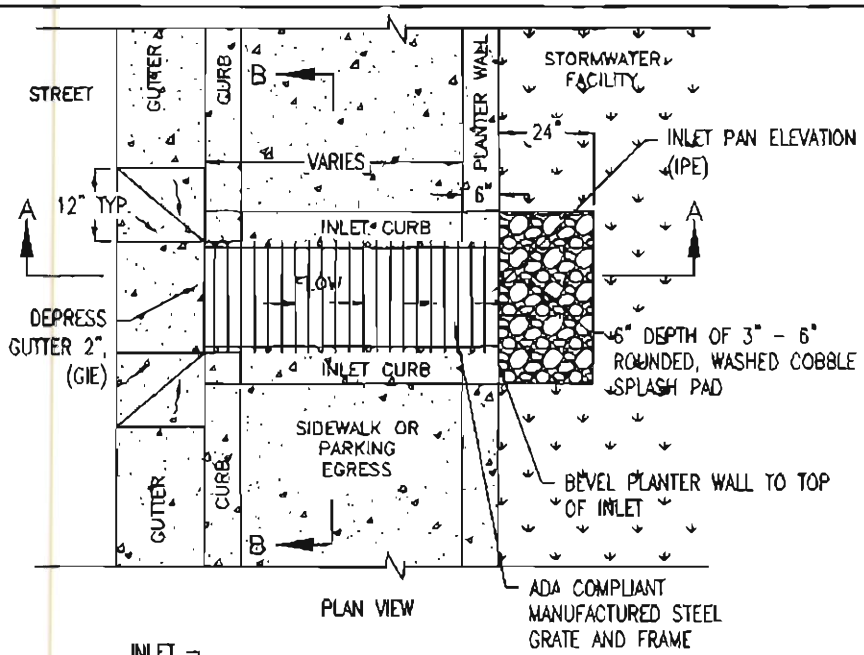
N.T.S.

Curb Cut Inlet with Gravel Energy Dissipation

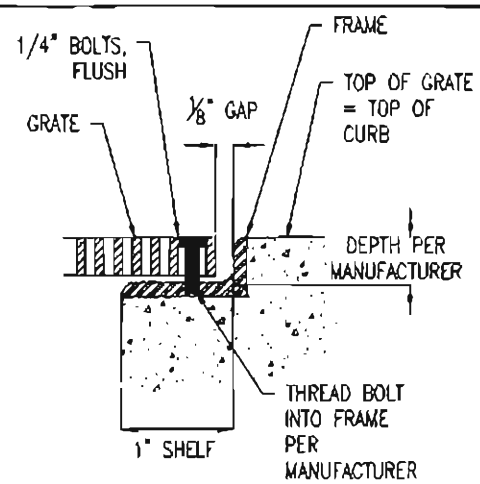
detail number

122

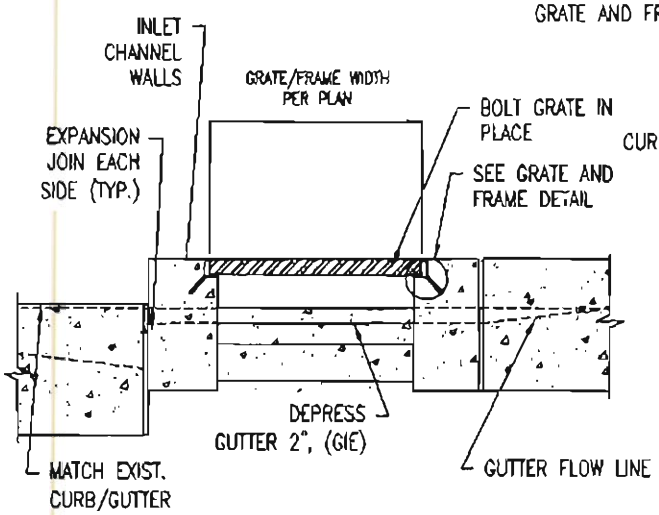
Municipality
Department Name



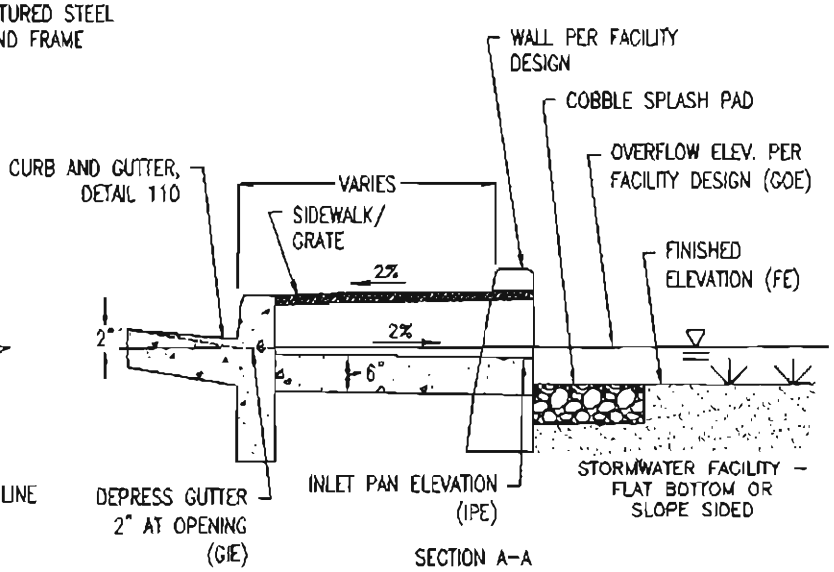
PLAN VIEW



GRATE AND FRAME



SECTION B–B



SECTION A–A

BIORETENTION DESIGN NOTES

1. FOR USE WITH STORMWATER FACILITIES WITH SLOPED SIDES OR FLAT BOTTOMS.
2. PROVIDE SPOT ELEVATIONS ON PLANS (FE, OE, GIE, IPE). SEE DETAILS 100, 101.
3. REFER TO MUNICIPAL STANDARD DRAWINGS AND MATCH GUTTER PAN OF ADJACENT CURB AND GUTTER.
4. IF SLOPED SIDES, WHERE INLET FLOW VELOCITY IS HIGH, EXTEND COBBLE INTO FACILITY, BUT AVOID EXCESSIVE USE.
5. BASE MATERIAL FOR CURB, GUTTER, AND SIDEWALK PER MUNICIPAL STANDARDS.

CONSTRUCTION NOTES

1. AFTER CONSTRUCTION PLACE SAND BAGS AT GUTTER OPENINGS TO KEEP STORM FLOWS FROM ENTERING FACILITY UNTIL VEGETATION IS ESTABLISHED.

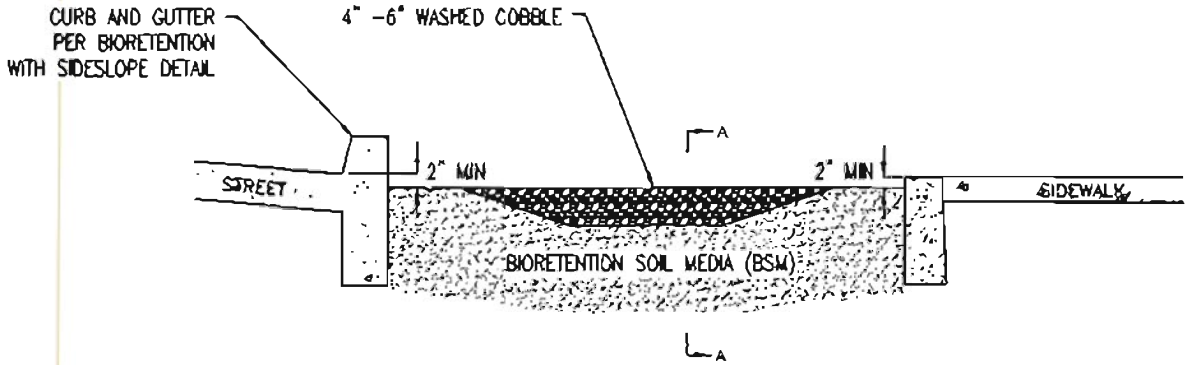
INLET WITH GRATE (123)
N.T.S.

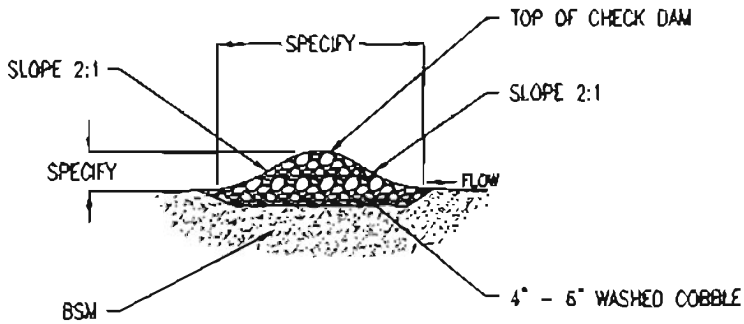
detail number

Inlet with Grate

123

Municipality
Department Name





SECTION A-A

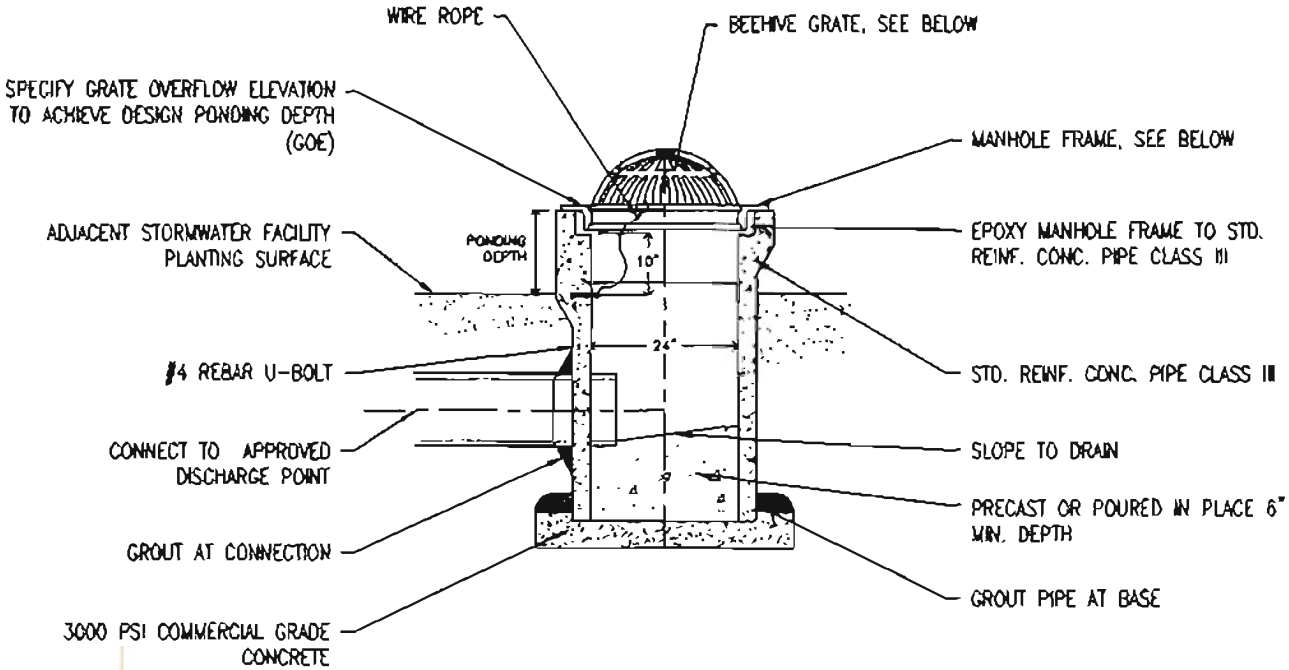
BIORETENTION DESIGN NOTES

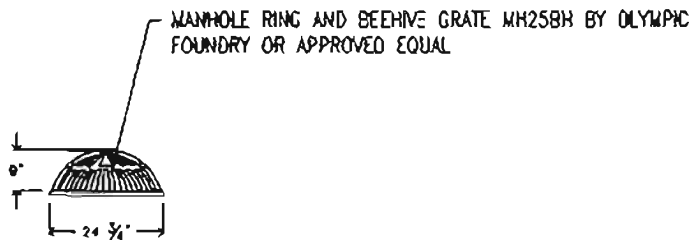
1. FOR USE WITH STORMWATER FACILITIES WITH SLOPED SIDES.
2. BEST SUITED FOR FACILITIES WITH < OF <= THAN 2% LONGITUDINAL SLOPE.
3. PROVIDE ELEVATIONS AND STATIONING AND/OR DIMENSIONING FOR CHECK DAMS.
4. SPACE CHECK DAMS TO MAXIMIZE PONDING ACROSS ENTIRE CELL.
5. ENSURE THAT CHECK DAM ELEVATIONS DO NOT CAUSE STORMWATER TO OVERFLOW TO SIDEWALK.

CONSTRUCTION NOTES

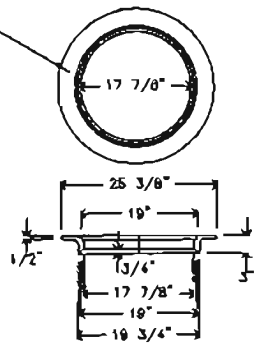
1. DO NOT WORK DURING RAIN OR UNDER WET CONDITIONS.
2. KEEP ALL HEAVY MACHINERY OUTSIDE BIORETENTION AREA LIMITS.

GRAVEL CHECK DAM — 130
N.T.S.





BEEHIVE GRATE



24"x4" REVERSIBLE MANHOLE FRAME

DESIGN NOTES

1. PROVIDE GRATE OVERFLOW ELEVATION ON PLANS.
2. TO INCORPORATE FLEXIBILITY INTO DESIGN OVERFLOW ELEVATION OR CORRECT ELEVATION OF AN EXISTING STRUCTURE, INSTALL OVERFLOW COLLAR, PER DETAIL 141.

CONSTRUCTION NOTES

1. DO NOT ADJUST OVERFLOW GRATE ELEVATION, CONSTRUCT AS SHOWN ON PLANS.

OVERFLOW STRUCTURE 140
N.T.S.

LOW IMPACT DEVELOPMENT STORMWATER MANAGEMENT STANDARD DETAILS VERSION: 3/6/2013

detail number

Overflow Structure w/ Beehive Grate

140

Municipality
Department Name

TREES

Native	Scientific Name	Common Name	Planting Area	Height	Spread	Exposure	Type	Bioretention Characteristics: Plant Inundation Zone A	Plant Inundation Zone B	Small Planting Strips (<5' wide)	Large Planting Strips (>5' wide)	Tolerates Periodic Inundation	Tolerates Prolonged Dry Periods	Requires Good Drainage	Wind Tolerant	Notes
X	Cercis occidentalis	Western Redbud	Small	20'	20'	Full Sun	Deciduous		X	X		X	X			Small tree or large shrub, tolerates clay, winter wet, drought, flowers stronger with frost
X	Chilopsis linearis	Desert Willow	Small	25'	30'	Full Sun	Deciduous		X		X	X	X		X	Tolerates alkaline soil, sand, clay, seasonal flooding and drought, not coastal conditional
X	Platanus racemosa	California Sycamore	Large	40'-80'	40'-70'	Full Sun	Deciduous		X							Tolerates sand and clay soils, seasonal flooding, needs space to grow, avoid underground water/sewer pipes
X	Quercus agrifolia	Coast Live Oak	Medium	25'-60'	40'-70'	Full Sun-Shade	Deciduous		X		X		X	X	X	Tolerates drought and winter wet conditions, mature trees produce significant litter limiting understory plantings, need space to grow

SHRUBS

Native	Scientific Name	Common Name	Height	Spread	Exposure	Type	Bioretention Characteristics: Plant Inundation Zone A	Plant Inundation Zone B	Small Planting Strips (<5' wide)	Large Planting Strips (>5' wide)	Tolerates Periodic Inundation	Tolerates Prolonged Dry Periods	Requires Good Drainage	Wind Tolerant	Notes
X	Baccharis pilularis consanguinea	Coyote Brush	3'-6'	5'	Sun	Evergreen		X	X	X	X			X	Adaptable evergreen shrub, provides quick cover and bank stabilization, tolerant of coastal conditions, alkaline soil, sand, clay and seasonal wet
X	Heteromeles arbutifolia	Toyon, Christmas Berry	8'-10'	4'-5'	Sun	Evergreen		X		X	X			X	Tolerates sand, clay and serpentine soils, seasonal water with good drainage
X	Iris douglasiana	Douglas Iris	3'	1'-2'	Full Sun-Partial Shade	Grass		X	X		X				Tolerates sand, clay and serpentine soils, seasonal wet (but not soggy) soils and drought
X	Myrica californica	Pacific Wax Myrtle	15'	15'	Sun	Evergreen		X	X		X			X	Large shrub or small tree, tolerates coastal conditions, sand, clay and seasonal inundation
X	Rosa californica	California Rose	3'-8'	3'-5'	Sun-Partial Shade	Deciduous	X	X	X	X	X	X			Tolerates a wide variety of soils, seasonal flooding and some drought, spreads aggressively, avoid edges of walkways because of thorns
X	Sambucus mexicana	Mexican Elderberry	8'-12'	8'	Sun-Partial Shade	Deciduous		X		X	X			X	Large shrub to tree, tolerates clay, seasonal flooding and drought, good wildlife food source
X	Solidago californica	California Goldenrod	1'-4'	1'-4'	Full Sun-Partial Shade	Herbaceous Perennial		X	X	X	X	X			Tolerates poor soils, seasonal wet and drought, can spread aggressively if over irrigated

LOW IMPACT DEVELOPMENT STORMWATER MANAGEMENT STANDARD DETAILS VERSION: 3/6/2013

detail number

LID Recommended Plant List Trees and Shrubs

160

Municipality
Department Name

GROUNDCOVER AND VINES

Native	Scientific Name	Common Name	Height	Spread	Exposure	Type	Bioretention Characteristics: Plant Inundation Zone A	Plant Inundation Zone B	Tolerates Periodic Inundation	Tolerates Prolonged Dry Periods	Requires Good Drainage	Tolerates Mowing	Notes
	Carex divulsa	Berkeley Sedge, Grey Sedge	12"-18"	12"-18"	Full Sun-Partial Shade	Grass	X	X	X	X			Tolerates foot traffic, some drought and boggy soils
X	Carex pansa	California Meadow Sedge	6"-8"	N/A	Full Sun-Partial Shade	Grass	X	X	X		X		Good lawn substitute, tolerates wide range of growing conditions, seasonal inundation, drought, foot traffic and mowing
X	Carex praegracilis	Clustered Field Sedge	3'-4'	2'-3'	Full Sun-Partial Shade	Grass	X		X	X		X	Useful lawn substitute and bank stabilizer, good planted in masses, tolerates wide range of growing conditions, foot traffic and mowing, may look weedy when mixed with other plants
X	Carex spissa	San Diego Sedge	6"-8"	N/A	Full Sun-Partial Sun	Grass	X	X	X			X	A large grass, tolerates alkaline soil, clay, serpentine, seasonal inundation, and deer
	Chondropetalum tectorum	Small Cape Rush	2'-3'	3'-4'	Full Sun-Partial Sun	Grass	X	X	X	X		X	A tough, attractive reed-like plant, tolerates boggy or clay soils and drought once established, Chondropetalum elephantinum is a much larger species
X	Festuca rubra 'molate'	Molate Red Fescue	Up to 10"	4"-40"	Full Sun-Partial Shade	Evergreen Perennial	X	X	X			X	A tufted, spreading bunchgrass, good lawn substitute, provides erosion control, tolerates wet conditions, but looks best with regular water, tolerates drought once established
X	Juncus effusus	Soft Rush	1'-2'	1'-2'	Full Sun-Partial Shade	Grass	X		X				Tolerates poor drainage, heavy soils, needs more supplemental water than Juncus patens
X	Juncus patens	Wire Grass, Blue Rush	2'-3'	Running	Full Sun	Grass	X		X	X			Strong performance in bioretention areas, tolerates poor drainage, seasonal inundation, drought, shade
X	Leymus condensatus	Canyon Prince Wild Rye	1'-2'	N/A	Partial Shade	Grass		X	X	X			tolerates drought, wet, but not soggy soils, looks best with supplemental irrigation, spreads by rhizomes
X	Muhlenbergia rigens	Deer Grass	6'-8'	6'-8'	Full Sun-Partial Shade	Evergreen Shrub		X	X	X			A large grass, tolerates sandy and clay soils, seasonal inundation, best when cut back annually to remove old thatch

LOW IMPACT DEVELOPMENT STORMWATER MANAGEMENT STANDARD DETAILS VERSION: 3/6/2013

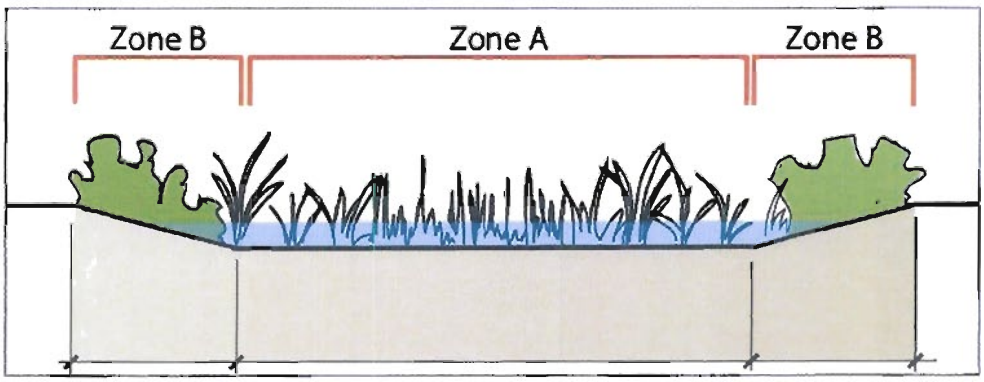
detail number

LID Recommended Plant List Groundcover and Vines

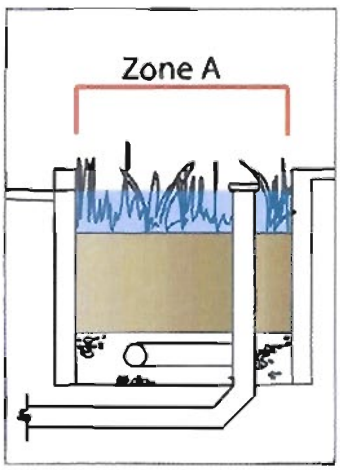
161

Municipality
Department Name

Varying slope and ponding levels: Varying slope and ponding levels: This bioretention planting area has sloped edges. Plants in the bottom area will be inundated during storms (Zone A). Those planted on the sideslopes are above the level of ponding, but will experience seasonally wet conditions (Zone B).



Uniform surface grade: This stormwater planter has a flat bottom with consistent depth of ponding across the structure. All of the plants selected for this design must be tolerant of periodic inundation (Zone A).

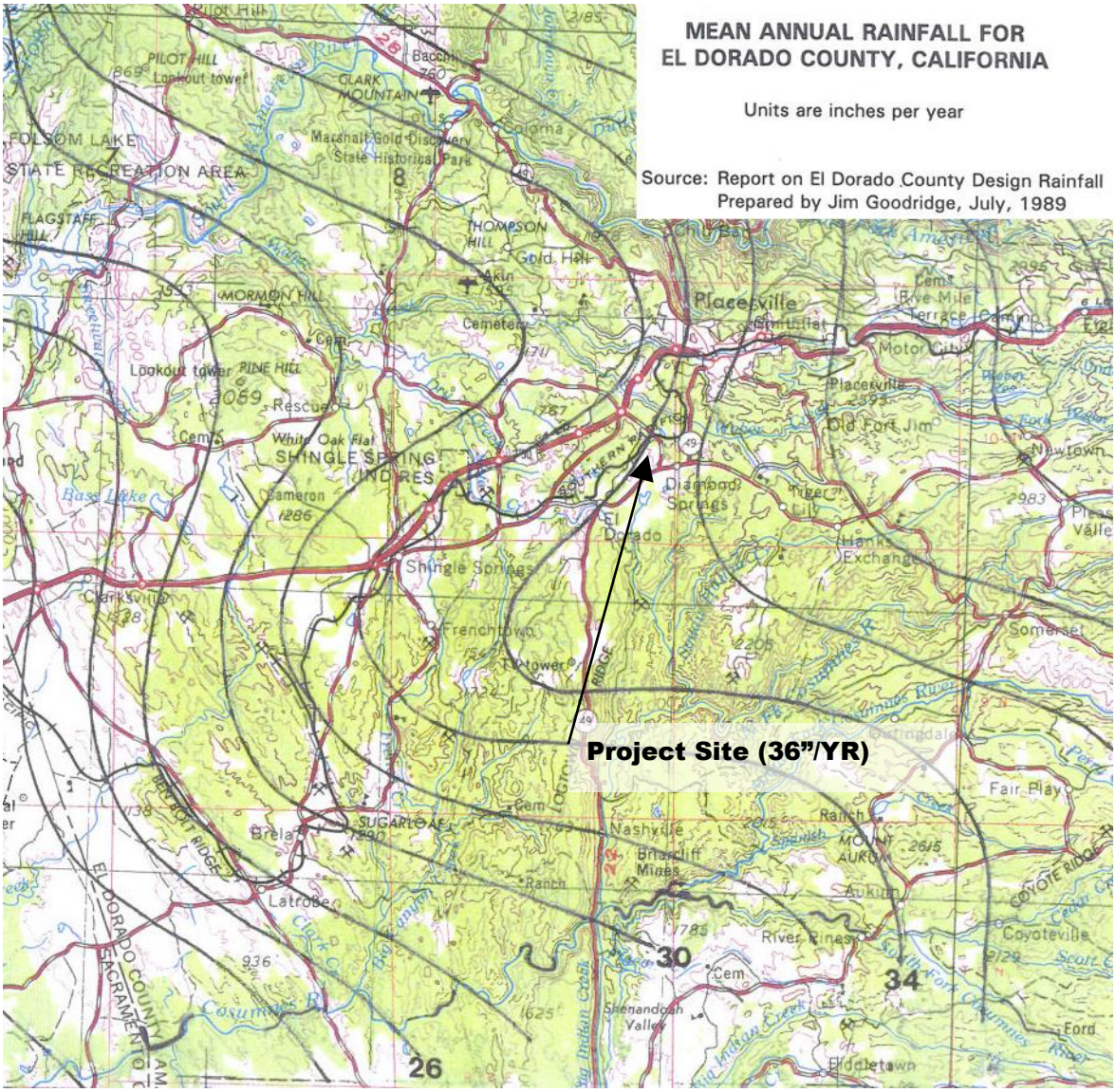


APPENDIX

MEAN ANNUAL RAINFALL FOR EL DORADO COUNTY, CALIFORNIA

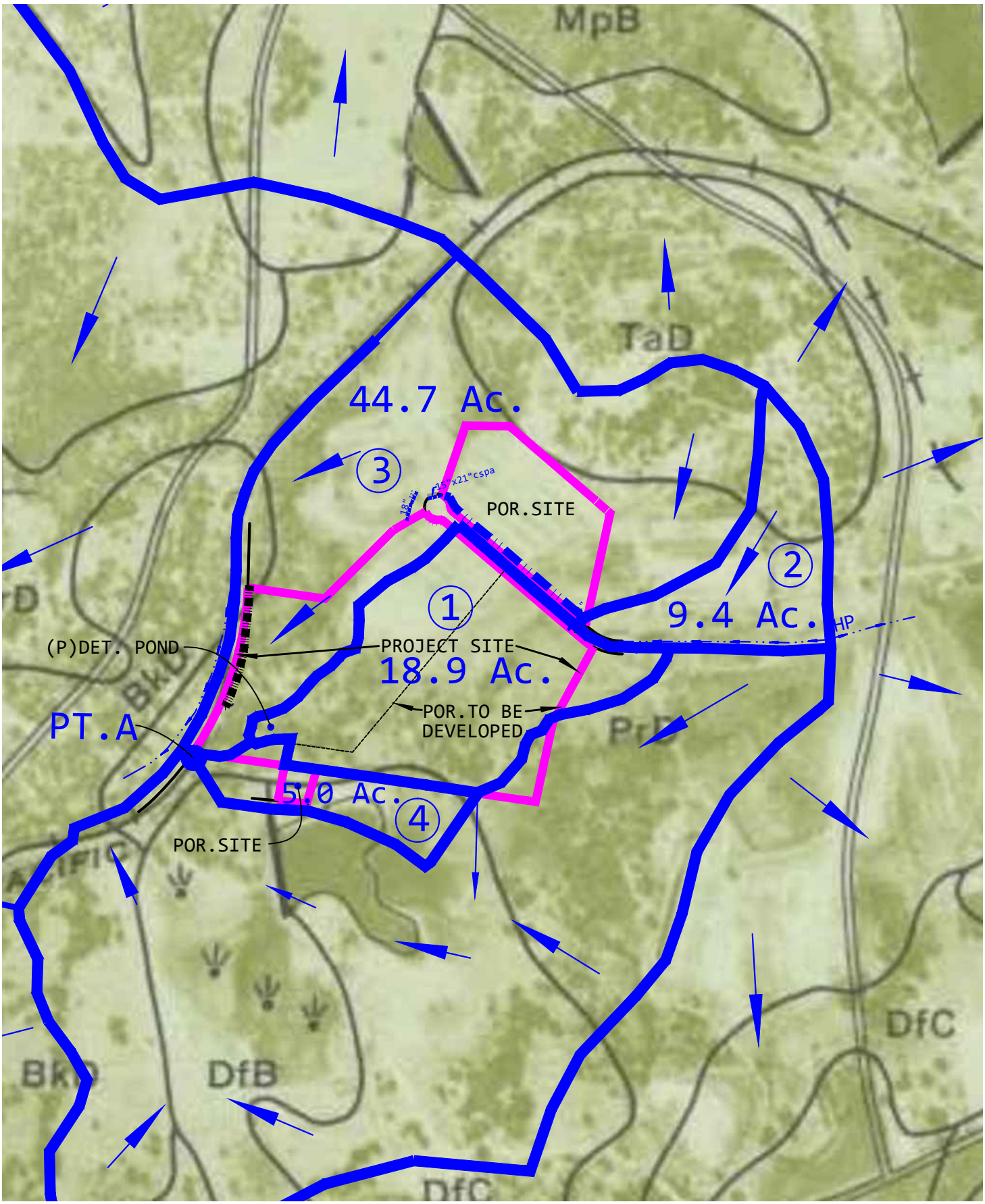
Units are inches per year

Source: Report on El Dorado County Design Rainfall
Prepared by Jim Goodridge, July, 1989



LEBECK · YOUNG

ENGINEERING, INC.



SOILS EXHIBIT MAP

USDA Soil Conservation Service - April 1974

SCALE: 1"=500'

1.) COMPOSITE CURVE NUMBERS - PRE-DEVELOPMENT:					
1	Total Watershed Area	18.9	Acres	Hydrological Soil Group	
	PrD, Placer Diggings	18.6	Acres	B	98%
	DfC, Diamond Springs, fine sandy loam	0.3	Acres	C	2%
			approx. Area		
			(ac.)	CN	CN * A
	Commercial	0%	0	92	0
	Vacant Land w-dirt trails, some brush & trees	100%	18.9	74	1398.6
	Subtotal		18.9		1398.6
	Composite CN =	74			
2	Total Watershed Area	9.4	acres	Hydrological Soil Group	
	PrD, Placer Diggings	6.7	Acres	B	71%
	DfC, Diamond Springs, fine sandy loam	2.7	Acres	B	29%
			approx. Area		
			(ac.)	CN	CN * A
	Industrial	89%	8.4	88	739
	Residential, Approx. 1 acre lots - dirt & brush	11%	1.0	68	68
	Subtotal		9.4		807
	Composite CN =	86			
3	Total Watershed Area	44.7	Acres	Hydrological Soil Group	
	PrD, Placer Diggings	32.13	Acres	B	72%
	TaD, Tailings	11.24	Acres	B	25%
	BkD, Boomer, very rocky loam	1.33	Acres	B	3%
			approx. Area		

			(ac.)	CN	CN * A
	Industrial	30%	13.3	88	1170.4
	Residential, Approx. 1 acre lots - dirt & brush	22%	10.0	68	680
	Vacant land (por. of Site N. of Industrial)	14%	6.2	74	458.8
	Vacant Land (western por. of site & other areas)	34%	15.2	74	1124.8
	Subtotal		44.7		3434
	Composite CN =	77			
4	Total Watershed Area	5.0	acres	Hydrological Soil Group	
	PrD, Placer Diggings	1.4	Acres	B	15%
	DfC, Diamond Springs, fine sandy loam	3.1	Acres	C	33%
	DfB, Diamond Springs, very fine sandy loam	0.5	Acres	C	5%
		approx. Area			
			(ac.)	CN	CN * A
	Industrial	80%	4.0	88	352
	Vacant Land, dirt, some brush & trees	20%	1.0	80	80
	Subtotal		5		432
	Composite CN =	86			

2.) COMPOSITE CURVE NUMBERS - DEVELOPED WATERSHEDS:					
(Only Watershed 1 will be changed					
1	Total Watershed Area	18.9	Acres	Hydrological Soil Group	
	PrD, Placer Diggings	18.6	Acres	B	98%
	DfC, Diamond Springs, fine sandy loam	0.3	Acres	C	2%
		approx. Area			
			(ac.)	CN	CN * A
	Commercial - Por. of Site to be developed	60%	11.3	92	1039.6
Por. of site - to remain vacant, but trib. To Det. Pond		40%	7.6	74	562.4
	Subtotal		18.9		1602
	Composite CN =	85			
3.) COMPOSITE CURVE NUMBERS - CHECK ULTIMATE/ FUTURE DEVELOPED WATERSHEDS:					
(i.e. Make sure pond has capacity in case future development occurs)					
1	Total Watershed Area	18.9	Acres	Hydrological Soil Group	
	PrD, Placer Diggings	18.6	Acres	B	98%
	DfC, Diamond Springs, fine sandy loam	0.3	Acres	C	2%
		approx. Area			
			(ac.)	CN	CN * A
	Commercial - Por. of Site to be developed	60%	11.3	92	1039.6
Rem. Por. of area trib. To Det. Pond; Ck if Fut. Devel.		40%	7.6	92	699.2
	Subtotal		18.9		1738.8
	Composite CN =	92			

3	Total Watershed Area	44.7	Acres	Hydrological Soil Group	
	PrD, Placer Diggings	32.13	Acres	B	72%
	TaD, Tailings	11.24	Acres	B	25%
	BkD, Boomer, very rocky loam	1.33	Acres	B	3%
			approx. Area		
			(ac.)	CN	CN * A
	Industrial	30%	13.3	88	1170.4
	Residential, Approx. 1 acre lots - dirt & brush	22%	10.0	68	680.0
	Por. of Site N. of Industrial Dr- Ck for fut developmt	14%	6.2	92	570.4
	Off-site vacant land to west of site that should remain	22%	9.7	74	717.8
	Vacant Land (western por. of site, not trib to pond)	12%	5.5	92	506
(Note: this approx. 5.5 area can be re-routed to pond potentially in fut. if needed, but pond would need					
to be re-checked at that time & inlet/outlet structures re-evaluated & poss. adjusted)					
	Subtotal		44.7		3644.6
	Composite CN =	82			

Table 2-2c.—Runoff curve numbers for other agricultural lands[1]

Cover description		Curve numbers for hydrologic soil group—			
Cover type	Hydrologic condition	A	B	C	D
Pasture, grassland, or range—continuous forage for grazing.[2]	Poor	68	79	86	89
	Fair	49	69	79	84
	Good	39	61	74	80
Meadow—continuous grass, protected from grazing and generally mowed for hay.	—	30	58	71	78
Brush—brush-weed-grass mixture with brush the major element.[3]	Poor	48	67	77	83
	Fair	35	56	70	77
	Good	[4]30	48	65	73
Woods—grass combination (orchard or tree farm).[5]	Poor	57	73	82	86
	Fair	43	65	76	82
	Good	32	58	72	79
Woods.[6]	Poor	45	66	77	83
	Fair	36	60	73	79
	Good	[4]30	55	70	77
Farmsteads—buildings, lanes, driveways, and surrounding lots.	—	59	74	82	86

[1]Average runoff condition, and $I_a = 0.2S$.

[2]*Poor:* <50% ground cover or heavily grazed with no mulch.
Fair: 50 to 75% ground cover and not heavily grazed.
Good: >75% ground cover and lightly or only occasionally grazed.

[3]*Poor:* <50% ground cover.
Fair: 50 to 75% ground cover.
Good: >75% ground cover.

[4]Actual curve number is less than 30; use CN = 30 for runoff computations.

[5]CN's shown were computed for areas with 50% woods and 50% grass (pasture) cover. Other combinations of conditions may be computed from the CN's for woods and pasture.

[6]*Poor:* Forest litter, small trees, and brush are destroyed by heavy grazing or regular burning.
Fair: Woods are grazed but not burned, and some forest litter covers the soil.
Good: Woods are protected from grazing, and litter and brush adequately cover the soil.

Table 2-2a.—Runoff curve numbers for urban areas[1]

Cover description		Curve numbers for hydrologic soil group—			
Cover type and hydrologic condition	Average percent impervious area[2]	A	B	C	D
Fully developed urban areas (vegetation established)					
Open space (lawns, parks, golf courses, cemeteries, etc.)[3]:					
Poor condition (grass cover < 50%)		68	79	86	89
Fair condition (grass cover 50% to 75%)		49	69	79	84
Good condition (grass cover > 75%)		39	61	74	80
Impervious areas:					
Paved parking lots, roofs, driveways, etc. (excluding right-of-way)		98	98	98	98
Streets and roads:					
Paved; curbs and storm sewers (excluding right-of-way)		98	98	98	98
Paved; open ditches (including right-of-way)		83	89	92	93
Gravel (including right-of-way)		76	85	89	91
Dirt (including right-of-way)		72	82	87	89
Western desert urban areas:					
Natural desert landscaping (pervious areas only)[4]		63	77	85	88
Artificial desert landscaping (impervious weed barrier, desert shrub with 1- to 2-inch sand or gravel mulch and basin borders)		96	96	96	96
Urban districts:					
Commercial and business	85	89	92	94	95
Industrial	72	81	88	91	93
Residential districts by average lot size:					
1/8 acre or less (town houses)	65	77	85	90	92
1/4 acre	38	61	75	83	87
1/3 acre	30	57	72	81	86
1/2 acre	25	54	70	80	85
1 acre	20	51	68	79	84
2 acres	12	46	65	77	82
Developing urban areas					
Newly graded areas (pervious areas only, no vegetation)[5]		77	86	91	94
Idle lands (CN's are determined using cover types similar to those in table 2-2c).					

[1]Average runoff condition, and $I_a = 0.2S$.
[2]The average percent impervious area shown was used to develop the composite CN's. Other assumptions are as follows: impervious areas are directly connected to the drainage system, impervious areas have a CN of 98, and pervious areas are considered equivalent to open space in good hydrologic condition. CN's for other combinations of conditions may be computed using figure 2-3 or 2-4.
[3]CN's shown are equivalent to those of pasture. Composite CN's may be computed for other combinations of open space cover type.
[4]Composite CN's for natural desert landscaping should be computed using figures 2-3 or 2-4 based on the impervious area percentage (CN = 98) and the pervious area CN. The pervious area CN's are assumed equivalent to desert shrub in poor hydrologic condition.
[5]Composite CN's to use for the design of temporary measures during grading and construction should be computed using figure 2-3 or 2-4, based on the degree of development (impervious area percentage) and the CN's for the newly graded pervious areas.

El Dorado Design Rainfall

Rainfall Depth in Inches for Return Period = 2.33 years

Mean Annual Precipitation	5 Min	10 Min	15 Min	30 Min	1 Hr	2 Hrs	3 Hrs	6 Hrs	12 Hrs	24 Hrs
20	0.113	0.162	0.200	0.286	0.410	0.587	0.723	1.035	1.481	2.120
22	0.120	0.172	0.212	0.304	0.435	0.623	0.768	1.099	1.572	2.249
24	0.128	0.183	0.225	0.322	0.461	0.660	0.814	1.165	1.667	2.385
26	0.135	0.193	0.238	0.341	0.488	0.698	0.860	1.231	1.762	2.521
28	0.142	0.203	0.251	0.359	0.514	0.735	0.907	1.298	1.857	2.657
30	0.149	0.214	0.264	0.377	0.540	0.773	0.953	1.364	1.952	2.793
32	0.157	0.224	0.277	0.396	0.566	0.810	1.000	1.430	2.047	2.929
34	0.164	0.235	0.289	0.414	0.593	0.848	1.046	1.497	2.142	3.065
36	0.171	0.245	0.302	0.433	0.619	0.886	1.092	1.563	2.237	3.200
38	0.179	0.256	0.315	0.451	0.645	0.923	1.139	1.629	2.332	3.336
40	0.186	0.266	0.328	0.469	0.671	0.961	1.185	1.696	2.426	3.472
42	0.193	0.276	0.341	0.488	0.698	0.998	1.231	1.762	2.521	3.608
44	0.200	0.287	0.354	0.506	0.724	1.036	1.278	1.828	2.616	3.744
46	0.208	0.297	0.366	0.524	0.750	1.074	1.324	1.895	2.711	3.880
48	0.512	0.308	0.379	0.543	0.777	1.111	1.370	1.961	2.806	4.016
50	0.222	0.318	0.392	0.561	0.803	1.149	1.417	2.027	2.901	4.152
52	0.229	0.328	0.405	0.579	0.829	1.186	1.463	2.094	2.996	4.287
54	0.237	0.339	0.418	0.598	0.855	1.224	1.510	2.160	3.091	4.423
56	0.244	0.349	0.431	0.616	0.882	1.262	1.556	2.226	3.186	4.559
58	0.251	0.360	0.443	0.634	0.908	1.299	1.602	2.293	3.281	4.695
60	0.259	0.370	0.456	0.653	0.934	1.337	1.649	2.359	3.376	4.831
62	0.266	0.380	0.469	0.671	0.960	1.374	1.695	2.425	3.471	4.967
64	0.273	0.391	0.482	0.690	0.987	1.412	1.741	2.492	3.566	5.103
66	0.280	0.401	0.495	0.708	1.013	1.450	1.788	2.558	3.661	5.238
68	0.288	0.412	0.508	0.726	1.039	1.487	1.834	2.625	3.756	5.374
70	0.295	0.422	0.520	0.745	1.066	1.525	1.880	2.691	3.851	5.510
72	0.302	0.432	0.533	0.763	1.092	1.562	1.927	2.757	3.946	5.646
74	0.309	0.443	0.546	0.781	1.118	1.600	1.973	2.824	4.040	5.782
76	0.317	0.453	0.559	0.800	1.144	1.638	2.020	2.890	4.135	5.918
78	0.324	0.464	0.572	0.818	1.171	1.675	2.066	2.956	4.230	6.054
80	0.331	0.474	0.585	0.836	1.197	1.713	2.112	3.023	4.325	6.189
82	0.339	0.484	0.597	0.855	1.223	1.750	2.159	3.089	4.420	6.325
84	0.346	0.495	0.610	0.873	1.250	1.788	2.205	3.155	4.515	6.461
86	0.353	0.505	0.623	0.892	1.276	1.826	2.251	3.222	4.610	6.597
88	0.360	0.516	0.636	0.910	1.302	1.863	2.298	3.288	4.705	6.733
90	0.368	0.526	0.649	0.928	1.328	1.901	2.344	3.354	4.800	6.869

Source: Design Rainfall Tables for El Dorado County, prepared by Jim Goodridge, July 29, 1989

Mean Annual Percipitation	Rainfall Intensity in inches per hour for Return Period = 10 years									
	5Min	10Min	15Min	30Min	1Hr	2Hrs	3Hrs	6 Hrs	12Hrs	24 Hrs
20	2.004	1.434	1.179	.843	.603	.432	.355	.254	.182	.130
22	2.127	1.522	1.251	.895	.640	.458	.377	.270	.193	.138
24	2.255	1.613	1.326	.949	.679	.486	.399	.286	.204	.146
26	2.383	1.705	1.402	1.003	.718	.514	.422	.302	.216	.155
28	2.512	1.797	1.478	1.057	.756	.541	.445	.318	.228	.163
30	2.640	1.889	1.553	1.111	.795	.569	.468	.335	.239	.171
32	2.769	1.981	1.629	1.165	.834	.597	.490	.351	.251	.180
34	2.897	2.073	1.704	1.219	.872	.624	.513	.367	.263	.188
36	3.026	2.165	1.780	1.273	.911	.652	.536	.383	.274	.196
38	3.154	2.257	1.855	1.327	.950	.680	.559	.400	.286	.205
40	3.282	2.349	1.931	1.381	.988	.707	.581	.416	.298	.213
42	3.411	2.440	2.006	1.436	1.027	.735	.604	.432	.309	.221
44	3.539	2.532	2.082	1.490	1.066	.763	.627	.449	.321	.230
46	3.668	2.624	2.157	1.544	1.104	.790	.650	.465	.333	.238
48	3.796	2.716	2.233	1.598	1.143	.818	.672	.481	.344	.246
50	3.925	2.808	2.309	1.652	1.182	.846	.695	.497	.356	.255
52	4.053	2.900	2.384	1.706	1.221	.873	.718	.514	.368	.263
54	4.181	2.992	2.460	1.760	1.259	.901	.741	.530	.379	.271
56	4.310	3.084	2.535	1.814	1.298	.929	.763	.546	.391	.280
58	4.438	3.176	2.611	1.868	1.337	.956	.786	.563	.402	.288
60	4.567	3.267	2.686	1.922	1.375	.984	.809	.579	.414	.296
62	4.695	3.359	2.762	1.976	1.414	1.012	.832	.595	.426	.305
64	4.824	3.451	2.837	2.030	1.453	1.039	.854	.611	.437	.313
66	4.952	3.543	2.913	2.084	1.491	1.067	.877	.628	.449	.321
68	5.081	3.635	2.989	2.138	1.530	1.095	.900	.644	.461	.330
70	5.209	3.727	3.064	2.192	1.569	1.122	.923	.660	.472	.338
72	5.337	3.819	3.140	2.246	1.607	1.150	.945	.676	.484	.346
74	5.466	3.911	3.215	2.300	1.646	1.178	.968	.693	.496	.355
76	5.594	4.003	3.291	2.354	1.685	1.205	.991	.709	.507	.363
78	5.723	4.095	3.366	2.409	1.723	1.233	1.014	.725	.519	.371
80	5.851	4.186	3.442	2.463	1.762	1.261	1.036	.742	.531	.380
82	5.980	4.278	3.517	2.517	1.801	1.288	1.059	.758	.542	.388
84	6.108	4.370	3.593	2.571	1.839	1.316	1.082	.774	.554	.396
86	6.236	4.462	3.668	2.625	1.878	1.344	1.105	.790	.566	.405
88	6.365	4.554	3.744	2.679	1.917	1.371	1.127	.807	.577	.413
90	6.493	4.646	3.820	2.733	1.955	1.399	1.150	.823	.589	.421

7/24/89 Note older versions are superseded
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Mean Annual Percipitation	Rainfall Intensity in inches per hour for Return Period = 100 years									
	5Min	10Min	15Min	30Min	1Hr	2Hrs	3Hrs	6 Hrs	12Hrs	24 Hrs
20	2.840	2.032	1.671	1.195	.855	.612	.503	.360	.258	.184
22	3.014	2.157	1.773	1.269	.908	.649	.534	.382	.273	.196
24	3.196	2.287	1.880	1.345	.963	.689	.566	.405	.290	.207
→ 26	3.378	2.417	1.987	1.422	1.017	.728	.598	.428	.306	.219
28	3.561	2.548	2.094	1.499	1.072	.767	.631	.451	.323	.231
30	3.743	2.678	2.202	1.575	1.127	.806	.663	.474	.339	.243
32	3.925	2.808	2.309	1.652	1.182	.846	.695	.497	.356	.255
34	4.107	2.938	2.416	1.728	1.237	.885	.727	.520	.372	.266
36	4.289	3.069	2.523	1.805	1.291	.924	.760	.544	.389	.278
38	4.471	3.199	2.630	1.882	1.346	.963	.792	.567	.405	.290
40	4.653	3.329	2.737	1.958	1.401	1.002	.824	.590	.422	.302
42	4.835	3.459	2.844	2.035	1.456	1.042	.856	.613	.438	.314
44	5.017	3.590	2.951	2.112	1.511	1.081	.889	.636	.455	.326
46	5.199	3.720	3.058	2.188	1.566	1.120	.921	.659	.471	.337
48	5.381	3.850	3.165	2.265	1.620	1.159	.953	.682	.488	.349
50	5.563	3.980	3.272	2.341	1.675	1.199	.985	.705	.504	.361
52	5.745	4.111	3.380	2.418	1.730	1.238	1.018	.728	.521	.373
54	5.927	4.241	3.487	2.495	1.785	1.277	1.050	.751	.537	.385
56	6.109	4.371	3.594	2.571	1.840	1.316	1.082	.774	.554	.396
58	6.291	4.501	3.701	2.648	1.895	1.356	1.114	.797	.571	.408
60	6.473	4.632	3.808	2.725	1.949	1.395	1.147	.820	.587	.420
62	6.656	4.762	3.915	2.801	2.004	1.434	1.179	.844	.604	.432
64	6.838	4.892	4.022	2.878	2.059	1.473	1.211	.867	.620	.444
66	7.020	5.022	4.129	2.954	2.114	1.512	1.243	.890	.637	.455
68	7.202	5.153	4.236	3.031	2.169	1.552	1.276	.913	.653	.467
70	7.384	5.283	4.343	3.108	2.223	1.591	1.308	.936	.670	.479
72	7.566	5.413	4.450	3.184	2.278	1.630	1.340	.959	.686	.491
74	7.748	5.544	4.558	3.261	2.333	1.669	1.372	.982	.703	.503
76	7.930	5.674	4.665	3.338	2.388	1.709	1.405	1.005	.719	.514
78	8.112	5.804	4.772	3.414	2.443	1.748	1.437	1.028	.736	.526
80	8.294	5.934	4.879	3.491	2.498	1.787	1.469	1.051	.752	.538
82	8.476	6.065	4.986	3.567	2.552	1.826	1.501	1.074	.769	.550
84	8.658	6.195	5.093	3.644	2.607	1.865	1.534	1.097	.785	.562
86	8.840	6.325	5.200	3.721	2.662	1.905	1.566	1.120	.802	.574
88	9.022	6.455	5.307	3.797	2.717	1.944	1.598	1.143	.818	.585
90	9.204	6.586	5.414	3.874	2.772	1.983	1.630	1.167	.835	.597

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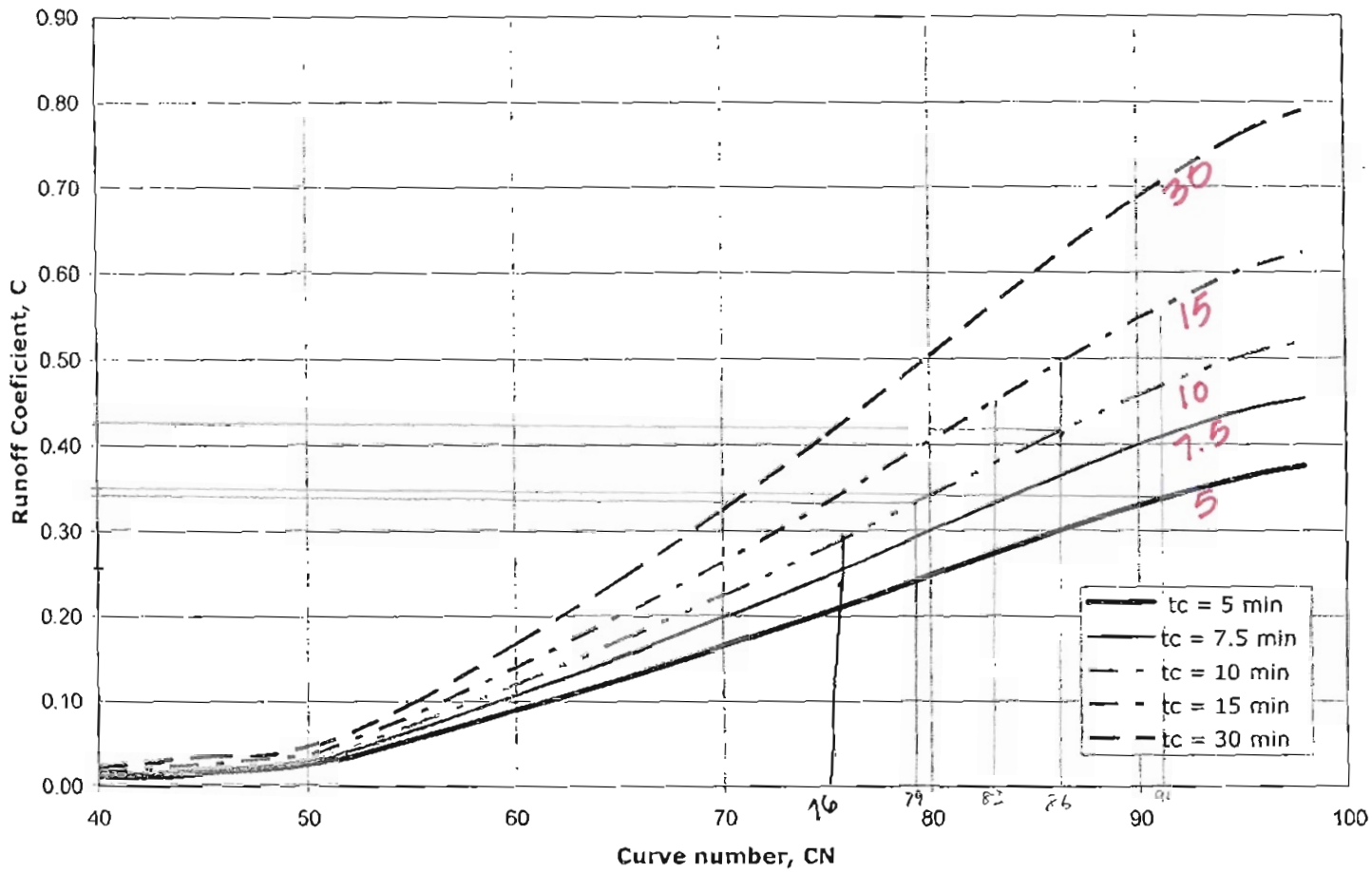


Figure 5. Runoff coefficients for 10-yr event above 1,640 ft (NRCS type 1A storm)

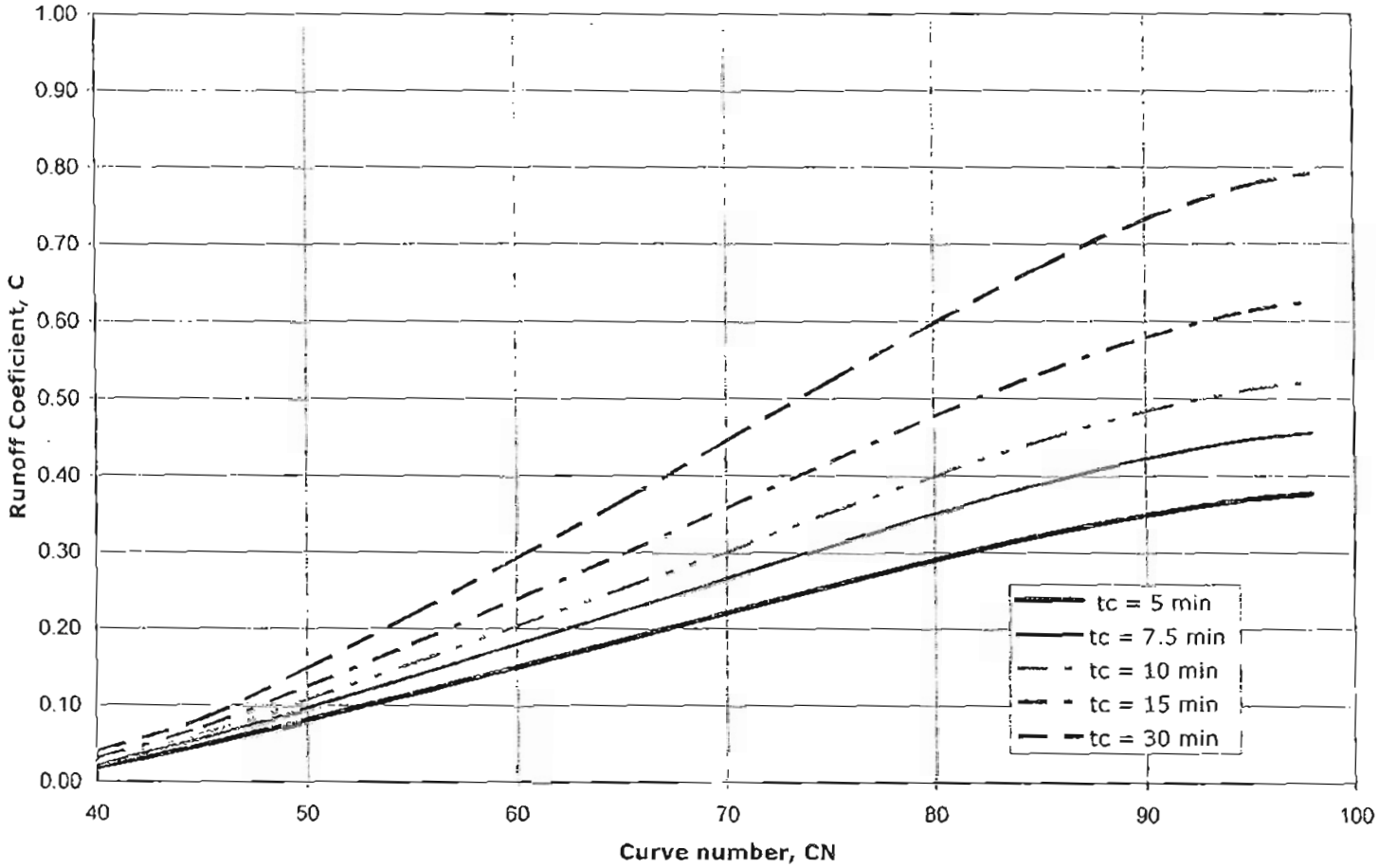
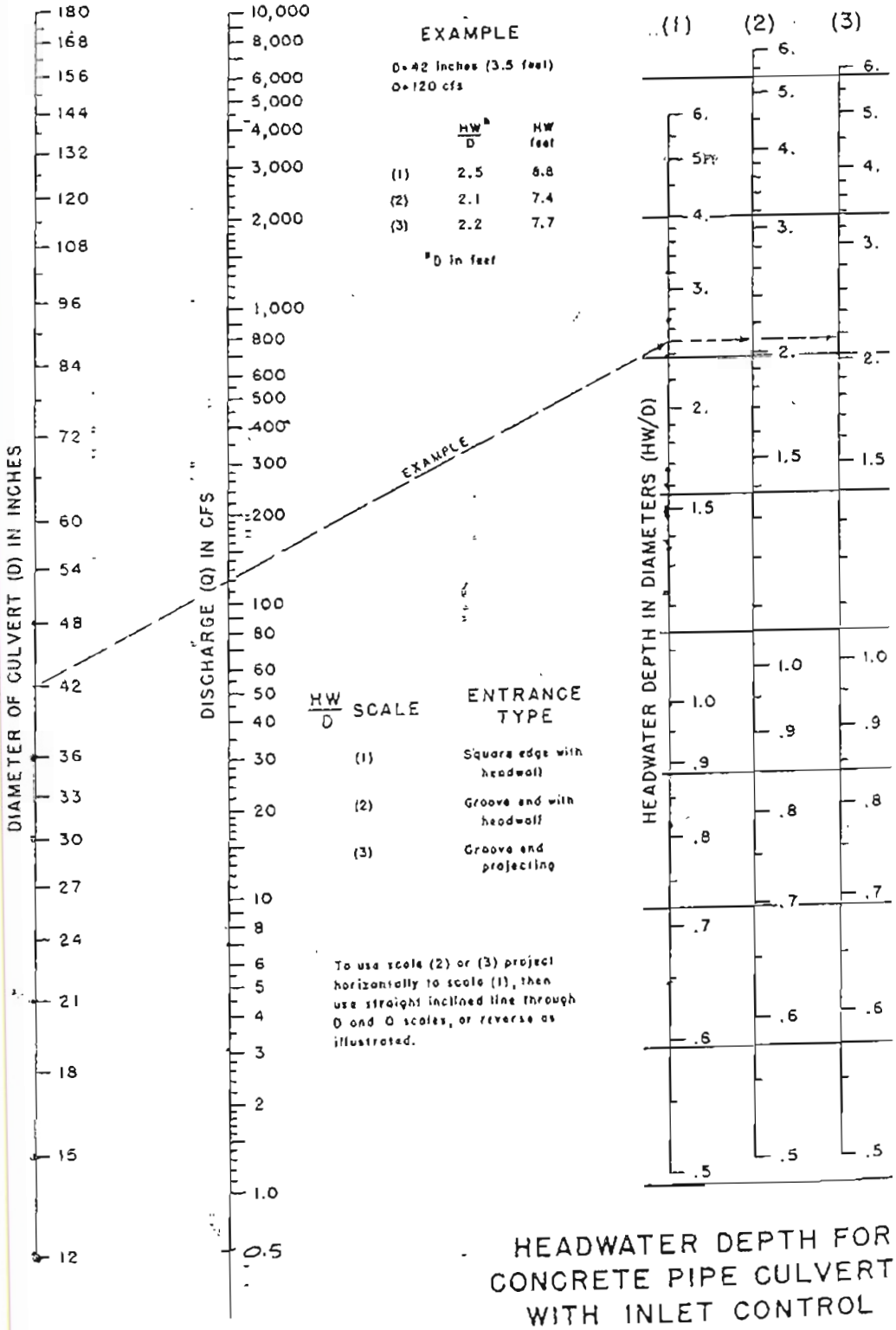


Figure 7. Runoff coefficients for 100-yr event above 1,640 ft (NRCS type 1A storm)



HEADWATER DEPTH FOR CONCRETE PIPE CULVERTS WITH INLET CONTROL

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In either case, the travel time is the flow path length divided by the velocity.

Channel flow: The velocity of flow in a clearly-defined channel is estimated with Manning's equation, assuming discharge equal the average annual value (2-yr event). If this discharge is unknown, the regression equation presented in Appendix 2.5 can be used to provide an estimate. The channel-flow travel time is the channel length divided by the velocity.

Table 2.4.3 Overland-flow Roughness Coefficients (Source: SCS, 1986)

Surface description (1)	Overland flow n (2)
Smooth surfaces (concrete, asphalt, gravel, or bare soil	0.011
Fallow (no residue)	0.05
Cultivated soils:	
Residue cover < 20%	0.06
Residue cover > 20%	0.17
Grass:	
Short grass prairie	0.15
Dense grasses	0.24
Bermuda	0.41
Range (natural)	0.13
Woods:	
Light underbrush	0.40
Dense underbrush	0.80

When the various travel times are determined, t_c can be computed as the sum. The UH lag is estimated as 60% t_c, and Eq. 2.4.5 is solved to find the UH peak. In the solution of Eq. 2.4.6, it is convenient to select ΔD equal the computation time step. Then the resulting UH can be used directly with rainfall excess, which is computed with this same time step, to estimate the runoff hydrograph.

Fig. 2.4.2 shows the 10-min UH developed for an example 5-sq mi catchment in which t_c = 1 hr. In that case, lag = 0.60 hr. Solving Eq. 2.4.6 yields T_p = 0.68 hr. Eq. 2.4.5 yields q_p = 3541.5 cfs/in. of excess rainfall. To develop the UH, values in cols. 1 and 3 of Table 2.4.2 are multiplied by T_p, and the values in cols. 2 and 4 are multiplied by q_p. To compute storm runoff, Eq. 2.4.4 is solved with the UH and excess.

APPENDIX J

AEC

ACOUSTICAL ENGINEERING CONSULTANTS

ACOUSTICS • NOISE & VIBRATION CONTROL • AUDIOVISUAL SYSTEM DESIGN

Noise Impact Study for the El Dorado County Public Safety Facility Project in Diamond Springs, California

Prepared for

County of El Dorado
Chief Administration Office - Facilities
3000 Fairlane Court, Suite 1
Placerville, CA 95667

Prepared by

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INCE Board Certified

December 9, 2015
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Introduction

The proposed El Dorado County Public Safety Facility in Diamond Springs will relocate the various Sheriff Department divisions into one geographic location with new facilities to support their essential services. Currently, the Sheriff Department operates out of seven different facilities throughout the County and consolidation into a single, highly functional facility is necessary. An Environmental Impact Report (EIR) is being prepared for the project site off of Industrial Drive in Diamond Springs. The Noise Impact Study of the EIR addresses potential transportation and non-transportation sound sources generated by the project on existing land uses in the project vicinity. Source sound levels and acoustical modeling was used to predict sound levels at nearby noise sensitive impacts, compare against various thresholds of significance, and provide noise control mitigation where required.

The County property at the end of Industrial Drive is approximately 30 acres, although only the parcels south of Industrial Drive will be developed. Of the portion south of Industrial Drive, the proposed Public Safety Facility will sit on the 11.3 acre parcel on the east side of the site while a solar farm is planned for a 7 acre piece on the west side of the site. Four main buildings are proposed for the Public Safety Facility consisting of the two-story Sheriff Administration Building (59,331 square feet), the one-story Training Building (24,000 square feet), the one-story SWAT, Search and Rescue Building (11,000 square feet), and the one-story County Morgue Building (12,000 square feet). Buildings are arranged strategically primarily for function, but also to use both distance and shielding from the buildings themselves to minimize noise impacts to sensitive residential properties to the north and west. A conceptual site plan for the project is shown in Figure 1. Single family residences exist to the north atop a bluff and also to the west beyond the Sacramento-Placerville Transportation Corridor and El Dorado Trail. The project site and adjacent properties are zoned for industrial use. Some of the existing facilities on the industrial use property primarily to the south and east include the County Animal Control Center, Solid Rock Faith Center and an associated mini playground area, the Western Sign Company facility, the El Dorado Truss Company, and various auto repair and other small businesses.

Environmental Setting

Technical Background

Sound can be described as the mechanical energy of a vibrating object transmitted by pressure waves through a liquid or gaseous medium (e.g., air) to a hearing organ, such as a human ear. In the context of acoustical studies, noise is defined generally as unwanted or annoying sound. A fundamental model in acoustics consists of a sound source, the propagation path, and a receiver. The loudness of the noise source and obstructions or atmospheric factors affecting the propagation path to the receptor determine the sound level and characteristics of the noise perceived by the receptor. Sound is often described by its frequency (pitch) and amplitude (loudness). Frequency is expressed in terms of cycles per second, or Hertz (Hz). High frequencies are sometimes more conveniently expressed in kilohertz (kHz), or thousands of Hertz. The audible frequency range for humans is generally between 20 Hz and 20,000 Hz.

The amplitude of pressure waves generated by a sound source determines the loudness of that source. Sound pressure amplitude is measured in micro-Pascals (μPa) or Pascals (Pa). Sound pressure amplitudes for different kinds of noise environments and for what humans can detect is enormous and can range from 200 μPa to 200 Pa. Because of this huge range of values, a logarithmic scale is used to describe sound pressure level (SPL) in terms of decibels (dB). Sound pressure levels, expressed in dB, are referenced to 20 μPa equivalent to 0 dB. Logarithmic numbers such as decibels cannot be added or subtracted through ordinary arithmetic. Under the decibel scale, a doubling of sound energy corresponds to a 3-dB increase. Two equal sources at equal distance from the receiver would produce 3 dB more than one of the sources under the same conditions. An increase of 10 dB represents a 10-fold increase in acoustical energy. Despite the sharp rise in acoustical energy with a relatively small change in

decibels, human perception of sound also follows more of a logarithmic scale rather than being based on acoustical energy or pressure. For example, laboratory studies have concluded that an increase of 3 dB is subjectively "barely perceptible" and that a 10 dB increase is perceived as approximately doubling of loudness using audio sources of an equivalent spectrum. In addition to level, humans have different sensitivities to different frequencies of sound. An A-weighted sound level (dBA) is used to approximate the response of the human ear, correlating to judgements of relative loudness, and is by far the most common metric used for noise regulations addressing common noise sources and limits. Table 1 describes typical A-weighted noise levels for various noise sources.

Table 1. Typical A-Weighted Noise Levels

Common Outdoor Activities	Noise Level (dBA)	Common Indoor Activities
	— 110 —	Rock band
Jet fly-over at 1000 feet		
	— 100 —	
Gas lawn mower at 3 feet		
	— 90 —	
Diesel truck at 50 feet at 50 mph		Food blender at 3 feet
	— 80 —	Garbage disposal at 3 feet
Noisy urban area, daytime		
Gas lawn mower, 100 feet	— 70 —	Vacuum cleaner at 10 feet
Commercial area		Normal speech at 3 feet
Heavy traffic at 300 feet	— 60 —	
		Large business office
Quiet urban daytime	— 50 —	Dishwasher next room
Quiet urban nighttime	— 40 —	Theater, large conference room (background)
Quiet suburban nighttime		
	— 30 —	Library
Quiet rural nighttime		Bedroom at night, concert hall (background)
	— 20 —	
		Broadcast/recording studio
	— 10 —	
Lowest threshold of human hearing	— 0 —	Lowest threshold of human hearing

Source: Caltrans 2013.

Statistical Descriptors

Additional statistical descriptors of sound are required to describe noise beyond a simple A-weighted metric. The time of day (or night) of a potential noise impact, the duration a noise source occurs, and even specific tones, impulses, or content must be understood to describe a potential noise source and impact. Some of the most common noise descriptors or time varying statistics of sound follow:

- Equivalent or Average Sound Level (L_{eq}): L_{eq} represents an average of the sound energy occurring over a specified period. In effect, L_{eq} is the steady-state sound level containing the same acoustical energy as the time-varying sound that actually occurs during the same period. For noise standards and environmental noise modeling, the L_{eq} is commonly expressed over a duration of 1-hour using A-weighting.
- Day-Night Average Sound Level (L_{dn}): L_{dn} is the energy average of A-weighted sound levels occurring over a 24-hour period, with a 10-dB penalty applied to A-weighted sound levels occurring during nighttime hours between 10 p.m. and 7 a.m.

- Community Noise Equivalent Level (CNEL): Similar to L_{dn}, CNEL is the energy average of the A-weighted sound levels occurring over a 24-hour period, with a 10-dB penalty applied to A-weighted sound levels occurring during the nighttime hours between 10 p.m. and 7 a.m., and a 5-dB penalty applied to the A-weighted sound levels occurring during evening hours between 7 p.m. and 10 p.m.
- Percentile-Exceeded Sound Level (L_{xx}): L_{xx} represents the sound level exceeded for a given percentage of a specified period (e.g., L10 is the sound level exceeded 10% of the time, and L90 is the sound level exceeded 90% of the time).
- Maximum Sound Level (L_{max}): L_{max} is the highest instantaneous sound level measured during a specified period.

Sound changes in level and frequency content as it propagates over distance due to geometric spreading, ground absorption (terrain and vegetation), and atmospheric effects. Sound from a localized source (i.e., a point source) propagates uniformly outward in a spherical pattern. The sound level attenuates (or decreases) at a rate of 6 decibels for each doubling of distance from a point source. For line sources such as steady traffic on roadways, the source propagates outward in a cylindrical pattern and attenuates at a rate of 3 decibels for each doubling of distance from the source over hard terrain (e.g. concrete or water) and at 4.5 dBA per doubling of distance if the intervening terrain is soft (e.g. dirt, grass, or scattered bushes and trees). Atmospheric factors such as wind speed and direction, air temperature, and humidity can cause fluctuations in environmental noise over long distances (typically greater than 1300 feet from the source).

A large object or barrier in the path between a noise source and a receptor can substantially attenuate noise levels at the receptor. The amount of attenuation provided by shielding depends on the source height, barrier height, source to barrier and barrier to receiver distances, and the frequency content of the noise source. Natural terrain features (e.g., hills and dense woods) and human-made features (e.g., buildings and walls) can substantially reduce noise levels. Walls are often constructed between a source and a receptor specifically to reduce noise. A barrier that breaks the line of sight between a source and a receptor will typically result in at least 5 dB of noise reduction. Taller barriers provide increased noise reduction. Holes or gaps in acoustical barriers can significantly reduce effectiveness.

Vibration

General vibration criteria for human comfort and potential impacts to buildings are listed in the Federal Transit Administration (FTA) Transit Noise and Vibration Impact Assessment[1] document. In contrast to airborne noise, ground-borne vibration is not a common environmental problem. Common sources of vibration include trains, heavy trucks or buses on rough roads, and construction activity such as impact pile driving and heavy earth moving equipment. Vibration levels with respect to structural impacts are often quantified using the peak particle velocity (PPV), whereas human response to vibration often uses the root mean square (rms) velocity expressed in VdB. PPV is typically a factor of 1.7 to 6 times greater than rms vibration velocity.

Ground vibrations from construction activities do not often reach the levels that can damage structures, and audible or feelable ranges of vibration typically only occur in buildings very close to the site as can be the case in an urban setting. Similar to sound, vibration drops off in energy with distance and the rate of propagation is determined primarily by soil conditions. Construction vibration is typically highest during heavy demolition of existing structures and when impact pile driving or similar vibration intensive methods of construction are used. Historic buildings are typically more sensitive to potential building damage due to lack of seismic safety features. Buildings that house sensitive medical equipment (MRI, optical surgery, etc.) or include micro/nano fabrication (computer chip manufacturing) are the most sensitive to ground borne vibration often at levels well below any feelable threshold. However, these facilities also typically include features to isolate vibration from all exterior and interior sources.

Existing Noise Environment

The project site for the proposed Public Safety Center is on the south side of Industrial Drive in El Dorado County with the site and surrounding land zoned for industrial use. Existing transportation sources of sound in the project vicinity include road traffic on Missouri Flat Road and other local roadways, general aviation flights, and distant trains. Several non-transportation sources exist associated with the industrial land use including vehicles on private land, sawing and hammering at El Dorado Truss Co., automotive repair tools at nearby service shops, mechanical equipment, and other sources. Single family residences beyond the industrial land also contribute sound sources that impact the surrounding area including dogs, roosters, air conditioning units, yard maintenance equipment, and residential construction.

Field sound tests were used to measure the existing ambient environment at or near the project site. Standard sound measuring equipment was used during the tests. Field sound measurements were made using one CEL 593 (s/n 084270) and one Larson Davis 831 (s/n 2325) sound analyzer. Both meters employ 1/2 inch random incidence condenser microphones. A Larson Davis CAL200 calibrator was used to calibrate these meters and the microphones to 114 dB at 1000 Hz before beginning measurements. The meters conform to the requirements of a Type I instrument per American National Standards Institute[2]. A windscreen covered each microphone during all sound measurements. Microphones were mounted on tripods approximately 5.5 feet above ground level. Both meters were set to measure statistical sound levels over consecutive intervals to identify sources and variations in sound with time. Statistical sound level descriptors such as the L_{25}, L_{50} and L_{90} were used to quantify the duration of time a specific threshold was reached. These are, respectively, the sound levels exceeded 25 percent, 50 percent and 90 percent of the time. The sound level meters also capture the maximum sound level, L_{MAX} and the average sound level, L_{eq}. Field sound measurements were made on August 2nd and 3rd of 2015 at two positions in the vicinity as shown in Figure 2: Site 1 was a test position at the end of Halyard Court, near single family residences north of and overlooking the site from an elevated position. Site 2 was located on the west side of the project site in the direction of single family residences along Forni Road and near the El Dorado Trail along the abandoned rail line. 24-hour testing was conducted at Site 1 while shorter duration (approximately 1 hour) measurements were made at Site 2. Table 2 below provides a summary of sound level measurements made on site to quantify existing noise sources with additional detail provided in Figures 3 and 4:

TABLE 2. Existing Ambient Noise Environment as Measured in the El Dorado County Public Safety Center Vicinity.

Location	Description	L_{dn} (CNEL), dBA	Measured Sound Levels, dBA					
			Daytime (7 am – 7 pm)		Evening (7 pm to 10 pm)		Night (10 pm to 7 am)	
			Hourly L_{eq}	L_{MAX}	Hourly L_{eq}	L_{MAX}	Hourly L_{eq}	L_{MAX}
Site 1	Residential North of Site, 24-hr data	49 (50)	47 (43 to 51)	69	45 (42 to 49)	65	42 (37 to 47)	59
Site 2	Near El Dorado Trail & West Residential	N/A	38	53	N/A	N/A	N/A	N/A

Existing Vibration Environment

Background vibration levels in residential areas are usually 50 VdB or lower, well below the threshold of perception for humans around 65 VdB. The project site and surrounding area have few vibration sources. Possible sources may include traffic (especially heavy trucks) over uneven road surfaces and some

industrial sources such as mechanical equipment, material handling, hammering, etc. No baseline vibration measurements were made at the project site.

Regulatory Framework

Federal

The U.S. Environmental Protection Agency and the Noise Control Act of 1972 established a national policy to promote an environment for all Americans free from noise that jeopardizes their health and welfare. The Act also served to (1) establish a means for effective coordination of Federal research and activities in noise control; (2) authorize the establishment of Federal noise emission standards for products distributed in commerce; and (3) provide information to the public respecting the noise emission and noise reduction characteristics of such products. Under the Clean Air Act, the EPA administrator established the Office of Noise Abatement and Control (ONAC) to carry out investigations and studies on noise and its effect on the public health and welfare. Through ONAC, the EPA coordinated all Federal noise control activities, but in 1981 the Administration concluded that noise issues were best handled at the State and local level. As a result, ONAC was closed and primary responsibility of addressing noise issues was transferred to State and local governments. EPA does not have any regulatory authority governing noise in local communities. The US EPA noise standards typically apply for transportation related sources and projects, such as highway improvements and airport land use studies.

State

The California Environmental Quality Act (CEQA) Guidelines, Appendix G provides a checklist to evaluate the significance of potential noise impacts aimed mostly at transportation noise sources. Although CEQA provides guidelines for addressing significance, it does not provide actual sound or vibration levels to quantify significance. Instead, it is assumed that local noise regulations provide the specific thresholds of significance. Each of the checklist items is replicated below:

"XII. NOISE: Would the project result in:

a) Exposure of persons to or generation of noise levels in excess of standards established in the local general plan or noise ordinance, or applicable standards of other agencies?
b) Exposure of persons to or generation of excessive groundborne vibration or groundborne noise levels?
c) A substantial permanent increase in ambient noise levels in the project vicinity above levels existing without the project?
d) A substantial temporary or periodic increase in ambient noise levels in the project vicinity above levels existing without the project?
e) For a project located within an airport land use plan or, where such a plan has not been adopted, within two miles of a public airport or public use airport, would the project expose people residing or working in the project area to excessive noise levels?
f) For a project within the vicinity of a private airstrip, would the project expose people residing or working in the project area to excessive noise levels?"

The 2013 California Green Building Standards Code (Cal Green) Section 5.507.4 contains acoustical requirements for nonresidential buildings both to limit exterior noise intrusion and to provide a baseline standard for interior separation between adjacent tenant spaces. Section 5.507.4.1 provides a prescriptive method of evaluating the exterior shell components using Sound Transmission Class (STC) or Outdoor-Indoor Sound Transmission Class (OITC) required ratings while section 5.507.4.2 provides a performance method to limit the intrusion of exterior sound to an interior L_{eq} of 50 dBA during a worst case hour. The

exterior noise intrusion requirements of Cal Green are *only* triggered if the project is located within a 65 dBA L_{dn} or CNEL contour from a transportation noise source or a one hour L_{eq} of 65 dBA or greater. Interior sound transmission criteria in 5.507.4.3 are assumed to apply only to multi-tenant spaces.

Local

El Dorado County General Plan

The Public Health, Safety, and Noise Element section of the El Dorado County General Plan[3] contains noise regulations for transportation, non-transportation, and construction noise sources. Regulations for transportation sound sources use the Day-Night Average Sound Level (L_{dn}) or Community Noise Equivalent Level (CNEL) descriptors of noise. Non-transportation and construction noise sources are limited by the hourly L_{eq} or maximum (L_{MAX}) statistical descriptors. Noise regulations from the County General Plan are separated in the following sections according to source type.

Transportation

Policy 6.5.1.9 and Policy 6.5.1.12 of the El Dorado General Plan are generally used to assess potential transportation noise impacts on sensitive land uses due to the addition of a new development project. Policy 6.5.1.9 references Table 6-1 to determine potential impacts to various land uses from transportation noise sources. Residential land use is the only noise sensitive land use in the project vicinity. A church is operating near the proposed project; however, the church is actually on a land use zoned industrial. The applicable portion of Table 6-1 is provided below:

TABLE 2. Maximum Allowable Noise Exposure for Transportation Noise Sources, Table 6.1, County of El Dorado Noise Element.

Land Use Designation	Outdoor Activity Areas L_{dn}/CNEL, dBA	Interior Spaces	
		L_{dn}/CNEL, dBA	Hourly L_{eq} dB(A)
Residential	60 (65 where achieving 60 is not feasible)	45	--

Table 6.1 is more appropriate for evaluating new development of residential property in areas impacted by existing transportation noise instead of using the table to define potential impacts from increases in transportation noise as a result of a development project. Policy 6.5.1.12 applies to the Public Safety Center project or similar developments as it evaluates the potential increase in transportation noise as a direct result of the project per the wording below:

"When determining the significance of impacts and appropriate mitigation for new development projects, the following criteria shall be taken into consideration:

A. Where existing or projected future traffic noise levels are less than 60 dBA L_{dn} at the outdoor activity areas of residential uses, an increase of more than 5 dBA L_{dn} caused by a new transportation noise source will be considered significant;
B. Where existing or projected future traffic noise levels range between 60 and 65 dBA L_{dn} at the outdoor activity areas of residential uses, an increase of more than 3 dBA L_{dn} caused by a new transportation noise source will be considered significant;; and
C. Where existing or projected future traffic noise levels are greater than 65 dBA L_{dn} at the outdoor activity areas of residential uses, an increase of more than 1.5 dBA L_{dn} caused by a new transportation noise source will be considered significant."

Non-Transportation

Policy 6.5.1.7 and Policy 6.5.1.13 of the Noise Element address non-transportation sound sources. Policy 6.5.1.7 refers to hourly average L_{eq} and maximum L_{MAX} limits in Table 6-2. It applies to non-transportation sound sources and sets limits based on the time of day, type of receiving land use, and the character of the sound. The policy makes no upward adjustment of noise level limits based on existing ambient (background) sound levels, but applies a 5 dBA penalty for simple tone noises, noises consisting primarily of speech or music, or for recurring impulsive noises. Displayed in Table 1 below is a summary of Table 6.2 from the El Dorado County Noise Element:

TABLE 3. Exterior Noise Level Performance Standards for Noise Sensitive Land Uses Affected by Non-Transportation Sources, Table 6.2, County of El Dorado Noise Element.

	Sound Level Limits, dBA					
	Daytime (7 am – 7 pm)		Evening (7 pm to 10 pm)		Night (10 pm to 7 am)	
Noise Level Descriptor	Community	Rural	Community	Rural	Community	Rural
Hourly L_{eq}	55	50	50	45	45	40
Maximum, L_{MAX}	70	60	60	55	55	50

In community areas the exterior noise level standard applies to the property line of the receiving property and in rural areas the exterior noise level standard applies at a point 100' away from the residence. El Dorado County Noise Element Performance Standards are more stringent than most, if not all, of the noise element or noise ordinance standards for counties in California. El Dorado County is unique in adding an "Evening" time period and separate "Community" and "Rural" distinctions instead of the typical single set of limits for daytime (7 am to 10 pm) and nighttime (10 pm to 7 am) periods. The added categories translate into lower rural and evening/nighttime limits than the general limits found in most California county noise elements.

Policy 6.5.1.13 of the County's Noise Element provides an alternative evaluation of new non-transportation noise sources. It reads:

"When determining the significance of impacts and appropriate mitigation to reduce those impacts for new development projects, the following criteria shall be taken into consideration:

D. In areas in which ambient noise levels are in accordance with the standards in Table 6-2, increases in ambient noise levels caused by new non-transportation noise sources that exceed 5 dBA shall be considered significant; and
E. In areas in which ambient noise levels are not in accordance with the standards in Table 6-2, increases in ambient noise levels caused by new non-transportation noise sources that exceed 3 dBA shall be considered significant."

This alternative policy for non-transportation sound sources creates some confusion as to which policy (6.5.1.7 or 6.5.1.13) has precedence. Ambient (background) plus 5 dBA or plus 3 dBA can produce different limits than those in Table 1.

Construction Noise

Policy 6.5.1.11 outlines standards for potential construction noise impacts in a series of three tables designated Table 6-3, 6-4, and 6-5. Standards vary depending on the identified land use area or region, specific land use designation, and time period. Policy 6.5.1.11 generally limits construction to the hours

of 7 am to 7 pm Monday through Friday and 8 a.m. to 5 p.m. for weekends and holidays, though the three tables specify limits for all time periods. Construction for the project is only expected to occur during normally allowed construction hours per 6.5.1.11 and only the relevant criteria is provided below:

TABLE 4. Maximum Allowable Noise Exposure for Non-Transportation Sources in Community Regions and Adopted Plan Areas – Construction Noise, Table 6.3, County of El Dorado Noise Element.

Land Use Designation	Time Period	Sound Level Limits, dBA	
		Hourly L_{eq}	L_{MAX}
Higher-Density Residential (MFR, HDR, MDR)	7 am to 7 pm	55	75
Commercial and Public Facilities (C, R&D, PF)	7 am to 7 pm	70	90
Industrial (I)	Any Time	80	90

El Dorado County Code of Ordinances

The El Dorado County Noise Ordinance[4] is found in Chapter 9.16, Noise, of the County Code of Ordinances. It states that it is unlawful for any person to create a loud or raucous noise to the extent that it carries onto private property or is heard by others using the highway within the unincorporated territory of the County. Unfortunately, this type of noise regulation is highly subjective and difficult to use for noise impact assessments since it contains no objective sound level metrics. Section 9.16.020 lists two exemptions that apply to the project. The Noise Ordinance provisions shall not apply to: "A. Any peace officer while carrying out his or her duties as a peace officer" and "D. The noise produced by a vehicle necessary to propel the vehicle." This would imply that normal daily activities at the Public Safety Facility, including training, would be exempt from the Chapter 9.16 and that vehicles on the property would also be exempt.

Analysis, Impacts, and Mitigation

Significance Criteria

Significance criteria for the Public Safety Center project specific to this EIR due to noise are a combination of local noise regulations and CEQA Appendix G. Impacts due to noise or vibration may be considered significant if construction or operation of the Public Safety Center would:

- Result in a substantial permanent increase in exterior noise levels in the project vicinity due to road traffic increases that exceed standards in the County's General Plan
- Result in a substantial permanent or periodic increase in exterior noise levels in the project vicinity due to non-transportation sources that exceed standards in the County's General Plan
- Result in a substantial temporary increase in exterior noise levels due to construction that exceed standards in the County's General Plan
- Expose adjacent residential or commercial buildings (and persons within) to significant vibration due to project construction.

The proposed Public Safety Center project is over 3.5 miles from the nearest public or private airstrip; therefore, CEQA items e) and f) described previously do not apply. The 2013 California Green Building Standards Code (Cal Green) Section 5.507.4 also does not apply since the project is not located within a 65 dBA L_{dn} or CNEL contour from a transportation noise source nor will any of the buildings be exposed to a one hour L_{eq} of 65 dBA or greater due to exterior sources.

Analysis Methods and Source Data

Traffic Noise Modeling

Acoustical modeling was completed for road segments anticipated to be used by vehicles accessing the Public Safety Center. Calculations of predicted day-night average sound levels were made using the Federal Highway Administration (FHWA) Highway Noise Prediction Model[5]. The FHWA model was modified to include the CalTrans noise emission levels[6]. This model assumes freely flowing traffic. The presence of intersections, with or without stoplights, and general traffic congestion can significantly affect real world values. The ground was assumed to be acoustically soft for automobiles, medium trucks and heavy trucks. Traffic volumes on Missouri Flat Road and other local roadways were obtained from Average Daily Traffic (ADT) data provided by the County of El Dorado Department of Transportation website[7] and from the project Traffic Impact Analysis report provided by KDAnderson & Associates[8]. Average traffic speeds were assumed based on posted speed limits. Nighttime percentage of ADT was assumed to be 12% for traffic noise modeling purposes based on actual percentages of 3% to 11% from published hourly counts.

TABLE 3. Daily Traffic Volumes Used to Predict L_{dn} Sound Levels for the El Dorado County Public Safety Center Vicinity.

Roadway	Segment/Location	Daily Traffic Volumes					
		Existing			2035 Cumulative		
		Existing	Project Only	Total	Year 2035	Project Only	Total
Missouri Flat Road	100′ north of Plaza Drive	22,776	94	22,870	27,000	80	27,080
	North of Forni Road	32,952	290	33,242	40,660	274	40,934
	South of Forni Road	25,668	300	25,968	31,700	284	31,984
	100′ south of China Garden Road	19,990	310	20,300	21,200	357	21,557
	200′ north of SR 49	17,701	126	17,827	16,240	85	16,325
Industrial Drive	West of Missouri Flat Road	961	436	1,397	1,100	436	1,536
Forni Road	300′ west of Missouri Flat Road	9,697	12	9,705	13,130	12	13,138
	North of Enterprise Drive	6,750 (e)	6	6,752	7,000	6	7,002
	South of Enterprise Drive	5,040 (e)	56	5,096	5,400	56	5,456
	200′ north of SR 49	3,393	56	3,449	3,700	56	3,756
Enterprise Drive	100′ east of Forni Road	2,962	58	3,020	3,000	58	3,058
	300′ west of Missouri Flat Road	2,582	58	2,640	2,970	58	3,028
Pleasant Valley Road	1,000′ west of SR 49 (W)	9,035	40	9,075	12,770	40	12,810
	East of SR 49 (W)	13,500	80	13,580	17,000	80	17,080
	West of Missouri Flat Road	13,500	32	13,532	16,950	32	16,982
	East of Missouri Flat Road	15,000	94	15,094	14,550	53	14,603

Construction Noise & Vibration Level Modeling

Noise modeling was used to predict sound levels and assess potential noise impacts from construction. The FHWA Roadway Construction Noise Model (RCNM)[9] program was used to predict construction noise based on general equipment sound level assumptions and acoustical usage factors. The RCNM program contains both "Spec" L_{MAX} values and "Actual" L_{MAX} values averaged from a variety of samples measured at 50 feet from equipment. An acoustical usage factor is included to describe the percent of

time the equipment operates at its full capacity or loudest sound level during a construction operation. Sound level predictions were made three different tasks or phases assumed to generate the highest noise levels at nearest noise sensitive receptors: site, foundations, and CMU/precast concrete installation. A list of equipment, quantity, and estimated usage was assumed based on typical construction tasks and the project description. Site work is expected to include a track excavator, loaders, grader, and various trucks. Foundation and CMU or precast concrete installation is expected to utilize concrete pumps, concrete ready-mix trucks, grout pumps, a generator, a forklift, skid steer loaders, delivery trucks, a boom lift, and a crane. Generalized source to receiver distances had to be used in prediction due to the varying equipment locations that occurs during real-world construction.

Vibration analysis was conducted based on planned construction equipment and locations using equations and methods outlined in Chapter 12 of the Federal Transit Administration (FTA) Transit Noise and Vibration Impact Assessment manual. Similar to prediction of construction noise, vibration modeling assumes fixed distances from source equipment for simplicity and consistency. Vibration analysis was limited to the project phase(s) with the most significant source equipment.

Non-Transportation Sources

Indoor Shooting Range

The proposed Public Safety Center will have an indoor shooting range within the single story training building. The shooting range will be used by the El Dorado County Sheriff Department for weapons training using a variety of firearms in tactical scenarios and for general target practice. AEC conducted field sound measurements of the Placer County Sheriff indoor range, facility that is similar to the planned El Dorado County range. The Placer County range features 8 lanes, firing distances of up to 25 yards, and a pair of large steel doors on one side of the building to allow a vehicle to be brought in for SWAT or other specialized training. The facility also uses a powerful ventilation system to clean and remove gun smoke and other airborne contaminants, as well as a lead/bullet trap and reclamation system at the end of the range. Mechanical equipment for the range sits in an enclosed outdoor equipment yard at the bullet trap end of the range. The exterior wall for the range is constructed of painted concrete block with corrugated metal siding on the exterior side. Training sessions for the Placer County range typically occur sometime Monday through Friday between 8 am and 12 pm.

Sound level measurements of the Placer County Sheriff indoor range were made on February 18, 2015 using both positions within the range and at various distances from the exterior. Measurements were made during several handgun training sessions and data was collected for shotgun and semi-automatic rifle bursts as well. A majority of the training for the sheriff department uses handguns, but officers also conduct shotgun training courses and occasional training using semi-automatic rifles. Measurements made on the exterior of the building indicated that, as expected, the weak path for sound transmission from the interior to the exterior was through the large metal double doors. Results of continuous measurements made approximately 40 feet from the doors are shown in Figure 5. The highest recorded maximum (L_{MAX}) at this position was 91 dBA due to shots from the semi-automatic rifle, though training with a semi-automatic rifle will be rare. The second highest L_{MAX} was recorded when a line of officers fired hand guns simultaneously using several rounds each reaching 80 dBA. L_{eq} averages over an hour were approximately 59 dBA during normal training sessions and 64 dBA when including training plus semi-automatic fire at a distance of 40 feet from the range doors.

Mechanical Equipment & Engine Generator

HVAC systems for the Public Safety Center would likely consist of either a series of packaged rooftop air conditioners or larger air handlers and chillers. Most modern rooftop air conditioning units produce

sound levels of 55 dBA or less at a distance of 50 feet from the unit without shielding. A modern air cooled chiller could be approximately 70 dBA at 50 feet.

The equipment for the ventilation and bullet reclamation systems for the indoor shooting range may include pumps to circulate water for bullet reclamation and scrubbing, large fans and air filtration to remove gun smoke and other contaminants from the air within the range, and other equipment. The Placer County facility housed equipment in an outdoor mechanical yard at ground level surrounded by concrete block walls. The CMU block walls were constructed at a height of 12 feet above grade with a four foot wide gate opening. Measurements were made of the Placer County range equipment outside of the equipment yard during the February 18th tests. Sound levels of 69 dBA were measured at the gate to the equipment yard dropping to 58 dBA at a distance of 40 feet from the gate.

The project will also include a backup power generation system located within a concrete block enclosure on the southeast side of the project. A diesel generator set in a sound attenuating enclosure is likely to be used for emergency power generation, tested once or twice per month to keep the equipment in working condition. A limit of 80 dBA (or less) at 23 feet from the enclosure will be specified and any routine testing will occur after 7 am and before 10 pm with a typical testing duration of 30 minutes or less.

Vehicle Maintenance

The vehicle maintenance building (labeled "Boat & Auto Service" or "SWAT, Search and Rescue, Radio Shop" depending on the drawing date) for the Public Safety Center will service both autos and boats. Although not yet designed, it is anticipated that there will be two service bays with doors opening to the southeast. Sound sources within a typical auto repair shop include air compressors, impact wrenches, lifts, tire installation equipment, air releases, and vehicle exhaust. It is anticipated that the majority of vehicle service work will be for oil and tire changes. The auto service shop is not anticipated to be a full body shop, so only typical auto repair shop sources were included. Boat service adds the sound of motors tested in a water tank. Outboard motor boat pass by tests show typical sound levels in the 80 to 82 dBA range at 50 feet, though this includes both water and engine noise. Measurements of an outboard motor tested in a stationary water tank, typical of what would occur maintaining sheriff patrol boats, averaged approximately 65 dBA at 30 feet over a five minute test.

Typical auto service shop source sound levels are published relative to OSHA requirements as measured on a worker very close to the sound source. Sound levels at distance from the bay openings will be much less than those at a worker's ears. In addition, the vast majority of the time in a given hour is void of major noise sources emanating from the service bay and sound levels averaged over an hour are reduced. Service bay noise is characterized by short bursts of an impact wrench or an air pressure release or a tire/wheel machine removing or installing a tire, all of which lasts only a few seconds or less. Hourly L_{eq} sound levels measured at a distance of 75 feet from an auto repair shop with multiple bays ranged from approximately 55 to 60 dBA including nearby road traffic sources.

Solar Farm

A seven acre solar farm is planned for the west side of the project site with the western edge approximately 250 feet from the nearest residential property to the west. Solar systems produce low noise levels relative to other forms of power generation. Only the solar inverters dispersed through the array field are typically considered as potential noise sources. Solar inverters are used to convert the variable DC output of the solar array to AC current and help to maximize power output and efficiency from each array. AEC measured several 1.25 MW platforms containing a pair of 625 kW solar inverters on each platform at various load conditions, directions, and distances from each platform. The solar inverters produced average L_{eq} sound levels ranging from 59 to 68 dBA at 10 feet under 80% to 100% loads, dropping to 55 to 56 dBA at 10 meters (33 feet). The primary noise source for the inverters is not

the inverter itself, but the cooling system used within the cabinets. Fan speeds and the number of fans operating will vary depending on internal temperatures. The planned solar farm next to the Public Safety Center will be capable of producing 2 to 3 Megawatts of electricity. It is likely that much smaller (and possibly quieter) solar inverters will be used for this site than what AEC measured previously.

Emergency Vehicle Sirens

Sirens on emergency vehicles are exempt from having to meet local noise regulations. Regardless, it is important to address the use of sirens on site as a new noise source added by the project. Siren use at the Public Safety facility would be minimal. During each shift change for patrol personnel, vehicle sirens would be tested briefly to ensure that they are working properly. This involves turning on the vehicle sirens only long enough to hear a momentary "chirp" of the siren. Shift changes would occur at 6:00 AM and 6:00 PM, with some cover shifts arriving at different times during the day. Additional use of sirens would be limited to Code 3 calls received by patrol personnel at the facility. While most Code 3 calls would be responded to by units already in the field, Code 3 responses from the Public Safety facility would occasionally be necessary. In such an event, the responding patrol officer would turn on his or her siren and then exit the facility onto public roads.

Emergency Vehicles Operations Course

Outdoor training activities would occur at the site, and are expected to involve Emergency Vehicles Operations Course (EVOC) driver training. EVOC training is currently conducted off-site every other year. Because the Sheriff's Office does not currently have a facility to conduct training, parking lots throughout the area are relied on for EVOC training. The parking lots currently used for EVOC training include Brown's Ravine (Folsom), DST Output (El Dorado Hills), and the Placerville Airport (Placerville). The training consists of a four hour block, only approximately two hours of which consist of driving. The EVOC training includes very slow speed maneuvering around cones and parking the vehicle. "Pursuit driving" around cones is also performed. During the pursuit driving, drivers reach speeds of approximately 45 miles per hour. Once the proposed project is constructed, EVOC training would be shifted to the project site within the project parking lot. EVOC training at the site would only occur during daytime hours and should continue to occur approximately once every other year. Noise sources specific to the EVOC may include elevated engine noise from rapid acceleration and occasional tire squeal from cornering or rapid deceleration. Tire squeal sound levels are difficult to quantify and are highly variable based on vehicle speed, road conditions, tire conditions, the type of vehicle, and the specific maneuver being performed. A conservative, single event L_{MAX} level of 85 dBA at a distance of 50 feet was used for analysis.

Impacts and Mitigation Measures

Impact NOI-1:	The project has the potential to result in a substantial permanent increase in exterior noise levels in the project vicinity due to road traffic increases that exceed standards in the County's General Plan. This impact is considered to be **less than significant**.

Predicted L_{dn} values in the table below are for a reference distance of 50 feet from the edge of the roadway and represent worst case conditions at residential receptors. Most residences and associated outdoor activity areas are at a much greater distance from the identified road segments. The existing L_{dn} sound level measured at the nearest residential property north of the project was well below 60 dBA; therefore, the threshold of significance is set to an increase of more than 5 dBA L_{dn} caused by a new transportation noise source at these residential receptor locations.

TABLE 3. Predicted L_{dn} Sound Levels for Existing and Existing Plus Project Conditions at in the El Dorado County Public Safety Center Vicinity due to Road Traffic Sources.

Roadway	Segment/Location	Predicted L_{dn} Sound Levels at 50′, dBA					
		Existing			2035 Cumulative		
		Existing	Exist. + Project	Diff.	Year 2035	C + Project	Diff.
Missouri Flat Road	100′ north of Plaza Drive	68	68	0	69	69	0
	North of Forni Road	70	70	0	71	71	0
	South of Forni Road	69	69	0	70	70	0
	100′ south of China Garden Road	69	69	0	69	69	0
	200′ north of SR 49	69	69	0	68	68	0
Industrial Drive	West of Missouri Flat Road	54	55	+1	55	56	+1
Forni Road	300′ west of Missouri Flat Road	64	64	0	65	65	0
	North of Enterprise Drive	62	62	0	63	63	0
	South of Enterprise Drive	61	61	0	62	62	0
	200′ north of SR 49	59	59	0	60	60	0
Enterprise Drive	100′ east of Forni Road	58	58	0	58	58	0
	300′ west of Missouri Flat Road	57	57	0	58	58	0
Pleasant Valley Road	1,000′ west of SR 49 (W)	64	64	0	65	65	0
	East of SR 49 (W)	65	65	0	66	66	0
	West of Missouri Flat Road	68	68	0	69	69	0
	East of Missouri Flat Road	66	66	0	66	66	0

The highest L_{dn} increase will occur as a result of increased traffic on Industrial Drive, only because the existing traffic levels are so low. The percentage of heavy trucks relative to other vehicle types on Industrial Drive should decrease once the Public Safety Center is complete due to the predominance of normal automobile and small truck activity created by the project. Noise impacts due to traffic increases will be **less than significant without mitigation**.

Impact NOI-2:	The project has the potential to result in a substantial permanent or periodic increase in exterior noise levels in the project vicinity due to non-transportation sources that exceed standards in the County's General Plan. This impact is considered to be **less than significant**.

Several new permanent noise sources will be added to the project vicinity as a result of the project. Sources include the indoor gun range, mechanical equipment, a diesel generator used for emergency power backup, an auto and boat service shop, and solar power inverters. An outdoor public address system will not be installed for the project. Sirens on emergency vehicles are exempt from the noise regulations. The conceptual site plan has the buildings arranged strategically to place noise sources on the southeast side of the buildings facing the industrial use area, using the buildings also to shield these sources from the residential properties to the north and west.

The County's General Plan Noise Element sets hourly L_{eq} and L_{MAX} limits for non-transportation sources affecting noise sensitive land uses. These limits would apply to the nearest residential property line(s) only. It is noted that there is a church (Solid Rock Faith Center) with a playground located southeast of the project site, which is closer to many of the non-transportation sources (Solid Rock Faith Center) than

the nearest residential areas. The playground and church are considered noise-sensitive uses per Table 6-1 of the El Dorado County General Plan Public Health, Safety, and Noise Element. However, the church and accessory playground are located on land designated Industrial by the El Dorado County General Plan. Industrial uses are allowed by right on lands designated Industrial; and the General Plan affords protection for industrial uses regardless of whether noise-sensitive uses are located within industrially-designated areas. Therefore, while the church and accessory playground are considered noise-sensitive, their location within an Industrial-designated area precludes them from being subject to the County's noise level standards for noise-sensitive uses included in the General Plan.

The completed analysis and noise control measures provided in this report are based on an initial conceptual site plan that is subject to change and based on building designs that have yet to be initiated. A design-level acoustical analysis shall be prepared and submitted in conjunction with the submittal of building plans and specifications to the Community Development Agency for the Public Safety Facility Project to address non-transportation sources. The acoustical analysis shall calculate the exterior noise levels at nearby residential property lines resulting from the project's non-transportation noise sources including the indoor firing range and associated outdoor equipment, backup generator, rooftop HVAC equipment, and any other outdoor stationary project equipment. If the predicted noise levels at the receiving residential property lines do not exceed the standards specified in Table 6-2 of the El Dorado County General Plan, then no further mitigation is required. If predicted noise levels exceed the noise standards in Table 6-2 at nearby residential property lines, then the acoustical report shall include recommendations to ensure that the noise levels are reduced to levels at or below those shown in Table 6-2. Potential noise reduction measures for each non-transportation noise source are discussed in the following sections.

Indoor Shooting Range

The indoor shooting range will be placed on the east side of the Training Building away from residential receptors. Although construction plans are not yet available, it is anticipated that the El Dorado County indoor shooting range facility will be similar in design to the existing Placer County Sheriff range used for reference. Source hourly L_{eq} sound levels of 59 dBA (L_{MAX} of 80 dBA) during normal training and 64 dBA (L_{MAX} of 91 dBA) during semi-automatic rifle fire at a distance of 40 feet were used to predict receiver sound levels at nearby residential property lines over 850 feet away from the proposed buildings. Hourly L_{eq} levels are predicted to be 32 to 37 dBA while L_{MAX} sound levels are predicted to reach 53 to 64 dBA at the nearest residents without considering shielding from the project buildings (assuming doors to the range are on the southeast side of the building). The buildings could provide up to an additional 15 dBA of noise reduction. The predicted exterior noise levels are lower than the County's 45 dBA hourly L_{eq} limit for nighttime use and below the County's 55 dBA L_{MAX} nighttime sound level limit for all shooting activities. This assumes that (for the semi-automatic rifle use in particular) significant shielding occurs and/or the range building design includes noise reduction measures beyond those assumed in the analysis for nighttime use. Daytime operation of the range will meet the County's noise limits for all assumed weapon types based on the conceptual site plan. Additional mitigation measures are not required; however, acoustical analysis assumes certain minimum site conditions and construction standards are employed. These minimum standards are listed as "mitigation" for the purposes of this noise study to be included in the project design. Impacts from the indoor range are predicted to be **less than significant with mitigation**. Noise control mitigation measures include the following:

Mitigation

I. Indoor shooting range noise control measures and assumptions

A. Training building housing the indoor shooting range shall be at least 700 feet from the nearest residential property line. The indoor range shall be placed within the southeast portion of the building with exterior doors also facing to the southeast.
B. Indoor range can operate 24-hours per day, 7 days per week for typical use. Field sound test verification should be used once the facility is complete to verify limits are met for all gun types and hours of operation.
C. Analysis is based on building shell construction that meets or exceeds the Sound Transmission Class (STC) or Outdoor-Indoor Transmission Class (OITC) rating of the Placer County facility. This includes the use of sound rated steel doors (STC 50+), grout-filled concrete block walls fully sealed or tilt up concrete walls (STC 50+), and a sufficient roof/ceiling assembly (STC 50+).

Mechanical Equipment & Engine Generator

Three separate systems were analyzed for potential noise impacts: rooftop mechanical equipment for the four buildings, on grade mechanical equipment used for the indoor range, and a backup power emergency engine generator on grade on the southeast side of the project site. Using a worst case source sound level of 70 dBA at 50 feet for rooftop equipment, hourly L_{eq} sound levels at nearby residential receptors are predicted to reach 45 dBA over 850 feet away, which is less than the daytime and evening limits of 55 and 50 dBA respectively, and right at the nighttime limit of 45 dBA. Actual sound levels will be less due to two factors. First, at least partial shielding is expected from parapet walls or other obstructions. Second, rooftop mechanical equipment is not anticipated to run continuously (especially at night), and any off cycle time will reduce hourly average levels further. Rooftop mechanical equipment is predicted to meet the County's daytime, evening, and nighttime limits without any additional noise reduction.

Mechanical equipment for the indoor range is predicted to be even lower than that from rooftop equipment, assuming the equipment and full concrete block equipment yard wall enclosure is installed similar to the Placer County facility. No measurements were made of this equipment without the presence of the concrete block walls, though one could assume that levels would be at the upper end of what is typical for HVAC systems. The noise impact from the range mechanical equipment is potentially significant (during nighttime hours) without the concrete block walls as mitigation.

The engine generator will be installed in an enclosure and likely placed on the southeast portion of the site at least 800 feet from the nearest residential property line. Routine testing of the generator set will occur during daytime hours only (7 am to 7 pm). Emergency use of the generator to support the facility during a power outage is exempt from noise regulations. Assuming the engine generator in the enclosure will be specified to meet 80 dBA or less at 23 feet from the enclosure walls, daytime routine testing is predicted to be below the County's limit of 55 dBA at the nearest residential property lines. Impacts from permanently installed mechanical equipment and the emergency generator are predicted to be **less than significant with mitigation**. Mitigation is described below:

Mitigation

I. Minimum mechanical equipment and generator set noise control measures

A. Rooftop mechanical equipment was assumed to be at least 700 feet from the nearest residential property line with solid parapets at least partially blocking the line of sight to the equipment, or at least 850 feet from the nearest residential property line without considering shielding.
B. Outdoor mechanical equipment yard housing the indoor shooting range equipment (fans, pumps, filtration, etc.) shall be at least 700 feet from the nearest residential property line. Concrete block walls (or similar solid construction equaling the weight per square foot of concrete block) shall surround the equipment, at a height sufficient to block the line of sight to the nearest residential receptor.
C. Engine generator and enclosure shall be specified to meet 80 dBA or less at a distance of 23 feet from the unit.
D. Analysis is based on generalized assumptions for equipment based on similar measured systems. Deviation from the analysis assumptions may require additional analysis and/or field sound test verification to ensure noise level limits are met.

Vehicle Maintenance

Sound levels from a typical auto repair shop and boat service facility were used to evaluate potential noise impacts at nearby residential property lines. Service facilities rarely produce high sustained noise levels and are instead characterized by short bursts from an impact wrench, tire/wheel machine, etc. Using an hourly average L_{eq} source sound level of 60 dBA at 75 feet from the bay door (at the top end of what was measured at existing service facilities), predicted sound levels at residential receptors are below 40 dBA, even without considering shielding from the facility buildings. Impacts from the auto and boat service bays are predicted to be **less than significant without mitigation**.

Solar Farm

The solar farm will place noise sources much closer to the residential property line to the west than any other permanent non-transportation sources. Using the source data AEC collected for large solar inverters, sound levels are predicted to below 40 dBA at the nearest residential property line over 250 feet from the nearest possible inverter, well below the County's limit of 45 dBA even for nighttime use. In addition, inverters are only under full load conditions during daytime hours and would significantly drop in level during nighttime hours. Impacts from the solar farm are predicted to be **less than significant without mitigation**.

Emergency Vehicles Operations Course

The highest anticipated sound levels from Emergency Vehicles Operations Course (EVOC) driver training would be generated from tire squeal. Assuming a conservative event L_{MAX} of 85 dBA at 50 feet, the level at over 550 feet to the nearest residence (assuming a vehicle on or near Industrial Drive) would be 65 dBA and below the daytime L_{MAX} limit of 70 dBA. Impacts from the EVOC are predicted to be **less than significant without mitigation**.

Impact NOI-3:	The project has the potential to result in a substantial temporary increase in exterior noise levels due to construction that exceed standards in the County's General Plan. This impact is considered to be **potentially significant with mitigation**.

Construction of the Public Safety Center facility will temporarily add new sound sources to the existing acoustic environment. Noise analysis was based on typical construction activities with the most significant noise-generating activity occurring within the first six months. Site work will include the use of a track excavator, loaders, a grader, and various trucks. Foundation and shell work will add concrete ready-mix trucks, pumps, cranes, and generators to the mix of equipment. The closest a grader would get to the property line of the industrial zone directly west would be approximately 50 feet. Acoustical modeling assumes a static distance between the source and receiver, when in reality the equipment is constantly moving. The predicted sound level at the nearest industrial property line from the single grader using a reduced usage factor is an L_{eq} of approximately 78 dBA with an L_{max} of 85. Modeling was also done for an assumed condition during foundation work at an average distance of 100 feet to the nearest industrial property line using several pieces of equipment operating simultaneously. Predicted L_{eq} sound levels were also 78 dBA without considering shielding. Construction noise levels are anticipated to be below the County's 80 dBA L_{eq} limit at industrial property lines without mitigation.

Similar analysis was conducted for the nearest residential receptors. It was assumed that a grader used during site work could be as close as 800 feet to the nearest west property line for the main project, as close as 250 feet from the nearest west residential property line for the solar farm, and as close as 550 feet to the nearest residential property line to the north. Foundation work will be more concentrated to the center of the project site at the building pad locations, with a distance of at least 830 feet to the nearest residence in any direction. Noise levels from the single grader at a normal usage factor are predicted to reach an L_{eq} of 57 dBA at the west residential property line due to the Public Safety Center, up to an L_{eq} of 67 dBA at the west residential property line due to grading at the solar farm, and 60 dBA at the north residential property line without considering shielding or mitigation. Noise levels during building foundation work with several pieces of equipment operating simultaneously are predicted to reach 59 dBA at both residential areas without considering shielding or mitigation. Many jurisdictions actually exempt construction noise during normal, daytime hours. However, the Noise Element for El Dorado County sets daytime limits for construction noise. The predicted noise levels exceed the County's 55 dBA hourly L_{eq} limit for construction noise impacting residential properties. Actual construction noise levels are anticipated to be lower than those predicted in the model, though impacts should still be considered potentially significant. Mitigation (such as temporary acoustical barriers) is not feasible based on site conditions including line of sight issues and the fact that construction noise sources are constantly moving; however, steps can be taken to reduce noise levels to the extent feasible including the following:

Mitigation

I. General noise control measures during construction

A. Equipment shall be well maintained with effective exhaust mufflers and intake silencers where applicable. Mufflers shall meet the equipment manufacturer's specifications and be free of rust, holes, and exhaust leaks. Construction contractors should select the quietest equipment possible with included optional noise control measures where feasible.
B. Construction techniques and equipment that minimizes noise and vibration will be implemented into the construction plan. Repetitive impact sources such as impact pile driving or use of a hydraulic breaker are not anticipated for this project.
C. Combine noisy operations to occur in the same period. The total noise level produced will not be significantly greater than the level produced if the operations were performed separately.
D. Plan noisiest equipment and activities during daytime hours with the highest background sound levels.
E. To the extent feasible, place the loudest equipment and activities on the construction lot as far as possible from noise sensitive locations.
F. Contractors shall utilize existing site electrical power where possible to avoid operating diesel powered generators.

G. Avoid excessive engine revving using lower engine speed where possible and turn off idling equipment. Do not use engine braking. Haul trucks should coast by residential properties under as low of engine speed as possible while avoiding heavy braking.

Impact NOI-4:	The project has the potential to expose adjacent residential or commercial buildings (and persons within) to significant vibration due to project construction. This impact is considered to be **less than significant**.

Elevated vibration levels are only expected to occur during construction. Normal operation of the Public Safety Center facility will not generate substantial vibration to any nearby receivers. Vibration analysis was based on typical construction activities with the most significant vibration-generating activity occurring within the first six months. Site work will include the use of a track excavator, loaders, grader, and various trucks. Foundation and shell work will add concrete ready-mix trucks, pumps, cranes, and generators to the mix of equipment. The closest a grader would get to any occupied buildings in the industrial zone directly south would be approximately 60 feet. Similarly, the closest proposed building for the Public Safety facility (Morgue & Coroner) would be approximately 60 feet from the nearest industrial building to the east. Using a bulldozer source to represent a grader at 0.089 PPV in/sec, vibration levels are anticipated to be below 0.024 in/sec PPV and well below any potential damage threshold. No sensitive facilities (such as hospitals or electronics manufacturing) are in the project vicinity. From an annoyance standpoint, vibration levels are predicted to be less than 76 dBV (ref. 1 micro in/sec) and below the potential office annoyance threshold of 84 dBV at the nearest possible office space. Vibration impacts are **less than significant without mitigation**.

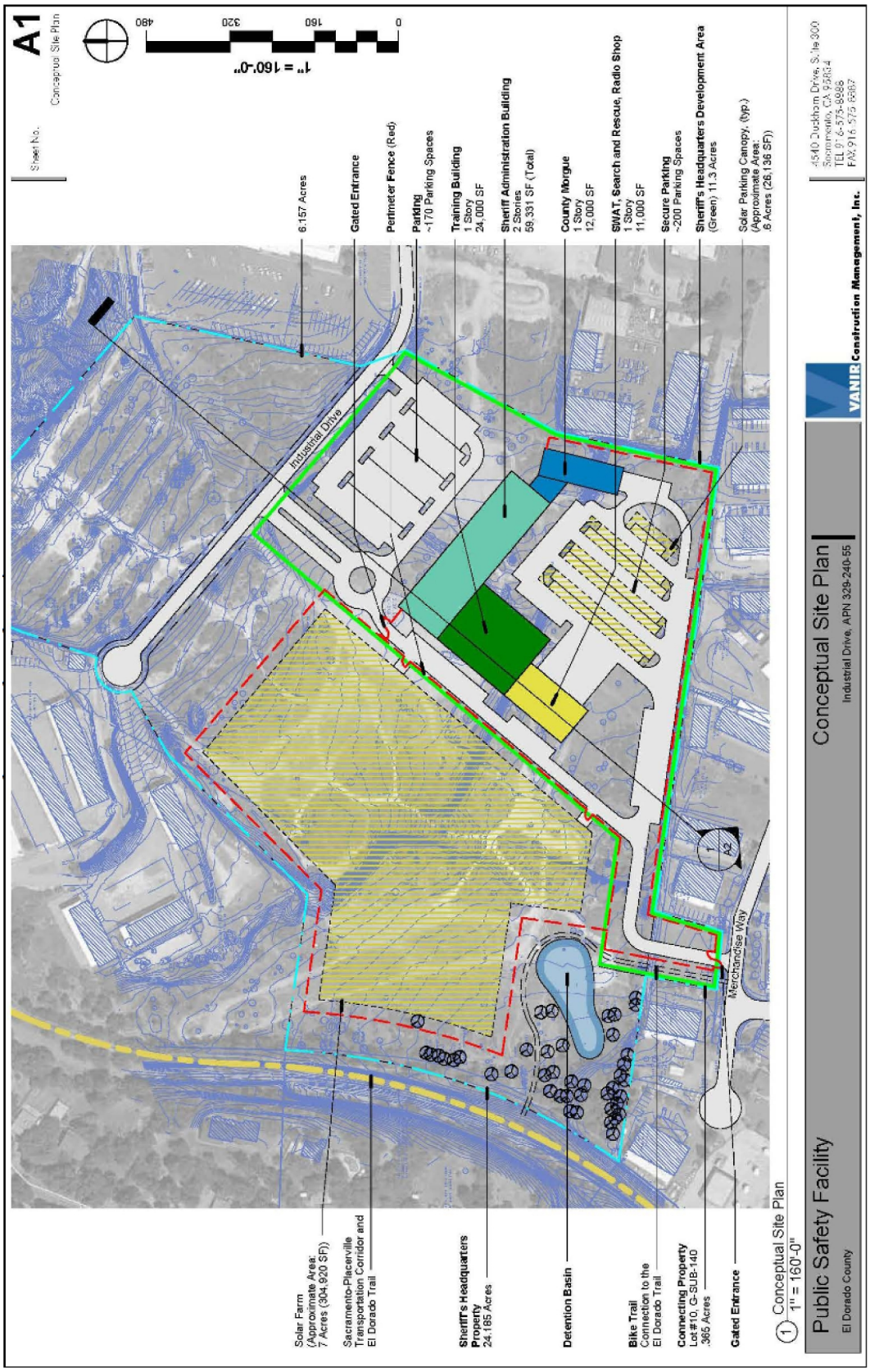

Figure 1. Conceptual Site Plan of El Dorado County Public Safety Facility in Diamond Springs, CA.

Figure 2. Satellite Map of El Dorado County Public Safety Facility Background Measurement Locations.

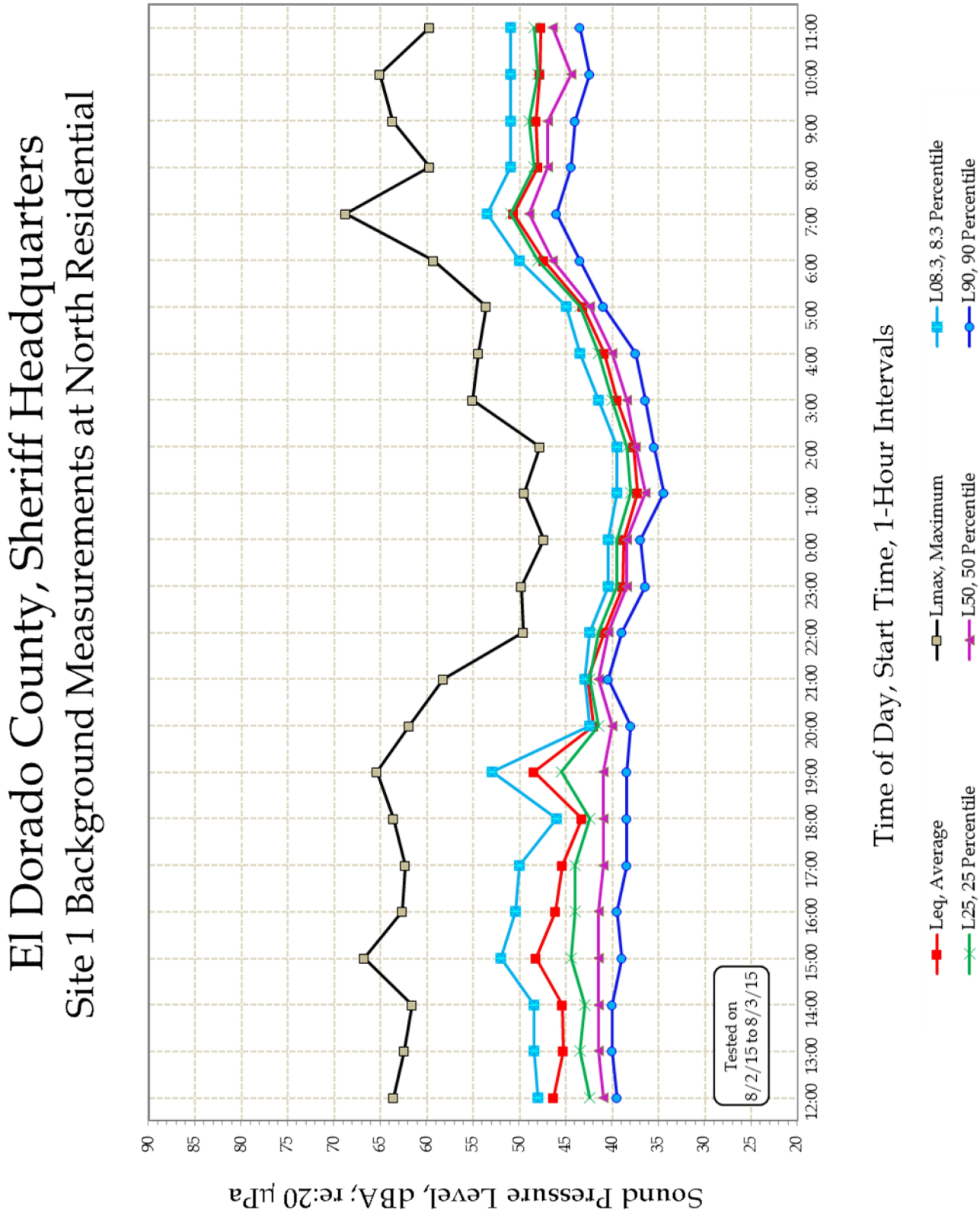

Figure 3. Results of 24-hour Measurements Made at the Nearest Residential Property Line North of the Site.

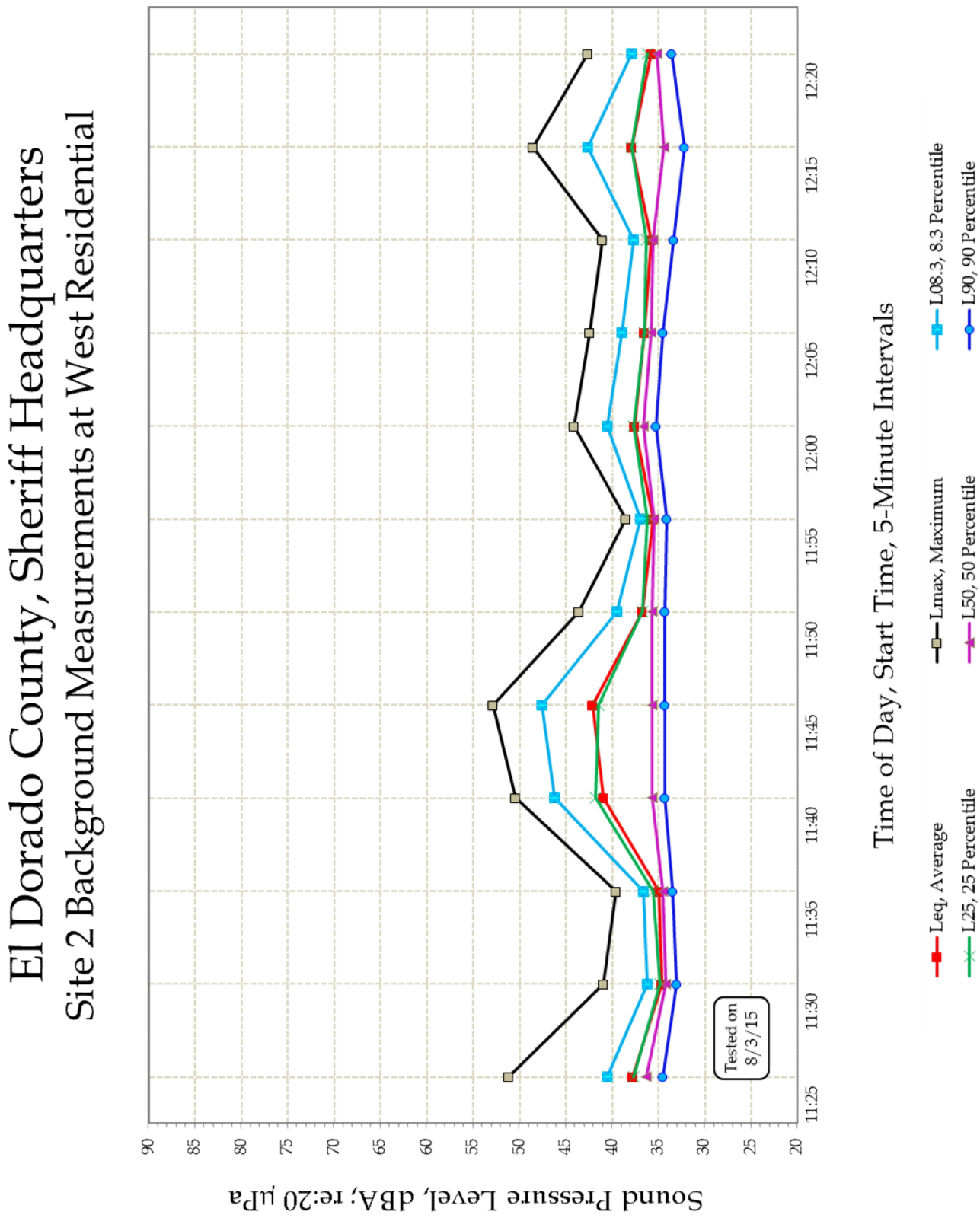

Figure 4. Short Duration Sound Level Measurements Made Near Residences West of the Project Site.

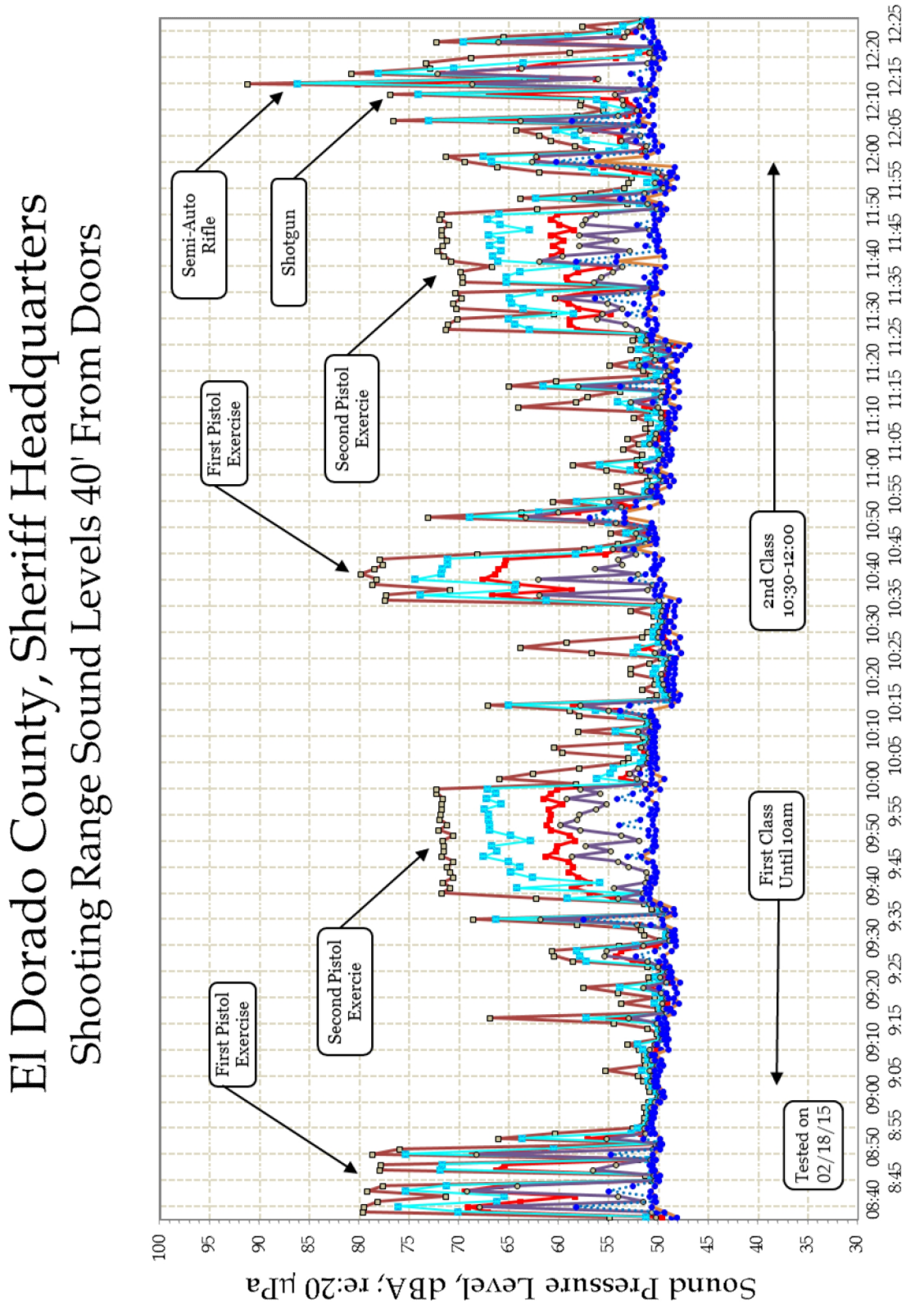

Figure 5. Sound Level Measurements Made Exterior to the Placer County Sheriff Indoor Shooting Range.

[1] *Transit Noise and Vibration Impact Assessment*, United States of American Department of Transportation, Federal Transit Administration, Office of Planning and Environment, Washington, D.C.; FTA-VA-90-1003-06, May 2006.

[2] American National Standards Institute, ANSI, Standard Specification for Sound Level Meters, S1.4-1983 (Precision)

[3] *El Dorado County General Plan, Public Health, Safety, and Noise Element,* El Dorado County; July 2004 and Amended December 2014, Section 6.5, pp. 113-119

[4] http://library.municode.com/index.aspx?clientId=15095, *El Dorado County Code of Ordinances, Chapter 9.16 Noise,* Municipal Code Corporation 2012; Online content updated on June 26, 2015.

[5] T.M. Barry & J.A. Readgan, *FHWA Highway Traffic Noise Prediction Model*, FHWA-Rd-77-108 (Federal Highway Administration, Office of Research, Office of Environmental Policy) December 1978.

[6] R.W. Hendriks, *California Vehicle Noise Emission Levels*, FHWA/CA/TL-87/03 (Office of Transportation Laboratory, California, Department of Transportation) Sacramento, California, 95819, January 1987.

[7] "Annual Traffic Summary, 2014" and Hourly Traffic Count Reports provided by the County of El Dorado Community Development Agency, Transportation Division, various traffic counts taken in 2014. http://edcapps.edcgov.us/dot/trafficcounts.asp#hourly

[8] *Traffic Impact Analysis for El Dorado County Sheriff Headquarters Facility,* Prepared by KD Anderson & Associates, Inc, Loomis, California; April 20, 2015 with amended traffic volumes dated September 8, 2015, Project 4431-01

[9] *FHWA Roadway Construction Noise Model User's Guide*, U.S. Department of Transportation, Research and Innovative Technology Administration, John A. Volpe National Transportation Systems Center, Acoustics Facility, Cambridge, MA; FHWA-HEP-05-054, DOT-VNTSC-FHWA-05-01, Final Report January 2006.

APPENDIX K

TRAFFIC IMPACT ANALYSIS

FOR

EL DORADO COUNTY SHERIFF HEADQUARTERS FACILITY

Diamond Springs, El Dorado County CA

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October 26, 2015

4431-01

0 EDC Sheriff Facility TIA.rpt

TRAFFIC IMPACT ANALYSIS FOR
EL DORADO COUNTY SHERIFF HEADQUARTERS FACILITY
Diamond Springs, El Dorado County

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KDA

TRAFFIC IMPACT ANALYSIS FOR
EL DORADO COUNTY SHERIFF HEADQUARTERS FACILITY
Diamond Springs, El Dorado County

EXECUTIVE SUMMARY

- **Project Description.** This study evaluates the traffic impacts associated with the proposed Sheriff's Headquarters project in the Diamond Springs area of El Dorado County. The project consists of four buildings totaling 106,331 square feet, 200 secure parking spaces and 170 public parking spaces. The project is located on the south side of Industrial Avenue west of Missouri Flat Road in the Diamond Springs area of El Dorado County. The trip generation for this project was developed based on the facility usage statistics occurring at the existing sheriff facility. The usage data indicates that the a.m. peak hour occurs between 7 and 8 a.m. with 116 peak hour trips generated while the p.m. peak hour occurs between 5 and 6 p.m. with 117 peak hour trips generated.

- **Existing Setting.** This study addresses traffic conditions at twelve existing intersections, nine along Missouri Flat Road, two on Pleasant Valley Road and one along Forni Road. Level of Service calculations were completed using *Synchro-SimTraffic* software. Unsignalized intersections that have two-way-left-turn-lanes (TWLTL) were analyzed using Synchro 2010 LOS methodology. All study intersections except the Missouri Flat Road / China Garden Road and the Missouri Flat Road / Enterprise Drive intersections currently operate with acceptable Levels of Service (i.e., LOS E or better) during the a.m. and p.m. peak hours.

- <u>Missouri Flat Road / China Garden Road:</u> The eastbound driveway opposite China Garden Road and the China Garden Road approach operates at LOS F in the a.m. peak hour. The intersection meets the peak hour signal warrant. Installation of a traffic signal will improve the level of service at the intersection to LOS B with a delay of 14.7 seconds. Alternatively, restricting the turning movements on the eastbound and westbound approaches to right-turns only would result in acceptable operations in both peak hours. The improvements for this impacted intersection are included in the 10-20 year time frame of the County's CIP. The County's 20-year CIP includes approximately $89,300,000 for traffic signal and intersection operational improvements. County Long Range Planning annually monitors intersections with the potential need for improvements, which would include this intersection. At such time that sufficient warrants are met, then the improvement project can be added to the CIP by name, and funding allocated.

- <u>Missouri Flat Road / Enterprise Drive:</u> The eastbound approach of the intersection operates at LOS F, and the intersection meets the peak hour signal warrant. Signalization of the intersection will result in an LOS A condition in the a.m. peak hour (6.8 seconds) and LOS B condition in the p.m. peak hour (12.4 seconds). The improvements for this impacted intersection are included in the 10-20 year time frame of the County's CIP. The County's 20-year CIP includes approximately $89,300,000 for traffic signal and intersection operational improvements. County Long Range Planning annually monitors intersections with the

potential need for improvements, which would include this intersection. At such time that sufficient warrants are met, then the improvement project can be added to the CIP by name, and funding allocated.

- **Existing Plus Project Impacts.** The operation of the proposed project will increase the volume of traffic on the study area circulation system. All intersections except Missouri Flat Road at China Garden Road and Missouri Flat Road at Enterprise Drive will operate within acceptable El Dorado County LOS thresholds. The following mitigations are noted:

  Pay TIM Fees: The Sheriff Department shall contribute its fair share to the cost of regional circulation improvements via the existing countywide traffic impact mitigation (TIM) fee program.

- Missouri Flat Road / China Garden Road: The eastbound driveway opposite China Garden Road and the China Garden Road approach will continue to operate at LOS F in the a.m. peak hour while the westbound China Garden Road approach will operate at LOS F in the a.m. and p.m. peak hours. Because the project adds more than 10 peak hour trips, this impact is significant. The intersection will meet the peak hour signal warrant. Installation of a traffic signal identified in the Existing Conditions will maintain acceptable levels of service at the intersection during the a.m. peak hour (LOS B – 16.1 seconds) and p.m. peak hour (LOS B – 16.1 seconds).

  A second option would be to limit China Garden Road and driveway traffic to right turns only. With this mitigation the intersection will operate with the worst movement (westbound) at LOS D (30.3 seconds) in the a.m. peak hour and LOS C (20.6 seconds) in the p.m. peak hour.

  The TIM fees paid by the Sheriff's Department would cover its fair share of this improvement, and no additional mitigation is required.

- Missouri Flat Road / Enterprise Drive: The eastbound approach to the intersection will continue to operate at LOS F in both the a.m. and p.m. peak hours. Because the project adds more than 10 peak hour trips, this impact is significant. The intersection will meet the peak hour signal warrant. Installation of a traffic signal identified in the Existing Conditions will maintain acceptable levels of service at the intersection during the a.m. peak hour (LOS A – 8.5 seconds) and p.m. peak hour (LOS B – 18.4 seconds). The TIM fees paid by the Sheriff's Department would cover its fair share of this improvement.

- **Year 2025 Background Conditions.** Pursuant to El Dorado County traffic study guidelines, Year 2025 conditions were identified based on interpolation between current traffic volumes and Year 2035 traffic volume forecasts. Diamond Springs Parkway (DSP) is expected to be constructed by 2025. Since the existing roadway configuration does not include the DSP a model run was conducted for the baseline 2010 a.m. and p.m. model conditions assuming DSP was built. This provided 'existing' roadway volumes, thereby allowing the roadway volumes to be calculated under 2025 conditions with DSP completed. Four intersections will operate with LOS F conditions. These include Missouri Flat Road at China Garden Road,

Missouri Flat Road at Enterprise Drive, Pleasant Valley Road at SR 49 and Pleasant Valley Road at Forni Road. The following recommendations are noted:

- Missouri Flat Road / China Garden Road: This intersection will operate with the westbound China Garden Road approach operating at LOS F. Installation of a traffic signal identified in the Existing Conditions will maintain acceptable levels of service at the intersection during the a.m. peak hour (LOS B – 12.4 seconds) and p.m. peak hour (LOS B – 10.1 seconds). Alternatively, restricting the turning movements on the eastbound and westbound approaches to right-turns only would result in acceptable operations in both peak hours.

- Missouri Flat Road / Enterprise Drive: This intersection will operate with the eastbound approach at LOS F in the a.m. and p.m. peak hours. Installation of a traffic signal identified in the Existing Conditions will maintain acceptable levels of service at the intersection during the a.m. peak hour (LOS A – 8.6 seconds) and p.m. peak hour (LOS B – 14.3 seconds).

- Pleasant Valley Road at SR 49: The intersection will decline to LOS F conditions in the a.m. peak hour. Signalization of the intersection will result in a LOS B condition in the a.m. peak hour (19.2 seconds). The improvements for this impacted intersection are included in the 10-20 year time frame of the County's CIP. The County's 20-year CIP includes approximately $89,300,000 for traffic signal and intersection operational improvements. County Long Range Planning annually monitors intersections with the potential need for improvements, which would include this intersection. At such time that sufficient warrants are met, then the improvement project can be added to the CIP by name, and funding allocated.

- Pleasant Valley Road / Forni Road: The southbound Forni Road approach will decline to LOS F in the a.m. peak hour. The County has identified improvements along Pleasant Valley Road between SR 49 and Missouri Flat Road (GP 176) that will include installation of a two-way-left-turn-lane. The project is programmed for construction between Fiscal Year 2025/26 and 2034/35. Installation of this improvement will allow the intersection to operate at LOS D (25.8 seconds).

- **2025 Plus Project Conditions.** The trips generated by the proposed project were superimposed onto the Year 2025 background conditions, and resulting peak hour Levels of Service were calculated. Four intersections will operate with LOS F conditions. These include Missouri Flat Road at China Garden Road, Missouri Flat Road at Enterprise Drive, Pleasant Valley Road at SR 49 and Pleasant Valley Road at Forni Road. In addition, the Missouri Flat Road / Industrial Drive intersection will meet the peak hour signal warrant. The following mitigations are identified:

- Missouri Flat Road / China Garden Road: Under Plus Project conditions the intersection will operate at LOS F conditions on the westbound approach. The project adds more than 10 trips to the intersection, and this impact is significant. Installation of a traffic signal identified in the Existing Conditions will maintain acceptable Levels of Service at the intersection during the a.m. peak hour (LOS B – 14.9 seconds) and p.m. peak hour (LOS B – 11.6 seconds).

Under the right turn limitation on China Garden Road and driveway traffic the intersection will operate with the worst movement (westbound) at LOS C (16.5 seconds) in the a.m. peak hour and LOS C (20.2 seconds) in the p.m. peak hour. The TIM fees paid by the Sheriff's Department would cover its fair share of this improvement.

- Missouri Flat Road / Enterprise Drive: Under project conditions the intersection will operate at LOS F conditions on the eastbound approach. The project adds more than 10 trips to the intersection, and this impact is significant. Installation of the traffic signal identified in the Existing Conditions will maintain acceptable levels of service at the intersection during the a.m. peak hour (LOS B – 10.9 seconds) and p.m. peak hour (LOS B – 14.4 seconds). The TIM fees paid by the Sheriff's Department would cover its fair share of this improvement.

- Pleasant Valley Road at SR 49: Under project conditions the intersection will operate at LOS F. The project adds more than 10 trips to the intersection, and this impact is significant. Installation of the traffic signal identified in the Year 2025 Conditions will maintain acceptable levels of service at the intersection during the a.m. peak hour (LOS C – 20.2 seconds). The TIM fees paid by the Sheriff's Department would cover its fair share of this improvement.

- Pleasant Valley Road / Forni Road: The southbound Forni Road approach will operate at LOS F in the a.m. peak hour. The project adds more than 10 trips to the intersection, and this impact is significant. Installation of a two-way-left-turn lane identified in the County's Capital Improvement Program will allow the intersection to operate at LOS D (26.5 seconds). The project is programmed for construction between Fiscal Year 2025/26 and 2034/35 and is therefore consistent with General Plan Policy TC-Xf. The TIM fees paid by the Sheriff's Department would cover its fair share of this improvement.

- Missouri Flat Road / Industrial Drive: Under project conditions the intersection will meet the peak hour signal warrant. The project should construct a traffic signal at this location to ensure public safety access is maintained. Installation of a new traffic signal would improve the operating conditions to LOS B (17.5 seconds) in the a.m. peak hour and LOS B (13.4 seconds) in the p.m. peak hour.

  As noted in the intersection descriptions there are several driveways on Missouri Flat Road that could be affected by installing a new traffic signal. The driveways adjacent to the intersection (i.e. the south driveway on the east side of the intersection and the north driveway in the southwest quadrant of the intersection) may require closure or realignment to improve safety and minimize interference of the operation of the signal. Additional driveways could be impacted depending on the area of improvement. These issues will be evaluated when the traffic signal is designed.

No other mitigations are necessary.

- **2035 Conditions.** Three intersections will operate with LOS F conditions. These include Missouri Flat Road at China Garden Road, Missouri Flat Road at Enterprise Drive and Pleasant Valley Road at SR 49. The following recommendations are noted:

- Missouri Flat Road / China Garden Road: This intersection will operate with the westbound China Garden Road approach operating at LOS F. Installation of a traffic signal identified in the Existing Conditions will maintain acceptable levels of service at the intersection during the a.m. peak hour (LOS B – 13.5 seconds) and p.m. peak hour (LOS B – 11.1 seconds). Alternatively, restricting the turning movements on the eastbound and westbound approaches to right-turns only would result in acceptable operations in both peak hours.

- Missouri Flat Road / Enterprise Drive: This intersection will operate with the eastbound approach at LOS F in the a.m. and p.m. peak hours. Installation of a traffic signal identified in the Existing Conditions will maintain acceptable levels of service at the intersection during the a.m. peak hour (LOS A – 8.3 seconds) and p.m. peak hour (LOS B – 13.4 seconds).

- Pleasant Valley Road / SR 49: The intersection will decline to LOS F conditions in the a.m. peak hour. Signalization of the intersection will result in an LOS C condition in the a.m. peak hour (29.9 seconds). The improvements for this impacted intersection are included in the 10-20 year time frame of the County's CIP. The County's 20-year CIP includes approximately $89,300,000 for traffic signal and intersection operational improvements. County Long Range Planning annually monitors intersections with the potential need for improvements, which would include this intersection. At such time that sufficient warrants are met, then the improvement project can be added to the CIP by name, and funding allocated.

2035 plus Project Conditions

- Missouri Flat Road / China Garden Road: Under project conditions the intersection will operate at LOS F conditions along the westbound China Garden Road approach. Because the project adds more than 10 peak hour trips, this impact is significant. Installation of a traffic signal identified in the Existing Conditions will maintain acceptable levels of service at the intersection during the a.m. peak hour (LOS B – 12.9 seconds) and p.m. peak hour (LOS B – 12.7 seconds).

  Under the right turn limitation on China Garden Road and driveway traffic the intersection will operate with the worst movement (westbound) at LOS C (18.6 seconds) in the a.m. peak hour and LOS C (23.5 seconds) in the p.m. peak hour. The TIM fees paid by the Sheriff's Department would cover its fair share of this improvement.

- Missouri Flat Road / Enterprise Drive: Under project conditions the intersection will operate at LOS F conditions on the eastbound Enterprise Drive approach. Because the project adds more than 10 peak hour trips, this impact is significant. Installation of a traffic signal identified in the Existing Conditions will maintain acceptable levels of service at the intersection during the a.m. peak hour (LOS A – 9.5 seconds) and p.m. peak hour (LOS B – 14.6 seconds). The TIM fees paid by the Sheriff's Department would cover its fair share of this improvement.

- Pleasant Valley Road / SR 49: The intersection will operate at LOS F conditions in the a.m. peak hour. The project adds more than 10 trips to the intersection, and this impact is significant. Signalization of the intersection will result in an LOS C condition in the a.m. peak hour (25.2 seconds). The County's 20-Year Capital Improvement Program (CIP) identifies about $89,300,000 for traffic signal and intersection operational improvements. The TIM fees paid by the Sheriff's Department would cover its fair share of this improvement.

No other mitigations are necessary.

TRAFFIC IMPACT ANALYSIS FOR
EL DORADO COUNTY SHERIFF HEADQUARTERS FACILITY
Diamond Springs, El Dorado County

INTRODUCTION

Study Purpose and Objectives

This study evaluates the traffic impacts associated with the proposed Sheriff's Headquarters project in the Diamond Springs area of El Dorado County. The project consists of four buildings totaling 106,331 square feet, 200 secure parking spaces and 170 public parking spaces. The project is located on the south side of Industrial Avenue west of Missouri Flat Road in the Diamond Springs area of El Dorado County. Figure 1 illustrates the site relative to the greater Diamond Springs area.

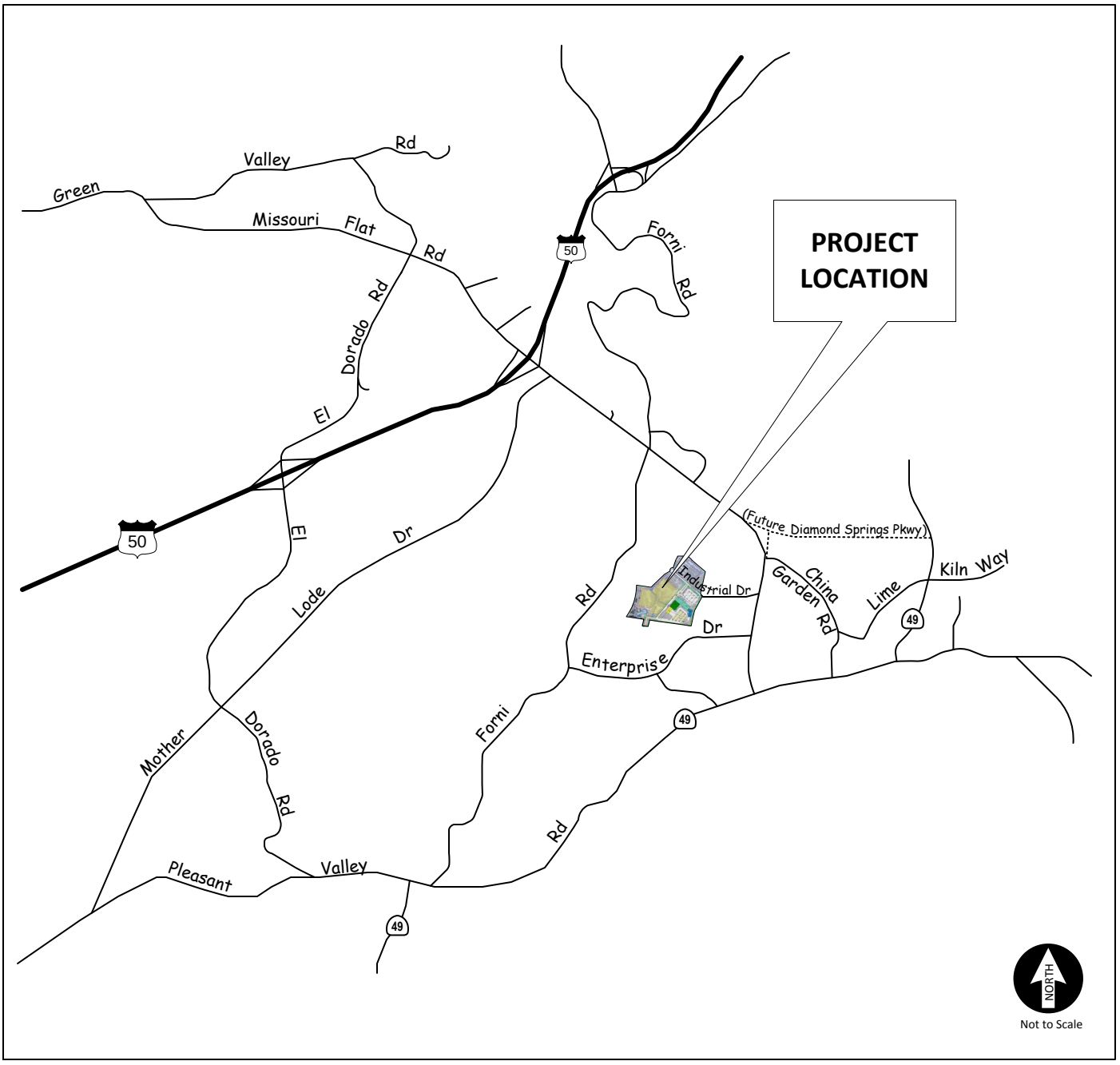
The scope of this traffic analysis has been identified through consideration of El Dorado County traffic study guidelines in consultation with El Dorado County Department of Transportation (DOT). Based on direction from DOT this study addresses the following scenarios:

1. Existing (2014) Traffic Conditions
2. Existing (2014) Plus Project Conditions
3. 2025 Traffic Conditions
4. 2025 Plus Project Conditions
5. 2035 Traffic Conditions
6. 2035 Plus Project Conditions

The objective of this study is to identify those roads and street intersections that may be impacted by development of this project based on El Dorado County significance criteria.

Project Description

The proposed project includes a new sheriff headquarters in the Diamond Springs area of El Dorado County. The project spans an 11 acre site and includes four buildings totaling 106,331 sure feet. The buildings include a 59,331 square feet administration facility, a 24,000 square foot training building, an 11,000 square foot service building and a 12,000 square foot morgue. The primary access and only public access will be from Industrial Avenue via Missouri Flat Road while a private access for official sheriff vehicles is also planned on the south side of the site. A gated access would allow sheriff's vehicles to access Missouri Flat Road via Enterprise Drive through Merchandise Way or Capitol Avenue. Figure 2 provides the proposed site plan along Industrial Avenue.



VICINITY MAP

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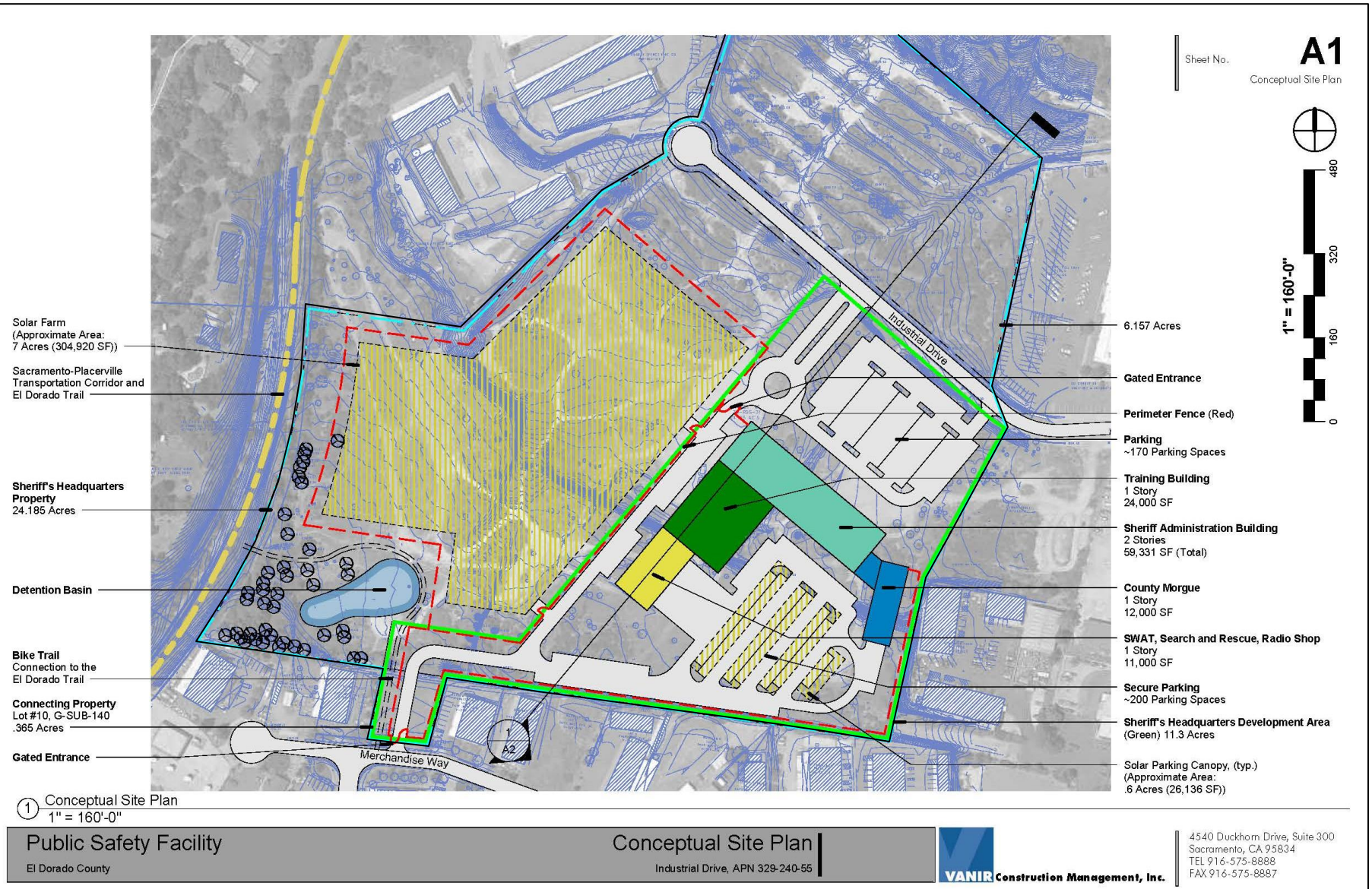
Sheriff's Headquarters Project El Dorado County

figure 1



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SITE PLAN

figure 2

EXISTING SETTING

Study Area

This study addresses traffic conditions at twelve (12) existing intersections, nine along Missouri Flat Road, one along Forni Road and two along Missouri Flat Road. The limits of the study area were based on discussion with El Dorado County staff. The text that follows describes the roadway facilities included in this analysis.

The quality of traffic flow is typically governed by the operation of major intersections and the daily volume of traffic along the roadways. The physical characteristics of the study intersections are described in the text which follows.

Study Area Intersections

The **Missouri Flat Road / Westbound US 50 ramps** intersection is controlled by a coordinated traffic signal. The Missouri Flat Road approaches feature dual northbound left turn lanes and a separate southbound right turn lane. The four lane exit from US 50 is configured with a dual left turn lane and dual right turn lanes.

The **Missouri Flat Road / Eastbound US 50 ramps** intersection is controlled by a coordinated traffic signal. The Missouri Flat Road approaches feature dual southbound left turn lanes and a separate northbound right turn lane. The three lane exit from US 50 is configured with a separate left turn lane and right turn lanes, as well as a combined left, thru and right turn lane.

The **Missouri Flat Road / Mother Lode Drive** intersection is signalized and located roughly 250 feet from the Eastbound US 50 ramps intersection. The Missouri Flat Road approaches have separate left turn and right turn lanes. The eastbound Mother Lode Drive approach has three lanes configured as dual left turns and a separate right turn lane.

The **Missouri Flat Road / Forni Road** intersection is also signalized and located roughly ½ mile south of the Mother Lode Drive intersection. The Missouri Flat Road approaches each include separate left turn and right turn lanes. The Forni Road approaches have separate left turn, through and right turn lanes, and a second left turn lane has been provided on the eastbound approach.

The **Missouri Flat Road / Golden Center Drive** intersection is located about 1,100 feet south of Forni Road. This signalized intersection includes separate left turn lanes on the Missouri Flat Road approaches and a separate right turn lane on the southbound approach. The Golden Center Drive approaches are single lanes which operate with permitted phasing.

The **Missouri Flat Road / China Garden Road** intersection is located about 2,100 feet south of Golden Center Drive. This unsignalized intersection includes single lanes along Missouri Flat Road with a separate left turn lane on the southbound approach. A TWLTL is present on the northbound approach of Missouri Flat Road and north of the southbound left turn lane. The China Garden Road approach consists of a single lane which is stop controlled.

The **Missouri Flat Road / Industrial Drive** intersection is located about 600 feet south of China Garden Road. This unsignalized intersection includes single lanes along Missouri Flat Road with a TWLTL present along Missouri Flat Road. The Industrial Drive approach consists of a single lane which is stop controlled. This intersection is the primary access intersection to the project site.

There are several driveways in the area of the intersection including two driveways on the east side of the intersection, the north driveway about 120' from the intersection and the south driveway about 70' from the intersection. Additionally, there are two driveways in the southwest quadrant of the intersection, with one driveway directly adjacent to Industrial Drive and a second about 300' to the south. The project traffic may impact these adjacent driveways.

The **Missouri Flat Road / Enterprise Drive** intersection is located along a two lane section of Missouri Flat Road. A TWLTL is available on Missouri Flat Road. The eastbound Enterprise Drive approach is controlled by a stop sign.

The **Missouri Flat Road / (SR 49) Pleasant Valley Road** intersection is located at the southern end of Missouri Flat Road. This tee intersection is controlled by an actuated traffic signal. The Pleasant Valley Road approaches have single through lanes in each direction, with dual eastbound left turn lanes and a separate westbound right turn lane. The two lane southbound approach on Missouri Flat Road is configured as separate left turn and right turn lanes, and the right turn "overlaps" the eastbound left turn phase.

The **Forni Road / Enterprise Drive** intersection is located approximately midway between Missouri Flat Road and Pleasant Valley Road. Enterprise Drive provides the only direct connector along Forni Road to either Missouri Flat Road or Pleasant Valley Road. This intersection is stop controlled along Enterprise Drive and includes single lanes along all approaches.

The **Pleasant Valley Road (SR 49) / SR 49 South** intersection is located about two miles southwest of the project site. This tee intersection is all-way stop controlled. Eastbound Pleasant Valley Road and northbound SR 49 have single lane approaches while westbound Pleasant Valley Road includes a left turn lane and a through lane.

The **Pleasant Valley Road (SR 49) / Forni Road** intersection is located about 500' east of the SR-49 South intersection. This tee intersection is stop controlled along Forni Road which intersects Pleasant Valley Road at about a 30° skew to the northeast. All roadway approaches are single lane.

Analysis Criteria

Level of Service Methodology. *Level of Service Analysis* has been employed to provide a basis for describing existing traffic conditions and for evaluating the significance of project traffic impacts. Level of Service measures the *quality* of traffic flow and is represented by letter designations from "A" to "F", with a grade of "A" referring to the best conditions, and "F"

representing the worst conditions. The guidelines and analyses used for this report follow El Dorado County standards.

Local agencies adopt minimum Level of Service standards for their facilities. El Dorado County identifies LOS E as the acceptable Level of Service on roadways and state highways within the unincorporated areas of the County in the Community Regions and LOS D in the Rural Centers and Rural Regions except as specified in the General Plan; the project is located within a Community Region. The County's General Plan allows some roadway segments to operate at LOS F. Two segments are along Missouri Flat Road, from US 50 to Mother Lode Drive and from Mother Lode Drive to China Garden Road while a third is along Pleasant Valley Road between El Dorado Road and SR 49.. The analysis techniques presented in the *2010 Highway Capacity Manual* were used to calculate Level of Service and to provide a basis for describing existing traffic conditions and evaluating the significance of project traffic impacts.

Various software programs have been developed to assist in calculating intersection Level of Service, and the level of sophistication of each program responds to factors that affect the overall flow of traffic. In this case, Synchro-SimTraffic software was employed in order to account for the effects of closely spaced traffic signals along Missouri Flat Road. The files originally developed for the El Dorado County Transportation Commission's *Diamond Springs and El Dorado Area Mobility and Livable Community Plan (DSEDAMLCP)* were obtained and, in consultation with El Dorado County DOT and KAI, applicable adjustments were made to reflect current geometry and operational characteristics. The software is a stochastic model, i.e. randomness is present when running the simulations. The results will vary within each scenario and between scenarios. This may result in some intersections having lower delays in the Plus Project scenario than in the No Project scenario. The simulation results contained herein reflect the average of the mean 10 one-hour simulation runs selected from a 20 run sample. Each run employed a 10 minute seeding period.

SimTraffic is not able to currently analyze two-stage gap analysis with two-way-left-turn–lanes (TWLTL). According to Trafficware, the program architecture "needs considerable changes to the driver lane choice, gap acceptance methods." They are continuing to look into these elements while the FHWA continues to look into new algorithms through their Next Generation Simulation Program. Since TWLTL analysis is unavailable using SimTraffic, intersections with TWLTL's were evaluated using Synchro 2010 methodology which does analyze gap acceptance with two-way-left-turn-lanes.

The intersection Levels of Service presented in this analysis are based on the weighted average total delay per vehicle for the intersection as a whole at signalized intersections and at locations controlled by all-way stops. The average delay experienced by motorists yielding the right of way is the basis for identification of Level of Service at locations controlled by side street stop signs. Applicable Level of Service thresholds based on average delay are shown in Table 1.

TABLE 1
LEVEL OF SERVICE DEFINITIONS

Level of Service	Signalized Intersection	Unsignalized Intersection	Roadway (Daily)
"A"	Uncongested operations, all queues clear in a single-signal cycle. Delay ≤ 10.0 sec	Little or no delay. Delay ≤ 10 sec/veh	Completely free flow.
"B"	Uncongested operations, all queues clear in a single cycle. Delay > 10.0 sec and ≤ 20.0 sec	Short traffic delays. Delay > 10 sec/veh and ≤ 15 sec/veh	Free flow, presence of other vehicles noticeable.
"C"	Light congestion, occasional backups on critical approaches. Delay > 20.0 sec and ≤ 35.0 sec	Average traffic delays. Delay > 15 sec/veh and ≤ 25 sec/veh	Ability to maneuver and select operating speed affected.
"D"	Significant congestion of critical approaches but intersection functional. Cars required to wait through more than one cycle during short peaks. No long queues formed. Delay > 35.0 sec and ≤ 55.0 sec	Long traffic delays. Delay > 25 sec/veh and ≤ 35 sec/veh	Unstable flow, speeds and ability to maneuver restricted.
"E"	Severe congestion with some long standing queues on critical approaches. Blockage of intersection may occur if traffic signal does not provide for protected turning movements. Traffic queue may block nearby intersection(s) upstream of critical approach(es). Delay > 55.0 sec and ≤ 80.0 sec	Very long traffic delays, failure, extreme congestion. Delay > 35 sec/veh and ≤ 50 sec/veh	At or near capacity, flow quite unstable.
"F"	Total breakdown, stop-and-go operation. Delay > 80.0 sec	Intersection blocked by external causes. Delay > 50 sec/veh	Forced flow, breakdown.
Sources: 2010 Highway Capacity Manual, Transportation Research Board (TRB).			

Intersection Level of Service Thresholds of Significance. A traffic impact is considered to be significant under El Dorado County guidelines if the project causes an intersection to change from LOS E to LOS F. Worsening of conditions at facilities already operating at unacceptable levels of service is also considered a significant impact. The County's General Plan Policy TC-Xe defines worsen as any of the following conditions:

a. a 2% increase in traffic during the a.m. peak hour, p.m. peak hour or daily trips, or
b. the addition of 100 or more daily trips, or
c. the addition of 10 or more trips during the a.m. peak hour or the p.m. peak hour.

When a project identifies an impact on the County's roadway network for a scenario with or without the project, a separate analysis must be done to identify what improvements are needed for mitigation and when the improvements must be in place. The timing of the proposed mitigation must be in compliance with General Plan Policy TC-Xf:

At the time of approval of the tentative map for a single family residential subdivision of five or more parcels that worsens (defined as a project that triggers Policy TC-Xe [A] or [B] or [C]) traffic on the County road system, the County shall do one of the following: (1) condition the project to construct all road improvements necessary to maintain or attain Level of Service standards as detailed in this Transportation and Circulation Element based on existing traffic plus traffic generated from the development plus forecasted traffic growth at 10-years from project submittal; or (2) ensure the commencement of construction of the necessary road improvements are included in the County's 10-year CIP.

For all other discretionary projects that worsen (defined as a project that triggers Policy TC-Xe [A] or [B] or [C]) traffic on the County road system, the County shall do one of the following: (1) condition the project to construct all road improvements necessary to maintain or attain Level of Service standards as detailed in this Transportation and Circulation Element; or (2) ensure the construction of the necessary road improvements are included in the County's 20-year CIP.

Projects that have impacts to Caltrans facilities shall use Caltrans LOS standards and significance thresholds in conjunction with the requirements of El Dorado County General Plan Circulation Policy TC-Xd.

Intersection Queuing Analysis. The quality of traffic flow can also be affected by queuing at signalized intersections. For this study the lengths of peak period queues have been identified at key signalized intersections and compared to available storage in order to determine whether spillover from turn lanes can affect adjoining travel or extend through adjacent intersections. 95th percentile queue lengths have been calculated as a byproduct of the SimTraffic output. Those locations where the 95th percentile queue exceeds the available storage have also been noted.

Traffic Signal Warrants. Traffic signal warrants are a series of standards which provide guidelines for determining if a traffic signal is appropriate. Signal warrant analyses are typically conducted at intersections of uncontrolled major streets and stop sign-controlled minor streets. If one or more signal warrants are met, signalization of the intersection may be appropriate. However, a signal should typically not be installed if none of the warrants are met, since the installation of signals would increase delays on the previously-uncontrolled major street, resulting in an undesirable increase in overall vehicle delay at the intersection. Signalization may also increase the occurrence of particular types of accidents. Therefore, if signals are installed where signal warrants are not met the detriment of increased accidents and overall delay may be greater than the benefit in traffic operating conditions on movements operating below the significance threshold. Signal warrants provide an industry-standard basis for identifying when the adverse effect on the worst movement is substantial enough to warrant signalization.

The extent to which existing or projected traffic volumes may justify signalization at un-signalized intersections has been determined based on consideration of traffic signal warrant presented in the *Manual of Uniform Traffic Control Devices, 2012*. For this analysis the volume thresholds associated with Warrant 3 (Peak Hour Volume) have been assessed. For this analysis the "rural" criteria have been employed along Missouri Flat Road based on speed limits in excess of 40 mph. The "rural" criteria was also used along Forni Road based on the road characteristics.

At unsignalized intersections, a traffic impact is considered "adverse" if the agency LOS standard is exceeded but the projected traffic does not satisfy traffic signal warrants. Under these conditions, the means to completely alleviate delays to stop controlled vehicles may be to install a traffic signal. However, the unmet signal warrants would imply that the reduction in delay for the stop-controlled vehicles may not justify the new delays that would be incurred by the major street traffic (which is currently not stopped). An alternative to a traffic signal could be installation of a roundabout.

Public Transit

The El Dorado County Transit Authority (EDCTA) offers local fixed route, regional commuter route, dial-a-ride and para-transit services. One local fixed route passes the project site along Missouri Flat Road. This is the Diamond Springs (DS) route. The DS route is about ¼ mile from the project site. This route travels along Missouri Flat Road to Pleasant Valley Road and loops along Racquet Way before returning to Missouri Flat Road on its way to Folsom Lake College. The route operates from about 7:00 a.m. to about 6:00 p.m. Monday through Friday at one-hour headways. Transit passengers can also use other routes to travel to the Missouri Flat Road Transit Center where they can transfer to the DS route.

EDCTA also operates commuter routes to downtown Sacramento Monday through Friday. A park-n-ride lot is available along Commerce Way, between Enterprise Drive and Pleasant Valley Road. Four inbound routes to Sacramento are operated from the Commerce Way lot between 5:30 a.m. and 6:00 a.m. Ten return trips from Sacramento are available but are 'request only' stops.

The *Western El Dorado County Short and Long Range Transit Plan* has identified the following improvements for transit service in the Diamond Springs area. Short Range improvements include beginning the route schedule at 6:00 a.m., extending the existing weekday route schedule by one hour at the end of the day and instituting Saturday service between 9:00 a.m. and 5:00 p.m. Long Range improvements include revising the route as a result of the construction of Diamond Springs Parkway between Missouri Flat Road and Diamond Road.

Bicycle and Pedestrian Facilities

Designated Class II bicycle facilities (bike lanes) exist along Missouri Flat Road from Golden Center Drive to Plaza Drive. Paved shoulders are present along most of Missouri Flat Road between Golden Center Drive and Pleasant Valley Road; however, these shoulders are not designated bicycle lanes. Narrow paved shoulders are also present along Forni Road between Missouri Flat Road and Pleasant Valley Road; these shoulders are generally less than one foot wide and are not viable for bicyclists. Industrial Drive does not have marked bicycle facilities.

Future bicycle facilities include the extension of Class II bike lanes along Missouri Flat Road to Pleasant Valley Road, Class II bike lanes along Enterprise Drive and Commerce Way, Class II bike lanes along Forni Road, from Enterprise Drive to Missouri Flat Road and a Class I bike path along the Sacramento Placerville Transportation Corridor, a part of the El Dorado Trail.

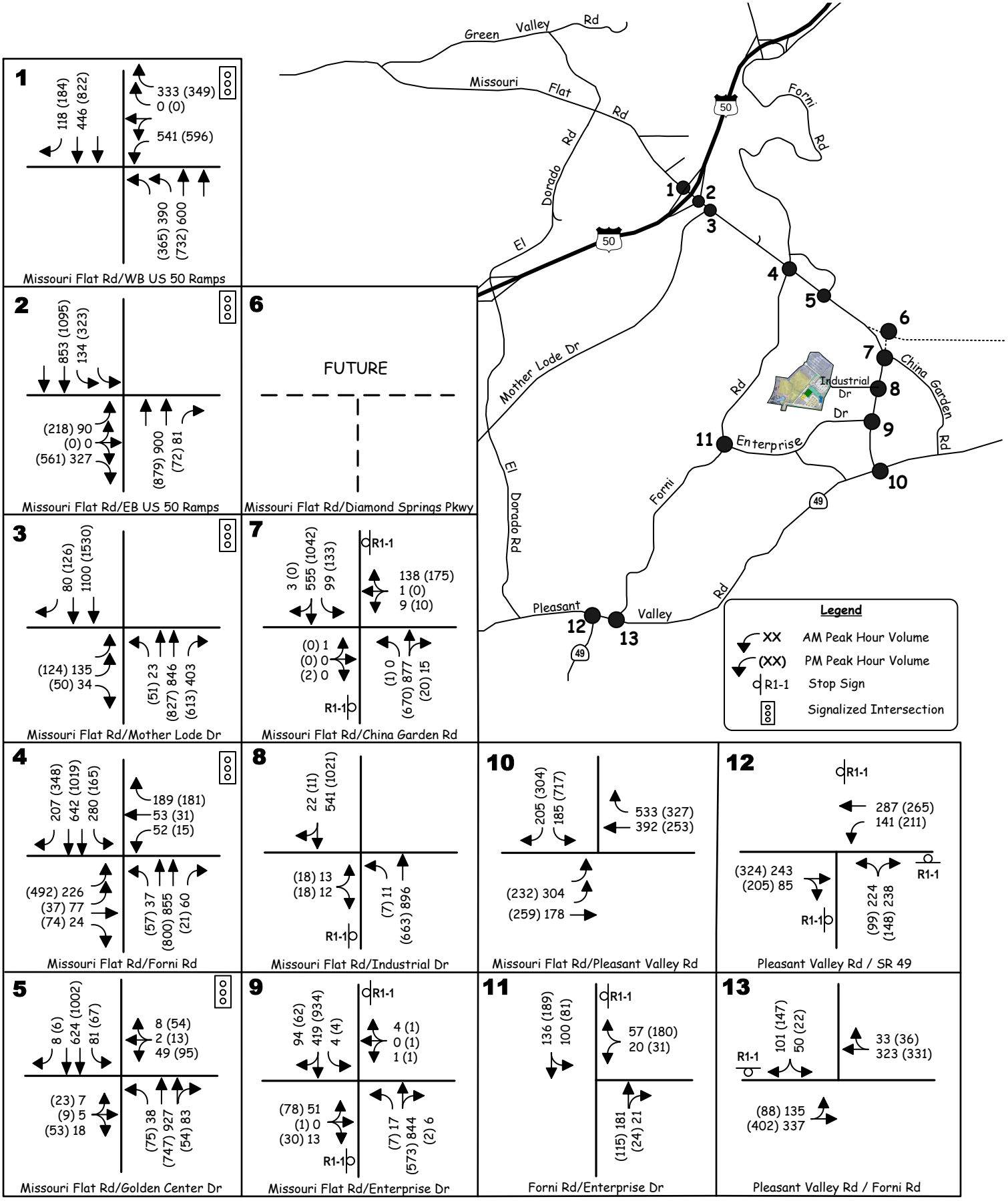
Sidewalk is present along both sides of Missouri Flat Road south of Golden Center Drive. The sidewalk extends about 300' south on the west side and about 550' south on the east side. The remaining roadways in the project vicinity do not have sidewalk and pedestrians have to walk along the shoulders of these facilities.

Existing Traffic Operating Conditions

Traffic Volume Counts. This analysis makes use of additional traffic counts conducted in July 2014 and October 2014. The July counts were adjusted based on turning movement counts that were conducted at adjacent intersections while school was in session. The counts are included in the Appendix, and the intersection turning movements are presented in Figure 3.

Intersection Levels of Service. Table 2 summarizes current operating Levels of Service at the study area intersections for both time periods. All study intersections except the Missouri Flat Road / China Garden Road and Missouri Flat Road / Enterprise Drive intersections currently operate with acceptable Levels of Service during the a.m. and p.m. peak hours. The side street approaches at the China Garden Road intersection operates at LOS F conditions in the a.m. peak hour; the eastbound approach at China Garden Road is a driveway with less than five vehicles entering Missouri Flat Road. The eastbound Enterprise Drive approach will operate at LOS F in both peak periods.

Traffic Signal Warrants. The peak hour traffic signal warrant is currently met at four intersections. These include China Garden Road at Missouri Flat Road, Enterprise Drive at Missouri Flat Road, Pleasant Valley Road at SR 49 and Forni Road at Pleasant Valley Road. The warrant is met in the p.m. period only at the Enterprise Drive at Missouri Flat Road intersection and is met during both peak periods at the remaining three. The Pleasant Valley Road / SR 49 and Forni Road / Pleasant Valley Road intersections operate within accepted County LOS thresholds while the China Garden Road / Missouri Flat Road intersection and the Enterprise Drive / Missouri Flat Road intersection will operate with at least one approach operating at LOS F.



EXISTING TRAFFIC VOLUMES AND LANE CONFIGURATIONS

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Sheriff's Headquarters Project El Dorado County

figure 3

TABLE 2
EXISTING PEAK HOUR LEVELS OF SERVICE AT INTERSECTIONS

Location	Control	AM Peak Hour LOS	AM Peak Hour Average Delay	PM Peak Hour LOS	PM Peak Hour Average Delay	Traffic Signal Warranted?
1. Missouri Flat Rd / WB US 50 ramps	Signal	B	18.4	B	17.6	N/A
2. Missouri Flat Rd / EB US 50 ramps	Signal	B	16.2	C	21.5	N/A
3. Missouri Flat Rd / Mother Lode Dr	Signal	A	8.5	A	8.6	N/A
4. Missouri Flat Rd / Forni Rd	Signal	C	21.5	C	22.4	N/A
5. Missouri Flat Rd / Golden Center Dr	Signal	B	14.8	C	21.0	N/A
6. Missouri Flat Rd / Diamond Springs Pkwy	Signal	N/A	N/A	N/A	N/A	N/A
7. Missouri Flat Rd / China Garden Rd	EB/WB					Yes*
NB Left	Stop	(Δ)	(Δ)	(B)	(10.6)	
SB Left		(B)	(11.2)	(A)	(9.8)	
EB		(F)	(185.9)	(C)	(18.6)	
WB		(F)	(55.9)	(E)	(43.5)	
8. Missouri Flat Rd / Industrial Dr	EB Stop					No
NB Left		(A)	(8.9)	(B)	(10.9)	
EB		(C)	(17.8)	(C)	(24.5)	
9. Missouri Flat Rd / Enterprise Dr						Yes†
NB Left	EB/WB	(A)	(8.7)	(B)	(10.5)	
SB Left	Stop	(B)	(10.2)	(A)	(8.7)	
EB		(F)	(99.1)	(F)	(250.8)	
WB		(C)	(23.7)	(E)	(40.0)	
10. Missouri Flat Rd / Pleasant Valley Rd	Signal	B	18.7	B	20.0	N/A
11. Forni Rd / Enterprise Dr	WB Stop					No
SB Left		(A)	(7.9)	(A)	(7.7)	
WB		(B)	(11.2)	(B)	(11.3)	
12. Pleasant Valley Rd / SR 49	AWS	E	41.7	C	20.8	Yes*
13. Pleasant Valley Rd / Forni Rd	SB Stop					Yes*
SB		(E)	(39.3)	(B)	(14.9)	
EB Left		(A)	(9.0)	(A)	(8.4)	

Δ no volume
* meets peak hour warrant in AM and PM peak hour
† meets peak hour warrant in PM peak hour
(xx) – delay and level of service for side street traffic using Synchro 2010 including TWLTL analysis
N/A – not applicable
AWS – all way stop

Intersection Queues. Table 3 presents information regarding current peak period queuing in lanes at signalized study intersections. In each case, the available storage has been presented along with current peak hour traffic volumes and the 95th percentile queue length. On multiple lane approaches the longest queue amongst a group of common lanes has been noted.

Most intersections have lane storage capacity that can accommodate peak period queues. Those 95th percentile queues with length exceeding the available storage have been highlighted. The 95th percentile queue exceeds available storage in eight locations.

TABLE 3
EXISTING PEAK HOUR QUEUES AT SIGNALIZED INTERSECTIONS

Location	Capacity (feet)	AM Peak Hour VPH	AM Peak Hour Queue (feet)	PM Peak Hour VPH	PM Peak Hour Queue (feet)
1. Missouri Flat Road / WB US 50 ramps					
NB left turn	160 (2)	390	167	365	163
NB through	360 (2)	600	274	732	215
SB through	520 (2)	446	158	822	250
WB left turn	410 (2)	541	214	596	227
WB right turn	410 (2)	333	139	349	149
2. Missouri Flat Road / EB US 50 ramps					
NB through	160 (2)	900	200	879	181
NB right turn	140	81	70	72	78
SB left	160 (2)	134	196	323	215
SB through	380 (2)	853	351	1,095	430
EB left+through+right turn	540 (3)	417	150	779	215
3. Missouri Flat Road / Mother Lode Drive					
NB left turn	150	23	55	51	79
NB through	2,300 (2)	846	182	827	164
SB through	140 (2)	1,100	102	1,530	169
SB right turn	130	80	<25	126	59
4. Missouri Flat Road / Forni Road					
NB left turn	250	37	48	57	94
NB through	1,000 (2)	855	242	800	275
NB right turn	160	60	101	21	83
SB left turn	300	280	275	165	194
SB through	2,300 (2)	642	207	1,019	259
SB right turn	150	207	108	348	180
5. Missouri Flat Road / Golden Center Drive					
NB left turn	120	38	75	75	111
SB left turn	160	81	124	67	154
10. Missouri Flat Road / Pleasant Valley Road					
EB Left*	130 (2)	304	165	232	138
WB Right	200	533	243	327	156

Highlighted values indicate queue length in excess of available storage
* - longest lane for multiple turn lane approaches

PROJECT CHARACTERISTICS

The development of this project will attract traffic to the project site. The amount of additional traffic on a particular section of the street network is dependent upon two factors:

- Trip Generation, the number of new trips generated by the project, and
- Trip Distribution and Assignment, the specific routes that the new traffic takes.

Trip Generation

Trip generation is determined by identifying the type and size of land use being developed. Recognized sources of trip generation data may then be used to calculate the total number of trip ends resulting from the day to day operation of the businesses in the project.

The trip generation for this project was developed based on the existing usage statistics occurring at the existing sheriff facility. Sheriff's department staff provided data for the various employees including time and days of shifts for each work group (i.e. patrol deputies, school resource officers, records, dispatch, etc.) as well as visitors to the department. The data indicates that the a.m. peak hour occurs between 7 and 8 a.m. and the p.m. peak hour occurs between 5 and 6 p.m. The entire projected mid-week trip generation for the site is shown in Table 4. The project is expected to generate 494 daily trips, 116 a.m. peak hour trips and 117 p.m. peak hour trips.

The site will also house a solar facility. Trips projected for the solar array will be limited to maintenance and operation of the site. KD Anderson & Associates, Inc. conducted a study for the Castor Solar Project in Taft, California in March 2014 for a 1.5 megawatt solar facility on 12 acres. The trip generation for this project included maintenance on the site two to four times annually, occurring for three to five days with up to three employees cleaning the solar panels. Based on this data, trip generation for the solar facility will not occur daily and is projected to be nominal.

TABLE 4
PROJECTED TRIP GENERATION – EL DORADO COUNTY SHERIFF FACILITY

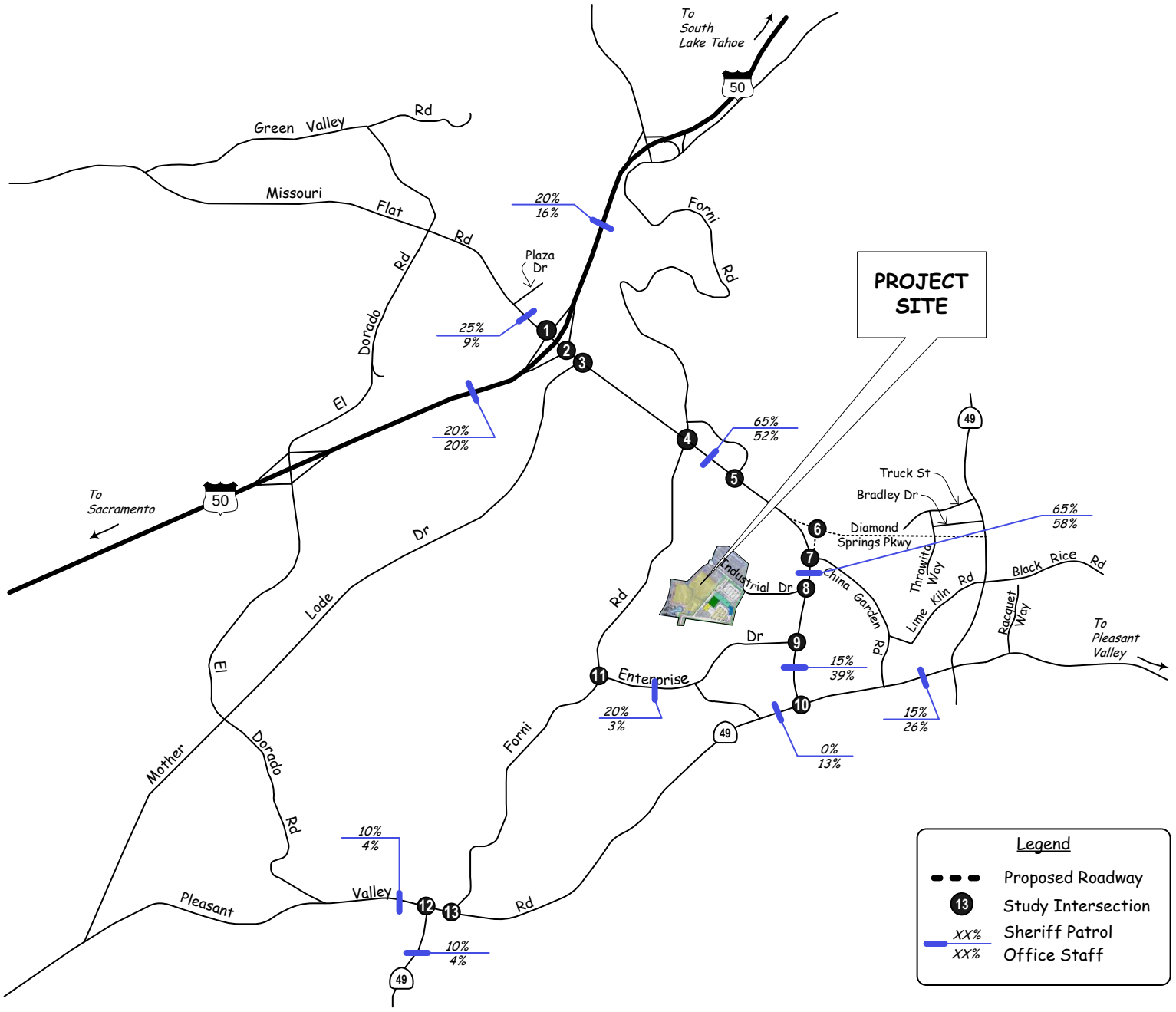
Wednesday	patrol		12 am - 1	1 - 2	2 - 3	3 - 4	4 - 5	5 - 6	6 -7	7 - 8	8 -9	9 -10	10 -11	11 - noon	12 - 1	1- 2	2 -3	3 - 4	4 - 5	5 - 6	6 -7	7- 8	8 - 9	9 - 10	10 - 11	11pm - 12 am	
"Commute to/from Site"																											
Patrol	team 1/2 IN							11		5																	
	team 1/2 OUT																					11		5			
	team 3/4 IN																	7		11							
	team 3/4 OUT							7		11																	
SRO	officer 1 IN								1																		
	officer 1 OUT																				1						
	officer 2 IN								1																		
	officer 2 OUT																				1						
SED	SGT IN													1													
	SGT OUT																									1	
	depty's IN													4													
	depty's OUT																									4	
Records (13)	IN									9							1		1						2		
	OUT		1			1						2									9						
Dispatch (24)	IN								6														6				
	OUT										6										6						
Dispatch Manager	IN									1																	
	OUT																			1							
office-non shift	IN									88																	
	OUT																			88							
volunteers (5)	IN										1	1	1		1		1										
	OUT												1		1		1		1	1							
visitors (49)	IN										4	5	5	5	7	6	5	6	6								
	OUT										2	5	5	5	6	7	5	5	6	3							
"Patrol movements to/from Site"																											
Patrol Activity	team 1/2 IN																			11		5					
activity	team 1/2 OUT								11		5																
	team 3/4 IN					7		11																			
	team 3/4 OUT																		7		11						
SRO (2)	IN																			2							
	OUT									2																	
Volunteers	IN															1			1								
(ex. Moving speed signs)	OUT										1			1													
		total	1	0	0	8	0	29	19	**116**	19	13	12	16	15	14	13	18	22	**117**	28	16	6	5	2	5	494
			12 am - 1	1 - 2	2 - 3	3 - 4	4 - 5	5 - 6	6 -7	7 - 8	8 -9	9 -10	10 -11	11 - noon	12 - 1	1- 2	2 -3	3 - 4	4 - 5	5 - 6	6 -7	7- 8	8 - 9	9 - 10	10 - 11	11pm - 12 am	
RED - INBOUND TRIPS																											
BLACK - OUTBOUND TRIPS																											

Trip Distribution & Assignment

The trip distribution was split into sheriff patrol and sheriff office staff. The distribution of project traffic was developed generally based on the patrol areas including school locations. A select link analysis was completed using the County's Travel Demand Model (TDM) to determine the trip distribution for office staff; patrol vehicles will circulate throughout the west slope of El Dorado County. An adjustment was also made for traffic along Missouri Flat Road as the TDM appears to direct vehicles to Diamond Road instead of Missouri Flat Road to head toward Placerville. After discussion with County staff a 10% shift in traffic from Diamond Road to Missouri Flat Road was made in the select link distribution. Table 5 presents the projected trip distribution percentages for the project. Figure 4 presents the trip distribution percentages generated by the project while Figure 5 presents the project trips generated.

TABLE 5
PROJECT TRIP DISTRIBUTION
EXISTING CONDITIONS

Direction	Route	Distribution	
		Sheriff Patrol	Office Staff
North	Via Missouri Flat Road	25%	9%
North	Internal Diamond Springs traffic via Missouri Flat Road	0%	13%
South	To SR49	10%	4%
South	Internal Diamond Springs traffic via Missouri Flat Road and Pleasant Valley Road	0%	8%
East	To US 50 via Missouri Flat Road	20%	16%
East	Via Pleasant Valley Road	15%	26%
West	Via US 50 via Missouri Flat Road	20%	20%
West	Via Pleasant Valley Road	10%	4%
	Total	100%	100%



EXISTING PROJECT TRIP DISTRIBUTION

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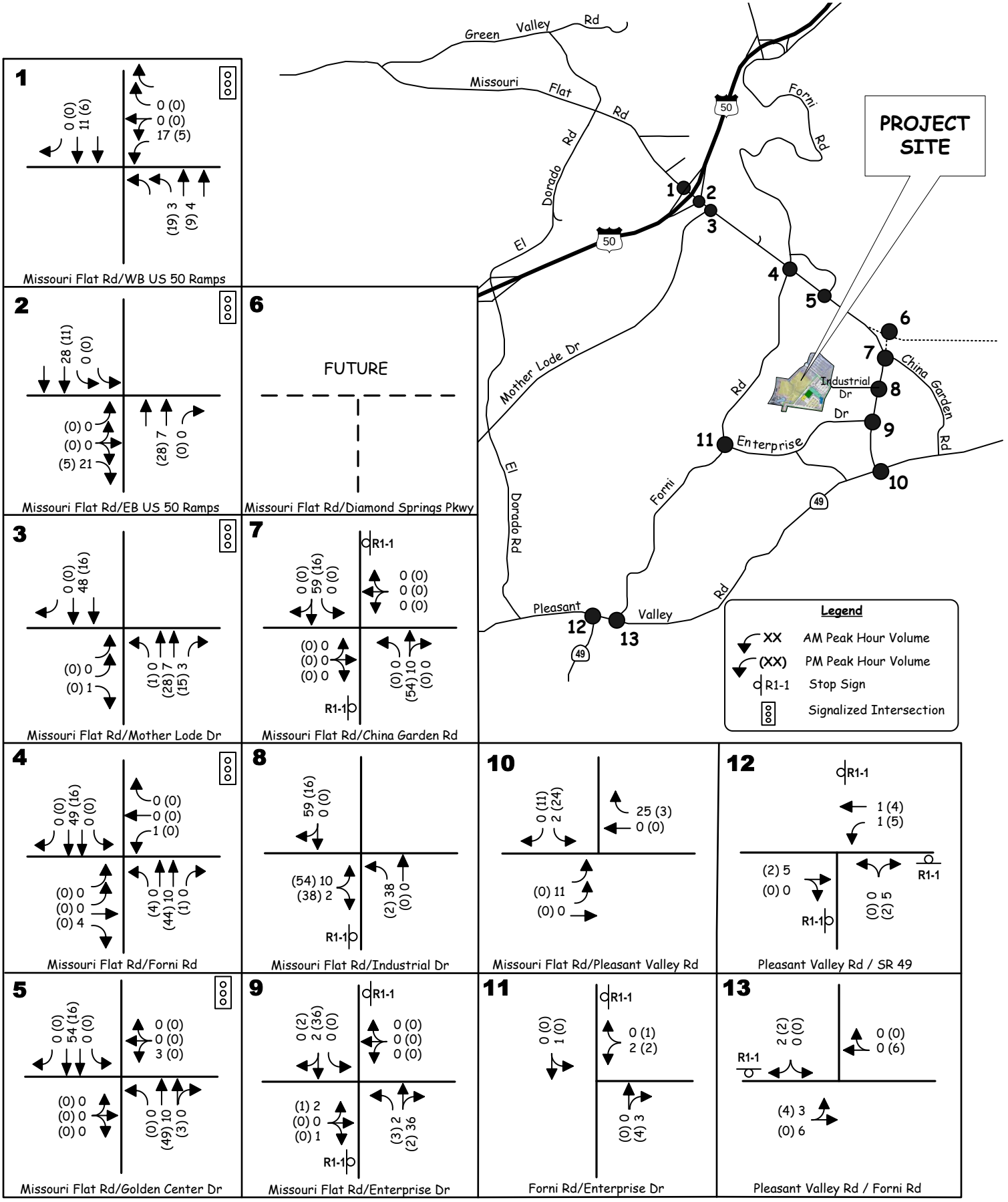
figure 4



EXISTING PROJECT ONLY VOLUMES AND LANE CONFIGURATIONS

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figure 5

PROJECT TRAFFIC IMPACTS

Existing Plus Project Conditions

Traffic Volumes The impacts of developing the project uses on the project site have been identified by superimposing project traffic onto existing background conditions. Figure 6 displays the "Existing Plus Project" traffic volumes at each study intersection in both a.m. and p.m. peak hours.

Intersection Levels of Service. Table 6 displays the peak hour Levels of Service at each study intersection comparing existing Levels of Service with those accompanying the project.

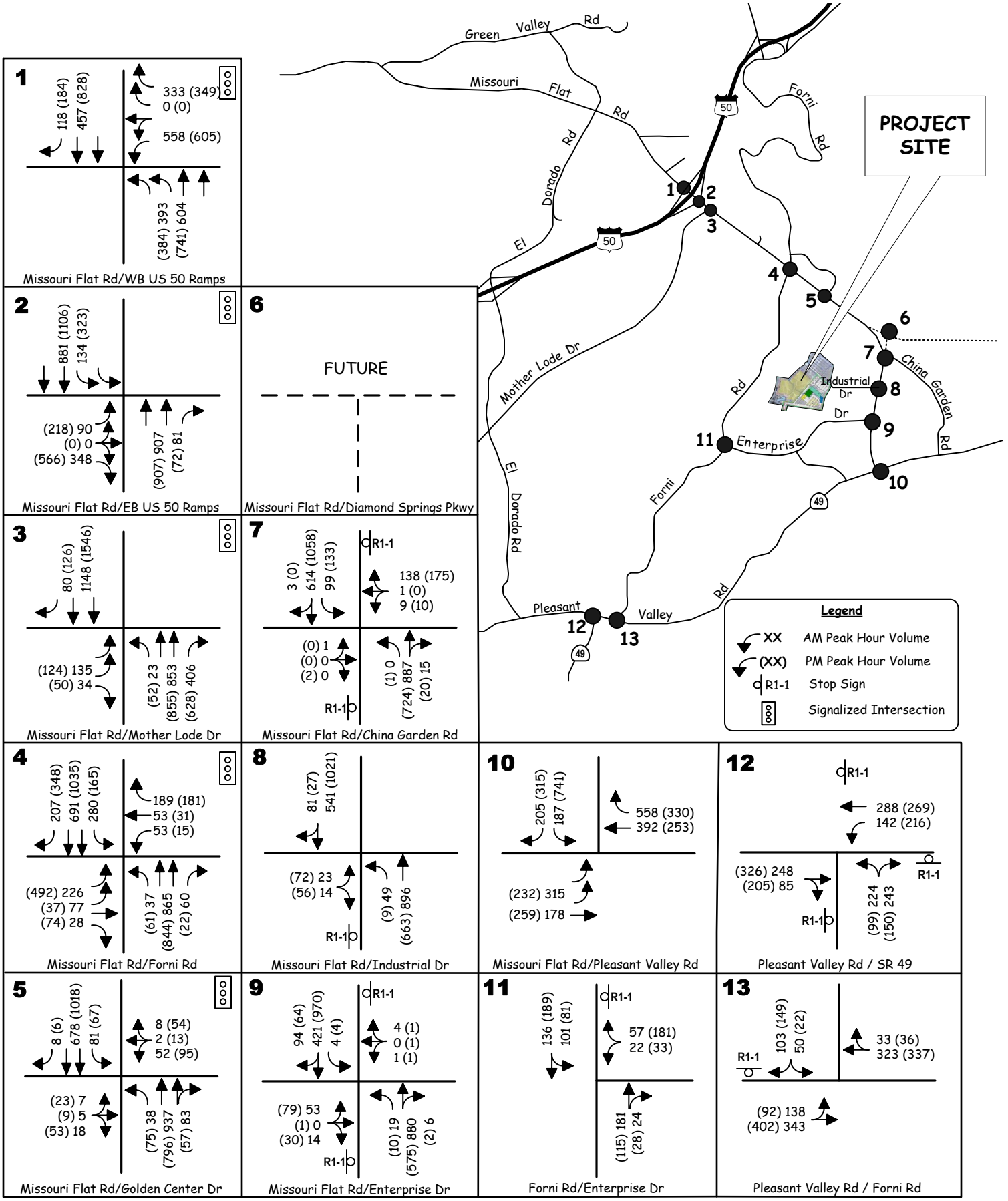
All intersections except the Missouri Flat Road / China Garden Road and Missouri Flat / Enterprise Drive intersections will continue to operate at or above the minimum El Dorado County standard (i.e., LOS E or better). The Missouri Flat Road / Enterprise Drive intersection will continue to operate with the eastbound Enterprise Drive approach at LOS F in both a.m. and p.m. peak hours. The westbound China Garden Road approach and eastbound driveway will continue to operate at LOS F in the a.m. peak hour at the Missouri Flat Road / China Garden Road intersection. The westbound approach will also decline to LOS F in the p.m. peak hour.

Because existing conditions already exceed the LOS E minimum standard the significance of the projects impact is based on the increase in traffic volume per General Plan Policy TC-Xe. At the Missouri Flat Road / Enterprise Drive intersection the project adds 44 peak hour trips. This exceeds the 10 trip increment permitted under the GP, and the project's impact is significant. At the Missouri Flat Road / China Garden Road intersection the project adds 70 peak hour trips. This also exceeds the 10 trip increment and the project's impact is significant.

Traffic Signal Warrants. The peak hour traffic signal warrant will be met at five intersections, including the China Garden Road / Missouri Flat Road intersection, Enterprise Drive / Missouri Flat Road intersection, Pleasant Valley Road / SR 49 intersection and the Forni Road / Pleasant Valley Road intersection that are met under the Existing conditions. With the project the Missouri Flat Road / Industrial Drive intersection will also meet the peak hour signal warrant in the p.m. peak hour. Satisfaction of traffic signal warrants is not a significant criteria under County traffic study guidelines.

The Pleasant Valley Road / SR 49 and Forni Road / Pleasant Valley Road intersections will continue to operate within accepted County LOS thresholds as will the Missouri Flat Road / Industrial Drive intersection while the China Garden Road / Missouri Flat Road intersection and the Enterprise Drive / Missouri Flat Road intersection will continue to operate with at least one approach at LOS F.

Intersection Queues. Table 7 identifies peak period queues assuming the addition of project trips. Project trips and the SimTraffic software may change the length of some queues. Those 95th percentile queues with length exceeding the available storage have been highlighted. Under Existing Plus Project conditions queues will exceed the available storage at the same intersections that were noted for existing conditions.



EXISTING PLUS PROJECT
TRAFFIC VOLUMES AND LANE CONFIGURATIONS

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figure 6

TABLE 6
PEAK HOUR INTERSECTION LEVELS OF SERVICE - EXISTING PLUS PROJECT CONDITIONS

Location	Control	Existing				Existing Plus Project				Traffic Signal Warranted?
		AM		PM		AM		PM		
		LOS	Average Delay	LOS	Average Delay	LOS	Average Delay	LOS	Average Delay	
1. Missouri Flat Rd / WB US 50 ramps	Signal	B	18.4	B	17.6	B	18.3	B	18.1	N/A
2. Missouri Flat Rd / EB US 50 ramps	Signal	B	16.2	C	21.5	B	16.8	C	21.6	N/A
3. Missouri Flat Rd / Mother Lode Dr	Signal	A	8.5	A	8.6	A	8.6	A	8.7	N/A
4. Missouri Flat Rd / Forni Rd	Signal	C	21.5	C	22.4	C	21.5	C	23.0	N/A
5. Missouri Flat Rd / Golden Center Dr	Signal	B	14.8	C	21.0	B	15.0	C	21.5	N/A
6. Missouri Flat Rd / Diamond Springs Pkwy	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
7. Missouri Flat Rd / China Garden Rd	EB/WB Stop									Yes*
NB Left		(Δ)	(Δ)	(B)	(10.6)	(Δ)	(Δ)	(B)	(10.6)	
SB Left		(B)	(11.2)	(A)	(9.8)	(B)	(11.3)	(B)	(10.1)	
EB		(F)	(185.9)	(C)	(18.6)	(F)	(217.9)	(C)	(18.9)	
WB		(F)	(55.9)	(E)	(43.5)	(F)	(62.6)	(F)	(56.6)	
8. Missouri Flat Rd / Industrial Dr	EB Stop									Yes‡
NB Left		(A)	(8.9)	(B)	(10.9)	(A)	(9.3)	(B)	(11.0)	
EB		(C)	(17.8)	(C)	(24.5)	(C)	(21.7)	(E)	(47.4)	
9. Missouri Flat Rd / Enterprise Dr	EB/WB Stop									Yes†
NB Left		(A)	(8.7)	(B)	(10.5)	(A)	(8.8)	(B)	(10.8)	
SB Left		(B)	(10.2)	(A)	(8.7)	(B)	(10.4)	(A)	(8.7)	
EB		(F)	(99.1)	(F)	(250.8)	(F)	(124.6)	(F)	(293.3)	
WB		(C)	(23.7)	(E)	(40.0)	(D)	(25.1)	(E)	(43.0)	
10. Missouri Flat Rd / Pleasant Valley Rd	Signal	B	18.7	B	20.0	B	19.0	C	20.2	N/A
11. Forni Rd / Enterprise Dr	WB Stop									No
SB Left		(A)	(7.9)	(A)	(7.7)	(A)	(7.9)	(A)	(7.7)	
WB		(B)	(11.2)	(B)	(11.3)	(B)	(11.4)	(B)	(11.4)	
12. Pleasant Valley Rd / SR 49	AWS	E	41.7	C	20.8	E	41.4	C	21.2	Yes*
13. Pleasant Valley Rd / Forni Rd	SB Stop									Yes*
SB		(E)	(39.3)	(B)	(14.9)	(E)	(41.6)	(C)	(15.1)	
EB Left		(A)	(9.0)	(A)	(8.4)	(A)	(9.0)	(A)	(8.4)	

Δ no volume N/A – not applicable AWS – all way stop
* meets peak hour warrant in AM and PM peak hour without and with project
† meets peak hour warrant in PM peak hour without and with project
‡ meets peak hour warrant in PM peak hour with project
(xx) – delay and level of service for side street traffic using Synchro 2010 including TWLTL analysis

TABLE 7
EXISTING PLUS PROJECT PEAK HOUR QUEUES AT SIGNALIZED INTERSECTIONS

Location	Capacity (feet)	AM Peak Hour VPH Existing	AM Peak Hour VPH Project Only	AM Peak Hour VPH Total	AM Peak Hour Ex Plus Project Queue (feet)	PM Peak Hour VPH Existing	PM Peak Hour VPH Project Only	PM Peak Hour VPH Total	PM Peak Hour Ex Plus Project Queue (feet)
1. Missouri Flat Road / WB US 50 ramps									
NB left turn	160 (2)	390	3	393	169	365	19	384	164
NB through	360 (2)	600	4	604	270	732	9	741	234
SB through	520 (2)	446	11	457	163	822	6	828	252
WB left turn	410 (2)	541	17	558	228	596	5	601	229
WB right turn	410 (2)	333	0	333	131	349	0	349	153
2. Missouri Flat Road / EB US 50 ramps									
NB through	160 (2)	900	7	907	201	879	28	907	186
NB right turn	140	81	0	81	76	72	0	72	86
SB left	160 (2)	134	0	134	191	323	0	323	216
SB through	380 (2)	853	28	881	384	1,095	11	1,106	432
EB left+through+right turn	540 (3)	417	21	438	147	779	5	784	222
3. Missouri Flat Road / Mother Lode Drive									
NB left turn	150	23	0	23	61	51	1	52	70
NB through	2,300 (2)	846	7	853	177	827	28	855	149
SB through	140 (2)	1,100	48	1,148	107	1,530	16	1,546	169
SB right turn	130	80	0	80	<25	126	0	126	81

Highlighted values indicate queue length in excess of available storage

TABLE 7 (cont'd)
EXISTING PLUS PROJECT PEAK HOUR QUEUES AT SIGNALIZED INTERSECTIONS

Location	Capacity (feet)	AM Peak Hour				PM Peak Hour			
		VPH			Ex Plus Project Queue (feet)	VPH			Ex Plus Project Queue (feet)
		Existing	Project Only	Total		Existing	Project Only	Total	
4. Missouri Flat Road / Forni Road									
NB left turn	250	37	0	37	51	57	4	61	115
NB through	1,000 (2)	855	10	865	260	800	44	844	277
NB right turn	160	60	0	60	104	21	1	22	84
SB left turn	300	280	0	280	287	165	0	165	207
SB through	2,300 (2)	642	49	691	225	1,019	16	1,035	281
SB right turn	150	207	0	207	120	348	0	348	187
5. Missouri Flat Road / Golden Center Drive									
NB left turn	120	38	0	38	73	75	0	75	116
SB left turn	160	81	0	81	118	67	0	67	139
10. Missouri Flat Road / Pleasant Valley Road									
EB Left*	130 (2)	304	11	315	173	232	0	232	143
WB Right	200	533	25	558	245	327	3	330	153

Highlighted values indicate queue length in excess of available storage
* - longest lane for multiple turn lane approaches

NEAR TERM FUTURE CONDITIONS (2025)

The analysis of the near term future conditions (2025) is intended to consider the impact of this project within the context of the roadway facilities occurring in ten years.

Analysis Methodology

El Dorado County traffic study guidelines identify that near term future conditions are calculated using straight line interpolation between existing traffic conditions and 2035 traffic projections. The traffic network for 2025 includes all applicable projects in the County's Ten Year CIP.

Year 2025 Forecasts / Conditions

Year 2025 Lane Configurations. The near term cumulative analysis assumes regional circulation system improvements that will be completed by 2025 are identified in the County's Capital Improvement Program (CIP). One roadway project is identified below:

- Construction of the Diamond Springs Parkway (DSP), a four-lane arterial roadway from east of Golden Center Drive to a new T-intersection with SR 49 south of Bradley Drive. The project includes a new signalized intersection with Missouri Flat Road and Diamond Road (SR 49).

Basis for Analysis - Regional Traffic Growth. The most recent countywide regional travel demand forecasting model was used as the basis for developing future volumes forecasts in the study area.

Since the existing roadway configuration does not include the DSP a model run was conducted for the baseline 2010 a.m. and p.m. model conditions assuming DSP was built. This provided 'existing' roadway volumes, thereby allowing the roadway volumes to be calculated under 2025 conditions with DSP completed. An incremental approach was taken whereby the difference between baseline and future 2035 model forecasts were applied to current volumes to create adjusted future volume and approach growth factors. These growth factors were applied to each intersection approach and the turning movement volumes at the study intersections were balanced using the 'Furness' techniques described in NCHRP Report 255.

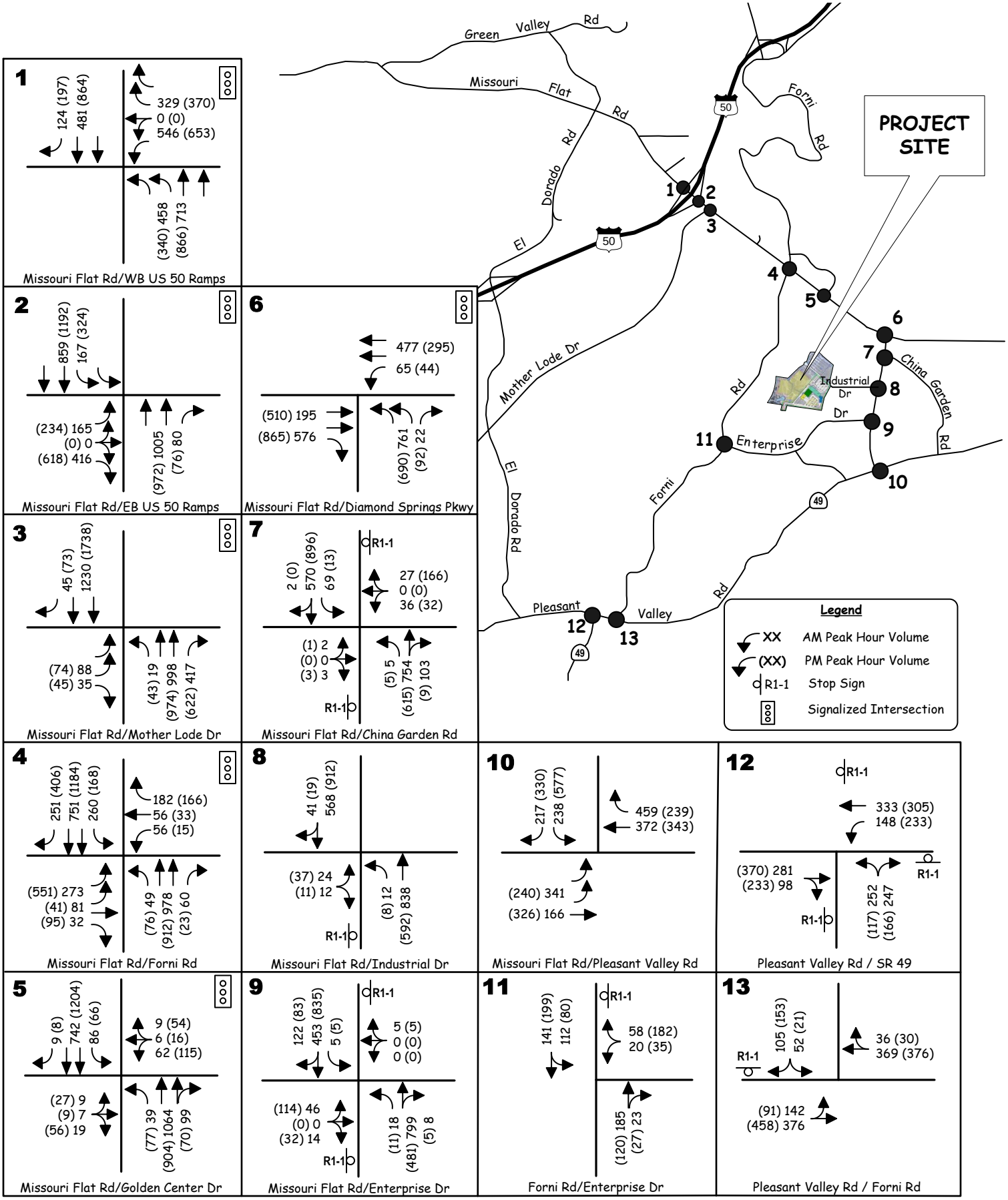
The incorporation of DSP will change area traffic patterns, and individual turning movements at intersections may increase or decrease when compared to existing traffic volumes. Figure 7 presents the projected 2025 traffic volumes.

Intersection Levels of Service. The identified Year 2025 volumes were used to recalculate operating Levels of Service at the selected intersections. Table 8 displays the a.m. and p.m. peak hour Levels of Service at each study intersection in the 2025 condition. Three unsignalized intersections, Missouri Flat Road at China Garden Road, Missouri Flat Road at Enterprise Drive and Pleasant Valley Road at Forni Road will operate at a LOS F condition along the side street approaches while the all-way stop controlled Pleasant Valley Road at SR 49 intersection will operate at LOS F.

Traffic Signal Warrants. The peak hour traffic signal warrant will be met at four intersections, China Garden Road at Missouri Flat Road, Enterprise Drive at Missouri Flat Road, Pleasant Valley Road at SR 49 and Forni Road at Pleasant Valley Road intersection.

All four intersections will operate with at least one approach at LOS F.

Intersection Queues. Table 9 identifies peak period queues under 2025 conditions. 95th percentile queues with length exceeding the available storage have been highlighted. Under 2025 conditions eight locations will exceed the available storage.



2025 TRAFFIC VOLUMES AND LANE CONFIGURATIONS

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4431-01 LT 10/26/2015

Sheriff's Headquarters Project El Dorado County

figure 7

TABLE 8
PEAK HOUR INTERSECTION LEVELS OF SERVICE - 2025 PLUS PROJECT CONDITIONS

		2025				2025 Plus Project				
		AM Peak Hour		PM Peak Hour		AM Peak Hour		PM Peak Hour		Traffic Signal Warranted?
Location	**Control**	**LOS**	**Average Delay**	**LOS**	**Average Delay**	**LOS**	**Average Delay**	**LOS**	**Average Delay**	
1. Missouri Flat Rd / WB US 50 ramps	Signal	B	16.6	B	16.6	B	16.7	B	17.7	N/A
2. Missouri Flat Rd / EB US 50 ramps	Signal	B	14.3	C	26.0	B	15.0	C	26.2	N/A
3. Missouri Flat Rd / Mother Lode Dr	Signal	B	11.0	B	12.4	B	11.1	B	12.3	N/A
4. Missouri Flat Rd / Forni Rd	Signal	C	26.4	D	40.7	C	28.9	D	35.9	N/A
5. Missouri Flat Rd / Golden Center Dr	Signal	C	21.8	C	27.3	C	21.4	C	30.4	N/A
6. Missouri Flat Rd / Diamond Springs Pkwy	Signal	B	10.6	B	12.2	B	11.3	B	12.6	N/A
7. Missouri Flat Rd / China Garden Rd	EB/WB Stop									Yes*
NB Left		(A)	(8.8)	(B)	(10.1)	(A)	(9.0)	(B)	(10.2)	
SB Left		(B)	(10.5)	(A)	(9.0)	(B)	(10.5)	(A)	(9.3)	
EB		(D)	(33.0)	(E)	(38.8)	(E)	(37.6)	(E)	(44.7)	
WB		(F)	(83.6)	(F)	(73.3)	(F)	(105.3)	(F)	(107.3)	
8. Missouri Flat Rd / Industrial Dr	EB Stop									Yes‡
NB Left		(A)	(8.9)	(B)	(10.3)	(A)	(9.4)	(B)	(10.4)	
EB		(C)	(18.8)	(C)	(23.3)	(C)	(21.7)	(E)	(40.4)	
9. Missouri Flat Rd / Enterprise Dr	EB/WB Stop									Yes†
NB Left		(A)	(8.8)	(B)	(10.3)	(A)	(8.9)	(B)	(10.4)	
SB Left		(A)	(9.7)	(A)	(8.5)	(A)	(9.8)	(A)	(8.5)	
EB		(F)	(64.2)	(F)	(>300)	(F)	(72.1)	(F)	(>300)	
WB		(C)	(15.5)	(B)	(11.6)	(C)	(15.8)	(B)	(11.6)	
10. Missouri Flat Rd / Pleasant Valley Rd	Signal	C	22.8	C	30.3	C	25.2	C	33.4	N/A
11. Forni Rd / Enterprise Dr	WB Stop									No
SB Left		(A)	(8.0)	(A)	(7.7)	(A)	(8.0)	(A)	(7.7)	
WB		(B)	(11.3)	(B)	(11.5)	(B)	(11.4)	(B)	(11.6)	
12. Pleasant Valley Rd / SR 49	AWS	F	50.4	E	39.2	F	51.5	E	39.4	Yes*
13. Pleasant Valley Rd / Forni Rd	SB Stop									Yes*
SB		(F)	(67.3)	(D)	(25.7)	(F)	(73.5)	(D)	(26.7)	
EB Left		(A)	(9.3)	(A)	(9.0)	(A)	(9.3)	(A)	(9.0)	

Δ no volume N/A – not applicable AWS – all way stop
* meets peak hour warrant in AM and PM peak hour without and with project
† meets peak hour warrant in PM peak hour without and with project
‡ meets peak hour warrant in PM peak hour with project
(xx) – delay and level of service for side street traffic using Synchro 2010 including TWLTL analysis

TABLE 9
PEAK HOUR QUEUES AT SIGNALIZED INTERSECTIONS - 2025 CONDITIONS

Location	Capacity (feet)	AM Peak Hour		PM Peak Hour	
		VPH	Queue (feet)	VPH	Queue (feet)
1. Missouri Flat Road / WB US 50 ramps					
NB left turn	160 (2)	458	168	340	153
NB through	360 (2)	713	353	866	133
SB through	520 (2)	481	146	864	255
WB left turn	410 (2)	546	199	653	228
WB right turn	410 (2)	329	135	370	171
2. Missouri Flat Road / EB US 50 ramps					
NB through	160 (2)	1,005	202	972	190
NB right turn	140	80	68	76	58
SB left	160 (2)	167	101	324	185
SB through	380 (2)	859	106	1,192	336
EB left+through+right turn	540 (3)	581	173	852	307
3. Missouri Flat Road / Mother Lode Drive					
NB left turn	150	19	63	43	119
NB through	2,300 (2)	998	278	974	304
SB through	140 (2)	1,230	187	1,738	192
SB right turn	130	45	53	73	76
4. Missouri Flat Road / Forni Road					
NB left turn	250	49	135	76	185
NB through	1,000 (2)	978	371	912	371
NB right turn	160	60	128	23	95
SB left turn	300	260	322	168	315
SB through	2,300 (2)	751	351	1,184	531
SB right turn	150	251	168	406	233
5. Missouri Flat Road / Golden Center Drive					
NB left turn	120	39	102	77	162
SB left turn	160	86	158	66	159
6. Missouri Flat Road / Diamond Springs Parkway					
NB left turn	275 (2)	761	142	690	154
EB right turn	250	576	161	865	207
WB left turn	500	65	78	44	63
10. Missouri Flat Road / Pleasant Valley Road					
EB Left*	130 (2)	341	198	240	208
WB Right	200	459	185	239	129

Highlighted values indicate queue length in excess of available storage
* - longest lane for multiple turn lane approaches

2025 Plus Project

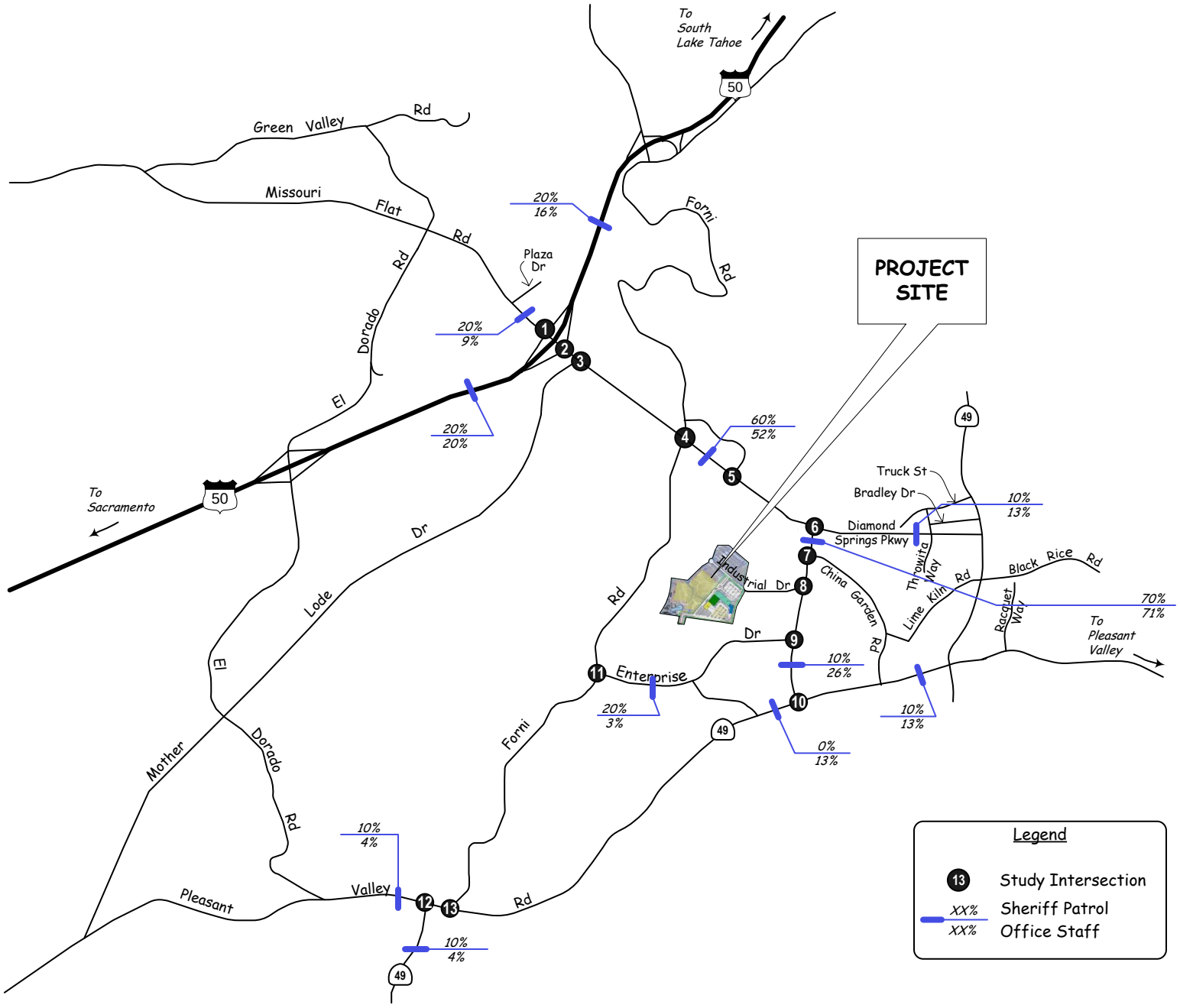
Trip Distribution & Assignment. With the construction of Diamond Springs Parkway a select link analysis showed a variation in trips to the east, with some trips using Diamond Springs Parkway instead of Pleasant Valley Road. Table 10 presents the projected trip distribution percentages for the project. Figure 8 presents the trip distribution percentages generated by the project while Figure 9 presents the project trips generated.

TABLE 10
PROJECT TRIP DISTRIBUTION

Direction	Route	Distribution	
		Sheriff Patrol	Office Staff
North	Via Missouri Flat Road	20%	9%
North	Internal Diamond Springs traffic via Missouri Flat Road	0%	13%
South	To SR49	10%	4%
South	Internal Diamond Springs traffic via Missouri Flat Road and Pleasant Valley Road	0%	8%
East	To US 50 via Missouri Flat Road	20%	16%
East	Via Pleasant Valley Road	10%	13%
East	Via Diamond Springs Parkway	10%	13%
West	Via US 50 via Missouri Flat Road	20%	20%
West	Via Pleasant Valley Road	10%	4%
Total		100%	100%

Intersection Levels of Service. The identified Year 2025 plus Project volumes were used to recalculate operating Levels of Service at selected intersections. Figure 10 displays the "2025 Plus Project" traffic volumes at each study intersection in both a.m. and p.m. peak hours while Table 8 displays the a.m. and p.m. peak hour Levels of Service at each study intersection in the 2025 plus Project condition. Four intersections will operate at LOS F conditions under the proposed project conditions. These include Missouri Flat Road at China Garden Road, Missouri Flat Road at Enterprise Drive, Pleasant Valley Road at Forni Road and Pleasant Valley Road at SR 49.

The westbound approach of the Missouri Flat Road / China Garden Road intersection will continue to operate at LOS F conditions in the a.m. and p.m. peak hours. As noted under Existing Plus Project conditions the project's additional traffic will exceed the permissible increment and this impact is significant. The eastbound approach of the Missouri Flat Road / Enterprise Drive intersection also will operate at LOS F in both peak periods, and project traffic at this location is more than 10 peak hour trips, thereby making the impact significant. The southbound approach of the Pleasant Valley Road / Forni Road intersection will continue to operate at LOS F in the a.m. peak hour. Because the project adds more than 10 peak hour trips, this impact is significant. Finally, the Pleasant Valley Road / SR 49 intersection will operate at LOS F in the a.m. peak hour. The project's additional traffic of more than 10 peak hour trips creates a significant impact at this intersection.



2025 / 2035
PROJECT TRIP DISTRIBUTION

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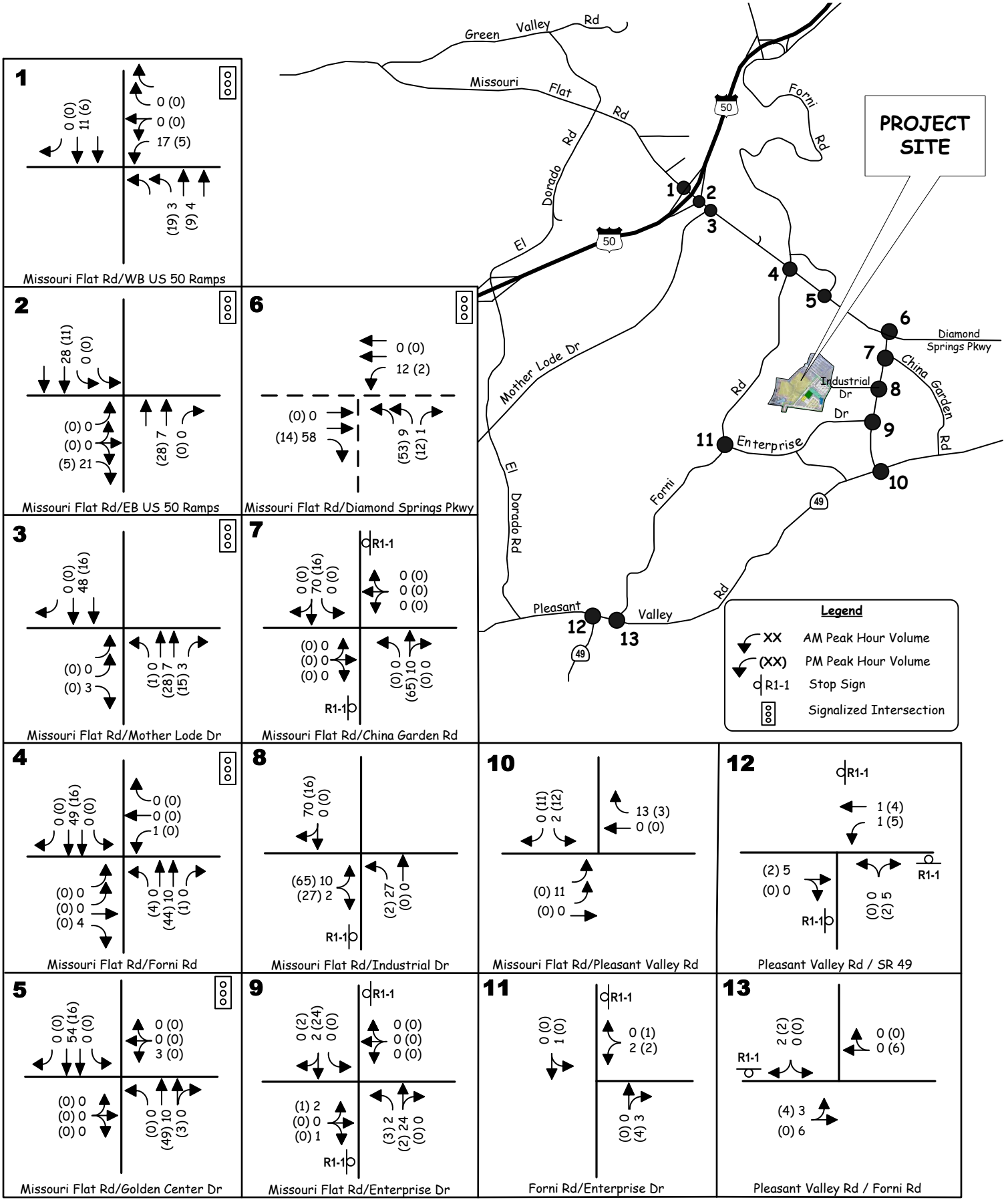
figure 8



2025 / 2035 PROJECT VOLUMES AND LANE CONFIGURATIONS

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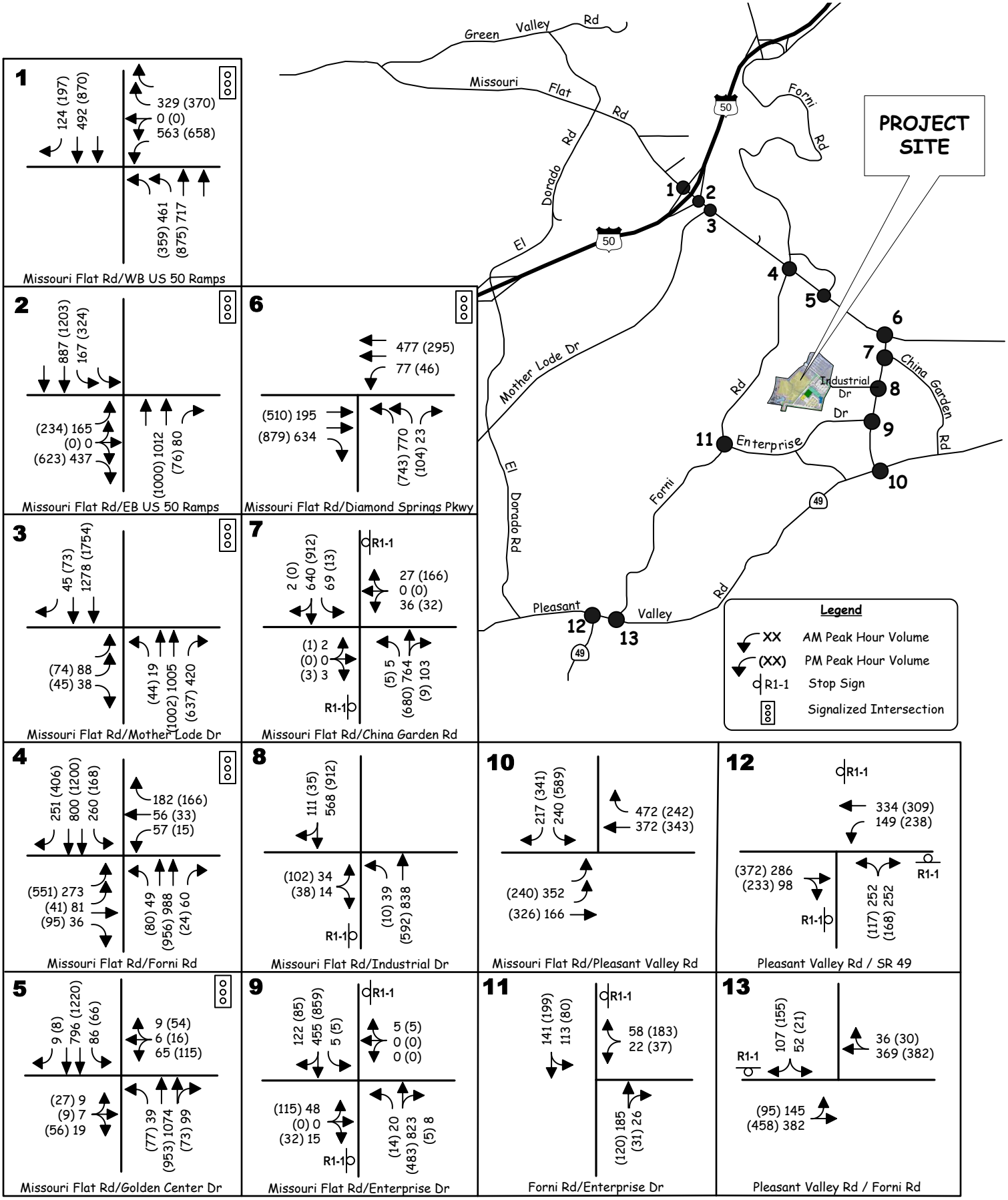
figure 9



2025 PLUS PROJECT
TRAFFIC VOLUMES AND LANE CONFIGURATIONS

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figure 10

Traffic Signal Warrants. Under 2025 plus Project conditions the peak hour traffic signal warrant will be met at five intersections, including the China Garden Road / Missouri Flat Road intersection, Enterprise Drive at Missouri Flat Road, Pleasant Valley Road at SR 49 and the Forni Road / Pleasant Valley Road intersection. With the project the Missouri Flat Road / Industrial Drive intersection will also meet the peak hour signal warrant in the p.m. peak hour.

Intersection Queues. Table 11 identifies peak period queues assuming the addition of project trips. Project trips and the SimTraffic software may change the length of some queues. Those 95th percentile queues with length exceeding the available storage have been highlighted. Under 2025 Plus Project conditions, nine locations will have queues that exceed the available storage.

TABLE 11
PEAK HOUR QUEUES AT SIGNALIZED INTERSECTIONS
2025 PLUS PROJECT CONDITIONS

Location	Capacity (feet)	AM Peak Hour				PM Peak Hour			
		VPH			2025 Plus Project Queue (feet)	VPH			2025 Plus Project Queue (feet)
		2025	Project Only	Total		2025	Project Only	Total	
1. Missouri Flat Road / WB US 50 ramps									
NB left turn	160 (2)	458	3	461	170	340	19	359	155
NB through	360 (2)	713	4	717	339	866	9	875	142
SB through	520 (2)	481	11	492	151	864	6	870	261
WB left turn	410 (2)	546	17	563	194	653	5	658	280
WB right turn	410 (2)	329	0	329	133	370	0	370	174
2. Missouri Flat Road / EB US 50 ramps									
NB through	160 (2)	1,005	7	1,012	193	972	28	1,000	191
NB right turn	140	80	0	80	68	76	0	76	61
SB left	160 (2)	167	0	167	102	324	0	324	189
SB through	380 (2)	859	28	887	131	1,192	11	1,203	356
EB left+through+right turn	540 (3)	581	21	602	184	852	5	857	306
3. Missouri Flat Road / Mother Lode Drive									
NB left turn	150	19	0	19	72	43	1	44	113
NB through	2,300 (2)	998	7	1,005	273	974	28	1,002	291
SB through	140 (2)	1,230	48	1,278	189	1,738	16	1,754	190
SB right turn	130	45	0	45	55	73	0	73	76

Highlighted values indicate queue length in excess of available storage

TABLE 11 (cont'd)
2025 PLUS PROJECT PEAK HOUR QUEUES AT SIGNALIZED INTERSECTIONS

Location	Capacity (feet)	AM Peak Hour VPH 2025	AM Peak Hour VPH Project Only	AM Peak Hour VPH Total	AM Peak Hour 2025 Plus Project Queue (feet)	PM Peak Hour VPH 2025	PM Peak Hour VPH Project Only	PM Peak Hour VPH Total	PM Peak Hour 2025 Plus Project Queue (feet)
4. Missouri Flat Road / Forni Road									
NB left turn	250	49	0	47	128	76	4	73	174
NB through	1,000 (2)	978	10	989	379	912	44	1,070	365
NB right turn	160	60	0	69	149	23	1	30	100
SB left turn	300	260	0	280	354	168	0	166	297
SB through	2,300 (2)	751	49	838	426	1,184	16	1,288	522
SB right turn	150	251	0	220	187	406	0	353	233
5. Missouri Flat Road / Golden Center Drive									
NB left turn	120	39	0	38	111	77	0	76	172
SB left turn	160	86	0	81	145	66	0	67	171
6. Missouri Flat Road / Diamond Springs Parkway									
NB left turn	275 (2)	761	9	770	155	690	53	743	164
EB right turn	250	576	58	634	214	865	14	879	225
WB left turn	500	65	12	77	91	44	2	46	62
10. Missouri Flat Road / Pleasant Valley Road									
EB Left*	130 (2)	341	11	352	203	240	0	240	206
WB Right	200	459	13	472	193	239	3	242	159

Highlighted values indicate queue length in excess of available storage
* - longest lane for multiple turn lane approaches

2035 CUMULATIVE IMPACTS

The analysis of the long term cumulative impact analysis is intended to consider the impact of this project within the context of conditions occurring under the El Dorado County General Plan in the Year 2035.

Year 2035 Lane Configurations. The cumulative analysis assumes regional circulation system improvements will be completed between 2026 and 2035 and are identified in the County's Capital Improvement Program (CIP). The identified roadway projects include:

- State Route 49 Widening from Pleasant Valley Road to Missouri Flat Road; this includes widening of State Route 49 from Pleasant Valley Road to Missouri Flat Road to accommodate a two-way left-turn lane.

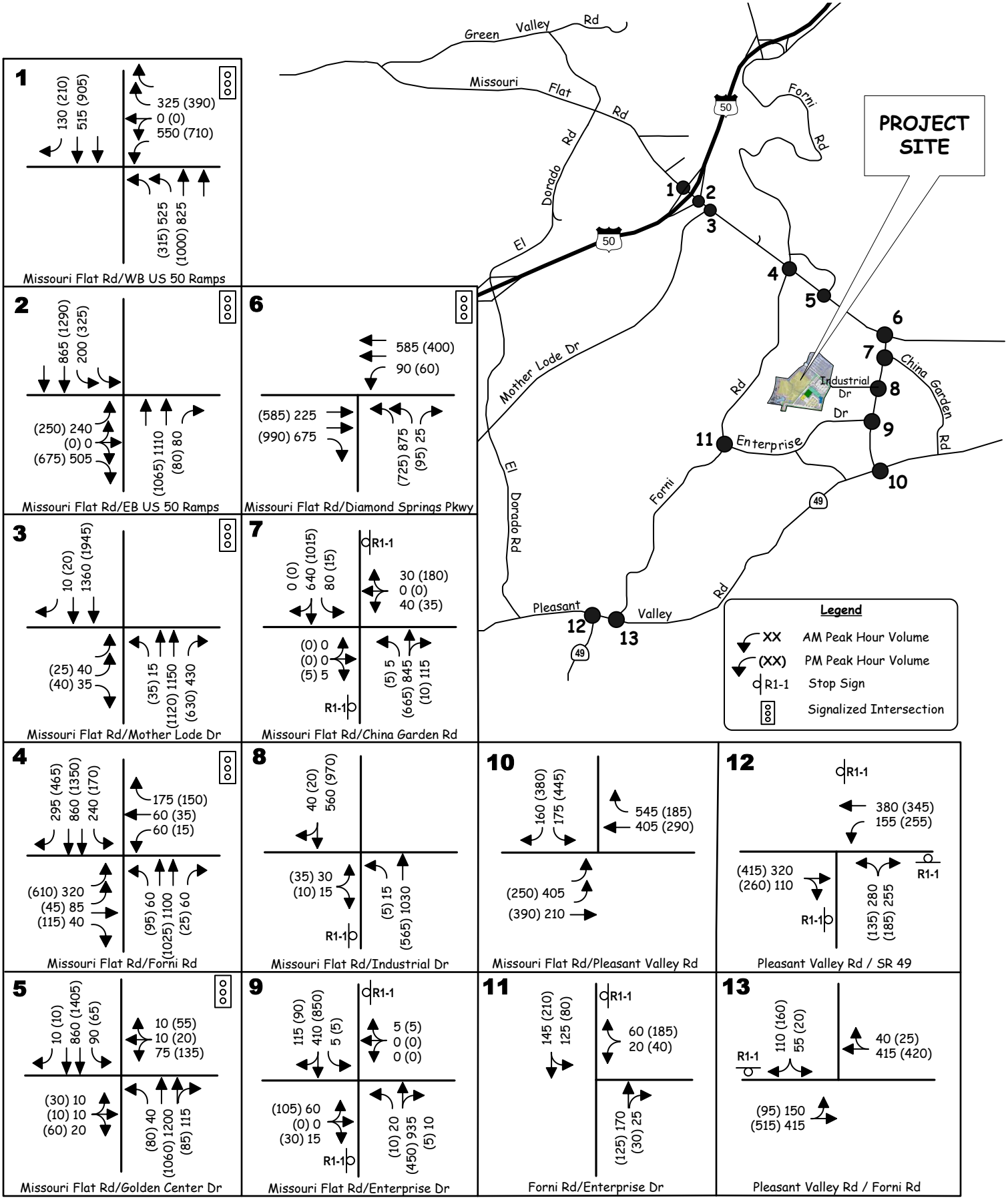
Year 2035 Forecasts / Conditions. As noted in the Year 2025 Forecasts / Conditions section turning movement volumes were projected for Year 2035 which reflect the effects of local and regional development as well the results of community wide circulation improvements. Figure 11 presents the projected Year 2035 traffic volumes.

Intersection Levels of Service. The identified Year 2035 volumes were used to recalculate operating Levels of Service at the selected intersections. Table 12 displays the a.m. and p.m. peak hour Levels of Service at each study intersection in the 2035 condition. Three unsignalized intersections, Missouri Flat Road at China Garden Road, Missouri Flat Road at Enterprise Drive and Pleasant Valley Road at SR 49 will operate at a LOS F conditions. The westbound approach of the Missouri Flat Road / China Garden Road intersection will operate at LOS F in both a.m. and p.m. peak hours while the eastbound approach of the Missouri Flat Road / Enterprise Drive intersection will operate at LOS F in both peak periods. The Pleasant Valley Road / SR 49 intersection will operate at LOS F in the a.m. peak hour only.

Traffic Signal Warrants. The peak hour traffic signal warrant will be met at four intersections, China Garden Road at Missouri Flat Road, Enterprise Drive at Missouri Flat Road, Pleasant Valley Road at SR 49 and Forni Road at Pleasant Valley Road intersection.

The Pleasant Valley Road / Forni Road intersection will operate within accepted County LOS thresholds while the China Garden Road / Missouri Flat Road intersection, the Enterprise Drive / Missouri Flat Road intersection and the SR 49 / Pleasant Valley Road intersection will operate with at least one approach at LOS F.

Intersection Queues. Table 13 identifies peak period queues under 2035 conditions. 95th percentile queues with length exceeding the available storage have been highlighted. Under 2035 conditions thirteen locations will exceed the available storage.



2035 TRAFFIC VOLUMES AND LANE CONFIGURATIONS

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figure 11

TABLE 12
PEAK HOUR INTERSECTION LEVELS OF SERVICE - 2035 PLUS PROJECT CONDITIONS

Location	Control	2035				2035 Plus Project				Traffic Signal Warranted?
		AM Peak Hour		PM Peak Hour		AM Peak Hour		PM Peak Hour		
		LOS	Average Delay	LOS	Average Delay	LOS	Average Delay	LOS	Average Delay	
1. Missouri Flat Rd / WB US 50 ramps	Signal	B	18.6	B	18.8	B	18.3	B	18.4	N/A
2. Missouri Flat Rd / EB US 50 ramps	Signal	B	16.9	C	25.6	B	17.2	C	26.3	N/A
3. Missouri Flat Rd / Mother Lode Dr	Signal	B	13.1	B	11.5	B	13.3	B	12.6	N/A
4. Missouri Flat Rd / Forni Rd	Signal	C	30.5	E	61.1	C	31.5	E	62.4	N/A
5. Missouri Flat Rd / Golden Center Dr	Signal	C	23.0	C	32.2	C	24.0	D	35.4	N/A
6. Missouri Flat Rd / Diamond Springs Pkwy	Signal	B	13.4	B	14.7	B	14.2	B	15.3	N/A
7. Missouri Flat Rd / China Garden Rd	EB/WB Stop									Yes*
NB Left		(A)	(9.0)	(B)	(10.7)	(A)	(9.3)	(B)	(10.8)	
SB Left		(B)	(11.2)	(A)	(9.2)	(B)	(11.3)	(A)	(9.5)	
EB		(B)	(13.2)	(C)	(19.3)	(B)	(14.1)	(C)	(19.7)	
WB		(F)	(188.1)	(F)	(174.9)	(F)	(265.6)	(F)	(242.2)	
8. Missouri Flat Rd / Industrial Dr	EB Stop									Yes‡
NB Left		(A)	(8.9)	(B)	(10.6)	(A)	(9.3)	(B)	(10.7)	
EB		(C)	(22.1)	(C)	(24.1)	(D)	(26.3)	(E)	(42.8)	
9. Missouri Flat Rd / Enterprise Dr										Yes*
NB Left	EB/WB Stop	(A)	(8.7)	(B)	(10.4)	(A)	(8.7)	(B)	(10.5)	
SB Left		(B)	(10.4)	(A)	(8.4)	(B)	(10.5)	(A)	(8.4)	
EB		(F)	(121.6)	(F)	(251.1)	(F)	(141.1)	(F)	(286.9)	
WB		(C)	(17.8)	(B)	(11.3)	(C)	(18.3)	(B)	(11.3)	
10. Missouri Flat Rd / Pleasant Valley Rd	Signal	D	45.7	C	20.8	D	48.3	C	21.0	N/A
11. Forni Rd / Enterprise Dr	WB Stop									No
SB Left		(A)	(7.9)	(A)	(7.7)	(A)	(8.0)	(A)	(7.7)	
WB		(B)	(11.3)	(B)	(11.9)	(B)	(11.5)	(B)	(12.0)	
12. Pleasant Valley Rd / SR 49	AWS	F	61.5	E	44.6	F	61.5	E	45.2	Yes*
13. Pleasant Valley Rd / Forni Rd	SB Stop									Yes*
SB		(D)	(33.9)	(C)	(21.9)	(E)	(35.4)	(C)	(22.5)	
EB Left		(A)	(9.1)	(A)	(9.2)	(A)	(9.7)	(A)	(9.3)	

Δ no volume N/A – not applicable AWS – all way stop
* meets peak hour warrant in AM and PM peak hour without and with project
† meets peak hour warrant in PM peak hour without and with project
‡ meets peak hour warrant in PM peak hour with project
(xx) – delay and level of service for side street traffic using Synchro 2010 including TWLTL analysis

TABLE 13
PEAK HOUR QUEUES AT SIGNALIZED INTERSECTIONS
2035 CONDITIONS

Location	Capacity (feet)	AM Peak Hour VPH	AM Peak Hour Queue (feet)	PM Peak Hour VPH	PM Peak Hour Queue (feet)
1. Missouri Flat Road / WB US 50 ramps					
NB left turn	160 (2)	525	163	315	146
NB through	360 (2)	825	438	1,000	129
SB through	520 (2)	515	165	905	260
WB left turn	410 (2)	550	188	710	325
WB right turn	410 (2)	325	144	390	234
2. Missouri Flat Road / EB US 50 ramps					
NB through	160 (2)	1,110	191	1,065	187
NB right turn	140	80	36	80	20
SB left	160 (2)	200	109	325	188
SB through	380 (2)	865	107	1,240	338
EB left+through+right turn	540 (3)	745	205	925	331
3. Missouri Flat Road / Mother Lode Drive					
NB left turn	150	15	88	30	109
NB through	2,300 (2)	1,150	468	1,120	322
SB through	140 (2)	1,360	190	1,945	207
SB right turn	130	10	20	20	32
4. Missouri Flat Road / Forni Road					
NB left turn	250	60	183	95	261
NB through	1,000 (2)	1,100	400	1,025	422
NB right turn	160	60	147	25	82
SB left turn	300	240	364	170	343
SB through	2,300 (2)	860	450	1,350	542
SB right turn	150	295	211	465	225
5. Missouri Flat Road / Golden Center Drive					
NB left turn	120	40	121	80	185
SB left turn	160	90	172	65	165
6. Missouri Flat Road / Diamond Springs Parkway					
NB left turn	275 (2)	875	180	725	177
EB right turn	250	675	234	990	271
WB left turn	500	90	105	60	76
10. Missouri Flat Road / Pleasant Valley Road					
EB Left*	130 (2)	405	190	250	197
WB Right	200	545	216	185	109

Highlighted values indicate queue length in excess of available storage
* - longest lane for multiple turn lane approaches

2035 PLUS PROJECT

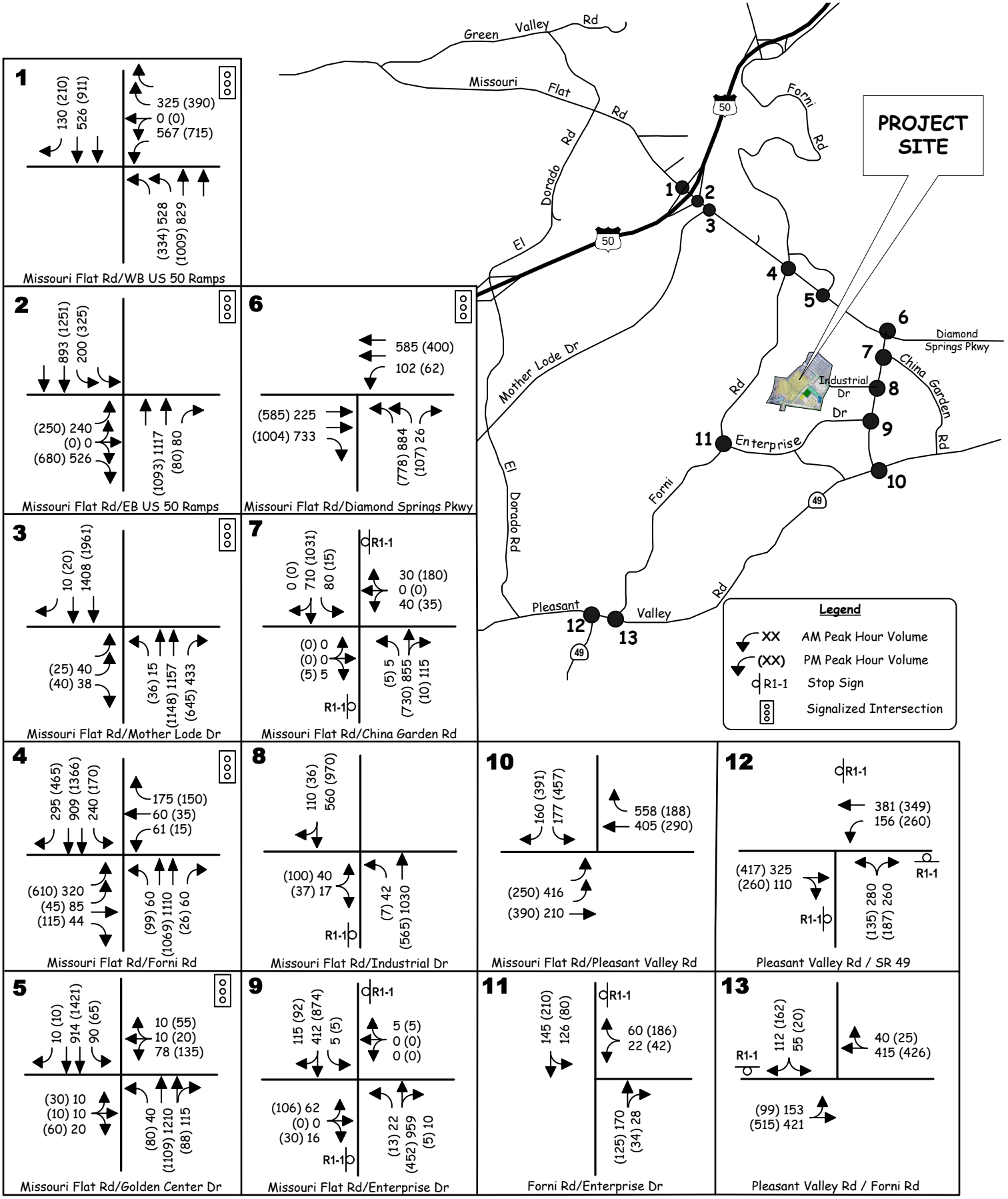
Intersection Levels of Service. The identified Year 2035 plus Project volumes were used to recalculate operating Levels of Service at selected intersections. Figure 12 displays the "2035 Plus Project" traffic volumes at each study intersection in both a.m. and p.m. peak hours. Table 12 displays the a.m. and p.m. peak hour Levels of Service at each study intersection in the 2035 plus Project condition.

Three unsignalized intersections, Missouri Flat Road at China Garden Road, Missouri Flat Road at Enterprise Drive and Pleasant Valley Road at SR 49 will operate at a LOS F conditions. The westbound approach of the Missouri Flat Road / China Garden Road intersection will continue to operate at LOS F in both a.m. and p.m. peak hours. Because the project adds more than 10 peak hour trips, this impact is significant. The eastbound approach of the Missouri Flat Road / Enterprise Drive intersection will continue to operate at LOS F in both peak periods. Because the project adds more than 10 peak hour trips, this impact is significant. The Pleasant Valley Road / SR 49 intersection will continue to operate at LOS F in the a.m. peak hour only. The project will add 13 trips to this intersection. This exceeds the 10 trip increment, and the project's impact is significant.

Traffic Signal Warrants. Under 2035 Plus Project conditions the peak hour traffic signal warrant will be met at five intersections, including the China Garden Road / Missouri Flat Road intersection, Enterprise Drive at Missouri Flat Road, Pleasant Valley Road at SR 49 and the Forni Road / Pleasant Valley Road intersection. With the project the Missouri Flat Road / Industrial Drive intersection will also meet the peak hour signal warrant in the p.m. peak hour.

The Pleasant Valley Road / Forni Road intersection and the Missouri Flat Road / Industrial Drive intersection will operate within accepted County LOS thresholds while the China Garden Road / Missouri Flat Road intersection, the Enterprise Drive / Missouri Flat Road intersection and the SR 49 / Pleasant Valley Road intersection will operate with at least one approach at LOS F.

Intersection Queues. Table 14 identifies peak period queues assuming the addition of project trips. Project trips and the SimTraffic software may change the length of some queues. Those 95th percentile queues with length exceeding the available storage have been highlighted. Under 2035 Plus Project conditions the same thirteen locations which had queues that exceed the available storage under the No Project condition, will continue to do so with the project.



2035 PLUS PROJECT
TRAFFIC VOLUMES AND LANE CONFIGURATIONS

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figure 12

TABLE 14
PEAK HOUR QUEUES AT SIGNALIZED INTERSECTIONS
2035 PLUS PROJECT CONDITIONS

Location	Capacity (feet)	AM Peak Hour				PM Peak Hour			
		VPH			2035 Plus Project Queue (feet)	VPH			2035 Plus Project Queue (feet)
		2035	Project Only	Total		2035	Project Only	Total	
1. Missouri Flat Road / WB US 50 ramps									
NB left turn	160 (2)	525	3	528	166	315	19	334	150
NB through	360 (2)	825	4	829	417	1,000	9	1,009	158
SB through	520 (2)	515	11	526	172	905	6	911	257
WB left turn	410 (2)	550	17	567	199	710	5	715	299
WB right turn	410 (2)	325	0	325	150	390	0	390	184
2. Missouri Flat Road / EB US 50 ramps									
NB through	160 (2)	1,110	7	1,117	194	1,065	28	1,093	189
NB right turn	140	80	0	80	47	80	0	80	21
SB left	160 (2)	200	0	200	121	325	0	325	162
SB through	380 (2)	865	28	893	122	1,240	11	1,251	338
EB left+through+right turn	540 (3)	745	21	766	218	925	5	930	351
3. Missouri Flat Road / Mother Lode Drive									
NB left turn	150	15	0	15	82	30	1	31	117
NB through	2,300 (2)	1,150	7	1,157	429	1,120	28	1,148	432
SB through	140 (2)	1,360	48	1,408	193	1,945	16	1,961	206
SB right turn	130	10	0	10	24	20	0	20	20

Highlighted values indicate queue length in excess of available storage

TABLE 14 (cont'd)
2035 PLUS PROJECT PEAK HOUR QUEUES AT SIGNALIZED INTERSECTIONS

Location	Capacity (feet)	AM Peak Hour				PM Peak Hour			
		VPH			2035 Plus Project Queue (feet)	VPH			2035 Plus Project Queue (feet)
		2035	Project Only	Total		2035	Project Only	Total	
4. Missouri Flat Road / Forni Road									
NB left turn	250	60	0	60	183	95	4	99	252
NB through	1,000 (2)	1,100	10	1,110	429	1,025	44	1,069	439
NB right turn	160	60	0	60	138	25	1	26	89
SB left turn	300	240	0	240	356	170	0	170	354
SB through	2,300 (2)	860	49	909	454	1,350	16	1,366	540
SB right turn	150	295	0	295	213	465	0	465	227
5. Missouri Flat Road / Golden Center Drive									
NB left turn	120	40	0	40	129	80	0	80	196
SB left turn	160	90	0	90	174	65	0	65	169
6. Missouri Flat Road / Diamond Springs Parkway									
NB left turn	275 (2)	875	9	884	188	725	53	778	179
EB right turn	250	675	58	733	276	990	14	1,004	274
WB left turn	500	90	12	102	114	60	2	62	77
10. Missouri Flat Road / Pleasant Valley Road									
EB Left*	130 (2)	405	11	416	188	250	0	250	198
WB Right	200	545	13	558	228	185	3	188	116

Highlighted values indicate queue length in excess of available storage
* - longest lane for multiple turn lane approaches

FINDINGS / RECOMMENDATIONS / MITIGATIONS

The preceding analysis has identified project impacts that may occur without mitigation. The text that follows identifies a strategy for mitigating the impacts of the proposed project. Recommendations are identified for facilities that have deficiencies in the roadway network without the project. If the project causes a significant impact, mitigations are identified for the facility.

Existing Conditions – Improvement Recommendations

All intersections, except the Missouri Flat Road / China Garden Road and Missouri Flat Road / Enterprise Drive intersections operate within acceptable El Dorado County LOS thresholds. The following recommendations are made:

- Missouri Flat Road / China Garden Road: The eastbound driveway opposite China Garden Road and the China Garden Road approach will operate at LOS F in the a.m. peak hour. The intersection meets the peak hour signal warrant. Installation of a traffic signal will improve the level of service at the intersection to LOS B with a delay of 14.7 seconds. Alternatively, restricting the eastbound and westbound approaches to right-turns only would result in acceptable operations in both peak hours. The improvements for this impacted intersection are included in the 10-20 year time frame of the County's CIP. The County's 20-year CIP includes approximately $89,300,000 for traffic signal and intersection operational improvements. County Long Range Planning annually monitors intersections with the potential need for improvements, which would include this intersection. At such time that sufficient warrants are met, then the improvement project can be added to the CIP by name, and funding allocated.

- Missouri Flat Road / Enterprise Drive: The eastbound approach of the intersection operates at LOS F and the intersection meets the peak hour signal warrant. Signalization of the intersection will result in an LOS A condition in the a.m. peak hour (6.8 seconds) and LOS B condition in the p.m. peak hour (12.4 seconds). The improvements for this impacted intersection are included in the 10-20 year time frame of the County's CIP. The County's 20-year CIP includes approximately $89,300,000 for traffic signal and intersection operational improvements. County Long Range Planning annually monitors intersections with the potential need for improvements, which would include this intersection. At such time that sufficient warrants are met, then the improvement project can be added to the CIP by name, and funding allocated.

Existing Plus Project Conditions - Mitigations

All intersections except Missouri Flat Road at China Garden Road and Missouri Flat Road at Enterprise Drive will operate within acceptable El Dorado County LOS thresholds. The following mitigations are noted:

Pay TIM Fees: The Sheriff Department shall contribute its fair share to the cost of regional circulation improvements via the existing countywide traffic impact mitigation (TIM) fee program.

- Missouri Flat Road / China Garden Road: The eastbound driveway opposite China Garden Road and the China Garden Road approach will continue to operate at LOS F in the a.m. peak hour while the westbound China Garden Road approach will operate at LOS F in the a.m. and p.m. peak hours. The project adds more than 10 trips to the intersection, and this impact is significant. The intersection will meet the peak hour signal warrant. Installation of a traffic signal identified in the Existing Conditions will maintain acceptable levels of service at the intersection during the a.m. peak hour (LOS B – 16.1 seconds) and p.m. peak hour (LOS B – 16.1 seconds).

  A second option would be to limit China Garden Road and driveway traffic to right turns only. With this mitigation the intersection will operate with the worst movement (westbound) at LOS D (30.3 seconds) in the a.m. peak hour and LOS C (20.6 seconds) in the p.m. peak hour.

  The TIM fees paid by the Sheriff's Department would cover its fair share of this improvement.

- Missouri Flat Road / Enterprise Drive: The eastbound approach to the intersection will continue to operate at LOS F in both the a.m. and p.m. peak hours. The project adds more than 10 trips to the intersection, and this impact is significant. The intersection will meet the peak hour signal warrant. Installation of a traffic signal identified in the Existing Conditions will maintain acceptable levels of service at the intersection during the a.m. peak hour (LOS A – 8.5 seconds) and p.m. peak hour (LOS B – 18.4 seconds). The TIM fees paid by the Sheriff's Department would cover its fair share of this improvement.

2025 Conditions – Improvement Recommendations

Four intersections will operate with LOS F conditions. These include Missouri Flat Road at China Garden Road, Missouri Flat Road at Enterprise Drive, Pleasant Valley Road at SR 49 and Pleasant Valley Road at Forni Road. The following recommendations are noted:

- Missouri Flat Road / China Garden Road: This intersection will operate with the westbound China Garden Road approach operating at LOS F. Installation of a traffic signal identified in the Existing Conditions will maintain acceptable levels of service at the intersection during the a.m. peak hour (LOS B – 12.4 seconds) and p.m. peak hour (LOS B – 10.1 seconds). Alternatively, restricting the eastbound and westbound approaches to right-turns only would result in acceptable operations in both peak hours.

- Missouri Flat Road / Enterprise Drive: This intersection will operate with the eastbound approach at LOS F in the a.m. and p.m. peak hours. Installation of a traffic signal identified

in the Existing Conditions will maintain acceptable levels of service at the intersection during the a.m. peak hour (LOS A – 8.6 seconds) and p.m. peak hour (LOS B – 14.3 seconds).

- Pleasant Valley Road at SR 49: The intersection will decline to LOS F conditions in the a.m. peak hour. Signalization of the intersection will result in an LOS B condition in the a.m. peak hour (19.2 seconds). The improvements for this impacted intersection are included in the 10-20 year time frame of the County's CIP. The County's 20-year CIP includes approximately $89,300,000 for traffic signal and intersection operational improvements. County Long Range Planning annually monitors intersections with the potential need for improvements, which would include this intersection. At such time that sufficient warrants are met, then the improvement project can be added to the CIP by name, and funding allocated.

- Pleasant Valley Road / Forni Road: The southbound Forni Road approach will decline to LOS F in the a.m. peak hour. The County has identified improvements along Pleasant Valley Road between SR 49 and Missouri Flat Road (GP 176) that will include installation of a two-way-left-turn-lane. The project is programmed for construction between Fiscal Year 2025/26 and 2034/35. Installation of this improvement will allow the intersection to operate at LOS D (25.8 seconds).

2025 Plus Project Conditions - Mitigations

Four intersections will operate with LOS F conditions. These include Missouri Flat Road at China Garden Road, Missouri Flat Road at Enterprise Drive, Pleasant Valley Road at SR 49 and Pleasant Valley Road at Forni Road. In addition, the Missouri Flat Road / Industrial Drive intersection will meet the peak hour signal warrant. The following mitigations are identified:

- Missouri Flat Road / China Garden Road: Under Plus Project conditions the intersection will operate at LOS F conditions on the westbound approach. The project adds more than 10 trips to the intersection, and this impact is significant. Installation of a traffic signal identified in the Existing Conditions will maintain acceptable levels of service at the intersection during the a.m. peak hour (LOS B – 14.9 seconds) and p.m. peak hour (LOS B – 11.6 seconds).

  Under the right turn limitation on China Garden Road and driveway traffic the intersection will operate with the worst movement (westbound) at LOS C (16.5 seconds) in the a.m. peak hour and LOS C (20.2 seconds) in the p.m. peak hour. The TIM fees paid by the Sheriff's Department would cover its fair share of this improvement.

- Missouri Flat Road / Enterprise Drive: Under project conditions the intersection will operate at LOS F conditions on the eastbound approach. The project adds more than 10 trips to the intersection, and this impact is significant. Installation of the traffic signal identified in the Existing Conditions will maintain acceptable levels of service at the intersection during the a.m. peak hour (LOS B – 10.9 seconds) and p.m. peak hour (LOS B – 14.4 seconds). The TIM fees paid by the Sheriff's Department would cover its fair share of this improvement.

- Pleasant Valley Road at SR 49: Under project conditions the intersection will operate at LOS F. The project adds more than 10 trips to the intersection, and this impact is significant. Installation of the traffic signal identified in the Year 2025 Conditions will maintain acceptable levels of service at the intersection during the a.m. peak hour (LOS C – 20.2 seconds). The TIM fees paid by the Sheriff's Department would cover its fair share of this improvement.

- Pleasant Valley Road / Forni Road: The southbound Forni Road approach will operate at LOS F in the a.m. peak hour. The project adds more than 10 trips to the intersection, and this impact is significant. Installation of a two-way-left-turn lane identified in the County's Capital Improvement Program will allow the intersection to operate at LOS D (26.5 seconds). The project is programmed for construction between Fiscal Year 2025/26 and 2034/35 and is therefore consistent with General Plan Policy TC-Xf. The TIM fees paid by the Sheriff's Department would cover its fair share of this improvement.

- Missouri Flat Road / Industrial Drive: Under project conditions the intersection will meet the peak hour signal warrant. The project should construct a traffic signal at this location to ensure public safety access is maintained. Installation of a new traffic signal would improve the operating conditions to LOS B (17.5 seconds) in the a.m. peak hour and LOS B (13.4 seconds) in the p.m. peak hour.

  As noted in the intersection descriptions there are several driveways on Missouri Flat Road that could be affected by installing a new traffic signal. The driveways adjacent to the intersection (i.e. the south driveway on the east side of the intersection and the north driveway in the southwest quadrant of the intersection) may require closure or realignment to improve safety and minimize interference of the operation of the signal. Additional driveways could be impacted depending on the area of improvement. These issues will be evaluated when the traffic signal is designed.

Table 15 presents the levels of service for the signalized intersection under the mitigated p.m. conditions, i.e. with signalization of the Missouri Flat Road / Industrial Drive intersection. All intersections operate with Level of Service that meet the LOS E standard. Table 16 presents the associated projected queuing under the mitigated p.m. conditions. No additional lanes will exceed capacity after mitigation.

No other mitigations are necessary.

2035 Conditions – Improvement Recommendations

Three intersections will operate with LOS F conditions if the proposed project does not proceed. These include Missouri Flat Road at China Garden Road, Missouri Flat Road at Enterprise Drive and Pleasant Valley Road at SR 49. The following recommendations are noted:

- Missouri Flat Road / China Garden Road: This intersection will operate with the westbound China Garden Road approach operating at LOS F. Installation of a traffic signal identified in the Existing Conditions will maintain acceptable levels of service at the intersection during

the a.m. peak hour (LOS B – 13.5 seconds) and p.m. peak hour (LOS B – 11.1 seconds). Alternatively, restricting the eastbound and westbound approaches to right-turns only would result in acceptable operations in both peak hours.

- Missouri Flat Road / Enterprise Drive: This intersection will operate with the eastbound approach at LOS F in the a.m. and p.m. peak hours. Installation of a traffic signal identified in the Existing Conditions will maintain acceptable levels of service at the intersection during the a.m. peak hour (LOS A – 8.3 seconds) and p.m. peak hour (LOS B – 13.4 seconds).

- Pleasant Valley Road / SR 49: The intersection will decline to LOS F conditions in the a.m. peak hour. Signalization of the intersection will result in an LOS C condition in the a.m. peak hour (29.9 seconds). The improvements for this impacted intersection are included in the 10-20 year time frame of the County's CIP. The County's 20-year CIP includes approximately $89,300,000 for traffic signal and intersection operational improvements. County Long Range Planning annually monitors intersections with the potential need for improvements, which would include this intersection. At such time that sufficient warrants are met, then the improvement project can be added to the CIP by name, and funding allocated.

2035 Plus Project Conditions - Mitigations

- Missouri Flat Road / China Garden Road: Under Plus Project conditions the intersection will operate at LOS F conditions along the westbound China garden Road approach. The project adds more than 10 trips to the intersection, and this impact is significant. Installation of a traffic signal identified in the Existing Conditions will maintain acceptable levels of service at the intersection during the a.m. peak hour (LOS B – 12.9 seconds) and p.m. peak hour (LOS B – 12.7 seconds).

  Under the right turn limitation on China Garden Road and driveway traffic the intersection will operate with the worst movement (westbound) at LOS C (18.6 seconds) in the a.m. peak hour and LOS C (23.5 seconds) in the p.m. peak hour. The TIM fees paid by the Sheriff's Department would cover its fair share of this improvement.

- Missouri Flat Road / Enterprise Drive: Under project conditions the intersection will operate at LOS F conditions on the eastbound Enterprise Drive approach. The project adds more than 10 trips to the intersection, and this impact is significant. Installation of a traffic signal identified in the Existing Conditions will maintain acceptable levels of service at the intersection during the a.m. peak hour (LOS A – 9.5 seconds) and p.m. peak hour (LOS B – 14.6 seconds). The TIM fees paid by the Sheriff's Department would cover its fair share of this improvement.

- Pleasant Valley Road / SR 49: The intersection will operate at LOS F conditions in the a.m. peak hour. The project adds more than 10 trips to the intersection, and this impact is significant. Signalization of the intersection will result in an LOS C condition in the a.m. peak hour (25.2 seconds). The County's 20-Year Capital Improvement Program (CIP) identifies about $89,300,000 for traffic signal and intersection operational improvements.

The TIM fees paid by the Sheriff's Department should cover its fair share of this improvement.

Table 15 presents the Levels of Service for the signalized intersection under the mitigated p.m. conditions, i.e. with signalization of the Missouri Flat Road / Industrial Drive intersection. All meet the minimum Level of Service standard. Table 16 presents the associated projected queuing under the mitigated p.m. conditions. As shown, implementing the mitigations eliminates one location where queues exceed storage.

No other mitigations are necessary.

TABLE 15
PEAK HOUR INTERSECTION LEVELS OF SERVICE
MITIGATED 'PLUS PROJECT' CONDITIONS

		2025 + Project		2035 Plus Project	
		PM Peak Hour		PM Peak Hour	
Location	**Control**	**LOS**	**Average Delay**	**LOS**	**Average Delay**
1. Missouri Flat Rd / WB US 50 ramps	Signal	B	16.4	B	18.3
2. Missouri Flat Rd / EB US 50 ramps	Signal	C	25.1	C	26.9
3. Missouri Flat Rd / Mother Lode Dr	Signal	B	12.7	B	12.4
4. Missouri Flat Rd / Forni Rd	Signal	D	35.8	E	63.3
5. Missouri Flat Rd / Golden Center Dr	Signal	C	29.1	D	33.4
6. Missouri Flat Rd / Diamond Springs Pkwy	Signal	B	12.7	B	15.7
7. Missouri Flat Rd / China Garden Rd	Signal (SSSC)	B (C)	11.6 (20.2)	B (C)	12.7 (23.5)
8. Missouri Flat Rd / Industrial Dr	Signal	B	13.4	B	12.9
9. Missouri Flat Rd / Enterprise Dr	Signal	B	14.4	B	14.6
10. Missouri Flat Rd / Pleasant Valley Rd	Signal	D	37.2	C	21.0
12. Pleasant Valley Rd / SR 49	Signal	N/A	N/A	E	46.4

SSSC – side street stop control (worst movement shown in either a.m. or p.m. peak hour)

TABLE 16
PEAK HOUR QUEUES AT SIGNALIZED INTERSECTIONS
MITIGATED 'PLUS PROJECT' CONDITIONS

Location	Capacity (feet)	MITIGATED 2025 PM Peak Hour				MITIGATED 2035 PM Peak Hour			
		VPH			2025 Plus Project Queue (feet)	VPH			2035 Plus Project Queue (feet)
		2025	Project Only	Total		2035	Project Only	Total	
1. Missouri Flat Road / WB US 50 ramps									
NB left turn	160 (2)	340	19	359	158	315	19	334	154
NB through	360 (2)	866	9	875	162	1,000	9	1,009	138
SB through	520 (2)	864	6	870	243	905	6	911	264
WB left turn	410 (2)	653	5	658	231	710	5	715	289
WB right turn	410 (2)	370	0	370	166	390	0	390	166
2. Missouri Flat Road / EB US 50 ramps									
NB through	160 (2)	972	28	1,000	193	1,065	28	1,093	187
NB right turn	140	76	0	76	63	80	0	80	25
SB left	160 (2)	324	0	324	185	325	0	325	188
SB through	380 (2)	1,192	11	1,203	323	1,240	11	1,251	337
EB left+through+right turn	540 (3)	852	5	857	297	925	5	930	343
3. Missouri Flat Road / Mother Lode Drive									
NB left turn	150	43	1	44	133	30	1	31	107
NB through	2,300 (2)	974	28	1,002	317	1,120	28	1,148	339
SB through	140 (2)	1,738	16	1,754	193	1,945	16	1,961	202
SB right turn	130	73	0	73	80	20	0	20	32
4. Missouri Flat Road / Forni Road									
NB left turn	250	76	4	80	169	95	4	99	232
NB through	1,000 (2)	912	44	956	372	1,025	44	1,069	441
NB right turn	160	23	1	24	104	25	1	26	102
SB left turn	300	168	0	168	279	170	0	170	356
SB through	2,300 (2)	1,184	16	1,200	511	1,350	16	1,366	543
SB right turn	150	406	0	406	235	465	0	465	230
5. Missouri Flat Road / Golden Center Drive									
NB left turn	120	77	0	77	172	80	0	80	180
SB left turn	160	66	0	66	150	65	0	65	170

TABLE 16 (cont'd)
PEAK HOUR QUEUES AT SIGNALIZED INTERSECTIONS
MITIGATED 'PLUS PROJECT' CONDITIONS

Location	Capacity (feet)	MITIGATED 2025 PM Peak Hour				MITIGATED 2035 PM Peak Hour			
		VPH			2025 Plus Project Queue (feet)	VPH			2035 Plus Project Queue (feet)
		2025	Project Only	Total		2035	Project Only	Total	
6. Missouri Flat Road / Diamond Springs Parkway									
NB left turn	275 (2)	690	53	743	162	725	53	778	180
EB right turn	250	865	14	879	230	990	14	1,004	281
WB left turn	500	44	2	46	60	60	2	62	74
7. Missouri Flat Road / China Garden Road									
NB Left	TWLTL	5	0	5	24	5	0	5	20
SB Left	200	13	0	13	61	15	0	15	87
EB	Driveway	4	0	4	20	5	0	5	25
WB	>600	198	0	198	153	215	0	215	167
8. Missouri Flat Road / Industrial Drive									
NB Left	TWLTL	8	2	10	29	5	2	7	28
EB	>600	48	92	140	181	45	92	137	165
9. Missouri Flat Road / Enterprise Drive									
NB Left	TWLTL	11	3	14	32	10	3	13	29
SB Left	TWLTL	5	0	5	19	5	0	5	25
EB	>600	146	1	147	158	135	1	136	141
WB	Driveway	5	0	5	24	5	0	5	18
10. Missouri Flat Road / Pleasant Valley Road									
EB Left	130 (2)	240	0	240	209	250	0	250	196
WB Right	200	239	3	242	143	185	3	188	103
12. Pleasant Valley Road / SR 49									
NB	700	N/A	N/A	N/A	N/A	320	2	322	389
WB Left	80	N/A	N/A	N/A	N/A	255	5	260	115

Queue exceeds storage with and without mitigation
Queue no longer exceeds storage with mitigation

REFERENCES

1. Transportation Research Board, *Highway Capacity Manual*, 2010
2. Caltrans *Highway Design Manual*, 2012
3. California *Manual of Uniform Traffic Control Devices*, 2012
4. Institute of Transportation Engineers. 2012. *Trip Generation*, 9th Edition. Washington, D.C.
5. Telephone and E-mail correspondence, Natalie Porter and Claudia Wade, El Dorado County, October and November, 2014
6. *Diamond Springs and El Dorado Area Mobility and Livable Community Plan Draft Technical Report*, Fehr & Peers, Inc. February 2014
7. *The Crossing Traffic Impact Study*, KDAnderson & Associates, Inc. May 2014
8. *Piedmont Oak Estates Traffic Impact Study*, KDAnderson & Associates, Inc. October 2014
9. *Diamond Springs Parkway DEIR*, Michael Brandman Associates, June 2010
10. El Dorado County Bicycle Transportation Plan 2010

APPENDICES

1: Missouri Flat Road & WB Ramps Performance by approach

Approach	WB	NB	SB	All
Denied Del/Veh (s)	1.3	0.0	0.0	0.5
Total Del/Veh (s)	24.7	16.0	12.7	18.4

2: Missouri Flat Road & EB Ramps Performance by approach

Approach	EB	NB	SB	All
Denied Del/Veh (s)	1.0	0.0	0.0	0.2
Total Del/Veh (s)	17.6	11.6	20.1	16.2

3: Missouri Flat Road & Mother Lode Drive Performance by approach

Approach	EB	NB	SB	All
Denied Del/Veh (s)	2.1	0.0	0.0	0.1
Total Del/Veh (s)	33.9	8.8	4.3	8.5

4: Missouri Flat Road & Forni Road Performance by approach

Approach	EB	WB	NB	SB	All
Denied Del/Veh (s)	0.6	0.0	0.0	0.0	0.1
Total Del/Veh (s)	38.5	17.6	20.8	18.1	21.5

5: Missouri Flat Road & Golden Center Drive Performance by approach

Approach	EB	WB	NB	SB	All
Denied Del/Veh (s)	0.1	0.1	0.0	0.0	0.0
Total Del/Veh (s)	13.6	22.2	12.4	17.6	14.8

10: Pleasant Valley Rd & Missouri Flat Rd Performance by approach

Approach	EB	WB	SB	All
Denied Del/Veh (s)	2.6	0.2	0.0	0.8
Total Del/Veh (s)	22.8	20.2	10.7	18.7

Total Zone Performance

Denied Del/Veh (s)	1.7
Total Del/Veh (s)	1165.7

Intersection	
Intersection Delay, s/veh	41.7
Intersection LOS	E

Movement	EBU	EBT	EBR	WBU	WBL	WBT	NBU	NBL	NBR
Vol, veh/h	0	243	85	0	141	287	0	224	238
Peak Hour Factor	0.92	0.78	0.78	0.92	0.78	0.78	0.92	0.78	0.78
Heavy Vehicles, %	2	2	2	2	2	2	2	2	2
Mvmt Flow	0	312	109	0	181	368	0	287	305
Number of Lanes	0	1	0	0	1	1	0	1	0

Approach	EB	WB	NB
Opposing Approach	WB	EB	
Opposing Lanes	2	1	0
Conflicting Approach Left		NB	EB
Conflicting Lanes Left	0	1	1
Conflicting Approach Right	NB		WB
Conflicting Lanes Right	1	0	2
HCM Control Delay	32.2	25.4	63.5
HCM LOS	D	D	F

Lane	NBLn1	EBLn1	WBLn1	WBLn2
Vol Left, %	48%	0%	100%	0%
Vol Thru, %	0%	74%	0%	100%
Vol Right, %	52%	26%	0%	0%
Sign Control	Stop	Stop	Stop	Stop
Traffic Vol by Lane	462	328	141	287
LT Vol	224	0	141	0
Through Vol	0	243	0	287
RT Vol	238	85	0	0
Lane Flow Rate	592	421	181	368
Geometry Grp	2	5	7	7
Degree of Util (X)	1	0.805	0.401	0.763
Departure Headway (Hd)	6.488	6.892	7.977	7.463
Convergence, Y/N	Yes	Yes	Yes	Yes
Cap	563	534	459	493
Service Time	4.488	4.803	5.598	5.099
HCM Lane V/C Ratio	1.052	0.788	0.394	0.746
HCM Control Delay	63.5	32.2	15.8	30.1
HCM Lane LOS	F	D	C	D
HCM 95th-tile Q	14.4	7.7	1.9	6.6

Intersection	
Int Delay, s/veh	5.6

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Vol, veh/h	1	0	0	9	1	138	0	877	15	99	555	3
Conflicting Peds, #/hr	0	0	0	0	0	0	0	0	0	0	0	0
Sign Control	Stop	Stop	Stop	Stop	Stop	Stop	Free	Free	Free	Free	Free	Free
RT Channelized	-	-	None	-	-	None	-	-	None	-	-	None
Storage Length	-	-	-	-	-	-	1	-	-	200	-	-
Veh in Median Storage, #	-	0	-	-	0	-	-	0	-	-	0	-
Grade, %	-	0	-	-	0	-	-	0	-	-	0	-
Peak Hour Factor	89	89	89	89	89	89	89	89	89	89	89	89
Heavy Vehicles, %	2	2	2	2	2	2	2	2	2	2	2	2
Mvmt Flow	1	0	0	10	1	155	0	985	17	111	624	3

Major/Minor	Minor2			Minor1			Major1			Major2		
Conflicting Flow All	1920	1850	625	1842	1843	994	627	0	0	1002	0	0
Stage 1	848	848	-	994	994	-	-	-	-	-	-	-
Stage 2	1072	1002	-	848	849	-	-	-	-	-	-	-
Critical Hdwy	7.12	6.52	6.22	7.12	6.52	6.22	4.12	-	-	4.12	-	-
Critical Hdwy Stg 1	6.12	5.52	-	6.12	5.52	-	-	-	-	-	-	-
Critical Hdwy Stg 2	6.12	5.52	-	6.12	5.52	-	-	-	-	-	-	-
Follow-up Hdwy	3.518	4.018	3.318	3.518	4.018	3.318	2.218	-	-	2.218	-	-
Pot Cap-1 Maneuver	51	74	485	58	75	297	955	-	-	691	-	-
Stage 1	356	378	-	295	323	-	-	-	-	-	-	-
Stage 2	267	320	-	356	377	-	-	-	-	-	-	-
Platoon blocked, %								-	-		-	-
Mov Cap-1 Maneuver	21	62	485	51	63	297	955	-	-	691	-	-
Mov Cap-2 Maneuver	21	62	-	51	63	-	-	-	-	-	-	-
Stage 1	356	317	-	295	323	-	-	-	-	-	-	-
Stage 2	127	320	-	299	316	-	-	-	-	-	-	-

Approach	EB	WB	NB	SB
HCM Control Delay, s	185.9	55.9	0	1.7
HCM LOS	F	F		

Minor Lane/Major Mvmt	NBL	NBT	NBR	EBLn1	WBLn1	SBL	SBT	SBR
Capacity (veh/h)	955	-	-	21	225	691	-	-
HCM Lane V/C Ratio	-	-	-	0.054	0.739	0.161	-	-
HCM Control Delay (s)	0	-	-	185.9	55.9	11.2	-	-
HCM Lane LOS	A	-	-	F	F	B	-	-
HCM 95th %tile Q(veh)	0	-	-	0.2	5	0.6	-	-

Intersection	
Int Delay, s/veh	0.4

Movement	EBL	EBR	NBL	NBT	SBT	SBR
Vol, veh/h	13	12	11	896	541	22
Conflicting Peds, #/hr	0	0	0	0	0	0
Sign Control	Stop	Stop	Free	Free	Free	Free
RT Channelized	-	None	-	None	-	None
Storage Length	0	-	1	-	-	-
Veh in Median Storage, #	0	-	-	0	0	-
Grade, %	0	-	-	0	0	-
Peak Hour Factor	88	88	88	88	88	88
Heavy Vehicles, %	2	2	2	2	2	2
Mvmt Flow	15	14	12	1018	615	25

Major/Minor	Minor2		Major1		Major2	
Conflicting Flow All	1670	627	640	0	-	0
Stage 1	627	-	-	-	-	-
Stage 2	1043	-	-	-	-	-
Critical Hdwy	6.42	6.22	4.12	-	-	-
Critical Hdwy Stg 1	5.42	-	-	-	-	-
Critical Hdwy Stg 2	5.42	-	-	-	-	-
Follow-up Hdwy	3.518	3.318	2.218	-	-	-
Pot Cap-1 Maneuver	106	484	944	-	-	-
Stage 1	532	-	-	-	-	-
Stage 2	339	-	-	-	-	-
Platoon blocked, %				-	-	-
Mov Cap-1 Maneuver	105	484	944	-	-	-
Mov Cap-2 Maneuver	232	-	-	-	-	-
Stage 1	532	-	-	-	-	-
Stage 2	334	-	-	-	-	-

Approach	EB	NB	SB
HCM Control Delay, s	17.8	0.1	0
HCM LOS	C		

Minor Lane/Major Mvmt	NBL	NBT	EBLn1	SBT	SBR
Capacity (veh/h)	944	-	309	-	-
HCM Lane V/C Ratio	0.013	-	0.092	-	-
HCM Control Delay (s)	8.9	-	17.8	-	-
HCM Lane LOS	A	-	C	-	-
HCM 95th %tile Q(veh)	0	-	0.3	-	-

Intersection	
Int Delay, s/veh	4.6

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Vol, veh/h	51	0	13	1	0	4	17	844	6	4	419	94
Conflicting Peds, #/hr	0	0	0	0	0	0	0	0	0	0	0	0
Sign Control	Stop	Stop	Stop	Stop	Stop	Stop	Free	Free	Free	Free	Free	Free
RT Channelized	-	-	None	-	-	None	-	-	None	-	-	None
Storage Length	-	-	-	-	-	-	1	-	-	1	-	-
Veh in Median Storage, #	-	0	-	-	0	-	-	0	-	-	0	-
Grade, %	-	0	-	-	0	-	-	0	-	-	0	-
Peak Hour Factor	86	86	86	86	86	86	86	86	86	86	86	86
Heavy Vehicles, %	2	2	2	2	2	2	2	2	2	2	2	2
Mvmt Flow	59	0	15	1	0	5	20	981	7	5	487	109

Major/Minor	Minor2			Minor1			Major1			Major2		
Conflicting Flow All	1578	1579	542	1583	1630	985	597	0	0	988	0	0
Stage 1	551	551	-	1024	1024	-	-	-	-	-	-	-
Stage 2	1027	1028	-	559	606	-	-	-	-	-	-	-
Critical Hdwy	7.12	6.52	6.22	7.12	6.52	6.22	4.12	-	-	4.12	-	-
Critical Hdwy Stg 1	6.12	5.52	-	6.12	5.52	-	-	-	-	-	-	-
Critical Hdwy Stg 2	6.12	5.52	-	6.12	5.52	-	-	-	-	-	-	-
Follow-up Hdwy	3.518	4.018	3.318	3.518	4.018	3.318	2.218	-	-	2.218	-	-
Pot Cap-1 Maneuver	89	109	540	88	102	301	980	-	-	699	-	-
Stage 1	519	515	-	284	313	-	-	-	-	-	-	-
Stage 2	283	311	-	513	487	-	-	-	-	-	-	-
Platoon blocked, %								-	-		-	-
Mov Cap-1 Maneuver	86	106	540	84	99	301	980	-	-	699	-	-
Mov Cap-2 Maneuver	86	106	-	84	99	-	-	-	-	-	-	-
Stage 1	508	511	-	278	307	-	-	-	-	-	-	-
Stage 2	273	305	-	495	484	-	-	-	-	-	-	-

Approach	EB	WB	NB	SB
HCM Control Delay, s	99.1	23.7	0.2	0.1
HCM LOS	F	C		

Minor Lane/Major Mvmt	NBL	NBT	NBR	EBLn1	WBLn1	SBL	SBT	SBR
Capacity (veh/h)	980	-	-	104	198	699	-	-
HCM Lane V/C Ratio	0.02	-	-	0.716	0.029	0.007	-	-
HCM Control Delay (s)	8.7	-	-	99.1	23.7	10.2	-	-
HCM Lane LOS	A	-	-	F	C	B	-	-
HCM 95th %tile Q(veh)	0.1	-	-	3.7	0.1	0	-	-

Intersection	
Int Delay, s/veh	3.2

Movement	WBL	WBR	NBT	NBR	SBL	SBT
Vol, veh/h	20	57	181	21	100	136
Conflicting Peds, #/hr	0	0	0	0	0	0
Sign Control	Stop	Stop	Free	Free	Free	Free
RT Channelized	-	None	-	None	-	None
Storage Length	0	-	-	-	-	-
Veh in Median Storage, #	0	-	0	-	-	0
Grade, %	0	-	0	-	-	0
Peak Hour Factor	89	89	89	89	89	89
Heavy Vehicles, %	2	2	2	2	2	2
Mvmt Flow	22	64	203	24	112	153

Major/Minor	Minor1		Major1		Major2	
Conflicting Flow All	593	215	0	0	227	0
Stage 1	215	-	-	-	-	-
Stage 2	378	-	-	-	-	-
Critical Hdwy	6.42	6.22	-	-	4.12	-
Critical Hdwy Stg 1	5.42	-	-	-	-	-
Critical Hdwy Stg 2	5.42	-	-	-	-	-
Follow-up Hdwy	3.518	3.318	-	-	2.218	-
Pot Cap-1 Maneuver	468	825	-	-	1341	-
Stage 1	821	-	-	-	-	-
Stage 2	693	-	-	-	-	-
Platoon blocked, %			-	-		-
Mov Cap-1 Maneuver	425	825	-	-	1341	-
Mov Cap-2 Maneuver	425	-	-	-	-	-
Stage 1	821	-	-	-	-	-
Stage 2	630	-	-	-	-	-

Approach	WB	NB	SB
HCM Control Delay, s	11.2	0	3.4
HCM LOS	B		

Minor Lane/Major Mvmt	NBT	NBR	WBLn1	SBL	SBT
Capacity (veh/h)	-	-	663	1341	-
HCM Lane V/C Ratio	-	-	0.13	0.084	-
HCM Control Delay (s)	-	-	11.2	7.9	0
HCM Lane LOS	-	-	B	A	A
HCM 95th %tile Q(veh)	-	-	0.4	0.3	-

Intersection	
Int Delay, s/veh	7.3

Movement	EBL	EBT	WBT	WBR	SBL	SBR
Vol, veh/h	135	337	323	33	50	101
Conflicting Peds, #/hr	0	0	0	0	0	0
Sign Control	Free	Free	Free	Free	Stop	Stop
RT Channelized	-	None	-	None	-	None
Storage Length	-	-	-	-	0	-
Veh in Median Storage, #	-	0	0	-	0	-
Grade, %	-	0	0	-	0	-
Peak Hour Factor	75	75	75	75	75	75
Heavy Vehicles, %	2	2	2	2	2	2
Mvmt Flow	180	449	431	44	67	135

Major/Minor	Major1		Major2		Minor2	
Conflicting Flow All	475	0	-	0	1262	453
Stage 1	-	-	-	-	453	-
Stage 2	-	-	-	-	809	-
Critical Hdwy	4.12	-	-	-	6.42	6.22
Critical Hdwy Stg 1	-	-	-	-	5.42	-
Critical Hdwy Stg 2	-	-	-	-	5.42	-
Follow-up Hdwy	2.218	-	-	-	3.518	3.318
Pot Cap-1 Maneuver	1087	-	-	-	188	607
Stage 1	-	-	-	-	640	-
Stage 2	-	-	-	-	438	-
Platoon blocked, %		-	-	-		
Mov Cap-1 Maneuver	1087	-	-	-	146	607
Mov Cap-2 Maneuver	-	-	-	-	146	-
Stage 1	-	-	-	-	640	-
Stage 2	-	-	-	-	341	-

Approach	EB	WB	SB
HCM Control Delay, s	2.6	0	39.3
HCM LOS			E

Minor Lane/Major Mvmt	EBL	EBT	WBT	WBR	SBLn1
Capacity (veh/h)	1087	-	-	-	297
HCM Lane V/C Ratio	0.166	-	-	-	0.678
HCM Control Delay (s)	9	0	-	-	39.3
HCM Lane LOS	A	A	-	-	E
HCM 95th %tile Q(veh)	0.6	-	-	-	4.6

Intersection: 1: Missouri Flat Road & WB Ramps

Movement	WB	WB	WB	WB	NB	NB	NB	NB	SB	SB
Directions Served	L	LT	R	R	L	L	T	T	T	T
Maximum Queue (ft)	240	220	167	130	137	149	339	164	184	152
Average Queue (ft)	149	131	79	33	109	121	96	49	92	70
95th Queue (ft)	214	194	139	88	167	167	274	121	158	133
Link Distance (ft)	983	983					395	395	459	459
Upstream Blk Time (%)							0			
Queuing Penalty (veh)							1			
Storage Bay Dist (ft)			400	400	125	125				
Storage Blk Time (%)					1	6	0			
Queuing Penalty (veh)					2	18	0			

Intersection: 2: Missouri Flat Road & EB Ramps

Movement	EB	EB	EB	NB	NB	NB	SB	SB	SB	SB
Directions Served	L	LTR	R	T	T	R	L	L	T	T
Maximum Queue (ft)	114	178	153	171	167	85	93	174	368	359
Average Queue (ft)	31	87	46	126	103	28	27	99	198	202
95th Queue (ft)	81	150	107	200	187	70	69	196	351	335
Link Distance (ft)		1460		138	138	138			395	395
Upstream Blk Time (%)				11	5				0	0
Queuing Penalty (veh)				36	16				0	0
Storage Bay Dist (ft)	700		550				150	150		
Storage Blk Time (%)								0	10	
Queuing Penalty (veh)								0	14	

Intersection: 3: Missouri Flat Road & Mother Lode Drive

Movement	EB	EB	EB	NB	NB	NB	B24	B24	SB	SB	SB
Directions Served	L	L	R	L	T	T	T	T	T	T	R
Maximum Queue (ft)	95	137	63	87	220	128	60	107	134	126	12
Average Queue (ft)	36	64	20	15	75	28	2	5	43	43	0
95th Queue (ft)	78	119	48	55	182	87	44	76	102	99	13
Link Distance (ft)		633			1949	1949	368	368	138	138	
Upstream Blk Time (%)								0	0	0	
Queuing Penalty (veh)								0	1	1	
Storage Bay Dist (ft)	200		200	150							200
Storage Blk Time (%)					2					0	
Queuing Penalty (veh)					0					0	

Intersection: 4: Missouri Flat Road & Forni Road

Movement	EB	EB	EB	EB	WB	WB	NB	NB	NB	NB	SB	SB	SB	SB	B24
Directions Served	L	L	T	R	L	T	L	T	T	R	L	T	T	R	T
Maximum Queue (ft)	124	146	136	43	110	110	72	254	266	157	292	252	217	162	10
Average Queue (ft)	41	55	47	13	43	44	14	131	131	17	182	94	89	45	0
95th Queue (ft)	94	109	98	36	87	88	48	235	242	101	275	207	173	108	10
Link Distance (ft)			3521			275		293	293			368	368		1949
Upstream Blk Time (%)								0	0			0			
Queuing Penalty (veh)								0	1			3			
Storage Bay Dist (ft)	195	195		150	190		250			150	300			150	
Storage Blk Time (%)			0					0	6	0	1	0	1	0	
Queuing Penalty (veh)			1					0	4	0	4	0	2	0	

Intersection: 5: Missouri Flat Road & Golden Center Drive

Movement	EB	WB	NB	NB	NB	B43	SB	SB	SB	SB
Directions Served	LTR	LTR	L	T	TR	T	L	T	T	R
Maximum Queue (ft)	55	84	114	210	215	7	181	261	261	16
Average Queue (ft)	16	35	31	112	119	0	57	88	104	1
95th Queue (ft)	40	71	75	176	184	7	124	195	204	9
Link Distance (ft)	184	367		216	216	2030		652	652	
Upstream Blk Time (%)				0	0					
Queuing Penalty (veh)				0	1					
Storage Bay Dist (ft)			150				175			500
Storage Blk Time (%)				1			0	2		
Queuing Penalty (veh)				1			0	1		

Intersection: 10: Pleasant Valley Rd & Missouri Flat Rd

Movement	EB	EB	EB	WB	WB	SB	SB	B68
Directions Served	L	L	T	T	R	L	R	T
Maximum Queue (ft)	140	152	312	441	225	184	139	43
Average Queue (ft)	102	66	88	191	124	79	44	2
95th Queue (ft)	148	165	211	362	243	152	97	25
Link Distance (ft)				1506		127	127	419
Upstream Blk Time (%)						3	0	
Queuing Penalty (veh)						6	1	
Storage Bay Dist (ft)	130	130			200			
Storage Blk Time (%)	5	3	2	5	0			
Queuing Penalty (veh)	9	6	6	27	1			

Zone Summary

Zone wide Queuing Penalty: 165

1: Missouri Flat Road & WB Ramps Performance by approach

Approach	WB	NB	SB	All
Denied Del/Veh (s)	1.3	0.0	0.0	0.4
Total Del/Veh (s)	25.3	14.1	14.3	17.6

2: Missouri Flat Road & EB Ramps Performance by approach

Approach	EB	NB	SB	All
Denied Del/Veh (s)	1.4	0.0	0.0	0.4
Total Del/Veh (s)	26.5	13.7	23.9	21.5

3: Missouri Flat Road & Mother Lode Drive Performance by approach

Approach	EB	NB	SB	All
Denied Del/Veh (s)	2.1	0.0	0.0	0.1
Total Del/Veh (s)	34.5	8.3	6.3	8.6

4: Missouri Flat Road & Forni Road Performance by approach

Approach	EB	WB	NB	SB	All
Denied Del/Veh (s)	1.3	0.0	0.1	0.0	0.3
Total Del/Veh (s)	46.1	10.5	21.4	15.5	22.4

5: Missouri Flat Road & Golden Center Drive Performance by approach

Approach	EB	WB	NB	SB	All
Denied Del/Veh (s)	0.2	0.2	0.0	0.0	0.0
Total Del/Veh (s)	20.2	25.8	16.1	24.2	21.0

10: Pleasant Valley Rd & Missouri Flat Rd Performance by approach

Approach	EB	WB	SB	All
Denied Del/Veh (s)	2.1	0.0	56.4	27.7
Total Del/Veh (s)	21.0	17.5	21.0	20.0

Total Zone Performance

Denied Del/Veh (s)	20.0
Total Del/Veh (s)	1138.3

Intersection	
Intersection Delay, s/veh	20.8
Intersection LOS	C

Movement	EBU	EBT	EBR	WBU	WBL	WBT	NBU	NBL	NBR
Vol, veh/h	0	324	205	0	211	265	0	99	148
Peak Hour Factor	0.92	0.94	0.94	0.92	0.94	0.94	0.92	0.94	0.94
Heavy Vehicles, %	2	2	2	2	2	2	2	2	2
Mvmt Flow	0	345	218	0	224	282	0	105	157
Number of Lanes	0	1	0	0	1	1	0	1	0

Approach	EB	WB	NB
Opposing Approach	WB	EB	
Opposing Lanes	2	1	0
Conflicting Approach Left		NB	EB
Conflicting Lanes Left	0	1	1
Conflicting Approach Right	NB		WB
Conflicting Lanes Right	1	0	2
HCM Control Delay	29.8	14.1	14.2
HCM LOS	D	B	B

Lane	NBLn1	EBLn1	WBLn1	WBLn2
Vol Left, %	40%	0%	100%	0%
Vol Thru, %	0%	61%	0%	100%
Vol Right, %	60%	39%	0%	0%
Sign Control	Stop	Stop	Stop	Stop
Traffic Vol by Lane	247	529	211	265
LT Vol	99	0	211	0
Through Vol	0	324	0	265
RT Vol	148	205	0	0
Lane Flow Rate	263	563	224	282
Geometry Grp	2	5	7	7
Degree of Util (X)	0.45	0.836	0.412	0.477
Departure Headway (Hd)	6.17	5.351	6.602	6.094
Convergence, Y/N	Yes	Yes	Yes	Yes
Cap	581	675	543	589
Service Time	4.231	3.4	4.36	3.851
HCM Lane V/C Ratio	0.453	0.834	0.413	0.479
HCM Control Delay	14.2	29.8	13.9	14.3
HCM Lane LOS	B	D	B	B
HCM 95th-tile Q	2.3	9.2	2	2.6

Intersection	
Int Delay, s/veh	4.6

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Vol, veh/h	0	0	2	10	0	175	1	670	20	133	1042	0
Conflicting Peds, #/hr	0	0	0	0	0	0	0	0	0	0	0	0
Sign Control	Stop	Stop	Stop	Stop	Stop	Stop	Free	Free	Free	Free	Free	Free
RT Channelized	-	-	None	-	-	None	-	-	None	-	-	None
Storage Length	-	-	-	-	-	-	1	-	-	200	-	-
Veh in Median Storage, #	-	0	-	-	0	-	-	0	-	-	0	-
Grade, %	-	0	-	-	0	-	-	0	-	-	0	-
Peak Hour Factor	97	97	97	97	97	97	97	97	97	97	97	97
Heavy Vehicles, %	2	2	2	2	2	2	2	2	2	2	2	2
Mvmt Flow	0	0	2	10	0	180	1	691	21	137	1074	0

Major/Minor	Minor2			Minor1			Major1			Major2		
Conflicting Flow All	2141	2061	1074	2052	2051	701	1074	0	0	711	0	0
Stage 1	1348	1348	-	703	703	-	-	-	-	-	-	-
Stage 2	793	713	-	1349	1348	-	-	-	-	-	-	-
Critical Hdwy	7.12	6.52	6.22	7.12	6.52	6.22	4.12	-	-	4.12	-	-
Critical Hdwy Stg 1	6.12	5.52	-	6.12	5.52	-	-	-	-	-	-	-
Critical Hdwy Stg 2	6.12	5.52	-	6.12	5.52	-	-	-	-	-	-	-
Follow-up Hdwy	3.518	4.018	3.318	3.518	4.018	3.318	2.218	-	-	2.218	-	-
Pot Cap-1 Maneuver	35	55	267	41	56	439	649	-	-	888	-	-
Stage 1	186	219	-	428	440	-	-	-	-	-	-	-
Stage 2	382	435	-	186	219	-	-	-	-	-	-	-
Platoon blocked, %								-	-		-	-
Mov Cap-1 Maneuver	18	46	267	36	47	439	649	-	-	888	-	-
Mov Cap-2 Maneuver	18	46	-	36	47	-	-	-	-	-	-	-
Stage 1	186	185	-	427	439	-	-	-	-	-	-	-
Stage 2	225	434	-	156	185	-	-	-	-	-	-	-

Approach	EB	WB	NB	SB
HCM Control Delay, s	18.6	43.5	0	1.1
HCM LOS	C	E		

Minor Lane/Major Mvmt	NBL	NBT	NBR	EBLn1	WBLn1	SBL	SBT	SBR
Capacity (veh/h)	649	-	-	267	274	888	-	-
HCM Lane V/C Ratio	0.002	-	-	0.008	0.696	0.154	-	-
HCM Control Delay (s)	10.6	-	-	18.6	43.5	9.8	-	-
HCM Lane LOS	B	-	-	C	E	A	-	-
HCM 95th %tile Q(veh)	0	-	-	0	4.7	0.5	-	-

Intersection	
Int Delay, s/veh	0.5

Movement	EBL	EBR	NBL	NBT	SBT	SBR
Vol, veh/h	18	18	7	663	1021	11
Conflicting Peds, #/hr	0	0	0	0	0	0
Sign Control	Stop	Stop	Free	Free	Free	Free
RT Channelized	-	None	-	None	-	None
Storage Length	0	-	1	-	-	-
Veh in Median Storage, #	0	-	-	0	0	-
Grade, %	0	-	-	0	0	-
Peak Hour Factor	91	91	91	91	91	91
Heavy Vehicles, %	2	2	2	2	2	2
Mvmt Flow	20	20	8	729	1122	12

Major/Minor	Minor2		Major1		Major2	
Conflicting Flow All	1872	1128	1134	0	-	0
Stage 1	1128	-	-	-	-	-
Stage 2	744	-	-	-	-	-
Critical Hdwy	6.42	6.22	4.12	-	-	-
Critical Hdwy Stg 1	5.42	-	-	-	-	-
Critical Hdwy Stg 2	5.42	-	-	-	-	-
Follow-up Hdwy	3.518	3.318	2.218	-	-	-
Pot Cap-1 Maneuver	79	249	616	-	-	-
Stage 1	309	-	-	-	-	-
Stage 2	470	-	-	-	-	-
Platoon blocked, %				-	-	-
Mov Cap-1 Maneuver	78	249	616	-	-	-
Mov Cap-2 Maneuver	203	-	-	-	-	-
Stage 1	309	-	-	-	-	-
Stage 2	464	-	-	-	-	-

Approach	EB	NB	SB
HCM Control Delay, s	24.5	0.1	0
HCM LOS	C		

Minor Lane/Major Mvmt	NBL	NBT	EBLn1	SBT	SBR
Capacity (veh/h)	616	-	224	-	-
HCM Lane V/C Ratio	0.012	-	0.177	-	-
HCM Control Delay (s)	10.9	-	24.5	-	-
HCM Lane LOS	B	-	C	-	-
HCM 95th %tile Q(veh)	0	-	0.6	-	-

Intersection	
Int Delay, s/veh	16.2

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Vol, veh/h	78	1	30	1	1	1	7	573	2	4	934	62
Conflicting Peds, #/hr	0	0	0	0	0	0	0	0	0	0	0	0
Sign Control	Stop	Stop	Stop	Stop	Stop	Stop	Free	Free	Free	Free	Free	Free
RT Channelized	-	-	None	-	-	None	-	-	None	-	-	None
Storage Length	-	-	-	-	-	-	1	-	-	1	-	-
Veh in Median Storage, #	-	0	-	-	0	-	-	0	-	-	0	-
Grade, %	-	0	-	-	0	-	-	0	-	-	0	-
Peak Hour Factor	94	94	94	94	94	94	94	94	94	94	94	94
Heavy Vehicles, %	2	2	2	2	2	2	2	2	2	2	2	2
Mvmt Flow	83	1	32	1	1	1	7	610	2	4	994	66

Major/Minor	Minor2			Minor1			Major1			Major2		
Conflicting Flow All	1662	1662	1027	1678	1694	611	1060	0	0	612	0	0
Stage 1	1035	1035	-	626	626	-	-	-	-	-	-	-
Stage 2	627	627	-	1052	1068	-	-	-	-	-	-	-
Critical Hdwy	7.12	6.52	6.22	7.12	6.52	6.22	4.12	-	-	4.12	-	-
Critical Hdwy Stg 1	6.12	5.52	-	6.12	5.52	-	-	-	-	-	-	-
Critical Hdwy Stg 2	6.12	5.52	-	6.12	5.52	-	-	-	-	-	-	-
Follow-up Hdwy	3.518	4.018	3.318	3.518	4.018	3.318	2.218	-	-	2.218	-	-
Pot Cap-1 Maneuver	~ 77	97	285	75	93	494	657	-	-	967	-	-
Stage 1	280	309	-	472	477	-	-	-	-	-	-	-
Stage 2	471	476	-	274	298	-	-	-	-	-	-	-
Platoon blocked, %								-	-		-	-
Mov Cap-1 Maneuver	~ 75	96	285	65	92	494	657	-	-	967	-	-
Mov Cap-2 Maneuver	~ 75	96	-	65	92	-	-	-	-	-	-	-
Stage 1	277	308	-	467	472	-	-	-	-	-	-	-
Stage 2	464	471	-	241	297	-	-	-	-	-	-	-

Approach	EB	WB	NB	SB
HCM Control Delay, s	250.8	40	0.1	0
HCM LOS	F	E		

Minor Lane/Major Mvmt	NBL	NBT	NBR	EBLn1	WBLn1	SBL	SBT	SBR
Capacity (veh/h)	657	-	-	94	106	967	-	-
HCM Lane V/C Ratio	0.011	-	-	1.234	0.03	0.004	-	-
HCM Control Delay (s)	10.5	-	-	250.8	40	8.7	-	-
HCM Lane LOS	B	-	-	F	E	A	-	-
HCM 95th %tile Q(veh)	0	-	-	8.1	0.1	0	-	-

Notes

~: Volume exceeds capacity $: Delay exceeds 300s +: Computation Not Defined *: All major volume in platoon

Intersection	
Int Delay, s/veh	4.8

Movement	WBL	WBR	NBT	NBR	SBL	SBT
Vol, veh/h	31	180	115	24	81	189
Conflicting Peds, #/hr	0	0	0	0	0	0
Sign Control	Stop	Stop	Free	Free	Free	Free
RT Channelized	-	None	-	None	-	None
Storage Length	0	-	-	-	-	-
Veh in Median Storage, #	0	-	0	-	-	0
Grade, %	0	-	0	-	-	0
Peak Hour Factor	92	92	92	92	92	92
Heavy Vehicles, %	2	2	2	2	2	2
Mvmt Flow	34	196	125	26	88	205

Major/Minor	Minor1		Major1		Major2	
Conflicting Flow All	520	138	0	0	151	0
Stage 1	138	-	-	-	-	-
Stage 2	382	-	-	-	-	-
Critical Hdwy	6.42	6.22	-	-	4.12	-
Critical Hdwy Stg 1	5.42	-	-	-	-	-
Critical Hdwy Stg 2	5.42	-	-	-	-	-
Follow-up Hdwy	3.518	3.318	-	-	2.218	-
Pot Cap-1 Maneuver	516	910	-	-	1430	-
Stage 1	889	-	-	-	-	-
Stage 2	690	-	-	-	-	-
Platoon blocked, %			-	-		-
Mov Cap-1 Maneuver	480	910	-	-	1430	-
Mov Cap-2 Maneuver	480	-	-	-	-	-
Stage 1	889	-	-	-	-	-
Stage 2	642	-	-	-	-	-

Approach	WB	NB	SB
HCM Control Delay, s	11.3	0	2.3
HCM LOS	B		

Minor Lane/Major Mvmt	NBT	NBR	WBLn1	SBL	SBT
Capacity (veh/h)	-	-	804	1430	-
HCM Lane V/C Ratio	-	-	0.285	0.062	-
HCM Control Delay (s)	-	-	11.3	7.7	0
HCM Lane LOS	-	-	B	A	A
HCM 95th %tile Q(veh)	-	-	1.2	0.2	-

Intersection	
Int Delay, s/veh	3.2

Movement	EBL	EBT	WBT	WBR	SBL	SBR
Vol, veh/h	88	402	331	36	22	147
Conflicting Peds, #/hr	0	0	0	0	0	0
Sign Control	Free	Free	Free	Free	Stop	Stop
RT Channelized	-	None	-	None	-	None
Storage Length	-	-	-	-	0	-
Veh in Median Storage, #	-	0	0	-	0	-
Grade, %	-	0	0	-	0	-
Peak Hour Factor	93	93	93	93	93	93
Heavy Vehicles, %	2	2	2	2	2	2
Mvmt Flow	95	432	356	39	24	158

Major/Minor	Major1		Major2		Minor2	
Conflicting Flow All	395	0	-	0	997	375
Stage 1	-	-	-	-	375	-
Stage 2	-	-	-	-	622	-
Critical Hdwy	4.12	-	-	-	6.42	6.22
Critical Hdwy Stg 1	-	-	-	-	5.42	-
Critical Hdwy Stg 2	-	-	-	-	5.42	-
Follow-up Hdwy	2.218	-	-	-	3.518	3.318
Pot Cap-1 Maneuver	1164	-	-	-	271	671
Stage 1	-	-	-	-	695	-
Stage 2	-	-	-	-	535	-
Platoon blocked, %		-	-	-		
Mov Cap-1 Maneuver	1164	-	-	-	242	671
Mov Cap-2 Maneuver	-	-	-	-	242	-
Stage 1	-	-	-	-	695	-
Stage 2	-	-	-	-	478	-

Approach	EB	WB	SB
HCM Control Delay, s	1.5	0	14.9
HCM LOS			B

Minor Lane/Major Mvmt	EBL	EBT	WBT	WBR	SBLn1
Capacity (veh/h)	1164	-	-	-	545
HCM Lane V/C Ratio	0.081	-	-	-	0.333
HCM Control Delay (s)	8.4	0	-	-	14.9
HCM Lane LOS	A	A	-	-	B
HCM 95th %tile Q(veh)	0.3	-	-	-	1.5

Intersection: 1: Missouri Flat Road & WB Ramps

Movement	WB	WB	WB	WB	NB	NB	NB	NB	SB	SB
Directions Served	L	LT	R	R	L	L	T	T	T	T
Maximum Queue (ft)	257	259	168	133	137	148	280	131	305	254
Average Queue (ft)	154	149	85	32	100	113	83	55	140	97
95th Queue (ft)	227	226	149	89	163	161	215	110	250	193
Link Distance (ft)	983	983					395	395	459	459
Upstream Blk Time (%)										
Queuing Penalty (veh)										
Storage Bay Dist (ft)			400	400	125	125				
Storage Blk Time (%)					1	3	0			0
Queuing Penalty (veh)					2	10	1			0

Intersection: 2: Missouri Flat Road & EB Ramps

Movement	EB	EB	EB	NB	NB	NB	SB	SB	SB	SB
Directions Served	L	LTR	R	T	T	R	L	L	T	T
Maximum Queue (ft)	192	240	209	169	159	95	160	174	406	401
Average Queue (ft)	90	147	119	144	97	36	74	134	295	294
95th Queue (ft)	165	215	194	181	157	78	156	215	430	413
Link Distance (ft)		1460		138	138	138			395	395
Upstream Blk Time (%)				12	2				0	0
Queuing Penalty (veh)				39	6				3	3
Storage Bay Dist (ft)	700		550				150	150		
Storage Blk Time (%)							0	1	16	
Queuing Penalty (veh)							1	5	52	

Intersection: 3: Missouri Flat Road & Mother Lode Drive

Movement	EB	EB	EB	NB	NB	NB	B24	B24	SB	SB	SB
Directions Served	L	L	R	L	T	T	T	T	T	T	R
Maximum Queue (ft)	83	134	66	100	219	82	76	150	156	156	121
Average Queue (ft)	26	63	27	32	60	15	4	8	91	106	8
95th Queue (ft)	62	115	60	79	164	54	66	96	164	169	59
Link Distance (ft)		633			1949	1949	368	368	138	138	
Upstream Blk Time (%)							0	0	2	4	0
Queuing Penalty (veh)							0	0	18	30	0
Storage Bay Dist (ft)	200		200	150							200
Storage Blk Time (%)					2					4	0
Queuing Penalty (veh)					1					4	0

Intersection: 4: Missouri Flat Road & Forni Road

Movement	EB	EB	EB	EB	WB	WB	NB	NB	NB	NB	SB	SB	SB	SB
Directions Served	L	L	T	R	L	T	L	T	T	R	L	T	T	R
Maximum Queue (ft)	207	220	584	74	59	91	134	310	300	129	230	272	305	175
Average Queue (ft)	152	163	102	27	14	30	43	149	155	15	118	132	144	87
95th Queue (ft)	227	234	375	53	44	67	94	273	275	83	194	234	259	180
Link Distance (ft)			3537			275		340	340			368	368	
Upstream Blk Time (%)								0	0			0	0	
Queuing Penalty (veh)								1	0			0	0	
Storage Bay Dist (ft)	195	195		150	190		250			150	300			150
Storage Blk Time (%)	3	8	1					1	11	0		0	6	0
Queuing Penalty (veh)	3	8	3					1	2	0		0	21	1

Intersection: 5: Missouri Flat Road & Golden Center Drive

Movement	EB	WB	NB	NB	NB	B43	SB	SB	SB	SB
Directions Served	LTR	LTR	L	T	TR	T	L	T	T	R
Maximum Queue (ft)	100	177	154	206	204	11	199	407	408	19
Average Queue (ft)	42	84	55	110	108	0	63	182	198	1
95th Queue (ft)	81	147	111	182	180	11	154	347	360	10
Link Distance (ft)	184	367		216	216	2030		652	652	
Upstream Blk Time (%)				0	0					
Queuing Penalty (veh)				1	1					
Storage Bay Dist (ft)			150				175			500
Storage Blk Time (%)			0	2			0	9	0	
Queuing Penalty (veh)			0	2			0	6	0	

Intersection: 10: Pleasant Valley Rd & Missouri Flat Rd

Movement	EB	EB	EB	WB	WB	SB	SB	B68	B68	B66
Directions Served	L	L	T	T	R	L	R	T	T	T
Maximum Queue (ft)	140	153	229	243	207	230	125	503	148	440
Average Queue (ft)	93	48	90	131	67	203	49	305	5	85
95th Queue (ft)	138	138	168	207	156	223	100	577	89	359
Link Distance (ft)				1302		131	131	419	419	625
Upstream Blk Time (%)						56	0	18		0
Queuing Penalty (veh)						276	1	86		1
Storage Bay Dist (ft)	130	130			200					
Storage Blk Time (%)	2	1	2	1	0					
Queuing Penalty (veh)	4	3	4	3	0					

Zone Summary

Zone wide Queuing Penalty: 603

1: Missouri Flat Road & WB Ramps Performance by approach

Approach	WB	NB	SB	All
Denied Del/Veh (s)	1.3	0.0	0.0	0.5
Total Del/Veh (s)	24.4	15.9	13.3	18.3

2: Missouri Flat Road & EB Ramps Performance by approach

Approach	EB	NB	SB	All
Denied Del/Veh (s)	1.0	0.0	0.0	0.2
Total Del/Veh (s)	17.1	12.3	21.1	16.8

3: Missouri Flat Road & Mother Lode Drive Performance by approach

Approach	EB	NB	SB	All
Denied Del/Veh (s)	2.0	0.0	0.0	0.1
Total Del/Veh (s)	36.1	9.0	4.5	8.6

4: Missouri Flat Road & Forni Road Performance by approach

Approach	EB	WB	NB	SB	All
Denied Del/Veh (s)	0.6	0.0	0.0	0.0	0.1
Total Del/Veh (s)	38.9	17.5	20.6	18.1	21.5

5: Missouri Flat Road & Golden Center Drive Performance by approach

Approach	EB	WB	NB	SB	All
Denied Del/Veh (s)	0.1	0.1	0.0	0.0	0.0
Total Del/Veh (s)	14.5	25.1	12.6	17.6	15.0

10: Pleasant Valley Rd & Missouri Flat Rd Performance by approach

Approach	EB	WB	SB	All
Denied Del/Veh (s)	2.8	0.3	0.0	0.9
Total Del/Veh (s)	23.2	20.4	11.1	19.0

Total Zone Performance

Denied Del/Veh (s)	1.7
Total Del/Veh (s)	1220.5

Intersection	
Intersection Delay, s/veh	41.4
Intersection LOS	E

Movement	EBU	EBT	EBR	WBU	WBL	WBT	NBU	NBL	NBR
Vol, veh/h	0	248	85	0	142	288	0	224	243
Peak Hour Factor	0.92	0.78	0.78	0.92	0.78	0.78	0.92	0.78	0.78
Heavy Vehicles, %	2	2	2	2	2	2	2	2	2
Mvmt Flow	0	318	109	0	182	369	0	287	312
Number of Lanes	0	1	0	0	1	1	0	1	0

Approach	EB	WB	NB
Opposing Approach	WB	EB	
Opposing Lanes	2	1	0
Conflicting Approach Left		NB	EB
Conflicting Lanes Left	0	1	1
Conflicting Approach Right	NB		WB
Conflicting Lanes Right	1	0	2
HCM Control Delay	31.9	24.9	63.4
HCM LOS	D	C	F

Lane	NBLn1	EBLn1	WBLn1	WBLn2
Vol Left, %	48%	0%	100%	0%
Vol Thru, %	0%	74%	0%	100%
Vol Right, %	52%	26%	0%	0%
Sign Control	Stop	Stop	Stop	Stop
Traffic Vol by Lane	467	333	142	288
LT Vol	224	0	142	0
Through Vol	0	248	0	288
RT Vol	243	85	0	0
Lane Flow Rate	599	427	182	369
Geometry Grp	2	5	7	7
Degree of Util (X)	1	0.802	0.397	0.754
Departure Headway (Hd)	6.384	6.764	7.853	7.354
Convergence, Y/N	Yes	Yes	Yes	Yes
Cap	563	538	459	491
Service Time	4.471	4.797	5.595	5.095
HCM Lane V/C Ratio	1.064	0.794	0.397	0.752
HCM Control Delay	63.4	31.9	15.7	29.4
HCM Lane LOS	F	D	C	D
HCM 95th-tile Q	14.4	7.7	1.9	6.4

Intersection	
Int Delay, s/veh	6

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Vol, veh/h	1	0	0	9	1	138	0	887	15	99	614	3
Conflicting Peds, #/hr	0	0	0	0	0	0	0	0	0	0	0	0
Sign Control	Stop	Stop	Stop	Stop	Stop	Stop	Free	Free	Free	Free	Free	Free
RT Channelized	-	-	None	-	-	None	-	-	None	-	-	None
Storage Length	-	-	-	-	-	-	1	-	-	200	-	-
Veh in Median Storage, #	-	0	-	-	0	-	-	0	-	-	0	-
Grade, %	-	0	-	-	0	-	-	0	-	-	0	-
Peak Hour Factor	89	89	89	89	89	89	89	89	89	89	89	89
Heavy Vehicles, %	2	2	2	2	2	2	2	2	2	2	2	2
Mvmt Flow	1	0	0	10	1	155	0	997	17	111	690	3

Major/Minor	Minor2			Minor1			Major1			Major2		
Conflicting Flow All	1997	1927	692	1919	1921	1005	693	0	0	1013	0	0
Stage 1	914	914	-	1005	1005	-	-	-	-	-	-	-
Stage 2	1083	1013	-	914	916	-	-	-	-	-	-	-
Critical Hdwy	7.12	6.52	6.22	7.12	6.52	6.22	4.12	-	-	4.12	-	-
Critical Hdwy Stg 1	6.12	5.52	-	6.12	5.52	-	-	-	-	-	-	-
Critical Hdwy Stg 2	6.12	5.52	-	6.12	5.52	-	-	-	-	-	-	-
Follow-up Hdwy	3.518	4.018	3.318	3.518	4.018	3.318	2.218	-	-	2.218	-	-
Pot Cap-1 Maneuver	45	67	444	51	67	293	902	-	-	684	-	-
Stage 1	327	352	-	291	319	-	-	-	-	-	-	-
Stage 2	263	316	-	327	351	-	-	-	-	-	-	-
Platoon blocked, %								-	-		-	-
Mov Cap-1 Maneuver	18	56	444	45	56	293	902	-	-	684	-	-
Mov Cap-2 Maneuver	18	56	-	45	56	-	-	-	-	-	-	-
Stage 1	327	295	-	291	319	-	-	-	-	-	-	-
Stage 2	123	316	-	274	294	-	-	-	-	-	-	-

Approach	EB	WB	NB	SB
HCM Control Delay, s	217.9	62.6	0	1.6
HCM LOS	F	F		

Minor Lane/Major Mvmt	NBL	NBT	NBR	EBLn1	WBLn1	SBL	SBT	SBR
Capacity (veh/h)	902	-	-	18	215	684	-	-
HCM Lane V/C Ratio	-	-	-	0.062	0.773	0.163	-	-
HCM Control Delay (s)	0	-	-	217.9	62.6	11.3	-	-
HCM Lane LOS	A	-	-	F	F	B	-	-
HCM 95th %tile Q(veh)	0	-	-	0.2	5.4	0.6	-	-

Intersection	
Int Delay, s/veh	0.8

Movement	EBL	EBR	NBL	NBT	SBT	SBR
Vol, veh/h	23	14	49	896	541	81
Conflicting Peds, #/hr	0	0	0	0	0	0
Sign Control	Stop	Stop	Free	Free	Free	Free
RT Channelized	-	None	-	None	-	None
Storage Length	0	-	1	-	-	-
Veh in Median Storage, #	0	-	-	0	0	-
Grade, %	0	-	-	0	0	-
Peak Hour Factor	88	88	88	88	88	88
Heavy Vehicles, %	2	2	2	2	2	2
Mvmt Flow	26	16	56	1018	615	92

Major/Minor	Minor2		Major1		Major2	
Conflicting Flow All	1791	661	707	0	-	0
Stage 1	661	-	-	-	-	-
Stage 2	1130	-	-	-	-	-
Critical Hdwy	6.42	6.22	4.12	-	-	-
Critical Hdwy Stg 1	5.42	-	-	-	-	-
Critical Hdwy Stg 2	5.42	-	-	-	-	-
Follow-up Hdwy	3.518	3.318	2.218	-	-	-
Pot Cap-1 Maneuver	89	462	891	-	-	-
Stage 1	514	-	-	-	-	-
Stage 2	308	-	-	-	-	-
Platoon blocked, %				-	-	-
Mov Cap-1 Maneuver	83	462	891	-	-	-
Mov Cap-2 Maneuver	203	-	-	-	-	-
Stage 1	514	-	-	-	-	-
Stage 2	289	-	-	-	-	-

Approach	EB	NB	SB
HCM Control Delay, s	21.7	0.5	0
HCM LOS	C		

Minor Lane/Major Mvmt	NBL	NBT	EBLn1	SBT	SBR
Capacity (veh/h)	891	-	258	-	-
HCM Lane V/C Ratio	0.062	-	0.163	-	-
HCM Control Delay (s)	9.3	-	21.7	-	-
HCM Lane LOS	A	-	C	-	-
HCM 95th %tile Q(veh)	0.2	-	0.6	-	-

Intersection	
Int Delay, s/veh	5.8

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Vol, veh/h	53	0	14	1	0	4	19	880	6	4	421	94
Conflicting Peds, #/hr	0	0	0	0	0	0	0	0	0	0	0	0
Sign Control	Stop	Stop	Stop	Stop	Stop	Stop	Free	Free	Free	Free	Free	Free
RT Channelized	-	-	None	-	-	None	-	-	None	-	-	None
Storage Length	-	-	-	-	-	-	1	-	-	1	-	-
Veh in Median Storage, #	-	0	-	-	0	-	-	0	-	-	0	-
Grade, %	-	0	-	-	0	-	-	0	-	-	0	-
Peak Hour Factor	86	86	86	86	86	86	86	86	86	86	86	86
Heavy Vehicles, %	2	2	2	2	2	2	2	2	2	2	2	2
Mvmt Flow	62	0	16	1	0	5	22	1023	7	5	490	109

Major/Minor	Minor2			Minor1			Major1			Major2		
Conflicting Flow All	1626	1627	544	1633	1679	1027	599	0	0	1030	0	0
Stage 1	553	553	-	1071	1071	-	-	-	-	-	-	-
Stage 2	1073	1074	-	562	608	-	-	-	-	-	-	-
Critical Hdwy	7.12	6.52	6.22	7.12	6.52	6.22	4.12	-	-	4.12	-	-
Critical Hdwy Stg 1	6.12	5.52	-	6.12	5.52	-	-	-	-	-	-	-
Critical Hdwy Stg 2	6.12	5.52	-	6.12	5.52	-	-	-	-	-	-	-
Follow-up Hdwy	3.518	4.018	3.318	3.518	4.018	3.318	2.218	-	-	2.218	-	-
Pot Cap-1 Maneuver	82	102	539	81	95	285	978	-	-	674	-	-
Stage 1	517	514	-	267	297	-	-	-	-	-	-	-
Stage 2	267	296	-	512	486	-	-	-	-	-	-	-
Platoon blocked, %								-	-		-	-
Mov Cap-1 Maneuver	79	99	539	77	92	285	978	-	-	674	-	-
Mov Cap-2 Maneuver	79	99	-	77	92	-	-	-	-	-	-	-
Stage 1	505	510	-	261	290	-	-	-	-	-	-	-
Stage 2	257	289	-	493	482	-	-	-	-	-	-	-

Approach	EB	WB	NB	SB
HCM Control Delay, s	124.6	25.1	0.2	0.1
HCM LOS	F	D		

Minor Lane/Major Mvmt	NBL	NBT	NBR	EBLn1	WBLn1	SBL	SBT	SBR
Capacity (veh/h)	978	-	-	96	185	674	-	-
HCM Lane V/C Ratio	0.023	-	-	0.812	0.031	0.007	-	-
HCM Control Delay (s)	8.8	-	-	124.6	25.1	10.4	-	-
HCM Lane LOS	A	-	-	F	D	B	-	-
HCM 95th %tile Q(veh)	0.1	-	-	4.4	0.1	0	-	-

Intersection	
Int Delay, s/veh	3.3

Movement	WBL	WBR	NBT	NBR	SBL	SBT
Vol, veh/h	22	57	181	24	101	136
Conflicting Peds, #/hr	0	0	0	0	0	0
Sign Control	Stop	Stop	Free	Free	Free	Free
RT Channelized	-	None	-	None	-	None
Storage Length	0	-	-	-	-	-
Veh in Median Storage, #	0	-	0	-	-	0
Grade, %	0	-	0	-	-	0
Peak Hour Factor	89	89	89	89	89	89
Heavy Vehicles, %	2	2	2	2	2	2
Mvmt Flow	25	64	203	27	113	153

Major/Minor	Minor1		Major1		Major2	
Conflicting Flow All	597	217	0	0	230	0
Stage 1	217	-	-	-	-	-
Stage 2	380	-	-	-	-	-
Critical Hdwy	6.42	6.22	-	-	4.12	-
Critical Hdwy Stg 1	5.42	-	-	-	-	-
Critical Hdwy Stg 2	5.42	-	-	-	-	-
Follow-up Hdwy	3.518	3.318	-	-	2.218	-
Pot Cap-1 Maneuver	466	823	-	-	1338	-
Stage 1	819	-	-	-	-	-
Stage 2	691	-	-	-	-	-
Platoon blocked, %			-	-		-
Mov Cap-1 Maneuver	423	823	-	-	1338	-
Mov Cap-2 Maneuver	423	-	-	-	-	-
Stage 1	819	-	-	-	-	-
Stage 2	627	-	-	-	-	-

Approach	WB	NB	SB
HCM Control Delay, s	11.4	0	3.4
HCM LOS	B		

Minor Lane/Major Mvmt	NBT	NBR	WBLn1	SBL	SBT
Capacity (veh/h)	-	-	651	1338	-
HCM Lane V/C Ratio	-	-	0.136	0.085	-
HCM Control Delay (s)	-	-	11.4	7.9	0
HCM Lane LOS	-	-	B	A	A
HCM 95th %tile Q(veh)	-	-	0.5	0.3	-

Intersection	
Int Delay, s/veh	7.7

Movement	EBL	EBT	WBT	WBR	SBL	SBR
Vol, veh/h	138	343	323	33	50	103
Conflicting Peds, #/hr	0	0	0	0	0	0
Sign Control	Free	Free	Free	Free	Stop	Stop
RT Channelized	-	None	-	None	-	None
Storage Length	-	-	-	-	0	-
Veh in Median Storage, #	-	0	0	-	0	-
Grade, %	-	0	0	-	0	-
Peak Hour Factor	75	75	75	75	75	75
Heavy Vehicles, %	2	2	2	2	2	2
Mvmt Flow	184	457	431	44	67	137

Major/Minor	Major1		Major2		Minor2	
Conflicting Flow All	475	0	-	0	1278	453
Stage 1	-	-	-	-	453	-
Stage 2	-	-	-	-	825	-
Critical Hdwy	4.12	-	-	-	6.42	6.22
Critical Hdwy Stg 1	-	-	-	-	5.42	-
Critical Hdwy Stg 2	-	-	-	-	5.42	-
Follow-up Hdwy	2.218	-	-	-	3.518	3.318
Pot Cap-1 Maneuver	1087	-	-	-	183	607
Stage 1	-	-	-	-	640	-
Stage 2	-	-	-	-	430	-
Platoon blocked, %		-	-	-		
Mov Cap-1 Maneuver	1087	-	-	-	141	607
Mov Cap-2 Maneuver	-	-	-	-	141	-
Stage 1	-	-	-	-	640	-
Stage 2	-	-	-	-	332	-

Approach	EB	WB	SB
HCM Control Delay, s	2.6	0	41.6
HCM LOS			E

Minor Lane/Major Mvmt	EBL	EBT	WBT	WBR	SBLn1
Capacity (veh/h)	1087	-	-	-	292
HCM Lane V/C Ratio	0.169	-	-	-	0.699
HCM Control Delay (s)	9	0	-	-	41.6
HCM Lane LOS	A	A	-	-	E
HCM 95th %tile Q(veh)	0.6	-	-	-	4.8

Intersection: 1: Missouri Flat Road & WB Ramps

Movement	WB	WB	WB	WB	NB	NB	NB	NB	SB	SB
Directions Served	L	LT	R	R	L	L	T	T	T	T
Maximum Queue (ft)	244	233	155	106	137	149	326	153	198	149
Average Queue (ft)	153	134	75	28	110	123	99	50	96	72
95th Queue (ft)	228	213	131	71	167	169	270	112	163	131
Link Distance (ft)	983	983					395	395	459	459
Upstream Blk Time (%)							0	0		
Queuing Penalty (veh)							0	0		
Storage Bay Dist (ft)			400	400	125	125				
Storage Blk Time (%)					1	6	0			
Queuing Penalty (veh)					3	17	0			

Intersection: 2: Missouri Flat Road & EB Ramps

Movement	EB	EB	EB	NB	NB	NB	SB	SB	SB	SB
Directions Served	L	LTR	R	T	T	R	L	L	T	T
Maximum Queue (ft)	99	166	139	166	165	96	85	174	387	373
Average Queue (ft)	30	88	49	133	109	31	26	94	219	218
95th Queue (ft)	73	147	104	201	185	76	66	191	384	366
Link Distance (ft)		1460		138	138	138			395	395
Upstream Blk Time (%)				13	5				0	0
Queuing Penalty (veh)				43	17				0	0
Storage Bay Dist (ft)	700		550				150	150		
Storage Blk Time (%)								0	12	
Queuing Penalty (veh)								0	16	

Intersection: 3: Missouri Flat Road & Mother Lode Drive

Movement	EB	EB	EB	NB	NB	NB	B24	B24	B24	SB	SB	SB
Directions Served	L	L	R	L	T	T	T	T		T	T	R
Maximum Queue (ft)	96	138	54	93	224	122	71	232	39	139	135	14
Average Queue (ft)	34	63	18	18	74	27	5	14	1	46	49	0
95th Queue (ft)	75	118	46	61	177	81	72	132	40	107	107	14
Link Distance (ft)		633			1949	1949	368	368	368	138	138	
Upstream Blk Time (%)							0	0	0	0	0	0
Queuing Penalty (veh)							0	0	0	1	1	0
Storage Bay Dist (ft)	200		200	150								200
Storage Blk Time (%)					1						0	0
Queuing Penalty (veh)					0						0	0

Intersection: 4: Missouri Flat Road & Forni Road

Movement	EB	EB	EB	EB	WB	WB	NB	NB	NB	NB	SB	SB	SB	SB	B24	B24
Directions Served	L	L	T	R	L	T	L	T	T	R	L	T	T	R	T	T
Maximum Queue (ft)	115	125	120	63	105	112	84	288	310	144	300	278	242	150	54	40
Average Queue (ft)	46	61	44	17	41	46	13	132	135	18	180	98	97	47	6	1
95th Queue (ft)	96	114	95	47	86	91	51	245	260	104	287	225	195	120	89	41
Link Distance (ft)			3521			275		293	293			368	368		1949	1949
Upstream Blk Time (%)								0	0			1	0			
Queuing Penalty (veh)								1	2			7	0			
Storage Bay Dist (ft)	195	195		150	190		250			150	300			150		
Storage Blk Time (%)			0					1	7	0	2	0	2	0		
Queuing Penalty (veh)			0					0	4	0	8	1	4	0		

Intersection: 5: Missouri Flat Road & Golden Center Drive

Movement	EB	WB	NB	NB	NB	B43	SB	SB	SB	SB
Directions Served	LTR	LTR	L	T	TR	T	L	T	T	R
Maximum Queue (ft)	53	85	108	208	225	26	165	240	247	17
Average Queue (ft)	16	37	30	115	125	1	56	97	109	2
95th Queue (ft)	40	74	73	179	192	22	118	197	204	10
Link Distance (ft)	184	367		216	216	2030		652	652	
Upstream Blk Time (%)				0	0					
Queuing Penalty (veh)				1	1					
Storage Bay Dist (ft)			150				175			500
Storage Blk Time (%)				2			0	1		
Queuing Penalty (veh)				1			0	1		

Intersection: 10: Pleasant Valley Rd & Missouri Flat Rd

Movement	EB	EB	EB	WB	WB	SB	SB	B68
Directions Served	L	L	T	T	R	L	R	T
Maximum Queue (ft)	141	153	296	420	225	178	125	8
Average Queue (ft)	107	74	94	185	128	83	46	0
95th Queue (ft)	150	173	225	338	245	155	100	5
Link Distance (ft)				1506		127	127	419
Upstream Blk Time (%)						3	0	
Queuing Penalty (veh)						7	0	
Storage Bay Dist (ft)	130	130			200			
Storage Blk Time (%)	6	4	2	4	1			
Queuing Penalty (veh)	11	7	5	26	2			

Zone Summary

Zone wide Queuing Penalty: 190

1: Missouri Flat Road & WB Ramps Performance by approach

Approach	WB	NB	SB	All
Denied Del/Veh (s)	1.3	0.0	0.0	0.4
Total Del/Veh (s)	25.0	14.9	14.9	18.1

2: Missouri Flat Road & EB Ramps Performance by approach

Approach	EB	NB	SB	All
Denied Del/Veh (s)	1.4	0.0	0.1	0.4
Total Del/Veh (s)	26.8	13.8	24.0	21.6

3: Missouri Flat Road & Mother Lode Drive Performance by approach

Approach	EB	NB	SB	All
Denied Del/Veh (s)	2.0	0.0	0.0	0.1
Total Del/Veh (s)	34.9	8.3	6.3	8.7

4: Missouri Flat Road & Forni Road Performance by approach

Approach	EB	WB	NB	SB	All
Denied Del/Veh (s)	1.3	0.0	0.1	0.0	0.2
Total Del/Veh (s)	48.9	11.7	21.1	15.9	23.0

5: Missouri Flat Road & Golden Center Drive Performance by approach

Approach	EB	WB	NB	SB	All
Denied Del/Veh (s)	0.2	0.2	0.0	0.0	0.0
Total Del/Veh (s)	22.0	25.5	15.8	25.6	21.5

10: Pleasant Valley Rd & Missouri Flat Rd Performance by approach

Approach	EB	WB	SB	All
Denied Del/Veh (s)	2.1	0.0	55.1	27.5
Total Del/Veh (s)	22.4	17.1	21.0	20.2

Total Zone Performance

Denied Del/Veh (s)	20.1
Total Del/Veh (s)	1202.3

Intersection	
Intersection Delay, s/veh	21.2
Intersection LOS	C

Movement	EBU	EBT	EBR	WBU	WBL	WBT	NBU	NBL	NBR
Vol, veh/h	0	326	205	0	216	269	0	99	150
Peak Hour Factor	0.92	0.94	0.94	0.92	0.94	0.94	0.92	0.94	0.94
Heavy Vehicles, %	2	2	2	2	2	2	2	2	2
Mvmt Flow	0	347	218	0	230	286	0	105	160
Number of Lanes	0	1	0	0	1	1	0	1	0

Approach	EB	WB	NB
Opposing Approach	WB	EB	
Opposing Lanes	2	1	0
Conflicting Approach Left		NB	EB
Conflicting Lanes Left	0	1	1
Conflicting Approach Right	NB		WB
Conflicting Lanes Right	1	0	2
HCM Control Delay	30.6	14.4	14.4
HCM LOS	D	B	B

Lane	NBLn1	EBLn1	WBLn1	WBLn2
Vol Left, %	40%	0%	100%	0%
Vol Thru, %	0%	61%	0%	100%
Vol Right, %	60%	39%	0%	0%
Sign Control	Stop	Stop	Stop	Stop
Traffic Vol by Lane	249	531	216	269
LT Vol	99	0	216	0
Through Vol	0	326	0	269
RT Vol	150	205	0	0
Lane Flow Rate	265	565	230	286
Geometry Grp	2	5	7	7
Degree of Util (X)	0.456	0.843	0.423	0.486
Departure Headway (Hd)	6.191	5.374	6.62	6.112
Convergence, Y/N	Yes	Yes	Yes	Yes
Cap	580	672	542	587
Service Time	4.254	3.426	4.382	3.873
HCM Lane V/C Ratio	0.457	0.841	0.424	0.487
HCM Control Delay	14.4	30.6	14.2	14.6
HCM Lane LOS	B	D	B	B
HCM 95th-tile Q	2.4	9.4	2.1	2.6

Intersection	
Int Delay, s/veh	5.6

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Vol, veh/h	0	0	2	10	0	175	1	724	20	133	1058	0
Conflicting Peds, #/hr	0	0	0	0	0	0	0	0	0	0	0	0
Sign Control	Stop	Stop	Stop	Stop	Stop	Stop	Free	Free	Free	Free	Free	Free
RT Channelized	-	-	None	-	-	None	-	-	None	-	-	None
Storage Length	-	-	-	-	-	-	1	-	-	200	-	-
Veh in Median Storage, #	-	0	-	-	0	-	-	0	-	-	0	-
Grade, %	-	0	-	-	0	-	-	0	-	-	0	-
Peak Hour Factor	97	97	97	97	97	97	97	97	97	97	97	97
Heavy Vehicles, %	2	2	2	2	2	2	2	2	2	2	2	2
Mvmt Flow	0	0	2	10	0	180	1	746	21	137	1091	0

Major/Minor	Minor2			Minor1			Major1			Major2		
Conflicting Flow All	2214	2134	1091	2125	2124	757	1091	0	0	767	0	0
Stage 1	1365	1365	-	759	759	-	-	-	-	-	-	-
Stage 2	849	769	-	1366	1365	-	-	-	-	-	-	-
Critical Hdwy	7.12	6.52	6.22	7.12	6.52	6.22	4.12	-	-	4.12	-	-
Critical Hdwy Stg 1	6.12	5.52	-	6.12	5.52	-	-	-	-	-	-	-
Critical Hdwy Stg 2	6.12	5.52	-	6.12	5.52	-	-	-	-	-	-	-
Follow-up Hdwy	3.518	4.018	3.318	3.518	4.018	3.318	2.218	-	-	2.218	-	-
Pot Cap-1 Maneuver	31	49	261	36	50	408	640	-	-	847	-	-
Stage 1	182	215	-	399	415	-	-	-	-	-	-	-
Stage 2	356	411	-	182	215	-	-	-	-	-	-	-
Platoon blocked, %								-	-		-	-
Mov Cap-1 Maneuver	15	41	261	31	42	408	640	-	-	847	-	-
Mov Cap-2 Maneuver	15	41	-	31	42	-	-	-	-	-	-	-
Stage 1	182	180	-	398	414	-	-	-	-	-	-	-
Stage 2	198	410	-	151	180	-	-	-	-	-	-	-

Approach	EB	WB	NB	SB
HCM Control Delay, s	18.9	56.6	0	1.1
HCM LOS	C	F		

Minor Lane/Major Mvmt	NBL	NBT	NBR	EBLn1	WBLn1	SBL	SBT	SBR
Capacity (veh/h)	640	-	-	261	246	847	-	-
HCM Lane V/C Ratio	0.002	-	-	0.008	0.775	0.162	-	-
HCM Control Delay (s)	10.6	-	-	18.9	56.6	10.1	-	-
HCM Lane LOS	B	-	-	C	F	B	-	-
HCM 95th %tile Q(veh)	0	-	-	0	5.7	0.6	-	-

Intersection	
Int Delay, s/veh	3.3

Movement	EBL	EBR	NBL	NBT	SBT	SBR
Vol, veh/h	72	56	9	663	1021	27
Conflicting Peds, #/hr	0	0	0	0	0	0
Sign Control	Stop	Stop	Free	Free	Free	Free
RT Channelized	-	None	-	None	-	None
Storage Length	0	-	1	-	-	-
Veh in Median Storage, #	0	-	-	0	0	-
Grade, %	0	-	-	0	0	-
Peak Hour Factor	91	91	91	91	91	91
Heavy Vehicles, %	2	2	2	2	2	2
Mvmt Flow	79	62	10	729	1122	30

Major/Minor	Minor2		Major1		Major2	
Conflicting Flow All	1885	1137	1152	0	-	0
Stage 1	1137	-	-	-	-	-
Stage 2	748	-	-	-	-	-
Critical Hdwy	6.42	6.22	4.12	-	-	-
Critical Hdwy Stg 1	5.42	-	-	-	-	-
Critical Hdwy Stg 2	5.42	-	-	-	-	-
Follow-up Hdwy	3.518	3.318	2.218	-	-	-
Pot Cap-1 Maneuver	~ 78	246	606	-	-	-
Stage 1	306	-	-	-	-	-
Stage 2	468	-	-	-	-	-
Platoon blocked, %				-	-	-
Mov Cap-1 Maneuver	~ 77	246	606	-	-	-
Mov Cap-2 Maneuver	201	-	-	-	-	-
Stage 1	306	-	-	-	-	-
Stage 2	460	-	-	-	-	-

Approach	EB	NB	SB
HCM Control Delay, s	47.4	0.1	0
HCM LOS	E		

Minor Lane/Major Mvmt	NBL	NBT	EBLn1	SBT	SBR
Capacity (veh/h)	606	-	218	-	-
HCM Lane V/C Ratio	0.016	-	0.645	-	-
HCM Control Delay (s)	11	-	47.4	-	-
HCM Lane LOS	B	-	E	-	-
HCM 95th %tile Q(veh)	0.1	-	3.9	-	-

Notes

~: Volume exceeds capacity $: Delay exceeds 300s +: Computation Not Defined *: All major volume in platoon

Intersection	
Int Delay, s/veh	18.7

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Vol, veh/h	79	1	30	1	1	1	10	575	2	4	970	64
Conflicting Peds, #/hr	0	0	0	0	0	0	0	0	0	0	0	0
Sign Control	Stop	Stop	Stop	Stop	Stop	Stop	Free	Free	Free	Free	Free	Free
RT Channelized	-	-	None	-	-	None	-	-	None	-	-	None
Storage Length	-	-	-	-	-	-	1	-	-	1	-	-
Veh in Median Storage, #	-	0	-	-	0	-	-	0	-	-	0	-
Grade, %	-	0	-	-	0	-	-	0	-	-	0	-
Peak Hour Factor	94	94	94	94	94	94	94	94	94	94	94	94
Heavy Vehicles, %	2	2	2	2	2	2	2	2	2	2	2	2
Mvmt Flow	84	1	32	1	1	1	11	612	2	4	1032	68

Major/Minor	Minor2			Minor1			Major1			Major2		
Conflicting Flow All	1709	1709	1066	1725	1743	613	1100	0	0	614	0	0
Stage 1	1074	1074	-	634	634	-	-	-	-	-	-	-
Stage 2	635	635	-	1091	1109	-	-	-	-	-	-	-
Critical Hdwy	7.12	6.52	6.22	7.12	6.52	6.22	4.12	-	-	4.12	-	-
Critical Hdwy Stg 1	6.12	5.52	-	6.12	5.52	-	-	-	-	-	-	-
Critical Hdwy Stg 2	6.12	5.52	-	6.12	5.52	-	-	-	-	-	-	-
Follow-up Hdwy	3.518	4.018	3.318	3.518	4.018	3.318	2.218	-	-	2.218	-	-
Pot Cap-1 Maneuver	~ 72	91	270	70	87	492	635	-	-	965	-	-
Stage 1	266	296	-	467	473	-	-	-	-	-	-	-
Stage 2	467	472	-	260	285	-	-	-	-	-	-	-
Platoon blocked, %								-	-		-	-
Mov Cap-1 Maneuver	~ 70	89	270	60	85	492	635	-	-	965	-	-
Mov Cap-2 Maneuver	~ 70	89	-	60	85	-	-	-	-	-	-	-
Stage 1	261	295	-	459	465	-	-	-	-	-	-	-
Stage 2	457	464	-	227	284	-	-	-	-	-	-	-

Approach	EB	WB	NB	SB
HCM Control Delay, s	293.3	43	0.2	0
HCM LOS	F	E		

Minor Lane/Major Mvmt	NBL	NBT	NBR	EBLn1	WBLn1	SBL	SBT	SBR
Capacity (veh/h)	635	-	-	88	98	965	-	-
HCM Lane V/C Ratio	0.017	-	-	1.33	0.033	0.004	-	-
HCM Control Delay (s)	10.8	-	-	293.3	43	8.7	-	-
HCM Lane LOS	B	-	-	F	E	A	-	-
HCM 95th %tile Q(veh)	0.1	-	-	8.7	0.1	0	-	-

Notes

~: Volume exceeds capacity $: Delay exceeds 300s +: Computation Not Defined *: All major volume in platoon

Intersection	
Int Delay, s/veh	4.9

Movement	WBL	WBR	NBT	NBR	SBL	SBT
Vol, veh/h	33	181	115	28	81	189
Conflicting Peds, #/hr	0	0	0	0	0	0
Sign Control	Stop	Stop	Free	Free	Free	Free
RT Channelized	-	None	-	None	-	None
Storage Length	0	-	-	-	-	-
Veh in Median Storage, #	0	-	0	-	-	0
Grade, %	0	-	0	-	-	0
Peak Hour Factor	92	92	92	92	92	92
Heavy Vehicles, %	2	2	2	2	2	2
Mvmt Flow	36	197	125	30	88	205

Major/Minor	Minor1		Major1		Major2	
Conflicting Flow All	522	140	0	0	155	0
Stage 1	140	-	-	-	-	-
Stage 2	382	-	-	-	-	-
Critical Hdwy	6.42	6.22	-	-	4.12	-
Critical Hdwy Stg 1	5.42	-	-	-	-	-
Critical Hdwy Stg 2	5.42	-	-	-	-	-
Follow-up Hdwy	3.518	3.318	-	-	2.218	-
Pot Cap-1 Maneuver	515	908	-	-	1425	-
Stage 1	887	-	-	-	-	-
Stage 2	690	-	-	-	-	-
Platoon blocked, %			-	-		-
Mov Cap-1 Maneuver	479	908	-	-	1425	-
Mov Cap-2 Maneuver	479	-	-	-	-	-
Stage 1	887	-	-	-	-	-
Stage 2	642	-	-	-	-	-

Approach	WB	NB	SB
HCM Control Delay, s	11.4	0	2.3
HCM LOS	B		

Minor Lane/Major Mvmt	NBT	NBR	WBLn1	SBL	SBT
Capacity (veh/h)	-	-	798	1425	-
HCM Lane V/C Ratio	-	-	0.291	0.062	-
HCM Control Delay (s)	-	-	11.4	7.7	0
HCM Lane LOS	-	-	B	A	A
HCM 95th %tile Q(veh)	-	-	1.2	0.2	-

Intersection	
Int Delay, s/veh	3.2

Movement	EBL	EBT	WBT	WBR	SBL	SBR
Vol, veh/h	92	402	337	36	22	149
Conflicting Peds, #/hr	0	0	0	0	0	0
Sign Control	Free	Free	Free	Free	Stop	Stop
RT Channelized	-	None	-	None	-	None
Storage Length	-	-	-	-	0	-
Veh in Median Storage, #	-	0	0	-	0	-
Grade, %	-	0	0	-	0	-
Peak Hour Factor	93	93	93	93	93	93
Heavy Vehicles, %	2	2	2	2	2	2
Mvmt Flow	99	432	362	39	24	160

Major/Minor	Major1		Major2		Minor2	
Conflicting Flow All	401	0	-	0	1012	382
Stage 1	-	-	-	-	382	-
Stage 2	-	-	-	-	630	-
Critical Hdwy	4.12	-	-	-	6.42	6.22
Critical Hdwy Stg 1	-	-	-	-	5.42	-
Critical Hdwy Stg 2	-	-	-	-	5.42	-
Follow-up Hdwy	2.218	-	-	-	3.518	3.318
Pot Cap-1 Maneuver	1158	-	-	-	265	665
Stage 1	-	-	-	-	690	-
Stage 2	-	-	-	-	531	-
Platoon blocked, %		-	-	-		
Mov Cap-1 Maneuver	1158	-	-	-	235	665
Mov Cap-2 Maneuver	-	-	-	-	235	-
Stage 1	-	-	-	-	690	-
Stage 2	-	-	-	-	471	-

Approach	EB	WB	SB
HCM Control Delay, s	1.6	0	15.1
HCM LOS			C

Minor Lane/Major Mvmt	EBL	EBT	WBT	WBR	SBLn1
Capacity (veh/h)	1158	-	-	-	538
HCM Lane V/C Ratio	0.085	-	-	-	0.342
HCM Control Delay (s)	8.4	0	-	-	15.1
HCM Lane LOS	A	A	-	-	C
HCM 95th %tile Q(veh)	0.3	-	-	-	1.5

Intersection: 1: Missouri Flat Road & WB Ramps

Movement	WB	WB	WB	WB	NB	NB	NB	NB	SB	SB
Directions Served	L	LT	R	R	L	L	T	T	T	T
Maximum Queue (ft)	260	247	195	164	137	148	314	148	294	252
Average Queue (ft)	154	148	85	34	104	118	91	59	142	106
95th Queue (ft)	229	224	153	95	164	162	234	115	252	205
Link Distance (ft)	983	983					395	395	459	459
Upstream Blk Time (%)							0			
Queuing Penalty (veh)							1			
Storage Bay Dist (ft)			400	400	125	125				
Storage Blk Time (%)					1	3	0			
Queuing Penalty (veh)					2	13	1			

Intersection: 2: Missouri Flat Road & EB Ramps

Movement	EB	EB	EB	NB	NB	NB	SB	SB	SB	SB
Directions Served	L	LTR	R	T	T	R	L	L	T	T
Maximum Queue (ft)	187	252	233	167	161	91	156	174	409	406
Average Queue (ft)	90	145	117	142	101	40	70	137	293	295
95th Queue (ft)	165	222	201	186	159	86	147	216	432	423
Link Distance (ft)		1460		138	138	138			395	395
Upstream Blk Time (%)				13	2				0	1
Queuing Penalty (veh)				42	7				4	4
Storage Bay Dist (ft)	700		550				150	150		
Storage Blk Time (%)							0	0	17	
Queuing Penalty (veh)							1	2	54	

Intersection: 3: Missouri Flat Road & Mother Lode Drive

Movement	EB	EB	EB	NB	NB	NB	B24	B24	SB	SB	SB
Directions Served	L	L	R	L	T	T	T	T	T	T	R
Maximum Queue (ft)	78	132	72	114	208	84	150	277	159	156	136
Average Queue (ft)	29	65	27	30	59	13	5	16	93	106	14
95th Queue (ft)	67	117	55	70	149	50	79	141	164	169	81
Link Distance (ft)		633			1949	1949	368	368	138	138	
Upstream Blk Time (%)							0	0	2	4	0
Queuing Penalty (veh)							0	1	18	32	0
Storage Bay Dist (ft)	200		200	150							200
Storage Blk Time (%)					1					4	0
Queuing Penalty (veh)					1					5	1

Intersection: 4: Missouri Flat Road & Forni Road

Movement	EB	EB	EB	EB	WB	WB	NB	NB	NB	NB	SB	SB	SB	SB	B24	B24
Directions Served	L	L	T	R	L	T	L	T	T	R	L	T	T	R	T	T
Maximum Queue (ft)	206	219	511	83	59	95	179	283	308	174	251	330	363	175	12	17
Average Queue (ft)	151	159	106	27	15	32	52	145	151	16	119	140	152	89	0	1
95th Queue (ft)	225	231	428	58	45	71	115	264	277	84	207	257	281	187	13	13
Link Distance (ft)			3537			275		340	340			368	368		1949	1949
Upstream Blk Time (%)								0	0			0	0			
Queuing Penalty (veh)								0	0			1	3			
Storage Bay Dist (ft)	195	195		150	190		250			150	300			150		
Storage Blk Time (%)	4	8	0			0		1	11	0		0	7	0		
Queuing Penalty (veh)	4	9	2			0		1	2	0		1	23	1		

Intersection: 5: Missouri Flat Road & Golden Center Drive

Movement	EB	WB	NB	NB	NB	B43	SB	SB	SB	SB
Directions Served	LTR	LTR	L	T	TR	T	L	T	T	R
Maximum Queue (ft)	109	179	154	232	223	34	199	452	450	19
Average Queue (ft)	44	83	55	115	116	2	57	194	208	2
95th Queue (ft)	87	149	116	198	192	28	139	374	387	10
Link Distance (ft)	184	367		216	216	2030		652	652	
Upstream Blk Time (%)				1	0					
Queuing Penalty (veh)				3	1					
Storage Bay Dist (ft)			150				175			500
Storage Blk Time (%)			1	2				11	0	
Queuing Penalty (veh)			3	2				7	0	

Intersection: 10: Pleasant Valley Rd & Missouri Flat Rd

Movement	EB	EB	EB	WB	WB	SB	SB	B68	B68	B66
Directions Served	L	L	T	T	R	L	R	T	T	T
Maximum Queue (ft)	137	152	266	248	214	236	138	503	247	452
Average Queue (ft)	92	49	100	128	68	205	55	342	9	115
95th Queue (ft)	136	143	195	207	153	229	112	594	117	451
Link Distance (ft)				1302		131	131	419	419	625
Upstream Blk Time (%)						58	0	21		0
Queuing Penalty (veh)						292	2	104		4
Storage Bay Dist (ft)	130	130			200					
Storage Blk Time (%)	2	1	3	1	0					
Queuing Penalty (veh)	5	3	7	3	0					

Zone Summary

Zone wide Queuing Penalty: 669

1: Missouri Flat Road & WB Ramps Performance by approach

Approach	WB	NB	SB	All
Denied Del/Veh (s)	1.3	0.0	0.0	0.4
Total Del/Veh (s)	22.3	17.0	10.2	16.6

2: Missouri Flat Road & EB Ramps Performance by approach

Approach	EB	NB	SB	All
Denied Del/Veh (s)	1.2	0.0	0.0	0.3
Total Del/Veh (s)	23.2	12.2	11.3	14.3

3: Missouri Flat Road & Mother Lode Drive Performance by approach

Approach	EB	NB	SB	All
Denied Del/Veh (s)	1.7	0.0	0.0	0.1
Total Del/Veh (s)	53.5	12.2	5.7	11.0

4: Missouri Flat Road & Forni Road Performance by approach

Approach	EB	WB	NB	SB	All
Denied Del/Veh (s)	3.0	0.0	0.0	0.1	0.4
Total Del/Veh (s)	37.6	18.2	25.1	26.1	26.4

5: Missouri Flat Road & Golden Center Drive Performance by approach

Approach	EB	WB	NB	SB	All
Denied Del/Veh (s)	0.1	0.2	0.0	0.0	0.0
Total Del/Veh (s)	21.6	33.9	17.7	26.6	21.8

6: Missouri Flat Road & Missouri Flat Rd/Diamond Springs Parkway Performance by approach

Approach	EB	WB	NB	All
Denied Del/Veh (s)	0.0	0.0	0.0	0.0
Total Del/Veh (s)	12.8	8.2	10.8	10.6

10: Pleasant Valley Rd & Missouri Flat Rd Performance by approach

Approach	EB	WB	SB	All
Denied Del/Veh (s)	0.0	0.1	0.0	0.0
Total Del/Veh (s)	40.8	16.2	10.6	22.8

Total Zone Performance

Denied Del/Veh (s)	1.6
Total Del/Veh (s)	344.1

Intersection	
Intersection Delay, s/veh	50.4
Intersection LOS	F

Movement	EBU	EBT	EBR	WBU	WBL	WBT	NBU	NBL	NBR
Vol, veh/h	0	281	98	0	148	333	0	252	247
Peak Hour Factor	0.92	0.78	0.78	0.92	0.78	0.78	0.92	0.78	0.78
Heavy Vehicles, %	2	2	2	2	2	2	2	2	2
Mvmt Flow	0	360	126	0	190	427	0	323	317
Number of Lanes	0	1	0	0	1	1	0	1	0

Approach	EB	WB	NB
Opposing Approach	WB	EB	
Opposing Lanes	2	1	0
Conflicting Approach Left		NB	EB
Conflicting Lanes Left	0	1	1
Conflicting Approach Right	NB		WB
Conflicting Lanes Right	1	0	2
HCM Control Delay	47.8	37.2	65
HCM LOS	E	E	F

Lane	NBLn1	EBLn1	WBLn1	WBLn2
Vol Left, %	51%	0%	100%	0%
Vol Thru, %	0%	74%	0%	100%
Vol Right, %	49%	26%	0%	0%
Sign Control	Stop	Stop	Stop	Stop
Traffic Vol by Lane	499	379	148	333
LT Vol	252	0	148	0
Through Vol	0	281	0	333
RT Vol	247	98	0	0
Lane Flow Rate	640	486	190	427
Geometry Grp	2	5	7	7
Degree of Util (X)	1	0.917	0.423	0.894
Departure Headway (Hd)	6.749	6.901	8.035	7.535
Convergence, Y/N	Yes	Yes	Yes	Yes
Cap	544	530	452	482
Service Time	4.768	4.901	5.735	5.235
HCM Lane V/C Ratio	1.176	0.917	0.42	0.886
HCM Control Delay	65	47.8	16.5	46.4
HCM Lane LOS	F	E	C	E
HCM 95th-tile Q	14.1	11	2.1	9.9

Intersection	
Int Delay, s/veh	4

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Vol, veh/h	2	0	3	36	0	27	5	754	103	69	570	2
Conflicting Peds, #/hr	0	0	0	0	0	0	0	0	0	0	0	0
Sign Control	Stop	Stop	Stop	Stop	Stop	Stop	Free	Free	Free	Free	Free	Free
RT Channelized	-	-	None	-	-	None	-	-	None	-	-	None
Storage Length	-	-	-	-	-	-	1	-	-	190	-	-
Veh in Median Storage, #	-	0	-	-	0	-	-	0	-	-	0	-
Grade, %	-	0	-	-	0	-	-	0	-	-	0	-
Peak Hour Factor	92	92	92	92	92	92	92	92	92	92	92	92
Heavy Vehicles, %	2	2	2	2	2	2	2	2	2	2	2	2
Mvmt Flow	2	0	3	39	0	29	5	820	112	75	620	2

Major/Minor	Minor2			Minor1			Major1			Major2		
Conflicting Flow All	1672	1713	621	1658	1658	876	622	0	0	932	0	0
Stage 1	771	771	-	886	886	-	-	-	-	-	-	-
Stage 2	901	942	-	772	772	-	-	-	-	-	-	-
Critical Hdwy	7.12	6.52	6.22	7.12	6.52	6.22	4.12	-	-	4.12	-	-
Critical Hdwy Stg 1	6.12	5.52	-	6.12	5.52	-	-	-	-	-	-	-
Critical Hdwy Stg 2	6.12	5.52	-	6.12	5.52	-	-	-	-	-	-	-
Follow-up Hdwy	3.518	4.018	3.318	3.518	4.018	3.318	2.218	-	-	2.218	-	-
Pot Cap-1 Maneuver	76	90	487	78	98	348	959	-	-	734	-	-
Stage 1	393	410	-	339	363	-	-	-	-	-	-	-
Stage 2	333	342	-	392	409	-	-	-	-	-	-	-
Platoon blocked, %								-	-		-	-
Mov Cap-1 Maneuver	64	80	487	71	88	348	959	-	-	734	-	-
Mov Cap-2 Maneuver	64	80	-	71	88	-	-	-	-	-	-	-
Stage 1	391	368	-	337	361	-	-	-	-	-	-	-
Stage 2	303	340	-	350	367	-	-	-	-	-	-	-

Approach	EB	WB	NB	SB
HCM Control Delay, s	33	83.6	0.1	1.1
HCM LOS	D	F		

Minor Lane/Major Mvmt	NBL	NBT	NBR	EBLn1	WBLn1	SBL	SBT	SBR
Capacity (veh/h)	959	-	-	134	108	734	-	-
HCM Lane V/C Ratio	0.006	-	-	0.041	0.634	0.102	-	-
HCM Control Delay (s)	8.8	-	-	33	83.6	10.5	-	-
HCM Lane LOS	A	-	-	D	F	B	-	-
HCM 95th %tile Q(veh)	0	-	-	0.1	3.2	0.3	-	-

Intersection	
Int Delay, s/veh	0.5

Movement	EBL	EBR	NBL	NBT	SBT	SBR
Vol, veh/h	24	12	12	838	568	41
Conflicting Peds, #/hr	0	0	0	0	0	0
Sign Control	Stop	Stop	Free	Free	Free	Free
RT Channelized	-	None	-	None	-	None
Storage Length	0	-	1	-	-	-
Veh in Median Storage, #	0	-	-	0	0	-
Grade, %	0	-	-	0	0	-
Peak Hour Factor	92	92	92	92	92	92
Heavy Vehicles, %	2	2	2	2	2	2
Mvmt Flow	26	13	13	911	617	45

Major/Minor	Minor2		Major1		Major2	
Conflicting Flow All	1577	640	662	0	-	0
Stage 1	640	-	-	-	-	-
Stage 2	937	-	-	-	-	-
Critical Hdwy	6.42	6.22	4.12	-	-	-
Critical Hdwy Stg 1	5.42	-	-	-	-	-
Critical Hdwy Stg 2	5.42	-	-	-	-	-
Follow-up Hdwy	3.518	3.318	2.218	-	-	-
Pot Cap-1 Maneuver	121	475	927	-	-	-
Stage 1	525	-	-	-	-	-
Stage 2	381	-	-	-	-	-
Platoon blocked, %				-	-	-
Mov Cap-1 Maneuver	119	475	927	-	-	-
Mov Cap-2 Maneuver	252	-	-	-	-	-
Stage 1	525	-	-	-	-	-
Stage 2	376	-	-	-	-	-

Approach	EB	NB	SB
HCM Control Delay, s	18.8	0.1	0
HCM LOS	C		

Minor Lane/Major Mvmt	NBL	NBT	EBLn1	SBT	SBR
Capacity (veh/h)	927	-	299	-	-
HCM Lane V/C Ratio	0.014	-	0.131	-	-
HCM Control Delay (s)	8.9	-	18.8	-	-
HCM Lane LOS	A	-	C	-	-
HCM 95th %tile Q(veh)	0	-	0.4	-	-

Intersection	
Int Delay, s/veh	2.8

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Vol, veh/h	46	0	14	0	0	5	18	799	8	5	453	122
Conflicting Peds, #/hr	0	0	0	0	0	0	0	0	0	0	0	0
Sign Control	Stop	Stop	Stop	Stop	Stop	Stop	Free	Free	Free	Free	Free	Free
RT Channelized	-	-	None	-	-	None	-	-	None	-	-	None
Storage Length	-	-	-	-	-	-	1	-	-	1	-	-
Veh in Median Storage, #	-	0	-	-	0	-	-	0	-	-	0	-
Grade, %	-	0	-	-	0	-	-	0	-	-	0	-
Peak Hour Factor	92	92	92	92	92	92	92	92	92	92	92	92
Heavy Vehicles, %	2	2	2	2	2	2	2	2	2	2	2	2
Mvmt Flow	50	0	15	0	0	5	20	868	9	5	492	133

Major/Minor	Minor2			Minor1			Major1			Major2		
Conflicting Flow All	1485	1486	559	1489	1548	873	625	0	0	877	0	0
Stage 1	570	570	-	912	912	-	-	-	-	-	-	-
Stage 2	915	916	-	577	636	-	-	-	-	-	-	-
Critical Hdwy	7.12	6.52	6.22	7.12	6.52	6.22	4.12	-	-	4.12	-	-
Critical Hdwy Stg 1	6.12	5.52	-	6.12	5.52	-	-	-	-	-	-	-
Critical Hdwy Stg 2	6.12	5.52	-	6.12	5.52	-	-	-	-	-	-	-
Follow-up Hdwy	3.518	4.018	3.318	3.518	4.018	3.318	2.218	-	-	2.218	-	-
Pot Cap-1 Maneuver	103	124	529	102	114	349	956	-	-	770	-	-
Stage 1	506	505	-	328	353	-	-	-	-	-	-	-
Stage 2	327	351	-	502	472	-	-	-	-	-	-	-
Platoon blocked, %								-	-		-	-
Mov Cap-1 Maneuver	99	121	529	97	111	349	956	-	-	770	-	-
Mov Cap-2 Maneuver	99	121	-	97	111	-	-	-	-	-	-	-
Stage 1	495	502	-	321	346	-	-	-	-	-	-	-
Stage 2	315	344	-	484	469	-	-	-	-	-	-	-

Approach	EB	WB	NB	SB
HCM Control Delay, s	64.2	15.5	0.2	0.1
HCM LOS	F	C		

Minor Lane/Major Mvmt	NBL	NBT	NBR	EBLn1	WBLn1	SBL	SBT	SBR
Capacity (veh/h)	956	-	-	122	349	770	-	-
HCM Lane V/C Ratio	0.02	-	-	0.535	0.016	0.007	-	-
HCM Control Delay (s)	8.8	-	-	64.2	15.5	9.7	-	-
HCM Lane LOS	A	-	-	F	C	A	-	-
HCM 95th %tile Q(veh)	0.1	-	-	2.5	0	0	-	-

Intersection	
Int Delay, s/veh	3.3

Movement	WBL	WBR	NBT	NBR	SBL	SBT
Vol, veh/h	20	58	185	23	112	141
Conflicting Peds, #/hr	0	0	0	0	0	0
Sign Control	Stop	Stop	Free	Free	Free	Free
RT Channelized	-	None	-	None	-	None
Storage Length	0	-	-	-	-	-
Veh in Median Storage, #	0	-	0	-	-	0
Grade, %	0	-	0	-	-	0
Peak Hour Factor	92	92	92	92	92	92
Heavy Vehicles, %	2	2	2	2	2	2
Mvmt Flow	22	63	201	25	122	153

Major/Minor	Minor1		Major1		Major2	
Conflicting Flow All	611	214	0	0	226	0
Stage 1	214	-	-	-	-	-
Stage 2	397	-	-	-	-	-
Critical Hdwy	6.42	6.22	-	-	4.12	-
Critical Hdwy Stg 1	5.42	-	-	-	-	-
Critical Hdwy Stg 2	5.42	-	-	-	-	-
Follow-up Hdwy	3.518	3.318	-	-	2.218	-
Pot Cap-1 Maneuver	457	826	-	-	1342	-
Stage 1	822	-	-	-	-	-
Stage 2	679	-	-	-	-	-
Platoon blocked, %			-	-		-
Mov Cap-1 Maneuver	412	826	-	-	1342	-
Mov Cap-2 Maneuver	412	-	-	-	-	-
Stage 1	822	-	-	-	-	-
Stage 2	612	-	-	-	-	-

Approach	WB	NB	SB
HCM Control Delay, s	11.3	0	3.5
HCM LOS	B		

Minor Lane/Major Mvmt	NBT	NBR	WBLn1	SBL	SBT
Capacity (veh/h)	-	-	657	1342	-
HCM Lane V/C Ratio	-	-	0.129	0.091	-
HCM Control Delay (s)	-	-	11.3	8	0
HCM Lane LOS	-	-	B	A	A
HCM 95th %tile Q(veh)	-	-	0.4	0.3	-

Intersection	
Int Delay, s/veh	11

Movement	EBL	EBT	WBT	WBR	SBL	SBR
Vol, veh/h	142	376	369	36	52	105
Conflicting Peds, #/hr	0	0	0	0	0	0
Sign Control	Free	Free	Free	Free	Stop	Stop
RT Channelized	-	None	-	None	-	None
Storage Length	-	-	-	-	0	-
Veh in Median Storage, #	-	0	0	-	0	-
Grade, %	-	0	0	-	0	-
Peak Hour Factor	75	75	75	75	75	75
Heavy Vehicles, %	2	2	2	2	2	2
Mvmt Flow	189	501	492	48	69	140

Major/Minor	Major1		Major2		Minor2	
Conflicting Flow All	540	0	-	0	1396	516
Stage 1	-	-	-	-	516	-
Stage 2	-	-	-	-	880	-
Critical Hdwy	4.12	-	-	-	6.42	6.22
Critical Hdwy Stg 1	-	-	-	-	5.42	-
Critical Hdwy Stg 2	-	-	-	-	5.42	-
Follow-up Hdwy	2.218	-	-	-	3.518	3.318
Pot Cap-1 Maneuver	1028	-	-	-	156	559
Stage 1	-	-	-	-	599	-
Stage 2	-	-	-	-	406	-
Platoon blocked, %		-	-	-		
Mov Cap-1 Maneuver	1028	-	-	-	116	559
Mov Cap-2 Maneuver	-	-	-	-	116	-
Stage 1	-	-	-	-	599	-
Stage 2	-	-	-	-	302	-

Approach	EB	WB	SB
HCM Control Delay, s	2.5	0	67.3
HCM LOS			F

Minor Lane/Major Mvmt	EBL	EBT	WBT	WBR	SBLn1
Capacity (veh/h)	1028	-	-	-	247
HCM Lane V/C Ratio	0.184	-	-	-	0.848
HCM Control Delay (s)	9.3	0	-	-	67.3
HCM Lane LOS	A	A	-	-	F
HCM 95th %tile Q(veh)	0.7	-	-	-	6.8

Intersection: 1: Missouri Flat Road & WB Ramps

Movement	WB	WB	WB	WB	NB	NB	NB	NB	SB	SB
Directions Served	L	LT	R	R	L	L	T	T	T	T
Maximum Queue (ft)	199	211	154	129	137	149	390	314	175	131
Average Queue (ft)	125	126	77	32	124	135	144	63	77	56
95th Queue (ft)	188	199	135	82	162	168	353	177	146	114
Link Distance (ft)	983	983					395	395	459	459
Upstream Blk Time (%)							0	0		
Queuing Penalty (veh)							3	0		
Storage Bay Dist (ft)			400	400	125	125				
Storage Blk Time (%)					1	11	0			
Queuing Penalty (veh)					5	39	1			

Intersection: 2: Missouri Flat Road & EB Ramps

Movement	EB	EB	EB	NB	NB	NB	SB	SB	SB	SB
Directions Served	L	LTR	R	T	T	R	L	L	T	T
Maximum Queue (ft)	147	194	185	171	170	103	103	115	132	156
Average Queue (ft)	55	113	84	140	119	20	42	66	27	40
95th Queue (ft)	122	173	158	202	193	68	85	101	80	106
Link Distance (ft)		1460		138	138	138			395	395
Upstream Blk Time (%)				15	7	0				
Queuing Penalty (veh)				54	27	0				
Storage Bay Dist (ft)	700		550				150	150		
Storage Blk Time (%)							0	0	0	
Queuing Penalty (veh)							0	0	0	

Intersection: 3: Missouri Flat Road & Mother Lode Drive

Movement	EB	EB	EB	NB	NB	NB	NB	B24	B24	B24	SB	SB
Directions Served	L	L	R	L	T	T	R	T	T		T	T
Maximum Queue (ft)	92	154	73	89	358	249	55	149	152	35	164	169
Average Queue (ft)	13	71	20	18	119	58	2	5	7	1	92	108
95th Queue (ft)	52	132	55	63	278	174	40	78	87	35	179	187
Link Distance (ft)		633			1949	1949		368	368	368	138	138
Upstream Blk Time (%)								0	0		5	7
Queuing Penalty (veh)								0	0		32	45
Storage Bay Dist (ft)	200		200	150			250					
Storage Blk Time (%)		0			6	0						7
Queuing Penalty (veh)		0			1	0						3

Intersection: 3: Missouri Flat Road & Mother Lode Drive

Movement	SB
Directions Served	R
Maximum Queue (ft)	82
Average Queue (ft)	6
95th Queue (ft)	53
Link Distance (ft)	
Upstream Blk Time (%)	0
Queuing Penalty (veh)	0
Storage Bay Dist (ft)	200
Storage Blk Time (%)	0
Queuing Penalty (veh)	0

Intersection: 4: Missouri Flat Road & Forni Road

Movement	EB	EB	EB	EB	WB	WB	NB	NB	NB	NB	B25	B25
Directions Served	L	L	T	R	L	T	L	T	T	R	T	T
Maximum Queue (ft)	176	186	148	67	101	109	238	376	382	175	41	44
Average Queue (ft)	71	90	51	19	47	44	41	198	200	27	3	3
95th Queue (ft)	141	159	111	49	90	92	135	361	371	128	24	29
Link Distance (ft)			1180			275		317	317		652	652
Upstream Blk Time (%)								2	3			
Queuing Penalty (veh)								14	16			
Storage Bay Dist (ft)	195	195		150	190		250			150		
Storage Blk Time (%)	0	0	0	0				6	17	0		
Queuing Penalty (veh)	0	0	1	0				3	10	0		

Intersection: 4: Missouri Flat Road & Forni Road

Movement	SB	SB	SB	SB	B24	B24
Directions Served	L	T	T	R	T	T
Maximum Queue (ft)	316	391	390	175	89	63
Average Queue (ft)	201	152	157	70	13	4
95th Queue (ft)	322	351	316	168	124	57
Link Distance (ft)		368	368		1949	1949
Upstream Blk Time (%)		4	1			
Queuing Penalty (veh)		25	5			
Storage Bay Dist (ft)	300			150		
Storage Blk Time (%)	7	1	6	0		
Queuing Penalty (veh)	27	2	16	0		

Intersection: 5: Missouri Flat Road & Golden Center Drive

Movement	EB	WB	NB	NB	NB	B43	B43	SB	SB	SB	SB
Directions Served	LTR	LTR	L	T	TR	T	T	L	T	T	R
Maximum Queue (ft)	66	142	155	300	301	126	140	194	442	486	17
Average Queue (ft)	20	52	38	182	199	11	15	77	126	188	2
95th Queue (ft)	51	105	102	295	307	72	84	158	312	388	10
Link Distance (ft)	184	367		216	216	1592	1592		652	652	
Upstream Blk Time (%)				5	7						
Queuing Penalty (veh)				32	47						
Storage Bay Dist (ft)			150					175			500
Storage Blk Time (%)				11				2	4	1	
Queuing Penalty (veh)				4				6	3	0	

Intersection: 6: Missouri Flat Road & Missouri Flat Rd/Diamond Springs Parkway

Movement	EB	EB	EB	WB	WB	WB	NB	NB	NB
Directions Served	T	T	R	L	T	T	L	L	R
Maximum Queue (ft)	104	192	230	95	120	132	154	159	30
Average Queue (ft)	37	46	46	38	54	57	87	92	8
95th Queue (ft)	81	116	161	78	101	105	136	142	28
Link Distance (ft)	1592	1592			2033	2033		451	451
Upstream Blk Time (%)									
Queuing Penalty (veh)									
Storage Bay Dist (ft)			250	500			275		
Storage Blk Time (%)			0						
Queuing Penalty (veh)			0						

Intersection: 10: Pleasant Valley Rd & Missouri Flat Rd

Movement	EB	EB	EB	WB	WB	SB	SB	B68
Directions Served	L	L	T	T	R	L	R	T
Maximum Queue (ft)	142	155	546	288	216	186	117	28
Average Queue (ft)	124	115	193	141	94	92	45	1
95th Queue (ft)	164	198	470	229	185	160	91	13
Link Distance (ft)			658	1506		127	127	419
Upstream Blk Time (%)			0			3	0	
Queuing Penalty (veh)			0			7	0	
Storage Bay Dist (ft)	130	130			200			
Storage Blk Time (%)	29	22	2	1	0			
Queuing Penalty (veh)	50	37	5	5	0			

Zone Summary

Zone wide Queuing Penalty: 530

1: Missouri Flat Road & WB Ramps Performance by approach

Approach	WB	NB	SB	All
Denied Del/Veh (s)	1.2	0.0	0.0	0.3
Total Del/Veh (s)	26.2	11.3	14.2	16.6

2: Missouri Flat Road & EB Ramps Performance by approach

Approach	EB	NB	SB	All
Denied Del/Veh (s)	1.6	0.0	0.1	0.4
Total Del/Veh (s)	37.8	18.0	24.6	26.0

3: Missouri Flat Road & Mother Lode Drive Performance by approach

Approach	EB	NB	SB	All
Denied Del/Veh (s)	1.9	0.0	0.0	0.1
Total Del/Veh (s)	50.4	15.3	7.3	12.4

4: Missouri Flat Road & Forni Road Performance by approach

Approach	EB	WB	NB	SB	All
Denied Del/Veh (s)	5.8	0.0	0.1	0.0	1.1
Total Del/Veh (s)	100.5	13.1	28.9	27.8	40.7

5: Missouri Flat Road & Golden Center Drive Performance by approach

Approach	EB	WB	NB	SB	All
Denied Del/Veh (s)	0.2	0.2	0.3	0.0	0.1
Total Del/Veh (s)	32.1	37.8	21.9	29.8	27.3

6: Missouri Flat Road & Missouri Flat Rd/Diamond Springs Parkway Performance by approach

Approach	EB	WB	NB	All
Denied Del/Veh (s)	0.0	0.0	0.0	0.0
Total Del/Veh (s)	18.0	5.2	10.9	12.2

10: Pleasant Valley Rd & Missouri Flat Rd Performance by approach

Approach	EB	WB	SB	All
Denied Del/Veh (s)	0.0	0.2	3.2	1.5
Total Del/Veh (s)	66.4	17.0	13.8	30.3

Total Zone Performance

Denied Del/Veh (s)	3.3
Total Del/Veh (s)	378.7

Intersection	
Intersection Delay, s/veh	39.2
Intersection LOS	E

Movement	EBU	EBT	EBR	WBU	WBL	WBT	NBU	NBL	NBR
Vol, veh/h	0	370	233	0	233	305	0	117	166
Peak Hour Factor	0.92	0.78	0.78	0.92	0.78	0.78	0.92	0.78	0.78
Heavy Vehicles, %	2	2	2	2	2	2	2	2	2
Mvmt Flow	0	474	299	0	299	391	0	150	213
Number of Lanes	0	1	0	0	1	1	0	1	0

Approach	EB	WB	NB
Opposing Approach	WB	EB	
Opposing Lanes	2	1	0
Conflicting Approach Left		NB	EB
Conflicting Lanes Left	0	1	1
Conflicting Approach Right	NB		WB
Conflicting Lanes Right	1	0	2
HCM Control Delay	61.5	23.4	21.5
HCM LOS	F	C	C

Lane	NBLn1	EBLn1	WBLn1	WBLn2
Vol Left, %	41%	0%	100%	0%
Vol Thru, %	0%	61%	0%	100%
Vol Right, %	59%	39%	0%	0%
Sign Control	Stop	Stop	Stop	Stop
Traffic Vol by Lane	283	603	233	305
LT Vol	117	0	233	0
Through Vol	0	370	0	305
RT Vol	166	233	0	0
Lane Flow Rate	363	773	299	391
Geometry Grp	2	5	7	7
Degree of Util (X)	0.659	1	0.602	0.733
Departure Headway (Hd)	6.538	6.089	7.253	6.752
Convergence, Y/N	Yes	Yes	Yes	Yes
Cap	548	603	502	540
Service Time	4.632	4.104	4.953	4.452
HCM Lane V/C Ratio	0.662	1.282	0.596	0.724
HCM Control Delay	21.5	61.5	20.3	25.8
HCM Lane LOS	C	F	C	D
HCM 95th-tile Q	4.8	14.9	3.9	6.1

Intersection	
Int Delay, s/veh	8.5

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Vol, veh/h	1	0	3	32	0	166	5	615	9	13	896	0
Conflicting Peds, #/hr	0	0	0	0	0	0	0	0	0	0	0	0
Sign Control	Stop	Stop	Stop	Stop	Stop	Stop	Free	Free	Free	Free	Free	Free
RT Channelized	-	-	None	-	-	None	-	-	None	-	-	None
Storage Length	-	-	-	-	-	-	1	-	-	190	-	-
Veh in Median Storage, #	-	0	-	-	0	-	-	0	-	-	0	-
Grade, %	-	0	-	-	0	-	-	0	-	-	0	-
Peak Hour Factor	92	92	92	92	92	92	92	92	92	92	92	92
Heavy Vehicles, %	2	2	2	2	2	2	2	2	2	2	2	2
Mvmt Flow	1	0	3	35	0	180	5	668	10	14	974	0

Major/Minor	Minor2			Minor1			Major1			Major2		
Conflicting Flow All	1776	1691	974	1688	1686	673	974	0	0	678	0	0
Stage 1	1002	1002	-	684	684	-	-	-	-	-	-	-
Stage 2	774	689	-	1004	1002	-	-	-	-	-	-	-
Critical Hdwy	7.12	6.52	6.22	7.12	6.52	6.22	4.12	-	-	4.12	-	-
Critical Hdwy Stg 1	6.12	5.52	-	6.12	5.52	-	-	-	-	-	-	-
Critical Hdwy Stg 2	6.12	5.52	-	6.12	5.52	-	-	-	-	-	-	-
Follow-up Hdwy	3.518	4.018	3.318	3.518	4.018	3.318	2.218	-	-	2.218	-	-
Pot Cap-1 Maneuver	64	93	306	74	94	455	708	-	-	914	-	-
Stage 1	292	320	-	439	449	-	-	-	-	-	-	-
Stage 2	391	446	-	291	320	-	-	-	-	-	-	-
Platoon blocked, %								-	-		-	-
Mov Cap-1 Maneuver	38	91	306	72	92	455	708	-	-	914	-	-
Mov Cap-2 Maneuver	38	91	-	72	92	-	-	-	-	-	-	-
Stage 1	290	315	-	436	446	-	-	-	-	-	-	-
Stage 2	234	443	-	283	315	-	-	-	-	-	-	-

Approach	EB	WB	NB	SB
HCM Control Delay, s	38.8	73.3	0.1	0.1
HCM LOS	E	F		

Minor Lane/Major Mvmt	NBL	NBT	NBR	EBLn1	WBLn1	SBL	SBT	SBR
Capacity (veh/h)	708	-	-	111	245	914	-	-
HCM Lane V/C Ratio	0.008	-	-	0.039	0.878	0.015	-	-
HCM Control Delay (s)	10.1	-	-	38.8	73.3	9	-	-
HCM Lane LOS	B	-	-	E	F	A	-	-
HCM 95th %tile Q(veh)	0	-	-	0.1	7.3	0	-	-

Intersection	
Int Delay, s/veh	0.7

Movement	EBL	EBR	NBL	NBT	SBT	SBR
Vol, veh/h	37	11	8	592	912	19
Conflicting Peds, #/hr	0	0	0	0	0	0
Sign Control	Stop	Stop	Free	Free	Free	Free
RT Channelized	-	None	-	None	-	None
Storage Length	0	-	1	-	-	-
Veh in Median Storage, #	0	-	-	0	0	-
Grade, %	0	-	-	0	0	-
Peak Hour Factor	92	92	92	92	92	92
Heavy Vehicles, %	2	2	2	2	2	2
Mvmt Flow	40	12	9	643	991	21

Major/Minor	Minor2		Major1		Major2	
Conflicting Flow All	1663	1002	1012	0	-	0
Stage 1	1002	-	-	-	-	-
Stage 2	661	-	-	-	-	-
Critical Hdwy	6.42	6.22	4.12	-	-	-
Critical Hdwy Stg 1	5.42	-	-	-	-	-
Critical Hdwy Stg 2	5.42	-	-	-	-	-
Follow-up Hdwy	3.518	3.318	2.218	-	-	-
Pot Cap-1 Maneuver	107	294	685	-	-	-
Stage 1	355	-	-	-	-	-
Stage 2	514	-	-	-	-	-
Platoon blocked, %				-	-	-
Mov Cap-1 Maneuver	106	294	685	-	-	-
Mov Cap-2 Maneuver	237	-	-	-	-	-
Stage 1	355	-	-	-	-	-
Stage 2	507	-	-	-	-	-

Approach	EB	NB	SB
HCM Control Delay, s	23.3	0.1	0
HCM LOS	C		

Minor Lane/Major Mvmt	NBL	NBT	EBLn1	SBT	SBR
Capacity (veh/h)	685	-	248	-	-
HCM Lane V/C Ratio	0.013	-	0.21	-	-
HCM Control Delay (s)	10.3	-	23.3	-	-
HCM Lane LOS	B	-	C	-	-
HCM 95th %tile Q(veh)	0	-	0.8	-	-

Intersection	
Int Delay, s/veh	28.2

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Vol, veh/h	114	0	32	0	0	5	11	481	5	5	835	83
Conflicting Peds, #/hr	0	0	0	0	0	0	0	0	0	0	0	0
Sign Control	Stop	Stop	Stop	Stop	Stop	Stop	Free	Free	Free	Free	Free	Free
RT Channelized	-	-	None	-	-	None	-	-	None	-	-	None
Storage Length	-	-	-	-	-	-	1	-	-	1	-	-
Veh in Median Storage, #	-	0	-	-	0	-	-	0	-	-	0	-
Grade, %	-	0	-	-	0	-	-	0	-	-	0	-
Peak Hour Factor	92	92	92	92	92	92	92	92	92	92	92	92
Heavy Vehicles, %	2	2	2	2	2	2	2	2	2	2	2	2
Mvmt Flow	124	0	35	0	0	5	12	523	5	5	908	90

Major/Minor	Minor2			Minor1			Major1			Major2		
Conflicting Flow All	1516	1516	953	1530	1558	526	998	0	0	528	0	0
Stage 1	964	964	-	549	549	-	-	-	-	-	-	-
Stage 2	552	552	-	981	1009	-	-	-	-	-	-	-
Critical Hdwy	7.12	6.52	6.22	7.12	6.52	6.22	4.12	-	-	4.12	-	-
Critical Hdwy Stg 1	6.12	5.52	-	6.12	5.52	-	-	-	-	-	-	-
Critical Hdwy Stg 2	6.12	5.52	-	6.12	5.52	-	-	-	-	-	-	-
Follow-up Hdwy	3.518	4.018	3.318	3.518	4.018	3.318	2.218	-	-	2.218	-	-
Pot Cap-1 Maneuver	~ 98	119	314	96	112	552	693	-	-	1039	-	-
Stage 1	307	334	-	520	516	-	-	-	-	-	-	-
Stage 2	518	515	-	300	318	-	-	-	-	-	-	-
Platoon blocked, %								-	-		-	-
Mov Cap-1 Maneuver	~ 95	116	314	84	110	552	693	-	-	1039	-	-
Mov Cap-2 Maneuver	~ 95	116	-	84	110	-	-	-	-	-	-	-
Stage 1	302	332	-	511	507	-	-	-	-	-	-	-
Stage 2	504	506	-	265	316	-	-	-	-	-	-	-

Approach	EB	WB	NB	SB
HCM Control Delay, s	$ 302.1	11.6	0.2	0
HCM LOS	F	B		

Minor Lane/Major Mvmt	NBL	NBT	NBR	EBLn1	WBLn1	SBL	SBT	SBR
Capacity (veh/h)	693	-	-	112	552	1039	-	-
HCM Lane V/C Ratio	0.017	-	-	1.417	0.01	0.005	-	-
HCM Control Delay (s)	10.3	-	-	$ 302.1	11.6	8.5	-	-
HCM Lane LOS	B	-	-	F	B	A	-	-
HCM 95th %tile Q(veh)	0.1	-	-	11.2	0	0	-	-

Notes

~: Volume exceeds capacity $: Delay exceeds 300s +: Computation Not Defined *: All major volume in platoon

Intersection	
Int Delay, s/veh	4.8

Movement	WBL	WBR	NBT	NBR	SBL	SBT
Vol, veh/h	35	182	120	27	80	199
Conflicting Peds, #/hr	0	0	0	0	0	0
Sign Control	Stop	Stop	Free	Free	Free	Free
RT Channelized	-	None	-	None	-	None
Storage Length	0	-	-	-	-	-
Veh in Median Storage, #	0	-	0	-	-	0
Grade, %	0	-	0	-	-	0
Peak Hour Factor	92	92	92	92	92	92
Heavy Vehicles, %	2	2	2	2	2	2
Mvmt Flow	38	198	130	29	87	216

Major/Minor	Minor1		Major1		Major2	
Conflicting Flow All	535	145	0	0	160	0
Stage 1	145	-	-	-	-	-
Stage 2	390	-	-	-	-	-
Critical Hdwy	6.42	6.22	-	-	4.12	-
Critical Hdwy Stg 1	5.42	-	-	-	-	-
Critical Hdwy Stg 2	5.42	-	-	-	-	-
Follow-up Hdwy	3.518	3.318	-	-	2.218	-
Pot Cap-1 Maneuver	506	902	-	-	1419	-
Stage 1	882	-	-	-	-	-
Stage 2	684	-	-	-	-	-
Platoon blocked, %			-	-		-
Mov Cap-1 Maneuver	471	902	-	-	1419	-
Mov Cap-2 Maneuver	471	-	-	-	-	-
Stage 1	882	-	-	-	-	-
Stage 2	636	-	-	-	-	-

Approach	WB	NB	SB
HCM Control Delay, s	11.5	0	2.2
HCM LOS	B		

Minor Lane/Major Mvmt	NBT	NBR	WBLn1	SBL	SBT
Capacity (veh/h)	-	-	786	1419	-
HCM Lane V/C Ratio	-	-	0.3	0.061	-
HCM Control Delay (s)	-	-	11.5	7.7	0
HCM Lane LOS	-	-	B	A	A
HCM 95th %tile Q(veh)	-	-	1.3	0.2	-

Intersection	
Int Delay, s/veh	4.7

Movement	EBL	EBT	WBT	WBR	SBL	SBR
Vol, veh/h	91	458	376	30	21	153
Conflicting Peds, #/hr	0	0	0	0	0	0
Sign Control	Free	Free	Free	Free	Stop	Stop
RT Channelized	-	None	-	None	-	None
Storage Length	-	-	-	-	0	-
Veh in Median Storage, #	-	0	0	-	0	-
Grade, %	-	0	0	-	0	-
Peak Hour Factor	75	75	75	75	75	75
Heavy Vehicles, %	2	2	2	2	2	2
Mvmt Flow	121	611	501	40	28	204

Major/Minor	Major1		Major2		Minor2	
Conflicting Flow All	541	0	-	0	1374	521
Stage 1	-	-	-	-	521	-
Stage 2	-	-	-	-	853	-
Critical Hdwy	4.12	-	-	-	6.42	6.22
Critical Hdwy Stg 1	-	-	-	-	5.42	-
Critical Hdwy Stg 2	-	-	-	-	5.42	-
Follow-up Hdwy	2.218	-	-	-	3.518	3.318
Pot Cap-1 Maneuver	1028	-	-	-	160	555
Stage 1	-	-	-	-	596	-
Stage 2	-	-	-	-	418	-
Platoon blocked, %		-	-	-		
Mov Cap-1 Maneuver	1028	-	-	-	132	555
Mov Cap-2 Maneuver	-	-	-	-	132	-
Stage 1	-	-	-	-	596	-
Stage 2	-	-	-	-	344	-

Approach	EB	WB	SB
HCM Control Delay, s	1.5	0	25.7
HCM LOS			D

Minor Lane/Major Mvmt	EBL	EBT	WBT	WBR	SBLn1
Capacity (veh/h)	1028	-	-	-	400
HCM Lane V/C Ratio	0.118	-	-	-	0.58
HCM Control Delay (s)	9	0	-	-	25.7
HCM Lane LOS	A	A	-	-	D
HCM 95th %tile Q(veh)	0.4	-	-	-	3.5

Intersection: 1: Missouri Flat Road & WB Ramps

Movement	WB	WB	WB	WB	NB	NB	NB	NB	SB	SB
Directions Served	L	LT	R	R	L	L	T	T	T	T
Maximum Queue (ft)	248	250	204	170	135	146	191	128	276	245
Average Queue (ft)	147	157	102	45	88	103	64	56	150	121
95th Queue (ft)	222	228	171	116	153	149	133	107	255	214
Link Distance (ft)	983	983					395	395	459	459
Upstream Blk Time (%)										
Queuing Penalty (veh)										
Storage Bay Dist (ft)			400	400	125	125				
Storage Blk Time (%)					0	1	0			
Queuing Penalty (veh)					1	5	0			

Intersection: 2: Missouri Flat Road & EB Ramps

Movement	EB	EB	EB	NB	NB	NB	SB	SB	SB	SB
Directions Served	L	LTR	R	T	T	R	L	L	T	T
Maximum Queue (ft)	285	352	372	172	173	91	160	174	394	395
Average Queue (ft)	117	191	192	155	141	17	94	123	147	168
95th Queue (ft)	243	307	316	183	190	58	157	185	331	336
Link Distance (ft)		1460		138	138	138			395	395
Upstream Blk Time (%)				26	14	0			0	0
Queuing Penalty (veh)				90	50	0			2	2
Storage Bay Dist (ft)	700		550				150	150		
Storage Blk Time (%)							1	3	8	
Queuing Penalty (veh)							4	20	25	

Intersection: 3: Missouri Flat Road & Mother Lode Drive

Movement	EB	EB	EB	NB	NB	NB	B24	B24	SB	SB	SB
Directions Served	L	L	R	L	T	T	T	T	T	T	R
Maximum Queue (ft)	46	130	86	174	355	233	224	273	166	189	123
Average Queue (ft)	7	60	31	43	147	74	8	12	131	135	12
95th Queue (ft)	29	110	67	119	304	179	97	125	191	192	76
Link Distance (ft)		633			1949	1949	368	368	138	138	
Upstream Blk Time (%)							0	0	13	15	0
Queuing Penalty (veh)							0	0	115	138	0
Storage Bay Dist (ft)	200		200	150							200
Storage Blk Time (%)					11	0				15	0
Queuing Penalty (veh)					5	0				11	1

Intersection: 4: Missouri Flat Road & Forni Road

Movement	EB	EB	EB	EB	WB	WB	NB	NB	NB	NB	B25	B25
Directions Served	L	L	T	R	L	T	L	T	T	R	T	T
Maximum Queue (ft)	207	220	922	74	57	94	257	366	377	174	55	93
Average Queue (ft)	190	204	438	30	16	31	75	194	205	15	3	6
95th Queue (ft)	240	248	1077	62	45	73	185	358	371	95	46	57
Link Distance (ft)			1180			275		317	317		652	652
Upstream Blk Time (%)			5					2	3			
Queuing Penalty (veh)			0					10	14			
Storage Bay Dist (ft)	195	195		150	190		250			150		
Storage Blk Time (%)	12	36					0	6	17	0		
Queuing Penalty (veh)	16	49					0	4	4	0		

Intersection: 4: Missouri Flat Road & Forni Road

Movement	SB	SB	SB	SB	B24	B24
Directions Served	L	T	T	R	T	T
Maximum Queue (ft)	324	432	447	175	227	316
Average Queue (ft)	168	261	329	139	29	61
95th Queue (ft)	315	465	531	233	160	241
Link Distance (ft)		368	368		1949	1949
Upstream Blk Time (%)		4	11			
Queuing Penalty (veh)		39	100			
Storage Bay Dist (ft)	300			150		
Storage Blk Time (%)	2	5	23	0		
Queuing Penalty (veh)	12	9	95	3		

Intersection: 5: Missouri Flat Road & Golden Center Drive

Movement	EB	WB	NB	NB	NB	B43	B43	SB	SB	SB	SB	B25
Directions Served	LTR	LTR	L	T	TR	T	T	L	T	T	R	T
Maximum Queue (ft)	154	242	172	289	282	82	85	198	569	600	117	84
Average Queue (ft)	57	113	81	166	178	4	5	69	236	307	7	3
95th Queue (ft)	118	201	162	265	271	45	48	159	517	586	96	53
Link Distance (ft)	184	367		216	216	1592	1592		652	652		317
Upstream Blk Time (%)	0			3	4				0	0		0
Queuing Penalty (veh)	0			16	21				1	2		0
Storage Bay Dist (ft)			150					175			500	
Storage Blk Time (%)			2	10				0	10	3		
Queuing Penalty (veh)			8	8				0	7	0		

Intersection: 5: Missouri Flat Road & Golden Center Drive

Movement	B25
Directions Served	T
Maximum Queue (ft)	44
Average Queue (ft)	2
95th Queue (ft)	36
Link Distance (ft)	317
Upstream Blk Time (%)	0
Queuing Penalty (veh)	0
Storage Bay Dist (ft)	
Storage Blk Time (%)	
Queuing Penalty (veh)	

Intersection: 6: Missouri Flat Road & Missouri Flat Rd/Diamond Springs Parkway

Movement	EB	EB	EB	WB	WB	WB	NB	NB	NB
Directions Served	T	T	R	L	T	T	L	L	R
Maximum Queue (ft)	168	227	246	78	98	80	171	180	64
Average Queue (ft)	73	82	75	29	39	36	89	97	25
95th Queue (ft)	138	163	207	63	76	72	146	154	52
Link Distance (ft)	1592	1592			2033	2033		451	451
Upstream Blk Time (%)									
Queuing Penalty (veh)									
Storage Bay Dist (ft)			250	500			275		
Storage Blk Time (%)			0						
Queuing Penalty (veh)			1						

Intersection: 10: Pleasant Valley Rd & Missouri Flat Rd

Movement	EB	EB	EB	WB	WB	SB	SB	B68	B68
Directions Served	L	L	T	T	R	L	R	T	T
Maximum Queue (ft)	142	154	608	261	224	208	153	224	10
Average Queue (ft)	121	115	307	137	50	172	62	51	0
95th Queue (ft)	166	208	696	221	129	233	118	173	3
Link Distance (ft)			658	1506		127	127	419	419
Upstream Blk Time (%)			7			25	1	0	
Queuing Penalty (veh)			41			111	2	0	
Storage Bay Dist (ft)	130	130			200				
Storage Blk Time (%)	40	29	9	1	0				
Queuing Penalty (veh)	134	98	22	3	0				

Zone Summary

Zone wide Queuing Penalty: 1301

1: Missouri Flat Road & WB Ramps Performance by approach

Approach	WB	NB	SB	All
Denied Del/Veh (s)	1.2	0.0	0.0	0.4
Total Del/Veh (s)	22.2	16.7	10.8	16.7

2: Missouri Flat Road & EB Ramps Performance by approach

Approach	EB	NB	SB	All
Denied Del/Veh (s)	1.2	0.0	0.0	0.3
Total Del/Veh (s)	24.7	12.6	11.8	15.0

3: Missouri Flat Road & Mother Lode Drive Performance by approach

Approach	EB	NB	SB	All
Denied Del/Veh (s)	1.7	0.0	0.0	0.1
Total Del/Veh (s)	49.3	12.4	6.2	11.1

4: Missouri Flat Road & Forni Road Performance by approach

Approach	EB	WB	NB	SB	All
Denied Del/Veh (s)	3.0	0.0	0.0	0.1	0.4
Total Del/Veh (s)	38.1	17.7	26.8	30.4	28.9

5: Missouri Flat Road & Golden Center Drive Performance by approach

Approach	EB	WB	NB	SB	All
Denied Del/Veh (s)	0.1	0.1	0.0	0.0	0.0
Total Del/Veh (s)	22.9	34.0	16.4	27.2	21.4

6: Missouri Flat Road & Missouri Flat Rd/Diamond Springs Parkway Performance by approach

Approach	EB	WB	NB	All
Denied Del/Veh (s)	0.0	0.0	0.0	0.0
Total Del/Veh (s)	14.2	8.5	10.9	11.3

10: Pleasant Valley Rd & Missouri Flat Rd Performance by approach

Approach	EB	WB	SB	All
Denied Del/Veh (s)	0.0	0.1	0.0	0.1
Total Del/Veh (s)	48.4	16.3	10.8	25.2

Total Zone Performance

Denied Del/Veh (s)	1.6
Total Del/Veh (s)	372.8

Intersection	
Intersection Delay, s/veh	51.5
Intersection LOS	F

Movement	EBU	EBT	EBR	WBU	WBL	WBT	NBU	NBL	NBR
Vol, veh/h	0	286	98	0	149	334	0	252	252
Peak Hour Factor	0.92	0.78	0.78	0.92	0.78	0.78	0.92	0.78	0.78
Heavy Vehicles, %	2	2	2	2	2	2	2	2	2
Mvmt Flow	0	367	126	0	191	428	0	323	323
Number of Lanes	0	1	0	0	1	1	0	1	0

Approach	EB	WB	NB
Opposing Approach	WB	EB	
Opposing Lanes	2	1	0
Conflicting Approach Left		NB	EB
Conflicting Lanes Left	0	1	1
Conflicting Approach Right	NB		WB
Conflicting Lanes Right	1	0	2
HCM Control Delay	50.9	37.8	65.1
HCM LOS	F	E	F

Lane	NBLn1	EBLn1	WBLn1	WBLn2
Vol Left, %	50%	0%	100%	0%
Vol Thru, %	0%	74%	0%	100%
Vol Right, %	50%	26%	0%	0%
Sign Control	Stop	Stop	Stop	Stop
Traffic Vol by Lane	504	384	149	334
LT Vol	252	0	149	0
Through Vol	0	286	0	334
RT Vol	252	98	0	0
Lane Flow Rate	646	492	191	428
Geometry Grp	2	5	7	7
Degree of Util (X)	1	0.934	0.427	0.899
Departure Headway (Hd)	6.775	6.827	8.055	7.555
Convergence, Y/N	Yes	Yes	Yes	Yes
Cap	543	527	449	484
Service Time	4.791	4.907	5.755	5.255
HCM Lane V/C Ratio	1.19	0.934	0.425	0.884
HCM Control Delay	65.1	50.9	16.6	47.3
HCM Lane LOS	F	F	C	E
HCM 95th-tile Q	14.1	11.5	2.1	10

Intersection	
Int Delay, s/veh	4.6

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Vol, veh/h	2	0	3	36	0	27	5	764	103	69	640	2
Conflicting Peds, #/hr	0	0	0	0	0	0	0	0	0	0	0	0
Sign Control	Stop	Stop	Stop	Stop	Stop	Stop	Free	Free	Free	Free	Free	Free
RT Channelized	-	-	None	-	-	None	-	-	None	-	-	None
Storage Length	-	-	-	-	-	-	1	-	-	190	-	-
Veh in Median Storage, #	-	0	-	-	0	-	-	0	-	-	0	-
Grade, %	-	0	-	-	0	-	-	0	-	-	0	-
Peak Hour Factor	92	92	92	92	92	92	92	92	92	92	92	92
Heavy Vehicles, %	2	2	2	2	2	2	2	2	2	2	2	2
Mvmt Flow	2	0	3	39	0	29	5	830	112	75	696	2

Major/Minor	Minor2			Minor1			Major1			Major2		
Conflicting Flow All	1759	1800	697	1745	1745	886	698	0	0	942	0	0
Stage 1	847	847	-	897	897	-	-	-	-	-	-	-
Stage 2	912	953	-	848	848	-	-	-	-	-	-	-
Critical Hdwy	7.12	6.52	6.22	7.12	6.52	6.22	4.12	-	-	4.12	-	-
Critical Hdwy Stg 1	6.12	5.52	-	6.12	5.52	-	-	-	-	-	-	-
Critical Hdwy Stg 2	6.12	5.52	-	6.12	5.52	-	-	-	-	-	-	-
Follow-up Hdwy	3.518	4.018	3.318	3.518	4.018	3.318	2.218	-	-	2.218	-	-
Pot Cap-1 Maneuver	66	80	441	68	86	343	898	-	-	728	-	-
Stage 1	357	378	-	334	358	-	-	-	-	-	-	-
Stage 2	328	338	-	356	378	-	-	-	-	-	-	-
Platoon blocked, %								-	-		-	-
Mov Cap-1 Maneuver	55	71	441	62	77	343	898	-	-	728	-	-
Mov Cap-2 Maneuver	55	71	-	62	77	-	-	-	-	-	-	-
Stage 1	355	339	-	332	356	-	-	-	-	-	-	-
Stage 2	298	336	-	317	339	-	-	-	-	-	-	-

Approach	EB	WB	NB	SB
HCM Control Delay, s	37.6	105.3	0.1	1
HCM LOS	E	F		

Minor Lane/Major Mvmt	NBL	NBT	NBR	EBLn1	WBLn1	SBL	SBT	SBR
Capacity (veh/h)	898	-	-	116	96	728	-	-
HCM Lane V/C Ratio	0.006	-	-	0.047	0.713	0.103	-	-
HCM Control Delay (s)	9	-	-	37.6	105.3	10.5	-	-
HCM Lane LOS	A	-	-	E	F	B	-	-
HCM 95th %tile Q(veh)	0	-	-	0.1	3.6	0.3	-	-

Intersection	
Int Delay, s/veh	0.9

Movement	EBL	EBR	NBL	NBT	SBT	SBR
Vol, veh/h	34	14	39	838	568	111
Conflicting Peds, #/hr	0	0	0	0	0	0
Sign Control	Stop	Stop	Free	Free	Free	Free
RT Channelized	-	None	-	None	-	None
Storage Length	0	-	1	-	-	-
Veh in Median Storage, #	0	-	-	0	0	-
Grade, %	0	-	-	0	0	-
Peak Hour Factor	92	92	92	92	92	92
Heavy Vehicles, %	2	2	2	2	2	2
Mvmt Flow	37	15	42	911	617	121

Major/Minor	Minor2		Major1		Major2	
Conflicting Flow All	1674	678	738	0	-	0
Stage 1	678	-	-	-	-	-
Stage 2	996	-	-	-	-	-
Critical Hdwy	6.42	6.22	4.12	-	-	-
Critical Hdwy Stg 1	5.42	-	-	-	-	-
Critical Hdwy Stg 2	5.42	-	-	-	-	-
Follow-up Hdwy	3.518	3.318	2.218	-	-	-
Pot Cap-1 Maneuver	105	452	868	-	-	-
Stage 1	504	-	-	-	-	-
Stage 2	357	-	-	-	-	-
Platoon blocked, %				-	-	-
Mov Cap-1 Maneuver	100	452	868	-	-	-
Mov Cap-2 Maneuver	229	-	-	-	-	-
Stage 1	504	-	-	-	-	-
Stage 2	340	-	-	-	-	-

Approach	EB	NB	SB
HCM Control Delay, s	21.7	0.4	0
HCM LOS	C		

Minor Lane/Major Mvmt	NBL	NBT	EBLn1	SBT	SBR
Capacity (veh/h)	868	-	267	-	-
HCM Lane V/C Ratio	0.049	-	0.195	-	-
HCM Control Delay (s)	9.4	-	21.7	-	-
HCM Lane LOS	A	-	C	-	-
HCM 95th %tile Q(veh)	0.2	-	0.7	-	-

Intersection	
Int Delay, s/veh	3.2

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Vol, veh/h	48	0	15	0	0	5	20	823	8	5	455	122
Conflicting Peds, #/hr	0	0	0	0	0	0	0	0	0	0	0	0
Sign Control	Stop	Stop	Stop	Stop	Stop	Stop	Free	Free	Free	Free	Free	Free
RT Channelized	-	-	None	-	-	None	-	-	None	-	-	None
Storage Length	-	-	-	-	-	-	1	-	-	1	-	-
Veh in Median Storage, #	-	0	-	-	0	-	-	0	-	-	0	-
Grade, %	-	0	-	-	0	-	-	0	-	-	0	-
Peak Hour Factor	92	92	92	92	92	92	92	92	92	92	92	92
Heavy Vehicles, %	2	2	2	2	2	2	2	2	2	2	2	2
Mvmt Flow	52	0	16	0	0	5	22	895	9	5	495	133

Major/Minor	Minor2			Minor1			Major1			Major2		
Conflicting Flow All	1517	1519	561	1522	1580	899	627	0	0	903	0	0
Stage 1	572	572	-	942	942	-	-	-	-	-	-	-
Stage 2	945	947	-	580	638	-	-	-	-	-	-	-
Critical Hdwy	7.12	6.52	6.22	7.12	6.52	6.22	4.12	-	-	4.12	-	-
Critical Hdwy Stg 1	6.12	5.52	-	6.12	5.52	-	-	-	-	-	-	-
Critical Hdwy Stg 2	6.12	5.52	-	6.12	5.52	-	-	-	-	-	-	-
Follow-up Hdwy	3.518	4.018	3.318	3.518	4.018	3.318	2.218	-	-	2.218	-	-
Pot Cap-1 Maneuver	98	119	527	97	109	338	955	-	-	753	-	-
Stage 1	505	504	-	316	342	-	-	-	-	-	-	-
Stage 2	314	340	-	500	471	-	-	-	-	-	-	-
Platoon blocked, %								-	-		-	-
Mov Cap-1 Maneuver	94	115	527	92	106	338	955	-	-	753	-	-
Mov Cap-2 Maneuver	94	115	-	92	106	-	-	-	-	-	-	-
Stage 1	493	501	-	309	334	-	-	-	-	-	-	-
Stage 2	302	332	-	481	468	-	-	-	-	-	-	-

Approach	EB	WB	NB	SB
HCM Control Delay, s	72.1	15.8	0.2	0.1
HCM LOS	F	C		

Minor Lane/Major Mvmt	NBL	NBT	NBR	EBLn1	WBLn1	SBL	SBT	SBR
Capacity (veh/h)	955	-	-	117	338	753	-	-
HCM Lane V/C Ratio	0.023	-	-	0.585	0.016	0.007	-	-
HCM Control Delay (s)	8.9	-	-	72.1	15.8	9.8	-	-
HCM Lane LOS	A	-	-	F	C	A	-	-
HCM 95th %tile Q(veh)	0.1	-	-	2.9	0	0	-	-

Intersection	
Int Delay, s/veh	3.3

Movement	WBL	WBR	NBT	NBR	SBL	SBT
Vol, veh/h	22	58	185	26	113	141
Conflicting Peds, #/hr	0	0	0	0	0	0
Sign Control	Stop	Stop	Free	Free	Free	Free
RT Channelized	-	None	-	None	-	None
Storage Length	0	-	-	-	-	-
Veh in Median Storage, #	0	-	0	-	-	0
Grade, %	0	-	0	-	-	0
Peak Hour Factor	92	92	92	92	92	92
Heavy Vehicles, %	2	2	2	2	2	2
Mvmt Flow	24	63	201	28	123	153

Major/Minor	Minor1		Major1		Major2	
Conflicting Flow All	614	215	0	0	229	0
Stage 1	215	-	-	-	-	-
Stage 2	399	-	-	-	-	-
Critical Hdwy	6.42	6.22	-	-	4.12	-
Critical Hdwy Stg 1	5.42	-	-	-	-	-
Critical Hdwy Stg 2	5.42	-	-	-	-	-
Follow-up Hdwy	3.518	3.318	-	-	2.218	-
Pot Cap-1 Maneuver	455	825	-	-	1339	-
Stage 1	821	-	-	-	-	-
Stage 2	678	-	-	-	-	-
Platoon blocked, %			-	-		-
Mov Cap-1 Maneuver	410	825	-	-	1339	-
Mov Cap-2 Maneuver	410	-	-	-	-	-
Stage 1	821	-	-	-	-	-
Stage 2	610	-	-	-	-	-

Approach	WB	NB	SB
HCM Control Delay, s	11.4	0	3.5
HCM LOS	B		

Minor Lane/Major Mvmt	NBT	NBR	WBLn1	SBL	SBT
Capacity (veh/h)	-	-	645	1339	-
HCM Lane V/C Ratio	-	-	0.135	0.092	-
HCM Control Delay (s)	-	-	11.4	8	0
HCM Lane LOS	-	-	B	A	A
HCM 95th %tile Q(veh)	-	-	0.5	0.3	-

Intersection	
Int Delay, s/veh	12

Movement	EBL	EBT	WBT	WBR	SBL	SBR
Vol, veh/h	145	382	369	36	52	107
Conflicting Peds, #/hr	0	0	0	0	0	0
Sign Control	Free	Free	Free	Free	Stop	Stop
RT Channelized	-	None	-	None	-	None
Storage Length	-	-	-	-	0	-
Veh in Median Storage, #	-	0	0	-	0	-
Grade, %	-	0	0	-	0	-
Peak Hour Factor	75	75	75	75	75	75
Heavy Vehicles, %	2	2	2	2	2	2
Mvmt Flow	193	509	492	48	69	143

Major/Minor	Major1		Major2		Minor2	
Conflicting Flow All	540	0	-	0	1412	516
Stage 1	-	-	-	-	516	-
Stage 2	-	-	-	-	896	-
Critical Hdwy	4.12	-	-	-	6.42	6.22
Critical Hdwy Stg 1	-	-	-	-	5.42	-
Critical Hdwy Stg 2	-	-	-	-	5.42	-
Follow-up Hdwy	2.218	-	-	-	3.518	3.318
Pot Cap-1 Maneuver	1028	-	-	-	152	559
Stage 1	-	-	-	-	599	-
Stage 2	-	-	-	-	399	-
Platoon blocked, %		-	-	-		
Mov Cap-1 Maneuver	1028	-	-	-	112	559
Mov Cap-2 Maneuver	-	-	-	-	112	-
Stage 1	-	-	-	-	599	-
Stage 2	-	-	-	-	294	-

Approach	EB	WB	SB
HCM Control Delay, s	2.6	0	73.5
HCM LOS			F

Minor Lane/Major Mvmt	EBL	EBT	WBT	WBR	SBLn1
Capacity (veh/h)	1028	-	-	-	242
HCM Lane V/C Ratio	0.188	-	-	-	0.876
HCM Control Delay (s)	9.3	0	-	-	73.5
HCM Lane LOS	A	A	-	-	F
HCM 95th %tile Q(veh)	0.7	-	-	-	7.2

Intersection: 1: Missouri Flat Road & WB Ramps

Movement	WB	WB	WB	WB	NB	NB	NB	NB	SB	SB
Directions Served	L	LT	R	R	L	L	T	T	T	T
Maximum Queue (ft)	213	214	163	126	137	149	382	267	173	152
Average Queue (ft)	126	127	77	32	120	133	135	59	84	62
95th Queue (ft)	193	194	133	81	164	170	339	159	151	125
Link Distance (ft)	983	983					395	395	459	459
Upstream Blk Time (%)							0	0		
Queuing Penalty (veh)							2	0		
Storage Bay Dist (ft)			400	400	125	125				
Storage Blk Time (%)					1	10	0			
Queuing Penalty (veh)					4	37	1			

Intersection: 2: Missouri Flat Road & EB Ramps

Movement	EB	EB	EB	NB	NB	NB	SB	SB	SB	SB
Directions Served	L	LTR	R	T	T	R	L	L	T	T
Maximum Queue (ft)	163	212	202	173	168	100	107	115	165	184
Average Queue (ft)	58	118	98	144	125	21	42	66	36	49
95th Queue (ft)	127	184	174	197	193	68	88	102	107	131
Link Distance (ft)		1460		138	138	138			395	395
Upstream Blk Time (%)				16	8	0				
Queuing Penalty (veh)				58	31	0				
Storage Bay Dist (ft)	700		550				150	150		
Storage Blk Time (%)									0	
Queuing Penalty (veh)									0	

Intersection: 3: Missouri Flat Road & Mother Lode Drive

Movement	EB	EB	EB	NB	NB	NB	B24	B24	SB	SB	SB
Directions Served	L	L	R	L	T	T	T	T	T	T	R
Maximum Queue (ft)	80	151	60	110	330	211	243	298	157	172	108
Average Queue (ft)	12	70	21	19	125	57	10	12	103	118	7
95th Queue (ft)	46	130	49	72	273	150	105	119	183	189	55
Link Distance (ft)		633			1949	1949	368	368	138	138	
Upstream Blk Time (%)							0	0	6	9	0
Queuing Penalty (veh)							0	0	38	57	0
Storage Bay Dist (ft)	200		200	150							200
Storage Blk Time (%)		0			6	0				9	0
Queuing Penalty (veh)		0			1	0				4	0

Intersection: 4: Missouri Flat Road & Forni Road

Movement	EB	EB	EB	EB	WB	WB	WB	NB	NB	NB	NB	B25
Directions Served	L	L	T	R	L	T	R	L	T	T	R	T
Maximum Queue (ft)	169	176	126	53	109	113	19	219	384	383	175	74
Average Queue (ft)	70	94	49	18	47	42	1	40	203	209	36	3
95th Queue (ft)	138	158	104	44	93	88	19	128	362	379	149	34
Link Distance (ft)			1180			275			317	317		652
Upstream Blk Time (%)									2	3		
Queuing Penalty (veh)									14	18		
Storage Bay Dist (ft)	195	195		150	190		175	250			150	
Storage Blk Time (%)	0	0	0						6	17	0	
Queuing Penalty (veh)	0	0	1						3	10	0	

Intersection: 4: Missouri Flat Road & Forni Road

Movement	B25	SB	SB	SB	SB	B24	B24
Directions Served	T	L	T	T	R	T	T
Maximum Queue (ft)	85	324	415	397	175	60	63
Average Queue (ft)	5	230	201	185	80	7	4
95th Queue (ft)	40	354	426	360	187	52	42
Link Distance (ft)	652		368	368		1949	1949
Upstream Blk Time (%)			5	1			
Queuing Penalty (veh)			31	10			
Storage Bay Dist (ft)		300			150		
Storage Blk Time (%)		11	2	9	0		
Queuing Penalty (veh)		46	5	23	0		

Intersection: 5: Missouri Flat Road & Golden Center Drive

Movement	EB	WB	NB	NB	NB	B43	B43	SB	SB	SB	SB
Directions Served	LTR	LTR	L	T	TR	T	T	L	T	T	R
Maximum Queue (ft)	70	154	158	294	292	107	124	188	477	520	17
Average Queue (ft)	22	52	40	177	191	7	10	71	141	226	2
95th Queue (ft)	52	108	111	288	297	48	61	145	347	446	12
Link Distance (ft)	184	367		216	216	1592	1592		652	652	
Upstream Blk Time (%)				4	6						
Queuing Penalty (veh)				25	37						
Storage Bay Dist (ft)			150					175			500
Storage Blk Time (%)				10				0	4	1	
Queuing Penalty (veh)				4				2	4	0	

Intersection: 6: Missouri Flat Road & Missouri Flat Rd/Diamond Springs Parkway

Movement	EB	EB	EB	B43	WB	WB	WB	NB	NB	NB
Directions Served	T	T	R	T	L	T	T	L	L	R
Maximum Queue (ft)	93	193	257	7	110	128	137	172	181	32
Average Queue (ft)	36	46	78	0	46	55	58	89	96	8
95th Queue (ft)	76	123	214	5	91	104	107	144	155	28
Link Distance (ft)	1592	1592		216		2033	2033		451	451
Upstream Blk Time (%)										
Queuing Penalty (veh)										
Storage Bay Dist (ft)			250		500			275		
Storage Blk Time (%)			0							
Queuing Penalty (veh)			0							

Intersection: 10: Pleasant Valley Rd & Missouri Flat Rd

Movement	EB	EB	EB	WB	WB	SB	SB	B68
Directions Served	L	L	T	T	R	L	R	T
Maximum Queue (ft)	142	154	599	306	224	186	128	23
Average Queue (ft)	123	111	224	142	99	93	46	1
95th Queue (ft)	162	203	580	234	193	162	98	12
Link Distance (ft)			658	1506		127	127	419
Upstream Blk Time (%)			3			3	0	
Queuing Penalty (veh)			16			8	1	
Storage Bay Dist (ft)	130	130			200			
Storage Blk Time (%)	31	24	2	1	0			
Queuing Penalty (veh)	53	41	7	6	0			

Zone Summary

Zone wide Queuing Penalty: 599

1: Missouri Flat Road & WB Ramps Performance by approach

Approach	WB	NB	SB	All
Denied Del/Veh (s)	1.2	0.0	0.0	0.3
Total Del/Veh (s)	29.4	11.4	14.5	17.7

2: Missouri Flat Road & EB Ramps Performance by approach

Approach	EB	NB	SB	All
Denied Del/Veh (s)	1.6	0.0	0.2	0.5
Total Del/Veh (s)	36.4	18.1	26.1	26.2

3: Missouri Flat Road & Mother Lode Drive Performance by approach

Approach	EB	NB	SB	All
Denied Del/Veh (s)	1.9	0.0	0.0	0.1
Total Del/Veh (s)	54.5	14.9	7.2	12.3

4: Missouri Flat Road & Forni Road Performance by approach

Approach	EB	WB	NB	SB	All
Denied Del/Veh (s)	4.2	0.0	0.1	0.0	0.8
Total Del/Veh (s)	83.7	12.5	26.6	25.8	35.9

5: Missouri Flat Road & Golden Center Drive Performance by approach

Approach	EB	WB	NB	SB	All
Denied Del/Veh (s)	0.1	0.2	0.7	0.0	0.3
Total Del/Veh (s)	33.5	42.7	24.2	33.5	30.4

6: Missouri Flat Road & Missouri Flat Rd/Diamond Springs Parkway Performance by approach

Approach	EB	WB	NB	All
Denied Del/Veh (s)	0.0	0.0	0.0	0.0
Total Del/Veh (s)	18.6	5.2	11.1	12.6

10: Pleasant Valley Rd & Missouri Flat Rd Performance by approach

Approach	EB	WB	SB	All
Denied Del/Veh (s)	0.0	0.2	3.5	1.6
Total Del/Veh (s)	75.5	17.7	15.1	33.4

Total Zone Performance

Denied Del/Veh (s)	3.3
Total Del/Veh (s)	389.2

Intersection	
Intersection Delay, s/veh	39.4
Intersection LOS	E

Movement	EBU	EBT	EBR	WBU	WBL	WBT	NBU	NBL	NBR
Vol, veh/h	0	372	233	0	238	309	0	117	168
Peak Hour Factor	0.92	0.78	0.78	0.92	0.78	0.78	0.92	0.78	0.78
Heavy Vehicles, %	2	2	2	2	2	2	2	2	2
Mvmt Flow	0	477	299	0	305	396	0	150	215
Number of Lanes	0	1	0	0	1	1	0	1	0

Approach	EB	WB	NB
Opposing Approach	WB	EB	
Opposing Lanes	2	1	0
Conflicting Approach Left		NB	EB
Conflicting Lanes Left	0	1	1
Conflicting Approach Right	NB		WB
Conflicting Lanes Right	1	0	2
HCM Control Delay	61.6	24.1	21.8
HCM LOS	F	C	C

Lane	NBLn1	EBLn1	WBLn1	WBLn2
Vol Left, %	41%	0%	100%	0%
Vol Thru, %	0%	61%	0%	100%
Vol Right, %	59%	39%	0%	0%
Sign Control	Stop	Stop	Stop	Stop
Traffic Vol by Lane	285	605	238	309
LT Vol	117	0	238	0
Through Vol	0	372	0	309
RT Vol	168	233	0	0
Lane Flow Rate	365	776	305	396
Geometry Grp	2	5	7	7
Degree of Util (X)	0.664	1	0.616	0.744
Departure Headway (Hd)	6.546	6.111	7.266	6.765
Convergence, Y/N	Yes	Yes	Yes	Yes
Cap	548	597	500	539
Service Time	4.639	4.126	4.966	4.465
HCM Lane V/C Ratio	0.666	1.3	0.61	0.735
HCM Control Delay	21.8	61.6	20.9	26.6
HCM Lane LOS	C	F	C	D
HCM 95th-tile Q	4.9	14.8	4.1	6.4

Intersection	
Int Delay, s/veh	11.9

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Vol, veh/h	1	0	3	32	0	166	5	680	9	13	912	0
Conflicting Peds, #/hr	0	0	0	0	0	0	0	0	0	0	0	0
Sign Control	Stop	Stop	Stop	Stop	Stop	Stop	Free	Free	Free	Free	Free	Free
RT Channelized	-	-	None	-	-	None	-	-	None	-	-	None
Storage Length	-	-	-	-	-	-	1	-	-	190	-	-
Veh in Median Storage, #	-	0	-	-	0	-	-	0	-	-	0	-
Grade, %	-	0	-	-	0	-	-	0	-	-	0	-
Peak Hour Factor	92	92	92	92	92	92	92	92	92	92	92	92
Heavy Vehicles, %	2	2	2	2	2	2	2	2	2	2	2	2
Mvmt Flow	1	0	3	35	0	180	5	739	10	14	991	0

Major/Minor	Minor2			Minor1			Major1			Major2		
Conflicting Flow All	1865	1780	991	1776	1775	744	991	0	0	749	0	0
Stage 1	1020	1020	-	755	755	-	-	-	-	-	-	-
Stage 2	845	760	-	1021	1020	-	-	-	-	-	-	-
Critical Hdwy	7.12	6.52	6.22	7.12	6.52	6.22	4.12	-	-	4.12	-	-
Critical Hdwy Stg 1	6.12	5.52	-	6.12	5.52	-	-	-	-	-	-	-
Critical Hdwy Stg 2	6.12	5.52	-	6.12	5.52	-	-	-	-	-	-	-
Follow-up Hdwy	3.518	4.018	3.318	3.518	4.018	3.318	2.218	-	-	2.218	-	-
Pot Cap-1 Maneuver	56	82	299	64	83	415	698	-	-	860	-	-
Stage 1	285	314	-	401	417	-	-	-	-	-	-	-
Stage 2	357	414	-	285	314	-	-	-	-	-	-	-
Platoon blocked, %								-	-		-	-
Mov Cap-1 Maneuver	31	80	299	62	81	415	698	-	-	860	-	-
Mov Cap-2 Maneuver	31	80	-	62	81	-	-	-	-	-	-	-
Stage 1	283	309	-	398	414	-	-	-	-	-	-	-
Stage 2	200	411	-	277	309	-	-	-	-	-	-	-

Approach	EB	WB	NB	SB
HCM Control Delay, s	44.7	107.3	0.1	0.1
HCM LOS	E	F		

Minor Lane/Major Mvmt	NBL	NBT	NBR	EBLn1	WBLn1	SBL	SBT	SBR
Capacity (veh/h)	698	-	-	95	216	860	-	-
HCM Lane V/C Ratio	0.008	-	-	0.046	0.996	0.016	-	-
HCM Control Delay (s)	10.2	-	-	44.7	107.3	9.3	-	-
HCM Lane LOS	B	-	-	E	F	A	-	-
HCM 95th %tile Q(veh)	0	-	-	0.1	8.9	0.1	-	-

Intersection	
Int Delay, s/veh	3.4

Movement	EBL	EBR	NBL	NBT	SBT	SBR
Vol, veh/h	102	38	10	592	912	35
Conflicting Peds, #/hr	0	0	0	0	0	0
Sign Control	Stop	Stop	Free	Free	Free	Free
RT Channelized	-	None	-	None	-	None
Storage Length	0	-	1	-	-	-
Veh in Median Storage, #	0	-	-	0	0	-
Grade, %	0	-	-	0	0	-
Peak Hour Factor	92	92	92	92	92	92
Heavy Vehicles, %	2	2	2	2	2	2
Mvmt Flow	111	41	11	643	991	38

Major/Minor	Minor2		Major1		Major2	
Conflicting Flow All	1675	1010	1029	0	-	0
Stage 1	1010	-	-	-	-	-
Stage 2	665	-	-	-	-	-
Critical Hdwy	6.42	6.22	4.12	-	-	-
Critical Hdwy Stg 1	5.42	-	-	-	-	-
Critical Hdwy Stg 2	5.42	-	-	-	-	-
Follow-up Hdwy	3.518	3.318	2.218	-	-	-
Pot Cap-1 Maneuver	~ 105	291	675	-	-	-
Stage 1	352	-	-	-	-	-
Stage 2	511	-	-	-	-	-
Platoon blocked, %				-	-	-
Mov Cap-1 Maneuver	~ 103	291	675	-	-	-
Mov Cap-2 Maneuver	234	-	-	-	-	-
Stage 1	352	-	-	-	-	-
Stage 2	503	-	-	-	-	-

Approach	EB	NB	SB
HCM Control Delay, s	40.4	0.2	0
HCM LOS	E		

Minor Lane/Major Mvmt	NBL	NBT	EBLn1	SBT	SBR
Capacity (veh/h)	675	-	247	-	-
HCM Lane V/C Ratio	0.016	-	0.616	-	-
HCM Control Delay (s)	10.4	-	40.4	-	-
HCM Lane LOS	B	-	E	-	-
HCM 95th %tile Q(veh)	0	-	3.7	-	-

Notes

~: Volume exceeds capacity $: Delay exceeds 300s +: Computation Not Defined *: All major volume in platoon

Intersection	
Int Delay, s/veh	32.2

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Vol, veh/h	115	0	32	0	0	5	14	483	5	5	859	85
Conflicting Peds, #/hr	0	0	0	0	0	0	0	0	0	0	0	0
Sign Control	Stop	Stop	Stop	Stop	Stop	Stop	Free	Free	Free	Free	Free	Free
RT Channelized	-	-	None	-	-	None	-	-	None	-	-	None
Storage Length	-	-	-	-	-	-	1	-	-	1	-	-
Veh in Median Storage, #	-	0	-	-	0	-	-	0	-	-	0	-
Grade, %	-	0	-	-	0	-	-	0	-	-	0	-
Peak Hour Factor	92	92	92	92	92	92	92	92	92	92	92	92
Heavy Vehicles, %	2	2	2	2	2	2	2	2	2	2	2	2
Mvmt Flow	125	0	35	0	0	5	15	525	5	5	934	92

Major/Minor	Minor2			Minor1			Major1			Major2		
Conflicting Flow All	1552	1552	980	1566	1595	528	1026	0	0	530	0	0
Stage 1	991	991	-	558	558	-	-	-	-	-	-	-
Stage 2	561	561	-	1008	1037	-	-	-	-	-	-	-
Critical Hdwy	7.12	6.52	6.22	7.12	6.52	6.22	4.12	-	-	4.12	-	-
Critical Hdwy Stg 1	6.12	5.52	-	6.12	5.52	-	-	-	-	-	-	-
Critical Hdwy Stg 2	6.12	5.52	-	6.12	5.52	-	-	-	-	-	-	-
Follow-up Hdwy	3.518	4.018	3.318	3.518	4.018	3.318	2.218	-	-	2.218	-	-
Pot Cap-1 Maneuver	~ 92	113	303	90	107	550	677	-	-	1037	-	-
Stage 1	296	324	-	514	512	-	-	-	-	-	-	-
Stage 2	512	510	-	290	308	-	-	-	-	-	-	-
Platoon blocked, %								-	-		-	-
Mov Cap-1 Maneuver	~ 89	110	303	78	104	550	677	-	-	1037	-	-
Mov Cap-2 Maneuver	~ 89	110	-	78	104	-	-	-	-	-	-	-
Stage 1	289	322	-	503	501	-	-	-	-	-	-	-
Stage 2	496	499	-	255	307	-	-	-	-	-	-	-

Approach	EB	WB	NB	SB
HCM Control Delay, s	$ 349.7	11.6	0.3	0
HCM LOS	F	B		

Minor Lane/Major Mvmt	NBL	NBT	NBR	EBLn1	WBLn1	SBL	SBT	SBR
Capacity (veh/h)	677	-	-	105	550	1037	-	-
HCM Lane V/C Ratio	0.022	-	-	1.522	0.01	0.005	-	-
HCM Control Delay (s)	10.4	-	-	$ 349.7	11.6	8.5	-	-
HCM Lane LOS	B	-	-	F	B	A	-	-
HCM 95th %tile Q(veh)	0.1	-	-	11.9	0	0	-	-

Notes

~: Volume exceeds capacity $: Delay exceeds 300s +: Computation Not Defined *: All major volume in platoon

Intersection	
Int Delay, s/veh	4.9

Movement	WBL	WBR	NBT	NBR	SBL	SBT
Vol, veh/h	37	183	120	31	80	199
Conflicting Peds, #/hr	0	0	0	0	0	0
Sign Control	Stop	Stop	Free	Free	Free	Free
RT Channelized	-	None	-	None	-	None
Storage Length	0	-	-	-	-	-
Veh in Median Storage, #	0	-	0	-	-	0
Grade, %	0	-	0	-	-	0
Peak Hour Factor	92	92	92	92	92	92
Heavy Vehicles, %	2	2	2	2	2	2
Mvmt Flow	40	199	130	34	87	216

Major/Minor	Minor1		Major1		Major2	
Conflicting Flow All	537	147	0	0	164	0
Stage 1	147	-	-	-	-	-
Stage 2	390	-	-	-	-	-
Critical Hdwy	6.42	6.22	-	-	4.12	-
Critical Hdwy Stg 1	5.42	-	-	-	-	-
Critical Hdwy Stg 2	5.42	-	-	-	-	-
Follow-up Hdwy	3.518	3.318	-	-	2.218	-
Pot Cap-1 Maneuver	505	900	-	-	1414	-
Stage 1	880	-	-	-	-	-
Stage 2	684	-	-	-	-	-
Platoon blocked, %			-	-		-
Mov Cap-1 Maneuver	470	900	-	-	1414	-
Mov Cap-2 Maneuver	470	-	-	-	-	-
Stage 1	880	-	-	-	-	-
Stage 2	636	-	-	-	-	-

Approach	WB	NB	SB
HCM Control Delay, s	11.6	0	2.2
HCM LOS	B		

Minor Lane/Major Mvmt	NBT	NBR	WBLn1	SBL	SBT
Capacity (veh/h)	-	-	780	1414	-
HCM Lane V/C Ratio	-	-	0.307	0.061	-
HCM Control Delay (s)	-	-	11.6	7.7	0
HCM Lane LOS	-	-	B	A	A
HCM 95th %tile Q(veh)	-	-	1.3	0.2	-

Intersection	
Int Delay, s/veh	4.9

Movement	EBL	EBT	WBT	WBR	SBL	SBR
Vol, veh/h	95	458	382	30	21	155
Conflicting Peds, #/hr	0	0	0	0	0	0
Sign Control	Free	Free	Free	Free	Stop	Stop
RT Channelized	-	None	-	None	-	None
Storage Length	-	-	-	-	0	-
Veh in Median Storage, #	-	0	0	-	0	-
Grade, %	-	0	0	-	0	-
Peak Hour Factor	75	75	75	75	75	75
Heavy Vehicles, %	2	2	2	2	2	2
Mvmt Flow	127	611	509	40	28	207

Major/Minor	Major1		Major2		Minor2	
Conflicting Flow All	549	0	-	0	1393	529
Stage 1	-	-	-	-	529	-
Stage 2	-	-	-	-	864	-
Critical Hdwy	4.12	-	-	-	6.42	6.22
Critical Hdwy Stg 1	-	-	-	-	5.42	-
Critical Hdwy Stg 2	-	-	-	-	5.42	-
Follow-up Hdwy	2.218	-	-	-	3.518	3.318
Pot Cap-1 Maneuver	1021	-	-	-	156	550
Stage 1	-	-	-	-	591	-
Stage 2	-	-	-	-	413	-
Platoon blocked, %		-	-	-		
Mov Cap-1 Maneuver	1021	-	-	-	127	550
Mov Cap-2 Maneuver	-	-	-	-	127	-
Stage 1	-	-	-	-	591	-
Stage 2	-	-	-	-	335	-

Approach	EB	WB	SB
HCM Control Delay, s	1.6	0	26.7
HCM LOS			D

Minor Lane/Major Mvmt	EBL	EBT	WBT	WBR	SBLn1
Capacity (veh/h)	1021	-	-	-	394
HCM Lane V/C Ratio	0.124	-	-	-	0.596
HCM Control Delay (s)	9	0	-	-	26.7
HCM Lane LOS	A	A	-	-	D
HCM 95th %tile Q(veh)	0.4	-	-	-	3.7

Intersection: 1: Missouri Flat Road & WB Ramps

Movement	WB	WB	WB	WB	NB	NB	NB	NB	SB	SB
Directions Served	L	LT	R	R	L	L	T	T	T	T
Maximum Queue (ft)	299	314	205	146	135	146	212	117	323	267
Average Queue (ft)	162	173	99	43	92	106	63	54	152	127
95th Queue (ft)	269	280	174	104	155	152	142	100	261	224
Link Distance (ft)	983	983					395	395	459	459
Upstream Blk Time (%)										
Queuing Penalty (veh)										
Storage Bay Dist (ft)			400	400	125	125				
Storage Blk Time (%)		0	0		0	2	0			0
Queuing Penalty (veh)		1	0		1	7	1			0

Intersection: 2: Missouri Flat Road & EB Ramps

Movement	EB	EB	EB	NB	NB	NB	SB	SB	SB	SB
Directions Served	L	LTR	R	T	T	R	L	L	T	T
Maximum Queue (ft)	293	349	333	174	179	95	160	174	408	407
Average Queue (ft)	107	187	188	155	140	18	98	126	169	185
95th Queue (ft)	228	302	306	189	191	61	163	189	354	356
Link Distance (ft)		1460		138	138	138			395	395
Upstream Blk Time (%)				26	14	0			0	0
Queuing Penalty (veh)				95	49	0			2	3
Storage Bay Dist (ft)	700		550				150	150		
Storage Blk Time (%)							1	4	10	
Queuing Penalty (veh)							4	24	33	

Intersection: 3: Missouri Flat Road & Mother Lode Drive

Movement	EB	EB	EB	NB	NB	NB	NB	B24	B24	SB	SB	SB
Directions Served	L	L	R	L	T	T	R	T	T	T	T	R
Maximum Queue (ft)	40	151	94	155	342	241	28	78	230	161	179	123
Average Queue (ft)	6	64	32	44	145	65	1	3	12	132	139	12
95th Queue (ft)	27	126	70	113	291	162	28	53	122	190	189	76
Link Distance (ft)		633			1949	1949		368	368	138	138	
Upstream Blk Time (%)								0	0	13	15	0
Queuing Penalty (veh)								0	1	118	140	0
Storage Bay Dist (ft)	200		200	150			250					200
Storage Blk Time (%)		0			10	0					15	0
Queuing Penalty (veh)		0			4	0					11	1

Intersection: 4: Missouri Flat Road & Forni Road

Movement	EB	EB	EB	EB	WB	WB	WB	NB	NB	NB	NB	B25
Directions Served	L	L	T	R	L	T	R	L	T	T	R	T
Maximum Queue (ft)	207	220	920	96	57	96	20	242	372	379	140	25
Average Queue (ft)	186	200	351	33	14	30	1	67	185	192	17	1
95th Queue (ft)	241	251	901	70	43	73	20	174	354	365	100	14
Link Distance (ft)			1180			275			317	317		652
Upstream Blk Time (%)			1						2	2		
Queuing Penalty (veh)			0						8	12		
Storage Bay Dist (ft)	195	195		150	190		175	250			150	
Storage Blk Time (%)	10	32		0		0			6	16	0	
Queuing Penalty (veh)	13	44		0		0			5	4	0	

Intersection: 4: Missouri Flat Road & Forni Road

Movement	B25	SB	SB	SB	SB	B24	B24
Directions Served	T	L	T	T	R	T	T
Maximum Queue (ft)	38	319	439	455	175	299	396
Average Queue (ft)	2	164	256	325	134	33	64
95th Queue (ft)	18	297	453	522	233	174	256
Link Distance (ft)	652		368	368		1949	1949
Upstream Blk Time (%)			3	10			
Queuing Penalty (veh)			29	95			
Storage Bay Dist (ft)		300			150		
Storage Blk Time (%)		0	5	22	0		
Queuing Penalty (veh)		1	9	92	2		

Intersection: 5: Missouri Flat Road & Golden Center Drive

Movement	EB	WB	NB	NB	NB	B43	B43	SB	SB	SB	SB	B25
Directions Served	LTR	LTR	L	T	TR	T	T	L	T	T	R	T
Maximum Queue (ft)	135	258	174	286	289	101	122	200	635	669	119	3
Average Queue (ft)	56	122	86	181	185	10	9	77	265	345	5	0
95th Queue (ft)	107	217	172	288	289	62	59	171	563	640	79	4
Link Distance (ft)	184	367		216	216	1592	1592		652	652		317
Upstream Blk Time (%)				7	6				0	1		
Queuing Penalty (veh)				36	31				1	5		
Storage Bay Dist (ft)			150					175			500	
Storage Blk Time (%)			6	12				0	13	5		
Queuing Penalty (veh)			27	9				1	9	0		

Intersection: 5: Missouri Flat Road & Golden Center Drive

Movement	B25
Directions Served	T
Maximum Queue (ft)	141
Average Queue (ft)	6
95th Queue (ft)	75
Link Distance (ft)	317
Upstream Blk Time (%)	0
Queuing Penalty (veh)	0
Storage Bay Dist (ft)	
Storage Blk Time (%)	
Queuing Penalty (veh)	

Intersection: 6: Missouri Flat Road & Missouri Flat Rd/Diamond Springs Parkway

Movement	EB	EB	EB	B43	WB	WB	WB	NB	NB	NB
Directions Served	T	T	R	T	L	T	T	L	L	R
Maximum Queue (ft)	167	248	255	4	72	78	84	181	198	66
Average Queue (ft)	72	86	81	0	29	35	38	92	101	29
95th Queue (ft)	135	180	225	4	62	69	71	152	164	56
Link Distance (ft)	1592	1592		216		2033	2033		451	451
Upstream Blk Time (%)										
Queuing Penalty (veh)										
Storage Bay Dist (ft)			250		500			275		
Storage Blk Time (%)		0	0							
Queuing Penalty (veh)		0	1							

Intersection: 10: Pleasant Valley Rd & Missouri Flat Rd

Movement	EB	EB	EB	WB	WB	SB	SB	B68	B68
Directions Served	L	L	T	T	R	L	R	T	T
Maximum Queue (ft)	142	155	637	296	216	218	152	271	4
Average Queue (ft)	126	122	337	148	60	177	63	76	0
95th Queue (ft)	165	206	742	241	159	238	121	216	4
Link Distance (ft)			658	1506		127	127	419	419
Upstream Blk Time (%)			9			31	1		
Queuing Penalty (veh)			58			143	3		
Storage Bay Dist (ft)	130	130			200				
Storage Blk Time (%)	47	35	8	2	0				
Queuing Penalty (veh)	157	115	19	5	0				

Zone Summary

Zone wide Queuing Penalty: 1432

1: Missouri Flat Road & WB Ramps Performance by approach

Approach	WB	NB	SB	All
Denied Del/Veh (s)	1.2	0.0	0.0	0.4
Total Del/Veh (s)	22.9	20.2	11.5	18.6

2: Missouri Flat Road & EB Ramps Performance by approach

Approach	EB	NB	SB	All
Denied Del/Veh (s)	1.3	0.0	0.0	0.3
Total Del/Veh (s)	23.6	16.1	12.9	16.9

3: Missouri Flat Road & Mother Lode Drive Performance by approach

Approach	EB	NB	SB	All
Denied Del/Veh (s)	2.2	0.0	0.0	0.1
Total Del/Veh (s)	41.3	19.1	4.9	13.1

4: Missouri Flat Road & Forni Road Performance by approach

Approach	EB	WB	NB	SB	All
Denied Del/Veh (s)	3.0	0.0	0.0	0.0	0.4
Total Del/Veh (s)	41.2	21.8	26.6	32.1	30.5

5: Missouri Flat Road & Golden Center Drive Performance by approach

Approach	EB	WB	NB	SB	All
Denied Del/Veh (s)	0.1	0.2	0.0	0.0	0.0
Total Del/Veh (s)	26.9	38.8	17.4	29.5	23.0

6: Missouri Flat Road & Missouri Flat Rd/Diamond Springs Parkway Performance by approach

Approach	EB	WB	NB	All
Denied Del/Veh (s)	0.0	0.0	0.0	0.0
Total Del/Veh (s)	15.8	10.5	13.6	13.4

10: Pleasant Valley Rd & Missouri Flat Rd Performance by approach

Approach	EB	WB	SB	All
Denied Del/Veh (s)	13.0	0.6	0.0	4.3
Total Del/Veh (s)	114.0	17.3	9.3	45.7

Total Zone Performance

Denied Del/Veh (s)	4.9
Total Del/Veh (s)	511.7

Intersection	
Intersection Delay, s/veh	61.5
Intersection LOS	F

Movement	EBU	EBT	EBR	WBU	WBL	WBT	NBU	NBL	NBR
Vol, veh/h	0	320	110	0	155	380	0	280	255
Peak Hour Factor	0.92	0.78	0.78	0.92	0.78	0.78	0.92	0.78	0.78
Heavy Vehicles, %	2	2	2	2	2	2	2	2	2
Mvmt Flow	0	410	141	0	199	487	0	359	327
Number of Lanes	0	1	0	0	1	1	0	1	0

Approach	EB	WB	NB
Opposing Approach	WB	EB	
Opposing Lanes	2	1	0
Conflicting Approach Left		NB	EB
Conflicting Lanes Left	0	1	1
Conflicting Approach Right	NB		WB
Conflicting Lanes Right	1	0	2
HCM Control Delay	66	54	65.4
HCM LOS	F	F	F

Lane	NBLn1	EBLn1	WBLn1	WBLn2
Vol Left, %	52%	0%	100%	0%
Vol Thru, %	0%	74%	0%	100%
Vol Right, %	48%	26%	0%	0%
Sign Control	Stop	Stop	Stop	Stop
Traffic Vol by Lane	535	430	155	380
LT Vol	280	0	155	0
Through Vol	0	320	0	380
RT Vol	255	110	0	0
Lane Flow Rate	686	551	199	487
Geometry Grp	2	5	7	7
Degree of Util (X)	1	1	0.449	1
Departure Headway (Hd)	6.847	6.975	8.131	7.631
Convergence, Y/N	Yes	Yes	Yes	Yes
Cap	535	524	445	477
Service Time	4.847	4.975	5.831	5.331
HCM Lane V/C Ratio	1.282	1.052	0.447	1.021
HCM Control Delay	65.4	66	17.3	68.9
HCM Lane LOS	F	F	C	F
HCM 95th-tile Q	14	13.9	2.3	13.3

Intersection	
Int Delay, s/veh	8

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Vol, veh/h	0	0	5	40	0	30	5	845	115	80	640	0
Conflicting Peds, #/hr	0	0	0	0	0	0	0	0	0	0	0	0
Sign Control	Stop	Stop	Stop	Stop	Stop	Stop	Free	Free	Free	Free	Free	Free
RT Channelized	-	-	None	-	-	None	-	-	None	-	-	None
Storage Length	-	-	-	-	-	-	1	-	-	190	-	-
Veh in Median Storage, #	-	0	-	-	0	-	-	0	-	-	0	-
Grade, %	-	0	-	-	0	-	-	0	-	-	0	-
Peak Hour Factor	92	92	92	92	92	92	92	92	92	92	92	92
Heavy Vehicles, %	2	2	2	2	2	2	2	2	2	2	2	2
Mvmt Flow	0	0	5	43	0	33	5	918	125	87	696	0

Major/Minor	Minor2			Minor1			Major1			Major2		
Conflicting Flow All	1878	1924	696	1864	1862	981	696	0	0	1043	0	0
Stage 1	870	870	-	992	992	-	-	-	-	-	-	-
Stage 2	1008	1054	-	872	870	-	-	-	-	-	-	-
Critical Hdwy	7.12	6.52	6.22	7.12	6.52	6.22	4.12	-	-	4.12	-	-
Critical Hdwy Stg 1	6.12	5.52	-	6.12	5.52	-	-	-	-	-	-	-
Critical Hdwy Stg 2	6.12	5.52	-	6.12	5.52	-	-	-	-	-	-	-
Follow-up Hdwy	3.518	4.018	3.318	3.518	4.018	3.318	2.218	-	-	2.218	-	-
Pot Cap-1 Maneuver	54	67	442	56	73	303	900	-	-	667	-	-
Stage 1	346	369	-	296	324	-	-	-	-	-	-	-
Stage 2	290	303	-	345	369	-	-	-	-	-	-	-
Platoon blocked, %								-	-		-	-
Mov Cap-1 Maneuver	43	58	442	50	63	303	900	-	-	667	-	-
Mov Cap-2 Maneuver	43	58	-	50	63	-	-	-	-	-	-	-
Stage 1	344	321	-	294	322	-	-	-	-	-	-	-
Stage 2	257	301	-	296	321	-	-	-	-	-	-	-

Approach	EB	WB	NB	SB
HCM Control Delay, s	13.2	188.1	0	1.2
HCM LOS	B	F		

Minor Lane/Major Mvmt	NBL	NBT	NBR	EBLn1	WBLn1	SBL	SBT	SBR
Capacity (veh/h)	900	-	-	442	78	667	-	-
HCM Lane V/C Ratio	0.006	-	-	0.012	0.975	0.13	-	-
HCM Control Delay (s)	9	-	-	13.2	188.1	11.2	-	-
HCM Lane LOS	A	-	-	B	F	B	-	-
HCM 95th %tile Q(veh)	0	-	-	0	5.2	0.4	-	-

Intersection	
Int Delay, s/veh	0.7

Movement	EBL	EBR	NBL	NBT	SBT	SBR
Vol, veh/h	30	15	15	1030	560	40
Conflicting Peds, #/hr	0	0	0	0	0	0
Sign Control	Stop	Stop	Free	Free	Free	Free
RT Channelized	-	None	-	None	-	None
Storage Length	0	-	1	-	-	-
Veh in Median Storage, #	0	-	-	0	0	-
Grade, %	0	-	-	0	0	-
Peak Hour Factor	92	92	92	92	92	92
Heavy Vehicles, %	2	2	2	2	2	2
Mvmt Flow	33	16	16	1120	609	43

Major/Minor	Minor2		Major1		Major2	
Conflicting Flow All	1782	630	652	0	-	0
Stage 1	630	-	-	-	-	-
Stage 2	1152	-	-	-	-	-
Critical Hdwy	6.42	6.22	4.12	-	-	-
Critical Hdwy Stg 1	5.42	-	-	-	-	-
Critical Hdwy Stg 2	5.42	-	-	-	-	-
Follow-up Hdwy	3.518	3.318	2.218	-	-	-
Pot Cap-1 Maneuver	90	482	935	-	-	-
Stage 1	531	-	-	-	-	-
Stage 2	301	-	-	-	-	-
Platoon blocked, %				-	-	-
Mov Cap-1 Maneuver	88	482	935	-	-	-
Mov Cap-2 Maneuver	210	-	-	-	-	-
Stage 1	531	-	-	-	-	-
Stage 2	296	-	-	-	-	-

Approach	EB	NB	SB
HCM Control Delay, s	22.1	0.1	0
HCM LOS	C		

Minor Lane/Major Mvmt	NBL	NBT	EBLn1	SBT	SBR
Capacity (veh/h)	935	-	259	-	-
HCM Lane V/C Ratio	0.017	-	0.189	-	-
HCM Control Delay (s)	8.9	-	22.1	-	-
HCM Lane LOS	A	-	C	-	-
HCM 95th %tile Q(veh)	0.1	-	0.7	-	-

Intersection	
Int Delay, s/veh	6

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Vol, veh/h	60	0	15	0	0	5	20	935	10	5	410	115
Conflicting Peds, #/hr	0	0	0	0	0	0	0	0	0	0	0	0
Sign Control	Stop	Stop	Stop	Stop	Stop	Stop	Free	Free	Free	Free	Free	Free
RT Channelized	-	-	None	-	-	None	-	-	None	-	-	None
Storage Length	-	-	-	-	-	-	1	-	-	1	-	-
Veh in Median Storage, #	-	0	-	-	0	-	-	0	-	-	0	-
Grade, %	-	0	-	-	0	-	-	0	-	-	0	-
Peak Hour Factor	92	92	92	92	92	92	92	92	92	92	92	92
Heavy Vehicles, %	2	2	2	2	2	2	2	2	2	2	2	2
Mvmt Flow	65	0	16	0	0	5	22	1016	11	5	446	125

Major/Minor	Minor2			Minor1			Major1			Major2		
Conflicting Flow All	1587	1590	508	1592	1647	1022	571	0	0	1027	0	0
Stage 1	519	519	-	1065	1065	-	-	-	-	-	-	-
Stage 2	1068	1071	-	527	582	-	-	-	-	-	-	-
Critical Hdwy	7.12	6.52	6.22	7.12	6.52	6.22	4.12	-	-	4.12	-	-
Critical Hdwy Stg 1	6.12	5.52	-	6.12	5.52	-	-	-	-	-	-	-
Critical Hdwy Stg 2	6.12	5.52	-	6.12	5.52	-	-	-	-	-	-	-
Follow-up Hdwy	3.518	4.018	3.318	3.518	4.018	3.318	2.218	-	-	2.218	-	-
Pot Cap-1 Maneuver	87	108	565	87	99	287	1002	-	-	676	-	-
Stage 1	540	533	-	269	299	-	-	-	-	-	-	-
Stage 2	268	297	-	535	499	-	-	-	-	-	-	-
Platoon blocked, %								-	-		-	-
Mov Cap-1 Maneuver	83	105	565	83	96	287	1002	-	-	676	-	-
Mov Cap-2 Maneuver	83	105	-	83	96	-	-	-	-	-	-	-
Stage 1	528	529	-	263	292	-	-	-	-	-	-	-
Stage 2	257	290	-	516	495	-	-	-	-	-	-	-

Approach	EB	WB	NB	SB
HCM Control Delay, s	121.6	17.8	0.2	0.1
HCM LOS	F	C		

Minor Lane/Major Mvmt	NBL	NBT	NBR	EBLn1	WBLn1	SBL	SBT	SBR
Capacity (veh/h)	1002	-	-	100	287	676	-	-
HCM Lane V/C Ratio	0.022	-	-	0.815	0.019	0.008	-	-
HCM Control Delay (s)	8.7	-	-	121.6	17.8	10.4	-	-
HCM Lane LOS	A	-	-	F	C	B	-	-
HCM 95th %tile Q(veh)	0.1	-	-	4.5	0.1	0	-	-

Intersection	
Int Delay, s/veh	3.5

Movement	WBL	WBR	NBT	NBR	SBL	SBT
Vol, veh/h	20	60	170	25	125	145
Conflicting Peds, #/hr	0	0	0	0	0	0
Sign Control	Stop	Stop	Free	Free	Free	Free
RT Channelized	-	None	-	None	-	None
Storage Length	0	-	-	-	-	-
Veh in Median Storage, #	0	-	0	-	-	0
Grade, %	0	-	0	-	-	0
Peak Hour Factor	92	92	92	92	92	92
Heavy Vehicles, %	2	2	2	2	2	2
Mvmt Flow	22	65	185	27	136	158

Major/Minor	Minor1		Major1		Major2	
Conflicting Flow All	627	198	0	0	212	0
Stage 1	198	-	-	-	-	-
Stage 2	429	-	-	-	-	-
Critical Hdwy	6.42	6.22	-	-	4.12	-
Critical Hdwy Stg 1	5.42	-	-	-	-	-
Critical Hdwy Stg 2	5.42	-	-	-	-	-
Follow-up Hdwy	3.518	3.318	-	-	2.218	-
Pot Cap-1 Maneuver	447	843	-	-	1358	-
Stage 1	835	-	-	-	-	-
Stage 2	657	-	-	-	-	-
Platoon blocked, %			-	-		-
Mov Cap-1 Maneuver	398	843	-	-	1358	-
Mov Cap-2 Maneuver	398	-	-	-	-	-
Stage 1	835	-	-	-	-	-
Stage 2	585	-	-	-	-	-

Approach	WB	NB	SB
HCM Control Delay, s	11.3	0	3.7
HCM LOS	B		

Minor Lane/Major Mvmt	NBT	NBR	WBLn1	SBL	SBT
Capacity (veh/h)	-	-	659	1358	-
HCM Lane V/C Ratio	-	-	0.132	0.1	-
HCM Control Delay (s)	-	-	11.3	7.9	0
HCM Lane LOS	-	-	B	A	A
HCM 95th %tile Q(veh)	-	-	0.5	0.3	-

Intersection	
Int Delay, s/veh	6

Movement	EBL	EBT	WBT	WBR	SBL	SBR
Vol, veh/h	150	415	415	40	55	110
Conflicting Peds, #/hr	0	0	0	0	0	0
Sign Control	Free	Free	Free	Free	Stop	Stop
RT Channelized	-	None	-	None	-	None
Storage Length	-	-	-	-	0	-
Veh in Median Storage, #	-	0	0	-	1	-
Grade, %	-	0	0	-	0	-
Peak Hour Factor	75	75	75	75	75	75
Heavy Vehicles, %	2	2	2	2	2	2
Mvmt Flow	200	553	553	53	73	147

Major/Minor	Major1		Major2		Minor2	
Conflicting Flow All	607	0	-	0	1533	580
Stage 1	-	-	-	-	580	-
Stage 2	-	-	-	-	953	-
Critical Hdwy	4.12	-	-	-	6.42	6.22
Critical Hdwy Stg 1	-	-	-	-	5.42	-
Critical Hdwy Stg 2	-	-	-	-	5.42	-
Follow-up Hdwy	2.218	-	-	-	3.518	3.318
Pot Cap-1 Maneuver	971	-	-	-	128	514
Stage 1	-	-	-	-	560	-
Stage 2	-	-	-	-	375	-
Platoon blocked, %		-	-	-		
Mov Cap-1 Maneuver	971	-	-	-	90	514
Mov Cap-2 Maneuver	-	-	-	-	198	-
Stage 1	-	-	-	-	560	-
Stage 2	-	-	-	-	264	-

Approach	EB	WB	SB
HCM Control Delay, s	2.6	0	33.9
HCM LOS			D

Minor Lane/Major Mvmt	EBL	EBT	WBT	WBR	SBLn1
Capacity (veh/h)	971	-	-	-	336
HCM Lane V/C Ratio	0.206	-	-	-	0.655
HCM Control Delay (s)	9.7	0	-	-	33.9
HCM Lane LOS	A	A	-	-	D
HCM 95th %tile Q(veh)	0.8	-	-	-	4.4

Intersection: 1: Missouri Flat Road & WB Ramps

Movement	WB	WB	WB	WB	NB	NB	NB	NB	SB	SB
Directions Served	L	LT	R	R	L	L	T	T	T	T
Maximum Queue (ft)	219	218	166	119	137	149	408	384	195	157
Average Queue (ft)	123	120	84	32	131	141	220	108	91	65
95th Queue (ft)	188	187	144	81	150	163	438	281	165	131
Link Distance (ft)	983	983					395	395	459	459
Upstream Blk Time (%)							2	0		
Queuing Penalty (veh)							14	1		
Storage Bay Dist (ft)			400	400	125	125				
Storage Blk Time (%)					2	16	0			
Queuing Penalty (veh)					7	66	2			

Intersection: 2: Missouri Flat Road & EB Ramps

Movement	EB	EB	EB	NB	NB	NB	SB	SB	SB	SB
Directions Served	L	LTR	R	T	T	R	L	L	T	T
Maximum Queue (ft)	190	232	229	173	167	60	125	128	132	154
Average Queue (ft)	78	134	111	156	137	8	49	72	30	40
95th Queue (ft)	153	205	192	185	191	36	94	109	87	107
Link Distance (ft)		1460		138	138	138			395	395
Upstream Blk Time (%)				28	13					
Queuing Penalty (veh)				110	50					
Storage Bay Dist (ft)	700		550				150	150		
Storage Blk Time (%)							0	0	0	
Queuing Penalty (veh)							0	0	0	

Intersection: 3: Missouri Flat Road & Mother Lode Drive

Movement	EB	EB	NB	NB	NB	NB	B24	B24	SB	SB	SB
Directions Served	L	R	L	T	T	R	T	T	T	T	R
Maximum Queue (ft)	107	57	164	507	358	110	143	202	157	166	28
Average Queue (ft)	37	22	21	224	87	4	8	15	90	104	1
95th Queue (ft)	88	50	88	468	248	57	93	137	178	190	20
Link Distance (ft)	633			1949	1949		368	368	138	138	
Upstream Blk Time (%)							0	0	4	7	0
Queuing Penalty (veh)							0	1	29	46	0
Storage Bay Dist (ft)		200	150			250					200
Storage Blk Time (%)				20	0	0				7	0
Queuing Penalty (veh)				3	1	0				1	0

Intersection: 4: Missouri Flat Road & Forni Road

Movement	EB	EB	EB	EB	WB	WB	NB	NB	NB	NB	B25	B25	SB	SB	SB	SB	B24
Directions Served	L	L	T	R	L	T	L	T	T	R	T	T	L	T	T	R	T
Maximum Queue (ft)	192	197	154	65	110	121	259	386	395	175	106	110	324	439	419	175	116
Average Queue (ft)	93	108	59	21	49	50	62	218	221	35	6	7	238	229	206	101	14
95th Queue (ft)	169	178	123	54	93	102	183	390	400	147	47	49	364	450	386	211	92
Link Distance (ft)			1180			275		317	317		652	652		368	368		1949
Upstream Blk Time (%)								4	4					9	1		
Queuing Penalty (veh)								24	27					62	9		
Storage Bay Dist (ft)	195	195		150	190		250			150			300			150	
Storage Blk Time (%)	0	1	0					8	18	0			15	3	11	0	
Queuing Penalty (veh)	0	1	2					5	11	0			64	7	34	1	

Intersection: 4: Missouri Flat Road & Forni Road

Movement	B24
Directions Served	T
Maximum Queue (ft)	50
Average Queue (ft)	4
95th Queue (ft)	36
Link Distance (ft)	1949
Upstream Blk Time (%)	
Queuing Penalty (veh)	
Storage Bay Dist (ft)	
Storage Blk Time (%)	
Queuing Penalty (veh)	

Intersection: 5: Missouri Flat Road & Golden Center Drive

Movement	EB	WB	NB	NB	NB	B43	B43	SB	SB	SB	SB	B25
Directions Served	LTR	LTR	L	T	TR	T	T	L	T	T	R	T
Maximum Queue (ft)	81	150	166	297	298	193	209	194	458	538	119	7
Average Queue (ft)	25	70	43	203	217	23	26	86	167	242	6	0
95th Queue (ft)	61	130	121	315	324	112	116	172	375	468	79	7
Link Distance (ft)	184	367		216	216	1592	1592		652	652		317
Upstream Blk Time (%)				8	10				0	0		
Queuing Penalty (veh)				56	74				0	0		
Storage Bay Dist (ft)			150					175			500	
Storage Blk Time (%)				15				2	6	1		
Queuing Penalty (veh)				6				7	6	0		

Intersection: 6: Missouri Flat Road & Missouri Flat Rd/Diamond Springs Parkway

Movement	EB	EB	EB	B43	WB	WB	WB	NB	NB	NB
Directions Served	T	T	R	T	L	T	T	L	L	R
Maximum Queue (ft)	109	279	262	7	141	145	159	191	198	30
Average Queue (ft)	45	61	92	0	53	65	65	113	116	9
95th Queue (ft)	91	163	234	5	105	123	125	176	180	28
Link Distance (ft)	1592	1592		216		2033	2033		451	451
Upstream Blk Time (%)										
Queuing Penalty (veh)										
Storage Bay Dist (ft)			250		500			275		
Storage Blk Time (%)			1							
Queuing Penalty (veh)			1							

Intersection: 10: Pleasant Valley Rd & Missouri Flat Rd

Movement	EB	EB	EB	WB	WB	SB	SB	B68
Directions Served	L	L	T	T	R	L	R	T
Maximum Queue (ft)	142	155	676	339	224	158	96	4
Average Queue (ft)	138	145	522	159	115	72	36	0
95th Queue (ft)	154	190	876	277	216	131	76	4
Link Distance (ft)			658	1506		127	127	419
Upstream Blk Time (%)			21			1	0	
Queuing Penalty (veh)			132			3	0	
Storage Bay Dist (ft)	130	130			200			
Storage Blk Time (%)	60	50	4	2	0			
Queuing Penalty (veh)	130	107	15	14	1			

Zone Summary

Zone wide Queuing Penalty: 1125

1: Missouri Flat Road & WB Ramps Performance by approach

Approach	WB	NB	SB	All
Denied Del/Veh (s)	1.2	0.0	0.0	0.3
Total Del/Veh (s)	32.6	10.8	15.6	18.8

2: Missouri Flat Road & EB Ramps Performance by approach

Approach	EB	NB	SB	All
Denied Del/Veh (s)	1.6	0.0	0.0	0.4
Total Del/Veh (s)	37.0	19.1	23.3	25.6

3: Missouri Flat Road & Mother Lode Drive Performance by approach

Approach	EB	NB	SB	All
Denied Del/Veh (s)	2.6	0.0	0.1	0.1
Total Del/Veh (s)	47.9	16.3	6.1	11.5

4: Missouri Flat Road & Forni Road Performance by approach

Approach	EB	WB	NB	SB	All
Denied Del/Veh (s)	113.0	0.0	0.0	0.1	21.5
Total Del/Veh (s)	191.9	15.8	33.0	33.1	61.1

5: Missouri Flat Road & Golden Center Drive Performance by approach

Approach	EB	WB	NB	SB	All
Denied Del/Veh (s)	0.2	0.3	0.9	0.1	0.4
Total Del/Veh (s)	36.2	45.1	25.3	35.9	32.2

6: Missouri Flat Road & Missouri Flat Rd/Diamond Springs Parkway Performance by approach

Approach	EB	WB	NB	All
Denied Del/Veh (s)	0.0	0.0	0.0	0.0
Total Del/Veh (s)	20.6	6.8	12.8	14.7

10: Pleasant Valley Rd & Missouri Flat Rd Performance by approach

Approach	EB	WB	SB	All
Denied Del/Veh (s)	2.0	0.0	0.0	0.6
Total Del/Veh (s)	41.0	14.2	9.7	20.8

Total Zone Performance

Denied Del/Veh (s)	27.8
Total Del/Veh (s)	470.8

Intersection	
Intersection Delay, s/veh	44.6
Intersection LOS	E

Movement	EBU	EBT	EBR	WBU	WBL	WBT	NBU	NBL	NBR
Vol, veh/h	0	415	260	0	255	345	0	135	185
Peak Hour Factor	0.92	0.78	0.78	0.92	0.78	0.78	0.92	0.78	0.78
Heavy Vehicles, %	2	2	2	2	2	2	2	2	2
Mvmt Flow	0	532	333	0	327	442	0	173	237
Number of Lanes	0	1	0	0	1	1	0	1	0

Approach	EB	WB	NB
Opposing Approach	WB	EB	
Opposing Lanes	2	1	0
Conflicting Approach Left		NB	EB
Conflicting Lanes Left	0	1	1
Conflicting Approach Right	NB		WB
Conflicting Lanes Right	1	0	2
HCM Control Delay	63.1	33	27.5
HCM LOS	F	D	D

Lane	NBLn1	EBLn1	WBLn1	WBLn2
Vol Left, %	42%	0%	100%	0%
Vol Thru, %	0%	61%	0%	100%
Vol Right, %	58%	39%	0%	0%
Sign Control	Stop	Stop	Stop	Stop
Traffic Vol by Lane	320	675	255	345
LT Vol	135	0	255	0
Through Vol	0	415	0	345
RT Vol	185	260	0	0
Lane Flow Rate	410	865	327	442
Geometry Grp	2	5	7	7
Degree of Util (X)	0.755	1	0.681	0.861
Departure Headway (Hd)	6.626	6.393	7.504	7.004
Convergence, Y/N	Yes	Yes	Yes	Yes
Cap	542	571	484	522
Service Time	4.714	4.405	5.204	4.704
HCM Lane V/C Ratio	0.756	1.515	0.676	0.847
HCM Control Delay	27.5	63.1	24.7	39.2
HCM Lane LOS	D	F	C	E
HCM 95th-tile Q	6.6	14.5	5.1	9.2

Intersection	
Int Delay, s/veh	19.6

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Vol, veh/h	0	0	5	35	0	180	5	665	10	15	1015	0
Conflicting Peds, #/hr	0	0	0	0	0	0	0	0	0	0	0	0
Sign Control	Stop	Stop	Stop	Stop	Stop	Stop	Free	Free	Free	Free	Free	Free
RT Channelized	-	-	None	-	-	None	-	-	None	-	-	None
Storage Length	-	-	-	-	-	-	1	-	-	190	-	-
Veh in Median Storage, #	-	0	-	-	0	-	-	0	-	-	0	-
Grade, %	-	0	-	-	0	-	-	0	-	-	0	-
Peak Hour Factor	92	92	92	92	92	92	92	92	92	92	92	92
Heavy Vehicles, %	2	2	2	2	2	2	2	2	2	2	2	2
Mvmt Flow	0	0	5	38	0	196	5	723	11	16	1103	0

Major/Minor	Minor2			Minor1			Major1			Major2		
Conflicting Flow All	1973	1881	1103	1878	1875	728	1103	0	0	734	0	0
Stage 1	1136	1136	-	739	739	-	-	-	-	-	-	-
Stage 2	837	745	-	1139	1136	-	-	-	-	-	-	-
Critical Hdwy	7.12	6.52	6.22	7.12	6.52	6.22	4.12	-	-	4.12	-	-
Critical Hdwy Stg 1	6.12	5.52	-	6.12	5.52	-	-	-	-	-	-	-
Critical Hdwy Stg 2	6.12	5.52	-	6.12	5.52	-	-	-	-	-	-	-
Follow-up Hdwy	3.518	4.018	3.318	3.518	4.018	3.318	2.218	-	-	2.218	-	-
Pot Cap-1 Maneuver	47	71	257	54	72	423	633	-	-	871	-	-
Stage 1	246	277	-	409	424	-	-	-	-	-	-	-
Stage 2	361	421	-	245	277	-	-	-	-	-	-	-
Platoon blocked, %								-	-		-	-
Mov Cap-1 Maneuver	25	69	257	52	70	423	633	-	-	871	-	-
Mov Cap-2 Maneuver	25	69	-	52	70	-	-	-	-	-	-	-
Stage 1	244	272	-	406	421	-	-	-	-	-	-	-
Stage 2	192	418	-	235	272	-	-	-	-	-	-	-

Approach	EB	WB	NB	SB
HCM Control Delay, s	19.3	174.9	0.1	0.1
HCM LOS	C	F		

Minor Lane/Major Mvmt	NBL	NBT	NBR	EBLn1	WBLn1	SBL	SBT	SBR
Capacity (veh/h)	633	-	-	257	196	871	-	-
HCM Lane V/C Ratio	0.009	-	-	0.021	1.192	0.019	-	-
HCM Control Delay (s)	10.7	-	-	19.3	174.9	9.2	-	-
HCM Lane LOS	B	-	-	C	F	A	-	-
HCM 95th %tile Q(veh)	0	-	-	0.1	12	0.1	-	-

Intersection	
Int Delay, s/veh	0.7

Movement	EBL	EBR	NBL	NBT	SBT	SBR
Vol, veh/h	35	10	5	565	970	20
Conflicting Peds, #/hr	0	0	0	0	0	0
Sign Control	Stop	Stop	Free	Free	Free	Free
RT Channelized	-	None	-	None	-	None
Storage Length	0	-	1	-	-	-
Veh in Median Storage, #	0	-	-	0	0	-
Grade, %	0	-	-	0	0	-
Peak Hour Factor	92	92	92	92	92	92
Heavy Vehicles, %	2	2	2	2	2	2
Mvmt Flow	38	11	5	614	1054	22

Major/Minor	Minor2		Major1		Major2	
Conflicting Flow All	1690	1065	1076	0	-	0
Stage 1	1065	-	-	-	-	-
Stage 2	625	-	-	-	-	-
Critical Hdwy	6.42	6.22	4.12	-	-	-
Critical Hdwy Stg 1	5.42	-	-	-	-	-
Critical Hdwy Stg 2	5.42	-	-	-	-	-
Follow-up Hdwy	3.518	3.318	2.218	-	-	-
Pot Cap-1 Maneuver	103	270	648	-	-	-
Stage 1	331	-	-	-	-	-
Stage 2	534	-	-	-	-	-
Platoon blocked, %				-	-	-
Mov Cap-1 Maneuver	102	270	648	-	-	-
Mov Cap-2 Maneuver	229	-	-	-	-	-
Stage 1	331	-	-	-	-	-
Stage 2	530	-	-	-	-	-

Approach	EB	NB	SB
HCM Control Delay, s	24.1	0.1	0
HCM LOS	C		

Minor Lane/Major Mvmt	NBL	NBT	EBLn1	SBT	SBR
Capacity (veh/h)	648	-	237	-	-
HCM Lane V/C Ratio	0.008	-	0.206	-	-
HCM Control Delay (s)	10.6	-	24.1	-	-
HCM Lane LOS	B	-	C	-	-
HCM 95th %tile Q(veh)	0	-	0.8	-	-

Intersection	
Int Delay, s/veh	22

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Vol, veh/h	105	0	30	0	0	5	10	450	5	5	850	90
Conflicting Peds, #/hr	0	0	0	0	0	0	0	0	0	0	0	0
Sign Control	Stop	Stop	Stop	Stop	Stop	Stop	Free	Free	Free	Free	Free	Free
RT Channelized	-	-	None	-	-	None	-	-	None	-	-	None
Storage Length	-	-	-	-	-	-	1	-	-	1	-	-
Veh in Median Storage, #	-	0	-	-	0	-	-	0	-	-	0	-
Grade, %	-	0	-	-	0	-	-	0	-	-	0	-
Peak Hour Factor	92	92	92	92	92	92	92	92	92	92	92	92
Heavy Vehicles, %	2	2	2	2	2	2	2	2	2	2	2	2
Mvmt Flow	114	0	33	0	0	5	11	489	5	5	924	98

Major/Minor	Minor2			Minor1			Major1			Major2		
Conflicting Flow All	1500	1500	973	1514	1547	492	1022	0	0	495	0	0
Stage 1	984	984	-	514	514	-	-	-	-	-	-	-
Stage 2	516	516	-	1000	1033	-	-	-	-	-	-	-
Critical Hdwy	7.12	6.52	6.22	7.12	6.52	6.22	4.12	-	-	4.12	-	-
Critical Hdwy Stg 1	6.12	5.52	-	6.12	5.52	-	-	-	-	-	-	-
Critical Hdwy Stg 2	6.12	5.52	-	6.12	5.52	-	-	-	-	-	-	-
Follow-up Hdwy	3.518	4.018	3.318	3.518	4.018	3.318	2.218	-	-	2.218	-	-
Pot Cap-1 Maneuver	~ 100	122	306	98	114	577	679	-	-	1069	-	-
Stage 1	299	327	-	543	535	-	-	-	-	-	-	-
Stage 2	542	534	-	293	310	-	-	-	-	-	-	-
Platoon blocked, %								-	-		-	-
Mov Cap-1 Maneuver	~ 97	119	306	86	112	577	679	-	-	1069	-	-
Mov Cap-2 Maneuver	~ 97	119	-	86	112	-	-	-	-	-	-	-
Stage 1	294	325	-	534	526	-	-	-	-	-	-	-
Stage 2	528	525	-	261	309	-	-	-	-	-	-	-

Approach	EB	WB	NB	SB
HCM Control Delay, s	251.1	11.3	0.2	0
HCM LOS	F	B		

Minor Lane/Major Mvmt	NBL	NBT	NBR	EBLn1	WBLn1	SBL	SBT	SBR
Capacity (veh/h)	679	-	-	114	577	1069	-	-
HCM Lane V/C Ratio	0.016	-	-	1.287	0.009	0.005	-	-
HCM Control Delay (s)	10.4	-	-	251.1	11.3	8.4	-	-
HCM Lane LOS	B	-	-	F	B	A	-	-
HCM 95th %tile Q(veh)	0	-	-	9.7	0	0	-	-

Notes

~: Volume exceeds capacity $: Delay exceeds 300s +: Computation Not Defined *: All major volume in platoon

Intersection	
Int Delay, s/veh	4.9

Movement	WBL	WBR	NBT	NBR	SBL	SBT
Vol, veh/h	40	185	125	30	80	210
Conflicting Peds, #/hr	0	0	0	0	0	0
Sign Control	Stop	Stop	Free	Free	Free	Free
RT Channelized	-	None	-	None	-	None
Storage Length	0	-	-	-	-	-
Veh in Median Storage, #	0	-	0	-	-	0
Grade, %	0	-	0	-	-	0
Peak Hour Factor	92	92	92	92	92	92
Heavy Vehicles, %	2	2	2	2	2	2
Mvmt Flow	43	201	136	33	87	228

Major/Minor	Minor1		Major1		Major2	
Conflicting Flow All	554	152	0	0	168	0
Stage 1	152	-	-	-	-	-
Stage 2	402	-	-	-	-	-
Critical Hdwy	6.42	6.22	-	-	4.12	-
Critical Hdwy Stg 1	5.42	-	-	-	-	-
Critical Hdwy Stg 2	5.42	-	-	-	-	-
Follow-up Hdwy	3.518	3.318	-	-	2.218	-
Pot Cap-1 Maneuver	493	894	-	-	1410	-
Stage 1	876	-	-	-	-	-
Stage 2	676	-	-	-	-	-
Platoon blocked, %			-	-		-
Mov Cap-1 Maneuver	458	894	-	-	1410	-
Mov Cap-2 Maneuver	458	-	-	-	-	-
Stage 1	876	-	-	-	-	-
Stage 2	628	-	-	-	-	-

Approach	WB	NB	SB
HCM Control Delay, s	11.9	0	2.1
HCM LOS	B		

Minor Lane/Major Mvmt	NBT	NBR	WBLn1	SBL	SBT
Capacity (veh/h)	-	-	765	1410	-
HCM Lane V/C Ratio	-	-	0.32	0.062	-
HCM Control Delay (s)	-	-	11.9	7.7	0
HCM Lane LOS	-	-	B	A	A
HCM 95th %tile Q(veh)	-	-	1.4	0.2	-

Intersection	
Int Delay, s/veh	3.9

Movement	EBL	EBT	WBT	WBR	SBL	SBR
Vol, veh/h	95	515	420	25	20	160
Conflicting Peds, #/hr	0	0	0	0	0	0
Sign Control	Free	Free	Free	Free	Stop	Stop
RT Channelized	-	None	-	None	-	None
Storage Length	-	-	-	-	0	-
Veh in Median Storage, #	-	0	0	-	1	-
Grade, %	-	0	0	-	0	-
Peak Hour Factor	75	75	75	75	75	75
Heavy Vehicles, %	2	2	2	2	2	2
Mvmt Flow	127	687	560	33	27	213

Major/Minor	Major1		Major2		Minor2	
Conflicting Flow All	593	0	-	0	1517	577
Stage 1	-	-	-	-	577	-
Stage 2	-	-	-	-	940	-
Critical Hdwy	4.12	-	-	-	6.42	6.22
Critical Hdwy Stg 1	-	-	-	-	5.42	-
Critical Hdwy Stg 2	-	-	-	-	5.42	-
Follow-up Hdwy	2.218	-	-	-	3.518	3.318
Pot Cap-1 Maneuver	983	-	-	-	131	516
Stage 1	-	-	-	-	562	-
Stage 2	-	-	-	-	380	-
Platoon blocked, %		-	-	-		
Mov Cap-1 Maneuver	983	-	-	-	104	516
Mov Cap-2 Maneuver	-	-	-	-	221	-
Stage 1	-	-	-	-	562	-
Stage 2	-	-	-	-	301	-

Approach	EB	WB	SB
HCM Control Delay, s	1.4	0	21.9
HCM LOS			C

Minor Lane/Major Mvmt	EBL	EBT	WBT	WBR	SBLn1
Capacity (veh/h)	983	-	-	-	449
HCM Lane V/C Ratio	0.129	-	-	-	0.535
HCM Control Delay (s)	9.2	0	-	-	21.9
HCM Lane LOS	A	A	-	-	C
HCM 95th %tile Q(veh)	0.4	-	-	-	3.1

Intersection: 1: Missouri Flat Road & WB Ramps

Movement	WB	WB	WB	WB	NB	NB	NB	NB	SB	SB
Directions Served	L	LT	R	R	L	L	T	T	T	T
Maximum Queue (ft)	333	347	256	177	134	144	174	122	298	268
Average Queue (ft)	178	187	121	48	77	94	66	59	161	138
95th Queue (ft)	313	325	234	125	146	141	129	109	260	227
Link Distance (ft)	983	983					395	395	459	459
Upstream Blk Time (%)										
Queuing Penalty (veh)										
Storage Bay Dist (ft)			400	400	125	125				
Storage Blk Time (%)		1	0		0	1	0			
Queuing Penalty (veh)		5	0		1	4	2			

Intersection: 2: Missouri Flat Road & EB Ramps

Movement	EB	EB	EB	NB	NB	NB	SB	SB	SB	SB
Directions Served	L	LTR	R	T	T	R	L	L	T	T
Maximum Queue (ft)	309	374	373	173	178	30	161	174	369	377
Average Queue (ft)	123	200	201	156	148	4	98	125	148	163
95th Queue (ft)	262	331	333	182	187	20	164	188	332	338
Link Distance (ft)		1460		138	138	138			395	395
Upstream Blk Time (%)				28	20				0	0
Queuing Penalty (veh)				107	77				3	3
Storage Bay Dist (ft)	700		550				150	150		
Storage Blk Time (%)		0					0	3	8	
Queuing Penalty (veh)		0					3	21	25	

Intersection: 3: Missouri Flat Road & Mother Lode Drive

Movement	EB	EB	NB	NB	NB	NB	B24	B24	SB	SB	SB
Directions Served	L	R	L	T	T	R	T	T	T	T	R
Maximum Queue (ft)	79	75	174	403	289	82	180	276	167	190	54
Average Queue (ft)	27	26	37	154	89	6	6	15	116	126	2
95th Queue (ft)	64	60	109	322	224	71	86	134	198	207	32
Link Distance (ft)	633			1949	1949		368	368	138	138	
Upstream Blk Time (%)							0	0	9	12	0
Queuing Penalty (veh)							0	1	90	115	0
Storage Bay Dist (ft)		200	150			250					200
Storage Blk Time (%)				12	0	0				12	0
Queuing Penalty (veh)				4	2	0				2	0

Intersection: 4: Missouri Flat Road & Forni Road

Movement	EB	EB	EB	EB	WB	WB	NB	NB	NB	NB	B25	B25	SB	SB	SB	SB	B24
Directions Served	L	L	T	R	L	T	L	T	T	R	T	T	L	T	T	R	T
Maximum Queue (ft)	207	220	1226	81	57	94	274	396	395	160	127	130	325	454	471	175	804
Average Queue (ft)	203	218	993	32	16	34	114	227	232	12	11	12	187	334	395	154	212
95th Queue (ft)	223	227	1504	67	46	77	261	415	422	82	72	77	343	516	542	225	728
Link Distance (ft)			1180			275		317	317		652	652		368	368		1949
Upstream Blk Time (%)			43					6	6					10	24		
Queuing Penalty (veh)			0					33	36					104	242		
Storage Bay Dist (ft)	195	195		150	190		250			150			300			150	
Storage Blk Time (%)	18	60				0	1	10	21	0			1	12	31	1	
Queuing Penalty (veh)	29	97				0	6	10	5	0			7	21	145	8	

Intersection: 4: Missouri Flat Road & Forni Road

Movement	B24
Directions Served	T
Maximum Queue (ft)	920
Average Queue (ft)	294
95th Queue (ft)	871
Link Distance (ft)	1949
Upstream Blk Time (%)	0
Queuing Penalty (veh)	0
Storage Bay Dist (ft)	
Storage Blk Time (%)	
Queuing Penalty (veh)	

Intersection: 5: Missouri Flat Road & Golden Center Drive

Movement	EB	WB	NB	NB	NB	B43	B43	SB	SB	SB	SB	B25	B25
Directions Served	LTR	LTR	L	T	TR	T	T	L	T	T	R	T	T
Maximum Queue (ft)	155	271	174	292	294	134	141	200	656	687	374	126	246
Average Queue (ft)	66	143	101	199	204	14	15	73	312	379	19	5	11
95th Queue (ft)	130	240	185	309	311	78	83	165	654	710	171	65	100
Link Distance (ft)	184	367		216	216	1592	1592		652	652		317	317
Upstream Blk Time (%)	0			9	9				1	2		0	0
Queuing Penalty (veh)	0			50	52				5	17		0	1
Storage Bay Dist (ft)			150					175			500		
Storage Blk Time (%)			6	15				0	14	8	0		
Queuing Penalty (veh)			29	13				2	9	1	0		

Intersection: 6: Missouri Flat Road & Missouri Flat Rd/Diamond Springs Parkway

Movement	EB	EB	EB	B43	WB	WB	WB	NB	NB	NB
Directions Served	T	T	R	T	L	T	T	L	L	R
Maximum Queue (ft)	168	379	274	32	106	113	111	198	204	69
Average Queue (ft)	81	111	117	1	38	47	47	101	111	27
95th Queue (ft)	146	249	271	30	76	91	89	163	177	53
Link Distance (ft)	1592	1592		216		2033	2033		451	451
Upstream Blk Time (%)				0						
Queuing Penalty (veh)				0						
Storage Bay Dist (ft)			250		500			275		
Storage Blk Time (%)		0	2						0	
Queuing Penalty (veh)		0	5						0	

Intersection: 10: Pleasant Valley Rd & Missouri Flat Rd

Movement	EB	EB	EB	WB	WB	SB	SB	B68	B68
Directions Served	L	L	T	T	R	L	R	T	T
Maximum Queue (ft)	142	154	554	247	170	200	157	84	10
Average Queue (ft)	112	93	199	118	41	136	64	8	0
95th Queue (ft)	159	197	490	199	109	205	121	51	7
Link Distance (ft)			658	1506		127	127	419	419
Upstream Blk Time (%)			2			9	1		
Queuing Penalty (veh)			13			42	3		
Storage Bay Dist (ft)	130	130			200				
Storage Blk Time (%)	21	13	7	1	0				
Queuing Penalty (veh)	84	53	18	2	0				

Zone Summary

Zone wide Queuing Penalty: 1606

1: Missouri Flat Road & WB Ramps Performance by approach

Approach	WB	NB	SB	All
Denied Del/Veh (s)	1.2	0.0	0.0	0.3
Total Del/Veh (s)	23.3	18.9	12.0	18.3

2: Missouri Flat Road & EB Ramps Performance by approach

Approach	EB	NB	SB	All
Denied Del/Veh (s)	1.3	0.0	0.0	0.3
Total Del/Veh (s)	24.4	16.3	13.2	17.2

3: Missouri Flat Road & Mother Lode Drive Performance by approach

Approach	EB	NB	SB	All
Denied Del/Veh (s)	2.0	0.0	0.0	0.1
Total Del/Veh (s)	47.3	19.3	4.8	13.3

4: Missouri Flat Road & Forni Road Performance by approach

Approach	EB	WB	NB	SB	All
Denied Del/Veh (s)	3.0	0.0	0.0	0.2	0.5
Total Del/Veh (s)	43.7	21.1	28.5	32.4	31.5

5: Missouri Flat Road & Golden Center Drive Performance by approach

Approach	EB	WB	NB	SB	All
Denied Del/Veh (s)	0.1	0.2	0.0	0.0	0.0
Total Del/Veh (s)	28.8	38.9	18.3	30.4	24.0

6: Missouri Flat Road & Missouri Flat Rd/Diamond Springs Parkway Performance by approach

Approach	EB	WB	NB	All
Denied Del/Veh (s)	0.0	0.0	0.0	0.0
Total Del/Veh (s)	17.4	11.1	13.4	14.2

10: Pleasant Valley Rd & Missouri Flat Rd Performance by approach

Approach	EB	WB	SB	All
Denied Del/Veh (s)	28.5	0.6	0.0	8.9
Total Del/Veh (s)	125.9	17.9	9.1	48.3

Total Zone Performance

Denied Del/Veh (s)	8.5
Total Del/Veh (s)	554.5

Intersection	
Intersection Delay, s/veh	61.5
Intersection LOS	F

Movement	EBU	EBT	EBR	WBU	WBL	WBT	NBU	NBL	NBR
Vol, veh/h	0	325	110	0	156	381	0	280	260
Peak Hour Factor	0.92	0.78	0.78	0.92	0.78	0.78	0.92	0.78	0.78
Heavy Vehicles, %	2	2	2	2	2	2	2	2	2
Mvmt Flow	0	417	141	0	200	488	0	359	333
Number of Lanes	0	1	0	0	1	1	0	1	0

Approach	EB	WB	NB
Opposing Approach	WB	EB	
Opposing Lanes	2	1	0
Conflicting Approach Left		NB	EB
Conflicting Lanes Left	0	1	1
Conflicting Approach Right	NB		WB
Conflicting Lanes Right	1	0	2
HCM Control Delay	66	53.9	65.3
HCM LOS	F	F	F

Lane	NBLn1	EBLn1	WBLn1	WBLn2
Vol Left, %	52%	0%	100%	0%
Vol Thru, %	0%	75%	0%	100%
Vol Right, %	48%	25%	0%	0%
Sign Control	Stop	Stop	Stop	Stop
Traffic Vol by Lane	540	435	156	381
LT Vol	280	0	156	0
Through Vol	0	325	0	381
RT Vol	260	110	0	0
Lane Flow Rate	692	558	200	488
Geometry Grp	2	5	7	7
Degree of Util (X)	1	1	0.452	1
Departure Headway (Hd)	6.843	6.977	8.131	7.631
Convergence, Y/N	Yes	Yes	Yes	Yes
Cap	533	524	446	479
Service Time	4.843	4.977	5.831	5.331
HCM Lane V/C Ratio	1.298	1.065	0.448	1.019
HCM Control Delay	65.3	66	17.4	68.9
HCM Lane LOS	F	F	C	F
HCM 95th-tile Q	14	13.9	2.3	13.3

Intersection	
Int Delay, s/veh	10.6

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Vol, veh/h	0	0	5	40	0	30	5	855	115	80	710	0
Conflicting Peds, #/hr	0	0	0	0	0	0	0	0	0	0	0	0
Sign Control	Stop	Stop	Stop	Stop	Stop	Stop	Free	Free	Free	Free	Free	Free
RT Channelized	-	-	None	-	-	None	-	-	None	-	-	None
Storage Length	-	-	-	-	-	-	1	-	-	190	-	-
Veh in Median Storage, #	-	0	-	-	0	-	-	0	-	-	0	-
Grade, %	-	0	-	-	0	-	-	0	-	-	0	-
Peak Hour Factor	92	92	92	92	92	92	92	92	92	92	92	92
Heavy Vehicles, %	2	2	2	2	2	2	2	2	2	2	2	2
Mvmt Flow	0	0	5	43	0	33	5	929	125	87	772	0

Major/Minor	Minor2			Minor1			Major1			Major2		
Conflicting Flow All	1965	2011	772	1951	1949	992	772	0	0	1054	0	0
Stage 1	946	946	-	1003	1003	-	-	-	-	-	-	-
Stage 2	1019	1065	-	948	946	-	-	-	-	-	-	-
Critical Hdwy	7.12	6.52	6.22	7.12	6.52	6.22	4.12	-	-	4.12	-	-
Critical Hdwy Stg 1	6.12	5.52	-	6.12	5.52	-	-	-	-	-	-	-
Critical Hdwy Stg 2	6.12	5.52	-	6.12	5.52	-	-	-	-	-	-	-
Follow-up Hdwy	3.518	4.018	3.318	3.518	4.018	3.318	2.218	-	-	2.218	-	-
Pot Cap-1 Maneuver	47	59	400	48	64	298	843	-	-	661	-	-
Stage 1	314	340	-	292	320	-	-	-	-	-	-	-
Stage 2	286	299	-	313	340	-	-	-	-	-	-	-
Platoon blocked, %								-	-		-	-
Mov Cap-1 Maneuver	37	51	400	~ 42	55	298	843	-	-	661	-	-
Mov Cap-2 Maneuver	37	51	-	~ 42	55	-	-	-	-	-	-	-
Stage 1	312	295	-	290	318	-	-	-	-	-	-	-
Stage 2	253	297	-	268	295	-	-	-	-	-	-	-

Approach	EB	WB	NB	SB
HCM Control Delay, s	14.1	265.6	0	1.1
HCM LOS	B	F		

Minor Lane/Major Mvmt	NBL	NBT	NBR	EBLn1	WBLn1	SBL	SBT	SBR
Capacity (veh/h)	843	-	-	400	66	661	-	-
HCM Lane V/C Ratio	0.006	-	-	0.014	1.153	0.132	-	-
HCM Control Delay (s)	9.3	-	-	14.1	265.6	11.3	-	-
HCM Lane LOS	A	-	-	B	F	B	-	-
HCM 95th %tile Q(veh)	0	-	-	0	6	0.5	-	-

Notes

~: Volume exceeds capacity $: Delay exceeds 300s +: Computation Not Defined *: All major volume in platoon

Intersection	
Int Delay, s/veh	1.1

Movement	EBL	EBR	NBL	NBT	SBT	SBR
Vol, veh/h	40	17	42	1030	560	110
Conflicting Peds, #/hr	0	0	0	0	0	0
Sign Control	Stop	Stop	Free	Free	Free	Free
RT Channelized	-	None	-	None	-	None
Storage Length	0	-	1	-	-	-
Veh in Median Storage, #	0	-	-	0	0	-
Grade, %	0	-	-	0	0	-
Peak Hour Factor	92	92	92	92	92	92
Heavy Vehicles, %	2	2	2	2	2	2
Mvmt Flow	43	18	46	1120	609	120

Major/Minor	Minor2		Major1		Major2	
Conflicting Flow All	1879	668	728	0	-	0
Stage 1	668	-	-	-	-	-
Stage 2	1211	-	-	-	-	-
Critical Hdwy	6.42	6.22	4.12	-	-	-
Critical Hdwy Stg 1	5.42	-	-	-	-	-
Critical Hdwy Stg 2	5.42	-	-	-	-	-
Follow-up Hdwy	3.518	3.318	2.218	-	-	-
Pot Cap-1 Maneuver	78	458	876	-	-	-
Stage 1	510	-	-	-	-	-
Stage 2	282	-	-	-	-	-
Platoon blocked, %				-	-	-
Mov Cap-1 Maneuver	74	458	876	-	-	-
Mov Cap-2 Maneuver	190	-	-	-	-	-
Stage 1	510	-	-	-	-	-
Stage 2	267	-	-	-	-	-

Approach	EB	NB	SB
HCM Control Delay, s	26.3	0.4	0
HCM LOS	D		

Minor Lane/Major Mvmt	NBL	NBT	EBLn1	SBT	SBR
Capacity (veh/h)	876	-	230	-	-
HCM Lane V/C Ratio	0.052	-	0.269	-	-
HCM Control Delay (s)	9.3	-	26.3	-	-
HCM Lane LOS	A	-	D	-	-
HCM 95th %tile Q(veh)	0.2	-	1.1	-	-

Intersection	
Int Delay, s/veh	7.1

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Vol, veh/h	62	0	16	0	0	5	22	959	10	5	412	115
Conflicting Peds, #/hr	0	0	0	0	0	0	0	0	0	0	0	0
Sign Control	Stop	Stop	Stop	Stop	Stop	Stop	Free	Free	Free	Free	Free	Free
RT Channelized	-	-	None	-	-	None	-	-	None	-	-	None
Storage Length	-	-	-	-	-	-	1	-	-	1	-	-
Veh in Median Storage, #	-	0	-	-	0	-	-	0	-	-	0	-
Grade, %	-	0	-	-	0	-	-	0	-	-	0	-
Peak Hour Factor	92	92	92	92	92	92	92	92	92	92	92	92
Heavy Vehicles, %	2	2	2	2	2	2	2	2	2	2	2	2
Mvmt Flow	67	0	17	0	0	5	24	1042	11	5	448	125

Major/Minor	Minor2			Minor1			Major1			Major2		
Conflicting Flow All	1619	1622	510	1626	1680	1048	573	0	0	1053	0	0
Stage 1	521	521	-	1096	1096	-	-	-	-	-	-	-
Stage 2	1098	1101	-	530	584	-	-	-	-	-	-	-
Critical Hdwy	7.12	6.52	6.22	7.12	6.52	6.22	4.12	-	-	4.12	-	-
Critical Hdwy Stg 1	6.12	5.52	-	6.12	5.52	-	-	-	-	-	-	-
Critical Hdwy Stg 2	6.12	5.52	-	6.12	5.52	-	-	-	-	-	-	-
Follow-up Hdwy	3.518	4.018	3.318	3.518	4.018	3.318	2.218	-	-	2.218	-	-
Pot Cap-1 Maneuver	83	103	563	82	95	277	1000	-	-	661	-	-
Stage 1	539	532	-	259	289	-	-	-	-	-	-	-
Stage 2	258	288	-	533	498	-	-	-	-	-	-	-
Platoon blocked, %								-	-		-	-
Mov Cap-1 Maneuver	79	100	563	78	92	277	1000	-	-	661	-	-
Mov Cap-2 Maneuver	79	100	-	78	92	-	-	-	-	-	-	-
Stage 1	526	528	-	253	282	-	-	-	-	-	-	-
Stage 2	247	281	-	513	494	-	-	-	-	-	-	-

Approach	EB	WB	NB	SB
HCM Control Delay, s	141.1	18.3	0.2	0.1
HCM LOS	F	C		

Minor Lane/Major Mvmt	NBL	NBT	NBR	EBLn1	WBLn1	SBL	SBT	SBR
Capacity (veh/h)	1000	-	-	96	277	661	-	-
HCM Lane V/C Ratio	0.024	-	-	0.883	0.02	0.008	-	-
HCM Control Delay (s)	8.7	-	-	141.1	18.3	10.5	-	-
HCM Lane LOS	A	-	-	F	C	B	-	-
HCM 95th %tile Q(veh)	0.1	-	-	5	0.1	0	-	-

Intersection	
Int Delay, s/veh	3.5

Movement	WBL	WBR	NBT	NBR	SBL	SBT
Vol, veh/h	22	60	170	28	126	145
Conflicting Peds, #/hr	0	0	0	0	0	0
Sign Control	Stop	Stop	Free	Free	Free	Free
RT Channelized	-	None	-	None	-	None
Storage Length	0	-	-	-	-	-
Veh in Median Storage, #	0	-	0	-	-	0
Grade, %	0	-	0	-	-	0
Peak Hour Factor	92	92	92	92	92	92
Heavy Vehicles, %	2	2	2	2	2	2
Mvmt Flow	24	65	185	30	137	158

Major/Minor	Minor1		Major1		Major2	
Conflicting Flow All	632	200	0	0	215	0
Stage 1	200	-	-	-	-	-
Stage 2	432	-	-	-	-	-
Critical Hdwy	6.42	6.22	-	-	4.12	-
Critical Hdwy Stg 1	5.42	-	-	-	-	-
Critical Hdwy Stg 2	5.42	-	-	-	-	-
Follow-up Hdwy	3.518	3.318	-	-	2.218	-
Pot Cap-1 Maneuver	444	841	-	-	1355	-
Stage 1	834	-	-	-	-	-
Stage 2	655	-	-	-	-	-
Platoon blocked, %			-	-		-
Mov Cap-1 Maneuver	395	841	-	-	1355	-
Mov Cap-2 Maneuver	395	-	-	-	-	-
Stage 1	834	-	-	-	-	-
Stage 2	582	-	-	-	-	-

Approach	WB	NB	SB
HCM Control Delay, s	11.5	0	3.7
HCM LOS	B		

Minor Lane/Major Mvmt	NBT	NBR	WBLn1	SBL	SBT
Capacity (veh/h)	-	-	645	1355	-
HCM Lane V/C Ratio	-	-	0.138	0.101	-
HCM Control Delay (s)	-	-	11.5	8	0
HCM Lane LOS	-	-	B	A	A
HCM 95th %tile Q(veh)	-	-	0.5	0.3	-

Intersection	
Int Delay, s/veh	6.2

Movement	EBL	EBT	WBT	WBR	SBL	SBR
Vol, veh/h	153	421	415	40	55	112
Conflicting Peds, #/hr	0	0	0	0	0	0
Sign Control	Free	Free	Free	Free	Stop	Stop
RT Channelized	-	None	-	None	-	None
Storage Length	-	-	-	-	0	-
Veh in Median Storage, #	-	0	0	-	1	-
Grade, %	-	0	0	-	0	-
Peak Hour Factor	75	75	75	75	75	75
Heavy Vehicles, %	2	2	2	2	2	2
Mvmt Flow	204	561	553	53	73	149

Major/Minor	Major1		Major2		Minor2	
Conflicting Flow All	607	0	-	0	1549	580
Stage 1	-	-	-	-	580	-
Stage 2	-	-	-	-	969	-
Critical Hdwy	4.12	-	-	-	6.42	6.22
Critical Hdwy Stg 1	-	-	-	-	5.42	-
Critical Hdwy Stg 2	-	-	-	-	5.42	-
Follow-up Hdwy	2.218	-	-	-	3.518	3.318
Pot Cap-1 Maneuver	971	-	-	-	125	514
Stage 1	-	-	-	-	560	-
Stage 2	-	-	-	-	368	-
Platoon blocked, %		-	-	-		
Mov Cap-1 Maneuver	971	-	-	-	87	514
Mov Cap-2 Maneuver	-	-	-	-	193	-
Stage 1	-	-	-	-	560	-
Stage 2	-	-	-	-	256	-

Approach	EB	WB	SB
HCM Control Delay, s	2.6	0	35.4
HCM LOS			E

Minor Lane/Major Mvmt	EBL	EBT	WBT	WBR	SBLn1
Capacity (veh/h)	971	-	-	-	332
HCM Lane V/C Ratio	0.21	-	-	-	0.671
HCM Control Delay (s)	9.7	0	-	-	35.4
HCM Lane LOS	A	A	-	-	E
HCM 95th %tile Q(veh)	0.8	-	-	-	4.6

Intersection: 1: Missouri Flat Road & WB Ramps

Movement	WB	WB	WB	WB	NB	NB	NB	NB	SB	SB
Directions Served	L	LT	R	R	L	L	T	T	T	T
Maximum Queue (ft)	211	222	169	135	137	149	404	373	202	160
Average Queue (ft)	126	130	85	37	128	140	200	94	94	68
95th Queue (ft)	193	199	150	97	157	166	417	245	172	133
Link Distance (ft)	983	983					395	395	459	459
Upstream Blk Time (%)							1	0		
Queuing Penalty (veh)							10	1		
Storage Bay Dist (ft)			400	400	125	125				
Storage Blk Time (%)					2	14	0			
Queuing Penalty (veh)					7	58	2			

Intersection: 2: Missouri Flat Road & EB Ramps

Movement	EB	EB	EB	NB	NB	NB	SB	SB	SB	SB
Directions Served	L	LTR	R	T	T	R	L	L	T	T
Maximum Queue (ft)	199	258	243	172	169	73	132	141	164	166
Average Queue (ft)	80	142	118	157	141	11	54	76	32	45
95th Queue (ft)	160	218	204	183	194	47	107	121	104	122
Link Distance (ft)		1460		138	138	138			395	395
Upstream Blk Time (%)				28	14	0				
Queuing Penalty (veh)				114	56	0				
Storage Bay Dist (ft)	700		550				150	150		
Storage Blk Time (%)							0	0	0	
Queuing Penalty (veh)							0	0	1	

Intersection: 3: Missouri Flat Road & Mother Lode Drive

Movement	EB	EB	NB	NB	NB	NB	B24	B24	SB	SB	SB
Directions Served	L	R	L	T	T	R	T	T	T	T	R
Maximum Queue (ft)	120	59	132	476	312	81	188	260	159	167	40
Average Queue (ft)	44	22	19	214	100	4	6	10	87	101	1
95th Queue (ft)	97	50	82	429	261	57	86	111	181	193	24
Link Distance (ft)	633			1949	1949		368	368	138	138	
Upstream Blk Time (%)							0	0	4	7	0
Queuing Penalty (veh)							0	0	31	47	0
Storage Bay Dist (ft)		200	150			250					200
Storage Blk Time (%)				20	0	0				7	0
Queuing Penalty (veh)				3	1	0				1	0

Intersection: 4: Missouri Flat Road & Forni Road

Movement	EB	EB	EB	EB	WB	WB	NB	NB	NB	NB	B25	B25	SB	SB	SB	SB	B24
Directions Served	L	L	T	R	L	T	L	T	T	R	T	T	L	T	T	R	T
Maximum Queue (ft)	201	211	176	61	113	106	274	392	396	175	139	145	320	426	422	175	171
Average Queue (ft)	97	117	60	21	53	48	62	233	234	31	10	13	231	221	220	99	43
95th Queue (ft)	175	189	126	49	102	94	183	424	429	138	68	73	356	454	413	213	228
Link Distance (ft)			1180			275		317	317		652	652		368	368		1949
Upstream Blk Time (%)								6	6					13	3		
Queuing Penalty (veh)								35	36					97	20		
Storage Bay Dist (ft)	195	195		150	190		250			150			300			150	
Storage Blk Time (%)	0	1	0	0			0	11	21	0			17	1	13	0	
Queuing Penalty (veh)	0	1	1	0			0	7	12	0			76	4	39	0	

Intersection: 4: Missouri Flat Road & Forni Road

Movement	B24
Directions Served	T
Maximum Queue (ft)	196
Average Queue (ft)	38
95th Queue (ft)	220
Link Distance (ft)	1949
Upstream Blk Time (%)	
Queuing Penalty (veh)	
Storage Bay Dist (ft)	
Storage Blk Time (%)	
Queuing Penalty (veh)	

Intersection: 5: Missouri Flat Road & Golden Center Drive

Movement	EB	WB	NB	NB	NB	B43	B43	SB	SB	SB	SB	B25
Directions Served	LTR	LTR	L	T	TR	T	T	L	T	T	R	T
Maximum Queue (ft)	66	173	166	296	296	236	269	195	525	552	68	20
Average Queue (ft)	25	69	47	211	225	32	39	87	175	254	4	1
95th Queue (ft)	57	133	129	324	331	141	157	174	421	493	57	15
Link Distance (ft)	184	367		216	216	1592	1592		652	652		317
Upstream Blk Time (%)				9	12				0	0		
Queuing Penalty (veh)				71	89				0	1		
Storage Bay Dist (ft)			150					175			500	
Storage Blk Time (%)			0	16				2	7	1		
Queuing Penalty (veh)			0	6				10	6	0		

Intersection: 6: Missouri Flat Road & Missouri Flat Rd/Diamond Springs Parkway

Movement	EB	EB	EB	WB	WB	WB	NB	NB	NB
Directions Served	T	T	R	L	T	T	L	L	R
Maximum Queue (ft)	127	363	269	146	153	162	220	218	45
Average Queue (ft)	49	76	121	59	65	69	114	120	11
95th Queue (ft)	98	227	276	114	125	133	178	188	34
Link Distance (ft)	1592	1592			2033	2033		451	451
Upstream Blk Time (%)									
Queuing Penalty (veh)									
Storage Bay Dist (ft)			250	500			275		
Storage Blk Time (%)		0	2				0		
Queuing Penalty (veh)		0	2				0		

Intersection: 10: Pleasant Valley Rd & Missouri Flat Rd

Movement	EB	EB	EB	WB	WB	SB	SB
Directions Served	L	L	T	T	R	L	R
Maximum Queue (ft)	142	155	676	346	224	157	98
Average Queue (ft)	139	147	543	164	123	68	36
95th Queue (ft)	154	188	884	283	228	124	77
Link Distance (ft)			658	1506		127	127
Upstream Blk Time (%)			23			1	0
Queuing Penalty (veh)			142			2	0
Storage Bay Dist (ft)	130	130			200		
Storage Blk Time (%)	65	54	3	2	1		
Queuing Penalty (veh)	139	116	14	12	3		

Zone Summary

Zone wide Queuing Penalty: 1274

1: Missouri Flat Road & WB Ramps Performance by approach

Approach	WB	NB	SB	All
Denied Del/Veh (s)	1.2	0.0	0.0	0.3
Total Del/Veh (s)	31.2	11.2	15.1	18.4

2: Missouri Flat Road & EB Ramps Performance by approach

Approach	EB	NB	SB	All
Denied Del/Veh (s)	1.6	0.0	0.0	0.4
Total Del/Veh (s)	40.4	18.7	23.3	26.3

3: Missouri Flat Road & Mother Lode Drive Performance by approach

Approach	EB	NB	SB	All
Denied Del/Veh (s)	2.7	0.0	0.1	0.1
Total Del/Veh (s)	48.7	18.4	6.2	12.6

4: Missouri Flat Road & Forni Road Performance by approach

Approach	EB	WB	NB	SB	All
Denied Del/Veh (s)	105.4	0.0	0.0	0.1	19.8
Total Del/Veh (s)	203.0	15.0	31.8	34.4	62.4

5: Missouri Flat Road & Golden Center Drive Performance by approach

Approach	EB	WB	NB	SB	All
Denied Del/Veh (s)	0.2	0.3	0.9	0.2	0.5
Total Del/Veh (s)	36.3	45.6	27.3	40.7	35.4

6: Missouri Flat Road & Missouri Flat Rd/Diamond Springs Parkway Performance by approach

Approach	EB	WB	NB	All
Denied Del/Veh (s)	0.0	0.0	0.0	0.0
Total Del/Veh (s)	21.4	6.9	13.4	15.3

10: Pleasant Valley Rd & Missouri Flat Rd Performance by approach

Approach	EB	WB	SB	All
Denied Del/Veh (s)	0.4	0.0	0.0	0.1
Total Del/Veh (s)	41.8	14.4	9.9	21.0

Total Zone Performance

Denied Del/Veh (s)	25.7
Total Del/Veh (s)	501.6

Intersection	
Intersection Delay, s/veh	45.2
Intersection LOS	E

Movement	EBU	EBT	EBR	WBU	WBL	WBT	NBU	NBL	NBR
Vol, veh/h	0	417	260	0	260	349	0	135	187
Peak Hour Factor	0.92	0.78	0.78	0.92	0.78	0.78	0.92	0.78	0.78
Heavy Vehicles, %	2	2	2	2	2	2	2	2	2
Mvmt Flow	0	535	333	0	333	447	0	173	240
Number of Lanes	0	1	0	0	1	1	0	1	0

Approach	EB	WB	NB
Opposing Approach	WB	EB	
Opposing Lanes	2	1	0
Conflicting Approach Left		NB	EB
Conflicting Lanes Left	0	1	1
Conflicting Approach Right	NB		WB
Conflicting Lanes Right	1	0	2
HCM Control Delay	63.2	34.4	28
HCM LOS	F	D	D

Lane	NBLn1	EBLn1	WBLn1	WBLn2
Vol Left, %	42%	0%	100%	0%
Vol Thru, %	0%	62%	0%	100%
Vol Right, %	58%	38%	0%	0%
Sign Control	Stop	Stop	Stop	Stop
Traffic Vol by Lane	322	677	260	349
LT Vol	135	0	260	0
Through Vol	0	417	0	349
RT Vol	187	260	0	0
Lane Flow Rate	413	868	333	447
Geometry Grp	2	5	7	7
Degree of Util (X)	0.761	1	0.696	0.872
Departure Headway (Hd)	6.633	6.415	7.52	7.019
Convergence, Y/N	Yes	Yes	Yes	Yes
Cap	541	573	483	519
Service Time	4.718	4.427	5.22	4.719
HCM Lane V/C Ratio	0.763	1.515	0.689	0.861
HCM Control Delay	28	63.2	25.7	40.8
HCM Lane LOS	D	F	D	E
HCM 95th-tile Q	6.7	14.5	5.3	9.5

Intersection	
Int Delay, s/veh	26

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Vol, veh/h	0	0	5	35	0	180	5	730	10	15	1031	0
Conflicting Peds, #/hr	0	0	0	0	0	0	0	0	0	0	0	0
Sign Control	Stop	Stop	Stop	Stop	Stop	Stop	Free	Free	Free	Free	Free	Free
RT Channelized	-	-	None	-	-	None	-	-	None	-	-	None
Storage Length	-	-	-	-	-	-	1	-	-	190	-	-
Veh in Median Storage, #	-	0	-	-	0	-	-	0	-	-	0	-
Grade, %	-	0	-	-	0	-	-	0	-	-	0	-
Peak Hour Factor	92	92	92	92	92	92	92	92	92	92	92	92
Heavy Vehicles, %	2	2	2	2	2	2	2	2	2	2	2	2
Mvmt Flow	0	0	5	38	0	196	5	793	11	16	1121	0

Major/Minor	Minor2			Minor1			Major1			Major2		
Conflicting Flow All	2061	1968	1121	1966	1963	799	1121	0	0	804	0	0
Stage 1	1153	1153	-	810	810	-	-	-	-	-	-	-
Stage 2	908	815	-	1156	1153	-	-	-	-	-	-	-
Critical Hdwy	7.12	6.52	6.22	7.12	6.52	6.22	4.12	-	-	4.12	-	-
Critical Hdwy Stg 1	6.12	5.52	-	6.12	5.52	-	-	-	-	-	-	-
Critical Hdwy Stg 2	6.12	5.52	-	6.12	5.52	-	-	-	-	-	-	-
Follow-up Hdwy	3.518	4.018	3.318	3.518	4.018	3.318	2.218	-	-	2.218	-	-
Pot Cap-1 Maneuver	40	63	251	47	63	386	623	-	-	820	-	-
Stage 1	240	272	-	374	393	-	-	-	-	-	-	-
Stage 2	330	391	-	239	272	-	-	-	-	-	-	-
Platoon blocked, %								-	-		-	-
Mov Cap-1 Maneuver	19	61	251	45	61	386	623	-	-	820	-	-
Mov Cap-2 Maneuver	19	61	-	45	61	-	-	-	-	-	-	-
Stage 1	238	267	-	371	390	-	-	-	-	-	-	-
Stage 2	161	388	-	229	267	-	-	-	-	-	-	-

Approach	EB	WB	NB	SB
HCM Control Delay, s	19.7	242.2	0.1	0.1
HCM LOS	C	F		

Minor Lane/Major Mvmt	NBL	NBT	NBR	EBLn1	WBLn1	SBL	SBT	SBR
Capacity (veh/h)	623	-	-	251	173	820	-	-
HCM Lane V/C Ratio	0.009	-	-	0.022	1.351	0.02	-	-
HCM Control Delay (s)	10.8	-	-	19.7	242.2	9.5	-	-
HCM Lane LOS	B	-	-	C	F	A	-	-
HCM 95th %tile Q(veh)	0	-	-	0.1	13.9	0.1	-	-

Intersection	
Int Delay, s/veh	3.5

Movement	EBL	EBR	NBL	NBT	SBT	SBR
Vol, veh/h	100	37	7	565	970	36
Conflicting Peds, #/hr	0	0	0	0	0	0
Sign Control	Stop	Stop	Free	Free	Free	Free
RT Channelized	-	None	-	None	-	None
Storage Length	0	-	1	-	-	-
Veh in Median Storage, #	0	-	-	0	0	-
Grade, %	0	-	-	0	0	-
Peak Hour Factor	92	92	92	92	92	92
Heavy Vehicles, %	2	2	2	2	2	2
Mvmt Flow	109	40	8	614	1054	39

Major/Minor	Minor2		Major1		Major2	
Conflicting Flow All	1703	1074	1093	0	-	0
Stage 1	1074	-	-	-	-	-
Stage 2	629	-	-	-	-	-
Critical Hdwy	6.42	6.22	4.12	-	-	-
Critical Hdwy Stg 1	5.42	-	-	-	-	-
Critical Hdwy Stg 2	5.42	-	-	-	-	-
Follow-up Hdwy	3.518	3.318	2.218	-	-	-
Pot Cap-1 Maneuver	~ 101	267	638	-	-	-
Stage 1	328	-	-	-	-	-
Stage 2	531	-	-	-	-	-
Platoon blocked, %				-	-	-
Mov Cap-1 Maneuver	~ 100	267	638	-	-	-
Mov Cap-2 Maneuver	227	-	-	-	-	-
Stage 1	328	-	-	-	-	-
Stage 2	524	-	-	-	-	-

Approach	EB	NB	SB
HCM Control Delay, s	42.8	0.1	0
HCM LOS	E		

Minor Lane/Major Mvmt	NBL	NBT	EBLn1	SBT	SBR
Capacity (veh/h)	638	-	237	-	-
HCM Lane V/C Ratio	0.012	-	0.628	-	-
HCM Control Delay (s)	10.7	-	42.8	-	-
HCM Lane LOS	B	-	E	-	-
HCM 95th %tile Q(veh)	0	-	3.8	-	-

Notes

~: Volume exceeds capacity $: Delay exceeds 300s +: Computation Not Defined *: All major volume in platoon

Intersection	
Int Delay, s/veh	24.8

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Vol, veh/h	106	0	30	0	0	5	13	452	5	5	874	92
Conflicting Peds, #/hr	0	0	0	0	0	0	0	0	0	0	0	0
Sign Control	Stop	Stop	Stop	Stop	Stop	Stop	Free	Free	Free	Free	Free	Free
RT Channelized	-	-	None	-	-	None	-	-	None	-	-	None
Storage Length	-	-	-	-	-	-	1	-	-	1	-	-
Veh in Median Storage, #	-	0	-	-	0	-	-	0	-	-	0	-
Grade, %	-	0	-	-	0	-	-	0	-	-	0	-
Peak Hour Factor	92	92	92	92	92	92	92	92	92	92	92	92
Heavy Vehicles, %	2	2	2	2	2	2	2	2	2	2	2	2
Mvmt Flow	115	0	33	0	0	5	14	491	5	5	950	100

Major/Minor	Minor2			Minor1			Major1			Major2		
Conflicting Flow All	1536	1536	1000	1549	1583	494	1050	0	0	497	0	0
Stage 1	1011	1011	-	522	522	-	-	-	-	-	-	-
Stage 2	525	525	-	1027	1061	-	-	-	-	-	-	-
Critical Hdwy	7.12	6.52	6.22	7.12	6.52	6.22	4.12	-	-	4.12	-	-
Critical Hdwy Stg 1	6.12	5.52	-	6.12	5.52	-	-	-	-	-	-	-
Critical Hdwy Stg 2	6.12	5.52	-	6.12	5.52	-	-	-	-	-	-	-
Follow-up Hdwy	3.518	4.018	3.318	3.518	4.018	3.318	2.218	-	-	2.218	-	-
Pot Cap-1 Maneuver	~ 95	116	295	93	109	575	663	-	-	1067	-	-
Stage 1	289	317	-	538	531	-	-	-	-	-	-	-
Stage 2	536	529	-	283	300	-	-	-	-	-	-	-
Platoon blocked, %								-	-		-	-
Mov Cap-1 Maneuver	~ 92	113	295	81	106	575	663	-	-	1067	-	-
Mov Cap-2 Maneuver	~ 92	113	-	81	106	-	-	-	-	-	-	-
Stage 1	283	316	-	527	520	-	-	-	-	-	-	-
Stage 2	520	518	-	251	299	-	-	-	-	-	-	-

Approach	EB	WB	NB	SB
HCM Control Delay, s	286.9	11.3	0.3	0
HCM LOS	F	B		

Minor Lane/Major Mvmt	NBL	NBT	NBR	EBLn1	WBLn1	SBL	SBT	SBR
Capacity (veh/h)	663	-	-	108	575	1067	-	-
HCM Lane V/C Ratio	0.021	-	-	1.369	0.009	0.005	-	-
HCM Control Delay (s)	10.5	-	-	286.9	11.3	8.4	-	-
HCM Lane LOS	B	-	-	F	B	A	-	-
HCM 95th %tile Q(veh)	0.1	-	-	10.3	0	0	-	-

Notes

~: Volume exceeds capacity $: Delay exceeds 300s +: Computation Not Defined *: All major volume in platoon

Intersection	
Int Delay, s/veh	4.9

Movement	WBL	WBR	NBT	NBR	SBL	SBT
Vol, veh/h	42	186	125	34	80	210
Conflicting Peds, #/hr	0	0	0	0	0	0
Sign Control	Stop	Stop	Free	Free	Free	Free
RT Channelized	-	None	-	None	-	None
Storage Length	0	-	-	-	-	-
Veh in Median Storage, #	0	-	0	-	-	0
Grade, %	0	-	0	-	-	0
Peak Hour Factor	92	92	92	92	92	92
Heavy Vehicles, %	2	2	2	2	2	2
Mvmt Flow	46	202	136	37	87	228

Major/Minor	Minor1		Major1		Major2	
Conflicting Flow All	556	154	0	0	173	0
Stage 1	154	-	-	-	-	-
Stage 2	402	-	-	-	-	-
Critical Hdwy	6.42	6.22	-	-	4.12	-
Critical Hdwy Stg 1	5.42	-	-	-	-	-
Critical Hdwy Stg 2	5.42	-	-	-	-	-
Follow-up Hdwy	3.518	3.318	-	-	2.218	-
Pot Cap-1 Maneuver	492	892	-	-	1404	-
Stage 1	874	-	-	-	-	-
Stage 2	676	-	-	-	-	-
Platoon blocked, %			-	-		-
Mov Cap-1 Maneuver	457	892	-	-	1404	-
Mov Cap-2 Maneuver	457	-	-	-	-	-
Stage 1	874	-	-	-	-	-
Stage 2	628	-	-	-	-	-

Approach	WB	NB	SB
HCM Control Delay, s	12	0	2.1
HCM LOS	B		

Minor Lane/Major Mvmt	NBT	NBR	WBLn1	SBL	SBT
Capacity (veh/h)	-	-	759	1404	-
HCM Lane V/C Ratio	-	-	0.327	0.062	-
HCM Control Delay (s)	-	-	12	7.7	0
HCM Lane LOS	-	-	B	A	A
HCM 95th %tile Q(veh)	-	-	1.4	0.2	-

Intersection	
Int Delay, s/veh	4

Movement	EBL	EBT	WBT	WBR	SBL	SBR
Vol, veh/h	99	515	426	25	20	162
Conflicting Peds, #/hr	0	0	0	0	0	0
Sign Control	Free	Free	Free	Free	Stop	Stop
RT Channelized	-	None	-	None	-	None
Storage Length	-	-	-	-	0	-
Veh in Median Storage, #	-	0	0	-	1	-
Grade, %	-	0	0	-	0	-
Peak Hour Factor	75	75	75	75	75	75
Heavy Vehicles, %	2	2	2	2	2	2
Mvmt Flow	132	687	568	33	27	216

Major/Minor	Major1		Major2		Minor2	
Conflicting Flow All	601	0	-	0	1536	585
Stage 1	-	-	-	-	585	-
Stage 2	-	-	-	-	951	-
Critical Hdwy	4.12	-	-	-	6.42	6.22
Critical Hdwy Stg 1	-	-	-	-	5.42	-
Critical Hdwy Stg 2	-	-	-	-	5.42	-
Follow-up Hdwy	2.218	-	-	-	3.518	3.318
Pot Cap-1 Maneuver	976	-	-	-	128	511
Stage 1	-	-	-	-	557	-
Stage 2	-	-	-	-	375	-
Platoon blocked, %		-	-	-		
Mov Cap-1 Maneuver	976	-	-	-	100	511
Mov Cap-2 Maneuver	-	-	-	-	215	-
Stage 1	-	-	-	-	557	-
Stage 2	-	-	-	-	293	-

Approach	EB	WB	SB
HCM Control Delay, s	1.5	0	22.5
HCM LOS			C

Minor Lane/Major Mvmt	EBL	EBT	WBT	WBR	SBLn1
Capacity (veh/h)	976	-	-	-	444
HCM Lane V/C Ratio	0.135	-	-	-	0.547
HCM Control Delay (s)	9.3	0	-	-	22.5
HCM Lane LOS	A	A	-	-	C
HCM 95th %tile Q(veh)	0.5	-	-	-	3.2

Intersection: 1: Missouri Flat Road & WB Ramps

Movement	WB	WB	WB	WB	NB	NB	NB	NB	SB	SB
Directions Served	L	LT	R	R	L	L	T	T	T	T
Maximum Queue (ft)	330	335	232	171	136	147	216	129	291	267
Average Queue (ft)	179	183	109	51	81	99	74	60	157	136
95th Queue (ft)	285	299	184	130	150	149	158	111	257	230
Link Distance (ft)	983	983					395	395	459	459
Upstream Blk Time (%)										
Queuing Penalty (veh)										
Storage Bay Dist (ft)			400	400	125	125				
Storage Blk Time (%)		0	0		0	1	0			
Queuing Penalty (veh)		1	0		1	6	1			

Intersection: 2: Missouri Flat Road & EB Ramps

Movement	EB	EB	EB	NB	NB	NB	SB	SB	SB	SB
Directions Served	L	LTR	R	T	T	R	L	L	T	T
Maximum Queue (ft)	322	402	409	175	179	39	161	174	392	396
Average Queue (ft)	134	213	213	155	148	4	95	122	149	163
95th Queue (ft)	270	351	357	183	189	21	162	183	333	338
Link Distance (ft)		1460		138	138	138			395	395
Upstream Blk Time (%)				29	18				0	0
Queuing Penalty (veh)				113	73				3	2
Storage Bay Dist (ft)	700		550				150	150		
Storage Blk Time (%)							1	3	7	
Queuing Penalty (veh)							4	19	22	

Intersection: 3: Missouri Flat Road & Mother Lode Drive

Movement	EB	EB	NB	NB	NB	NB	B24	B24	B24	SB	SB	SB
Directions Served	L	R	L	T	T	R	T	T		T	T	R
Maximum Queue (ft)	87	83	169	522	451	81	221	230	34	169	183	28
Average Queue (ft)	26	31	40	182	104	4	9	14	1	120	128	1
95th Queue (ft)	66	67	117	432	326	57	104	130	35	200	206	20
Link Distance (ft)	633			1949	1949		368	368	368	138	138	
Upstream Blk Time (%)							0	0		10	12	0
Queuing Penalty (veh)							0	1		97	119	0
Storage Bay Dist (ft)		200	150			250						200
Storage Blk Time (%)				17	0	0					12	0
Queuing Penalty (veh)				6	0	0					2	0

Intersection: 4: Missouri Flat Road & Forni Road

Movement	EB	EB	EB	EB	WB	WB	NB	NB	NB	NB	B25	B25	SB	SB	SB	SB	B24
Directions Served	L	L	T	R	L	T	L	T	T	R	T	T	L	T	T	R	T
Maximum Queue (ft)	207	220	1235	74	52	82	274	395	394	159	131	146	324	460	467	175	788
Average Queue (ft)	204	216	1010	31	15	33	111	219	225	14	12	16	196	356	410	157	249
95th Queue (ft)	223	234	1569	66	44	72	252	433	439	89	73	83	354	533	540	227	798
Link Distance (ft)			1180			275		317	317		652	652		368	368		1949
Upstream Blk Time (%)			52					7	8					13	27		
Queuing Penalty (veh)			0					43	48					135	277		
Storage Bay Dist (ft)	195	195		150	190		250			150			300			150	
Storage Blk Time (%)	21	60					0	11	19	0			1	16	33	1	
Queuing Penalty (veh)	34	97					1	11	5	0			3	27	153	8	

Intersection: 4: Missouri Flat Road & Forni Road

Movement	B24
Directions Served	T
Maximum Queue (ft)	864
Average Queue (ft)	325
95th Queue (ft)	896
Link Distance (ft)	1949
Upstream Blk Time (%)	
Queuing Penalty (veh)	
Storage Bay Dist (ft)	
Storage Blk Time (%)	
Queuing Penalty (veh)	

Intersection: 5: Missouri Flat Road & Golden Center Drive

Movement	EB	WB	NB	NB	NB	B43	B43	SB	SB	SB	SB	B25	B25
Directions Served	LTR	LTR	L	T	TR	T	T	L	T	T	R	T	T
Maximum Queue (ft)	168	289	174	292	302	219	206	200	665	701	322	206	258
Average Queue (ft)	67	148	106	220	225	26	26	78	344	412	19	9	19
95th Queue (ft)	131	249	196	322	321	126	121	169	681	733	171	93	137
Link Distance (ft)	184	367		216	216	1592	1592		652	652		317	317
Upstream Blk Time (%)	0	0		12	12				1	3		0	0
Queuing Penalty (veh)	0	0		74	72				9	23		0	1
Storage Bay Dist (ft)			150					175			500		
Storage Blk Time (%)			7	19				0	18	11	0		
Queuing Penalty (veh)			41	15				0	12	1	0		

Intersection: 6: Missouri Flat Road & Missouri Flat Rd/Diamond Springs Parkway

Movement	EB	EB	EB	B43	WB	WB	WB	NB	NB	NB
Directions Served	T	T	R	T	L	T	T	L	L	R
Maximum Queue (ft)	181	338	274	39	99	110	110	195	206	70
Average Queue (ft)	87	112	120	2	38	46	47	104	112	29
95th Queue (ft)	155	234	274	25	77	89	87	170	179	56
Link Distance (ft)	1592	1592		216		2033	2033		451	451
Upstream Blk Time (%)				0						
Queuing Penalty (veh)				0						
Storage Bay Dist (ft)			250		500			275		
Storage Blk Time (%)		0	1							
Queuing Penalty (veh)		0	4							

Intersection: 10: Pleasant Valley Rd & Missouri Flat Rd

Movement	EB	EB	EB	WB	WB	SB	SB	B68
Directions Served	L	L	T	T	R	L	R	T
Maximum Queue (ft)	142	154	537	217	190	201	148	85
Average Queue (ft)	111	98	206	117	43	138	67	7
95th Queue (ft)	159	198	472	188	116	203	125	47
Link Distance (ft)			658	1506		127	127	419
Upstream Blk Time (%)			1			10	1	
Queuing Penalty (veh)			5			46	4	
Storage Bay Dist (ft)	130	130			200			
Storage Blk Time (%)	22	15	7	1	0			
Queuing Penalty (veh)	91	63	18	1	0			

Zone Summary

Zone wide Queuing Penalty: 1795

7: Missouri Flat Road & China Garden Rd Performance by approach

Approach	EB	WB	NB	SB	All
Denied Del/Veh (s)	0.1	0.1	0.0	0.0	0.0
Total Del/Veh (s)	14.7	18.3	14.4	14.4	14.7

9: Missouri Flat Road & Enterprise Dr Performance by approach

Approach	EB	WB	NB	SB	All
Denied Del/Veh (s)	0.0	0.1	0.1	0.0	0.0
Total Del/Veh (s)	22.5	11.8	5.9	6.4	6.8

Total Zone Performance

Denied Del/Veh (s)	0.5
Total Del/Veh (s)	343.9

9: Missouri Flat Road & Enterprise Dr Performance by approach

Approach	EB	WB	NB	SB	All
Denied Del/Veh (s)	0.1	0.1	0.0	0.0	0.0
Total Del/Veh (s)	23.0	13.2	5.3	15.3	12.4

Total Zone Performance

Denied Del/Veh (s)	0.4
Total Del/Veh (s)	416.0

7: Missouri Flat Road & China Garden Rd Performance by approach

Approach	EB	WB	NB	SB	All
Denied Del/Veh (s)	0.1	0.1	0.0	0.0	0.0
Total Del/Veh (s)	69.0	27.4	13.6	16.8	16.1

9: Missouri Flat Road & Enterprise Dr Performance by approach

Approach	EB	WB	NB	SB	All
Denied Del/Veh (s)	0.0	0.1	0.1	0.0	0.0
Total Del/Veh (s)	35.5	17.1	7.1	7.4	8.5

Total Zone Performance

Denied Del/Veh (s)	0.5
Total Del/Veh (s)	406.0

7: Missouri Flat Road & China Garden Rd Performance by approach

Approach	EB	WB	NB	SB	All
Denied Del/Veh (s)	0.1	0.2	0.0	0.0	0.0
Total Del/Veh (s)	12.5	19.0	10.0	19.3	16.1

9: Missouri Flat Road & Enterprise Dr Performance by approach

Approach	EB	WB	NB	SB	All
Denied Del/Veh (s)	0.1	0.2	0.0	0.0	0.0
Total Del/Veh (s)	35.5	37.8	5.8	23.4	18.4

Total Zone Performance

Denied Del/Veh (s)	0.6
Total Del/Veh (s)	659.3

Intersection	
Int Delay, s/veh	3

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Vol, veh/h	0	0	1	0	0	138	0	887	15	99	614	3
Conflicting Peds, #/hr	0	0	0	0	0	0	0	0	0	0	0	0
Sign Control	Stop	Stop	Stop	Stop	Stop	Stop	Free	Free	Free	Free	Free	Free
RT Channelized	-	-	None	-	-	None	-	-	None	-	-	None
Storage Length	-	-	0	-	-	0	1	-	-	200	-	-
Veh in Median Storage, #	-	0	-	-	0	-	-	0	-	-	0	-
Grade, %	-	0	-	-	0	-	-	0	-	-	0	-
Peak Hour Factor	89	89	89	89	89	89	89	89	89	89	89	89
Heavy Vehicles, %	2	2	2	2	2	2	2	2	2	2	2	2
Mvmt Flow	0	0	1	0	0	155	0	997	17	111	690	3

Major/Minor	Minor2			Minor1			Major1			Major2		
Conflicting Flow All	1919	1927	692	1919	1921	1005	693	0	0	1013	0	0
Stage 1	914	914	-	1005	1005	-	-	-	-	-	-	-
Stage 2	1005	1013	-	914	916	-	-	-	-	-	-	-
Critical Hdwy	7.12	6.52	6.22	7.12	6.52	6.22	4.12	-	-	4.12	-	-
Critical Hdwy Stg 1	6.12	5.52	-	6.12	5.52	-	-	-	-	-	-	-
Critical Hdwy Stg 2	6.12	5.52	-	6.12	5.52	-	-	-	-	-	-	-
Follow-up Hdwy	3.518	4.018	3.318	3.518	4.018	3.318	2.218	-	-	2.218	-	-
Pot Cap-1 Maneuver	51	67	444	51	67	293	902	-	-	684	-	-
Stage 1	327	352	-	291	319	-	-	-	-	-	-	-
Stage 2	291	316	-	327	351	-	-	-	-	-	-	-
Platoon blocked, %								-	-		-	-
Mov Cap-1 Maneuver	21	56	444	45	56	293	902	-	-	684	-	-
Mov Cap-2 Maneuver	21	56	-	45	56	-	-	-	-	-	-	-
Stage 1	327	295	-	291	319	-	-	-	-	-	-	-
Stage 2	137	316	-	273	294	-	-	-	-	-	-	-

Approach	EB	WB	NB	SB
HCM Control Delay, s	13.1	30.3	0	1.6
HCM LOS	B	D		

Minor Lane/Major Mvmt	NBL	NBT	NBR	EBLn1	WBLn1	SBL	SBT	SBR
Capacity (veh/h)	902	-	-	444	293	684	-	-
HCM Lane V/C Ratio	-	-	-	0.003	0.529	0.163	-	-
HCM Control Delay (s)	0	-	-	13.1	30.3	11.3	-	-
HCM Lane LOS	A	-	-	B	D	B	-	-
HCM 95th %tile Q(veh)	0	-	-	0	2.9	0.6	-	-

Intersection	
Int Delay, s/veh	2.3

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Vol, veh/h	0	0	2	0	0	175	1	724	20	133	1058	0
Conflicting Peds, #/hr	0	0	0	0	0	0	0	0	0	0	0	0
Sign Control	Stop	Stop	Stop	Stop	Stop	Stop	Free	Free	Free	Free	Free	Free
RT Channelized	-	-	None	-	-	None	-	-	None	-	-	None
Storage Length	-	-	0	-	-	0	1	-	-	200	-	-
Veh in Median Storage, #	-	0	-	-	0	-	-	0	-	-	0	-
Grade, %	-	0	-	-	0	-	-	0	-	-	0	-
Peak Hour Factor	97	97	97	97	97	97	97	97	97	97	97	97
Heavy Vehicles, %	2	2	2	2	2	2	2	2	2	2	2	2
Mvmt Flow	0	0	2	0	0	180	1	746	21	137	1091	0

Major/Minor	Minor2			Minor1			Major1			Major2		
Conflicting Flow All	2124	2134	1091	2124	2124	757	1091	0	0	767	0	0
Stage 1	1365	1365	-	759	759	-	-	-	-	-	-	-
Stage 2	759	769	-	1365	1365	-	-	-	-	-	-	-
Critical Hdwy	7.12	6.52	6.22	7.12	6.52	6.22	4.12	-	-	4.12	-	-
Critical Hdwy Stg 1	6.12	5.52	-	6.12	5.52	-	-	-	-	-	-	-
Critical Hdwy Stg 2	6.12	5.52	-	6.12	5.52	-	-	-	-	-	-	-
Follow-up Hdwy	3.518	4.018	3.318	3.518	4.018	3.318	2.218	-	-	2.218	-	-
Pot Cap-1 Maneuver	36	49	261	36	50	408	640	-	-	847	-	-
Stage 1	182	215	-	399	415	-	-	-	-	-	-	-
Stage 2	399	411	-	182	215	-	-	-	-	-	-	-
Platoon blocked, %								-	-		-	-
Mov Cap-1 Maneuver	18	41	261	31	42	408	640	-	-	847	-	-
Mov Cap-2 Maneuver	18	41	-	31	42	-	-	-	-	-	-	-
Stage 1	182	180	-	398	414	-	-	-	-	-	-	-
Stage 2	222	410	-	151	180	-	-	-	-	-	-	-

Approach	EB	WB	NB	SB
HCM Control Delay, s	18.9	20.6	0	1.1
HCM LOS	C	C		

Minor Lane/Major Mvmt	NBL	NBT	NBR	EBLn1	WBLn1	SBL	SBT	SBR
Capacity (veh/h)	640	-	-	261	408	847	-	-
HCM Lane V/C Ratio	0.002	-	-	0.008	0.442	0.162	-	-
HCM Control Delay (s)	10.6	-	-	18.9	20.6	10.1	-	-
HCM Lane LOS	B	-	-	C	C	B	-	-
HCM 95th %tile Q(veh)	0	-	-	0	2.2	0.6	-	-

7: Missouri Flat Road & China Garden Rd Performance by approach

Approach	EB	WB	NB	SB	All
Denied Del/Veh (s)	0.1	0.0	0.0	0.0	0.0
Total Del/Veh (s)	21.0	23.4	12.2	11.2	12.4

9: Missouri Flat Road & Enterprise Dr Performance by approach

Approach	EB	WB	NB	SB	All
Denied Del/Veh (s)	0.0	0.1	0.1	0.0	0.0
Total Del/Veh (s)	17.2	6.1	7.8	7.6	8.6

12: SR 49 & Pleasant Valley Rd Performance by approach

Approach	EB	WB	NB	All
Denied Del/Veh (s)	0.4	0.0	1.1	0.5
Total Del/Veh (s)	22.0	16.7	19.4	19.2

Total Zone Performance

Denied Del/Veh (s)	0.8
Total Del/Veh (s)	435.5

Intersection	
Int Delay, s/veh	4.9

Movement	EBL	EBT	WBT	WBR	SBL	SBR
Vol, veh/h	142	376	369	36	52	105
Conflicting Peds, #/hr	0	0	0	0	0	0
Sign Control	Free	Free	Free	Free	Stop	Stop
RT Channelized	-	None	-	None	-	None
Storage Length	-	-	-	-	0	-
Veh in Median Storage, #	-	0	0	-	1	-
Grade, %	-	0	0	-	0	-
Peak Hour Factor	75	75	75	75	75	75
Heavy Vehicles, %	2	2	2	2	2	2
Mvmt Flow	189	501	492	48	69	140

Major/Minor	Major1		Major2		Minor2	
Conflicting Flow All	540	0	-	0	1396	516
Stage 1	-	-	-	-	516	-
Stage 2	-	-	-	-	880	-
Critical Hdwy	4.12	-	-	-	6.42	6.22
Critical Hdwy Stg 1	-	-	-	-	5.42	-
Critical Hdwy Stg 2	-	-	-	-	5.42	-
Follow-up Hdwy	2.218	-	-	-	3.518	3.318
Pot Cap-1 Maneuver	1028	-	-	-	156	559
Stage 1	-	-	-	-	599	-
Stage 2	-	-	-	-	406	-
Platoon blocked, %		-	-	-		
Mov Cap-1 Maneuver	1028	-	-	-	116	559
Mov Cap-2 Maneuver	-	-	-	-	228	-
Stage 1	-	-	-	-	599	-
Stage 2	-	-	-	-	302	-

Approach	EB	WB	SB
HCM Control Delay, s	2.5	0	25.8
HCM LOS			D

Minor Lane/Major Mvmt	EBL	EBT	WBT	WBR	SBLn1
Capacity (veh/h)	1028	-	-	-	377
HCM Lane V/C Ratio	0.184	-	-	-	0.555
HCM Control Delay (s)	9.3	0	-	-	25.8
HCM Lane LOS	A	A	-	-	D
HCM 95th %tile Q(veh)	0.7	-	-	-	3.2

7: Missouri Flat Road & China Garden Rd Performance by approach

Approach	EB	WB	NB	SB	All
Denied Del/Veh (s)	0.1	0.2	0.0	0.0	0.0
Total Del/Veh (s)	16.1	20.4	6.1	10.5	10.1

9: Missouri Flat Road & Enterprise Dr Performance by approach

Approach	EB	WB	NB	SB	All
Denied Del/Veh (s)	0.1	0.1	0.0	0.0	0.0
Total Del/Veh (s)	34.6	6.1	6.5	15.1	14.3

Total Zone Performance

Denied Del/Veh (s)	0.3
Total Del/Veh (s)	1622.0

7: Missouri Flat Road & China Garden Rd Performance by approach

Approach	EB	WB	NB	SB	All
Denied Del/Veh (s)	0.1	0.0	0.0	0.0	0.0
Total Del/Veh (s)	20.9	23.0	17.2	11.2	14.9

8: Missouri Flat Road & Industrial Dr Performance by approach

Approach	EB	NB	SB	All
Denied Del/Veh (s)	0.1	0.0	0.0	0.0
Total Del/Veh (s)	38.9	23.2	8.9	17.5

9: Missouri Flat Road & Enterprise Dr Performance by approach

Approach	EB	WB	NB	SB	All
Denied Del/Veh (s)	0.0	0.1	0.3	0.0	0.1
Total Del/Veh (s)	16.9	9.1	11.7	8.5	10.9

12: SR 49 & Pleasant Valley Rd Performance by approach

Approach	EB	WB	NB	All
Denied Del/Veh (s)	0.4	0.0	0.5	0.3
Total Del/Veh (s)	22.6	17.9	20.6	20.2

Total Zone Performance

Denied Del/Veh (s)	0.7
Total Del/Veh (s)	611.2

Intersection	
Int Delay, s/veh	5.1

Movement	EBL	EBT	WBT	WBR	SBL	SBR
Vol, veh/h	145	382	369	36	52	107
Conflicting Peds, #/hr	0	0	0	0	0	0
Sign Control	Free	Free	Free	Free	Stop	Stop
RT Channelized	-	None	-	None	-	None
Storage Length	-	-	-	-	0	-
Veh in Median Storage, #	-	0	0	-	1	-
Grade, %	-	0	0	-	0	-
Peak Hour Factor	75	75	75	75	75	75
Heavy Vehicles, %	2	2	2	2	2	2
Mvmt Flow	193	509	492	48	69	143

Major/Minor	Major1		Major2		Minor2	
Conflicting Flow All	540	0	-	0	1412	516
Stage 1	-	-	-	-	516	-
Stage 2	-	-	-	-	896	-
Critical Hdwy	4.12	-	-	-	6.42	6.22
Critical Hdwy Stg 1	-	-	-	-	5.42	-
Critical Hdwy Stg 2	-	-	-	-	5.42	-
Follow-up Hdwy	2.218	-	-	-	3.518	3.318
Pot Cap-1 Maneuver	1028	-	-	-	152	559
Stage 1	-	-	-	-	599	-
Stage 2	-	-	-	-	399	-
Platoon blocked, %		-	-	-		
Mov Cap-1 Maneuver	1028	-	-	-	112	559
Mov Cap-2 Maneuver	-	-	-	-	223	-
Stage 1	-	-	-	-	599	-
Stage 2	-	-	-	-	294	-

Approach	EB	WB	SB
HCM Control Delay, s	2.6	0	26.5
HCM LOS			D

Minor Lane/Major Mvmt	EBL	EBT	WBT	WBR	SBLn1
Capacity (veh/h)	1028	-	-	-	374
HCM Lane V/C Ratio	0.188	-	-	-	0.567
HCM Control Delay (s)	9.3	0	-	-	26.5
HCM Lane LOS	A	A	-	-	D
HCM 95th %tile Q(veh)	0.7	-	-	-	3.4

Intersection	
Int Delay, s/veh	0.8

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Vol, veh/h	0	0	5	0	0	27	5	764	103	69	640	2
Conflicting Peds, #/hr	0	0	0	0	0	0	0	0	0	0	0	0
Sign Control	Stop	Stop	Stop	Stop	Stop	Stop	Free	Free	Free	Free	Free	Free
RT Channelized	-	-	None	-	-	None	-	-	None	-	-	None
Storage Length	-	-	0	-	-	0	1	-	-	190	-	-
Veh in Median Storage, #	-	0	-	-	0	-	-	0	-	-	0	-
Grade, %	-	0	-	-	0	-	-	0	-	-	0	-
Peak Hour Factor	92	92	92	92	92	92	92	92	92	92	92	92
Heavy Vehicles, %	2	2	2	2	2	2	2	2	2	2	2	2
Mvmt Flow	0	0	5	0	0	29	5	830	112	75	696	2

Major/Minor	Minor2			Minor1			Major1			Major2		
Conflicting Flow All	1744	1800	697	1744	1745	886	698	0	0	942	0	0
Stage 1	847	847	-	897	897	-	-	-	-	-	-	-
Stage 2	897	953	-	847	848	-	-	-	-	-	-	-
Critical Hdwy	7.12	6.52	6.22	7.12	6.52	6.22	4.12	-	-	4.12	-	-
Critical Hdwy Stg 1	6.12	5.52	-	6.12	5.52	-	-	-	-	-	-	-
Critical Hdwy Stg 2	6.12	5.52	-	6.12	5.52	-	-	-	-	-	-	-
Follow-up Hdwy	3.518	4.018	3.318	3.518	4.018	3.318	2.218	-	-	2.218	-	-
Pot Cap-1 Maneuver	68	80	441	68	86	343	898	-	-	728	-	-
Stage 1	357	378	-	334	358	-	-	-	-	-	-	-
Stage 2	334	338	-	357	378	-	-	-	-	-	-	-
Platoon blocked, %								-	-		-	-
Mov Cap-1 Maneuver	57	71	441	62	77	343	898	-	-	728	-	-
Mov Cap-2 Maneuver	57	71	-	62	77	-	-	-	-	-	-	-
Stage 1	355	339	-	332	356	-	-	-	-	-	-	-
Stage 2	304	336	-	316	339	-	-	-	-	-	-	-

Approach	EB	WB	NB	SB
HCM Control Delay, s	13.3	16.5	0.1	1
HCM LOS	B	C		

Minor Lane/Major Mvmt	NBL	NBT	NBR	EBLn1	WBLn1	SBL	SBT	SBR
Capacity (veh/h)	898	-	-	441	343	728	-	-
HCM Lane V/C Ratio	0.006	-	-	0.012	0.086	0.103	-	-
HCM Control Delay (s)	9	-	-	13.3	16.5	10.5	-	-
HCM Lane LOS	A	-	-	B	C	B	-	-
HCM 95th %tile Q(veh)	0	-	-	0	0.3	0.3	-	-

7: Missouri Flat Road & China Garden Rd Performance by approach

Approach	EB	WB	NB	SB	All
Denied Del/Veh (s)	0.1	0.1	0.0	0.0	0.0
Total Del/Veh (s)	16.1	20.8	8.6	11.7	11.6

8: Missouri Flat Road & Industrial Dr Performance by approach

Approach	EB	NB	SB	All
Denied Del/Veh (s)	0.2	0.0	0.0	0.0
Total Del/Veh (s)	49.9	6.1	12.6	13.4

9: Missouri Flat Road & Enterprise Dr Performance by approach

Approach	EB	WB	NB	SB	All
Denied Del/Veh (s)	0.1	0.1	0.0	0.0	0.0
Total Del/Veh (s)	35.4	6.0	6.2	15.5	14.4

Total Zone Performance

Denied Del/Veh (s)	0.2
Total Del/Veh (s)	1783.0

1: Missouri Flat Road & WB Ramps Performance by approach

Approach	WB	NB	SB	All
Denied Del/Veh (s)	1.2	0.0	0.0	0.3
Total Del/Veh (s)	25.3	11.7	14.0	16.4

2: Missouri Flat Road & EB Ramps Performance by approach

Approach	EB	NB	SB	All
Denied Del/Veh (s)	1.5	0.0	0.0	0.4
Total Del/Veh (s)	36.5	17.7	23.8	25.1

3: Missouri Flat Road & Mother Lode Drive Performance by approach

Approach	EB	NB	SB	All
Denied Del/Veh (s)	2.0	0.0	0.0	0.1
Total Del/Veh (s)	50.5	16.1	7.2	12.7

4: Missouri Flat Road & Forni Road Performance by approach

Approach	EB	WB	NB	SB	All
Denied Del/Veh (s)	3.6	0.0	0.1	0.0	0.7
Total Del/Veh (s)	86.9	11.9	26.3	24.3	35.8

5: Missouri Flat Road & Golden Center Drive Performance by approach

Approach	EB	WB	NB	SB	All
Denied Del/Veh (s)	0.2	0.3	0.4	0.0	0.2
Total Del/Veh (s)	31.3	41.8	23.4	31.8	29.1

6: Missouri Flat Road & Missouri Flat Rd/Diamond Springs Parkway Performance by approach

Approach	EB	WB	NB	All
Denied Del/Veh (s)	0.0	0.0	0.0	0.0
Total Del/Veh (s)	18.7	5.4	11.4	12.7

10: Pleasant Valley Rd & Missouri Flat Rd Performance by approach

Approach	EB	WB	SB	All
Denied Del/Veh (s)	0.0	0.2	3.0	1.4
Total Del/Veh (s)	89.1	16.9	15.1	37.2

Total Zone Performance

Denied Del/Veh (s)	2.8
Total Del/Veh (s)	389.5

Intersection	
Int Delay, s/veh	2

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Vol, veh/h	0	0	4	0	0	166	5	680	9	13	912	0
Conflicting Peds, #/hr	0	0	0	0	0	0	0	0	0	0	0	0
Sign Control	Stop	Stop	Stop	Stop	Stop	Stop	Free	Free	Free	Free	Free	Free
RT Channelized	-	-	None	-	-	None	-	-	None	-	-	None
Storage Length	-	-	0	-	-	0	1	-	-	190	-	-
Veh in Median Storage, #	-	0	-	-	0	-	-	0	-	-	0	-
Grade, %	-	0	-	-	0	-	-	0	-	-	0	-
Peak Hour Factor	92	92	92	92	92	92	92	92	92	92	92	92
Heavy Vehicles, %	2	2	2	2	2	2	2	2	2	2	2	2
Mvmt Flow	0	0	4	0	0	180	5	739	10	14	991	0

Major/Minor	Minor2			Minor1			Major1			Major2		
Conflicting Flow All	1775	1780	991	1775	1775	744	991	0	0	749	0	0
Stage 1	1020	1020	-	755	755	-	-	-	-	-	-	-
Stage 2	755	760	-	1020	1020	-	-	-	-	-	-	-
Critical Hdwy	7.12	6.52	6.22	7.12	6.52	6.22	4.12	-	-	4.12	-	-
Critical Hdwy Stg 1	6.12	5.52	-	6.12	5.52	-	-	-	-	-	-	-
Critical Hdwy Stg 2	6.12	5.52	-	6.12	5.52	-	-	-	-	-	-	-
Follow-up Hdwy	3.518	4.018	3.318	3.518	4.018	3.318	2.218	-	-	2.218	-	-
Pot Cap-1 Maneuver	64	82	299	64	83	415	698	-	-	860	-	-
Stage 1	285	314	-	401	417	-	-	-	-	-	-	-
Stage 2	401	414	-	285	314	-	-	-	-	-	-	-
Platoon blocked, %								-	-		-	-
Mov Cap-1 Maneuver	36	80	299	62	81	415	698	-	-	860	-	-
Mov Cap-2 Maneuver	36	80	-	62	81	-	-	-	-	-	-	-
Stage 1	283	309	-	398	414	-	-	-	-	-	-	-
Stage 2	225	411	-	276	309	-	-	-	-	-	-	-

Approach	EB	WB	NB	SB
HCM Control Delay, s	17.2	20.2	0.1	0.1
HCM LOS	C	C		

Minor Lane/Major Mvmt	NBL	NBT	NBR	EBLn1	WBLn1	SBL	SBT	SBR
Capacity (veh/h)	698	-	-	299	415	860	-	-
HCM Lane V/C Ratio	0.008	-	-	0.015	0.435	0.016	-	-
HCM Control Delay (s)	10.2	-	-	17.2	20.2	9.3	-	-
HCM Lane LOS	B	-	-	C	C	A	-	-
HCM 95th %tile Q(veh)	0	-	-	0	2.1	0.1	-	-

Intersection: 7: Missouri Flat Road & China Garden Rd

Movement	EB	WB	NB	NB	SB	SB
Directions Served	LTR	LTR	L	TR	L	TR
Maximum Queue (ft)	30	183	29	273	84	455
Average Queue (ft)	4	84	6	106	17	147
95th Queue (ft)	20	153	24	237	61	352
Link Distance (ft)	158	1431		558		451
Upstream Blk Time (%)						1
Queuing Penalty (veh)						7
Storage Bay Dist (ft)			1		190	
Storage Blk Time (%)			8	11		4
Queuing Penalty (veh)			54	1		1

Intersection: 8: Missouri Flat Road & Industrial Dr

Movement	EB	NB	NB	SB
Directions Served	LR	L	T	TR
Maximum Queue (ft)	214	29	225	428
Average Queue (ft)	100	9	59	180
95th Queue (ft)	181	29	162	363
Link Distance (ft)	527		796	558
Upstream Blk Time (%)				0
Queuing Penalty (veh)				0
Storage Bay Dist (ft)		1		
Storage Blk Time (%)		12	4	
Queuing Penalty (veh)		73	0	

Intersection: 9: Missouri Flat Road & Enterprise Dr

Movement	EB	WB	NB	NB	SB	SB
Directions Served	LTR	LTR	L	TR	L	TR
Maximum Queue (ft)	194	31	29	241	26	455
Average Queue (ft)	93	5	11	64	4	153
95th Queue (ft)	158	24	32	159	19	337
Link Distance (ft)	2614	218		624		796
Upstream Blk Time (%)						
Queuing Penalty (veh)						
Storage Bay Dist (ft)			1		1	
Storage Blk Time (%)			16	7	5	12
Queuing Penalty (veh)			78	1	46	1

Zone Summary

Zone wide Queuing Penalty: 261

Intersection: 1: Missouri Flat Road & WB Ramps

Movement	WB	WB	WB	WB	NB	NB	NB	NB	SB	SB
Directions Served	L	LT	R	R	L	L	T	T	T	T
Maximum Queue (ft)	237	258	199	174	135	146	249	151	275	235
Average Queue (ft)	144	155	98	41	95	107	69	55	147	124
95th Queue (ft)	216	231	166	112	158	154	162	119	243	217
Link Distance (ft)	983	983					395	395	459	459
Upstream Blk Time (%)							0	0		
Queuing Penalty (veh)							0	0		
Storage Bay Dist (ft)			400	400	125	125				
Storage Blk Time (%)					0	2	0			
Queuing Penalty (veh)					2	7	2			

Intersection: 2: Missouri Flat Road & EB Ramps

Movement	EB	EB	EB	NB	NB	NB	SB	SB	SB	SB
Directions Served	L	LTR	R	T	T	R	L	L	T	T
Maximum Queue (ft)	269	327	338	171	177	98	160	174	354	349
Average Queue (ft)	108	188	190	155	142	17	93	121	149	167
95th Queue (ft)	218	290	297	186	193	63	154	185	319	323
Link Distance (ft)		1460		138	138	138			395	395
Upstream Blk Time (%)				26	14	0			0	0
Queuing Penalty (veh)				93	50	0			2	1
Storage Bay Dist (ft)	700		550				150	150		
Storage Blk Time (%)							0	2	7	
Queuing Penalty (veh)							2	14	24	

Intersection: 3: Missouri Flat Road & Mother Lode Drive

Movement	EB	EB	EB	NB	NB	NB	NB	B24	B24	SB	SB	SB
Directions Served	L	L	R	L	T	T	R	T	T	T	T	R
Maximum Queue (ft)	38	144	113	165	369	241	26	144	176	162	184	136
Average Queue (ft)	6	64	29	54	159	68	1	6	7	125	133	13
95th Queue (ft)	25	124	72	133	317	176	27	82	91	193	192	80
Link Distance (ft)		633			1949	1949		368	368	138	138	
Upstream Blk Time (%)								0	0	12	15	0
Queuing Penalty (veh)								0	0	113	135	0
Storage Bay Dist (ft)	200		200	150			250					200
Storage Blk Time (%)		0	0	0	12	0					15	0
Queuing Penalty (veh)		0	0	0	5	0					11	1

Intersection: 4: Missouri Flat Road & Forni Road

Movement	EB	EB	EB	EB	WB	WB	NB	NB	NB	NB	B25	B25
Directions Served	L	L	T	R	L	T	L	T	T	R	T	T
Maximum Queue (ft)	207	220	853	79	59	88	253	382	384	160	73	79
Average Queue (ft)	187	200	377	32	14	27	64	185	193	18	3	4
95th Queue (ft)	243	250	981	63	44	67	169	355	372	104	31	37
Link Distance (ft)			1180			275		317	317		652	652
Upstream Blk Time (%)			1					2	3			
Queuing Penalty (veh)			0					11	15			
Storage Bay Dist (ft)	195	195		150	190		250			150		
Storage Blk Time (%)	10	31						6	16	0		
Queuing Penalty (veh)	14	42						4	4	0		

Intersection: 4: Missouri Flat Road & Forni Road

Movement	SB	SB	SB	SB	B24	B24
Directions Served	L	T	T	R	T	T
Maximum Queue (ft)	307	430	443	175	309	370
Average Queue (ft)	153	244	307	136	29	52
95th Queue (ft)	279	448	511	235	176	238
Link Distance (ft)		368	368		1949	1949
Upstream Blk Time (%)		3	9			
Queuing Penalty (veh)		24	79			
Storage Bay Dist (ft)	300			150		
Storage Blk Time (%)	0	4	20	1		
Queuing Penalty (veh)	2	7	84	3		

Intersection: 5: Missouri Flat Road & Golden Center Drive

Movement	EB	WB	NB	NB	NB	B43	B43	SB	SB	SB	SB	B25
Directions Served	LTR	LTR	L	T	TR	T	T	L	T	T	R	T
Maximum Queue (ft)	138	265	174	290	289	96	105	196	569	627	168	109
Average Queue (ft)	56	126	87	176	184	7	8	68	258	328	9	4
95th Queue (ft)	113	217	172	287	287	51	56	150	547	618	111	60
Link Distance (ft)	184	367		216	216	1592	1592		652	652		317
Upstream Blk Time (%)	0	0		5	6				0	0		0
Queuing Penalty (veh)	0	0		24	30				1	3		0
Storage Bay Dist (ft)			150					175			500	
Storage Blk Time (%)			4	12				0	11	4	0	
Queuing Penalty (veh)			18	9				1	8	0	0	

Intersection: 5: Missouri Flat Road & Golden Center Drive

Movement	B25
Directions Served	T
Maximum Queue (ft)	104
Average Queue (ft)	4
95th Queue (ft)	65
Link Distance (ft)	317
Upstream Blk Time (%)	0
Queuing Penalty (veh)	0
Storage Bay Dist (ft)	
Storage Blk Time (%)	
Queuing Penalty (veh)	

Intersection: 6: Missouri Flat Road & Missouri Flat Rd/Diamond Springs Parkway

Movement	EB	EB	EB	B43	WB	WB	WB	NB	NB	NB
Directions Served	T	T	R	T	L	T	T	L	L	R
Maximum Queue (ft)	160	308	264	7	68	84	88	178	197	78
Average Queue (ft)	72	85	86	0	28	38	39	94	101	30
95th Queue (ft)	133	185	230	5	60	75	75	150	162	62
Link Distance (ft)	1592	1592		216		2033	2033		451	451
Upstream Blk Time (%)										
Queuing Penalty (veh)										
Storage Bay Dist (ft)			250		500			275		
Storage Blk Time (%)		0	1						0	
Queuing Penalty (veh)		0	2						0	

Intersection: 10: Pleasant Valley Rd & Missouri Flat Rd

Movement	EB	EB	EB	WB	WB	SB	SB	B68	B68
Directions Served	L	L	T	T	R	L	R	T	T
Maximum Queue (ft)	142	155	632	296	208	221	160	286	3
Average Queue (ft)	126	125	400	146	54	181	66	75	0
95th Queue (ft)	167	209	823	244	143	238	126	215	3
Link Distance (ft)			658	1506		127	127	419	419
Upstream Blk Time (%)			14			31	1	0	
Queuing Penalty (veh)			89			143	3	0	
Storage Bay Dist (ft)	130	130			200				
Storage Blk Time (%)	49	37	10	2	0				
Queuing Penalty (veh)	166	124	24	5	0				

Zone Summary

Zone wide Queuing Penalty: 1401

7: Missouri Flat Road & China Garden Rd Performance by approach

Approach	EB	WB	NB	SB	All
Denied Del/Veh (s)	0.1	0.0	0.0	0.0	0.0
Total Del/Veh (s)	8.2	28.2	13.7	11.8	13.5

9: Missouri Flat Road & Enterprise Dr Performance by approach

Approach	EB	WB	NB	SB	All
Denied Del/Veh (s)	0.0	0.1	0.0	0.0	0.0
Total Del/Veh (s)	18.5	9.6	7.5	7.1	8.3

12: SR 49 & Pleasant Valley Rd Performance by approach

Approach	EB	WB	NB	All
Denied Del/Veh (s)	2.2	0.1	3.2	1.8
Total Del/Veh (s)	36.0	21.2	33.6	29.9

Total Zone Performance

Denied Del/Veh (s)	2.8
Total Del/Veh (s)	268.4

7: Missouri Flat Road & China Garden Rd Performance by approach

Approach	EB	WB	NB	SB	All
Denied Del/Veh (s)	0.1	0.2	0.1	0.0	0.0
Total Del/Veh (s)	11.8	20.7	6.9	11.9	11.1

9: Missouri Flat Road & Enterprise Dr Performance by approach

Approach	EB	WB	NB	SB	All
Denied Del/Veh (s)	0.0	0.1	0.0	0.0	0.0
Total Del/Veh (s)	33.9	4.9	5.2	14.3	13.4

12: SR 49 & Pleasant Valley Rd Performance by approach

Approach	EB	WB	NB	All
Denied Del/Veh (s)	2.9	0.6	0.4	1.5
Total Del/Veh (s)	46.9	34.2	46.5	42.0

Total Zone Performance

Denied Del/Veh (s)	2.0
Total Del/Veh (s)	1133.3

7: Missouri Flat Road & China Garden Rd Performance by approach

Approach	EB	WB	NB	SB	All
Denied Del/Veh (s)	0.1	0.0	0.0	0.0	0.0
Total Del/Veh (s)	8.4	24.5	13.3	11.3	12.9

9: Missouri Flat Road & Enterprise Dr Performance by approach

Approach	EB	WB	NB	SB	All
Denied Del/Veh (s)	0.0	0.1	0.0	0.0	0.0
Total Del/Veh (s)	18.0	9.6	9.3	7.6	9.5

12: SR 49 & Pleasant Valley Rd Performance by approach

Approach	EB	WB	NB	All
Denied Del/Veh (s)	0.4	0.1	0.8	0.4
Total Del/Veh (s)	32.1	21.7	23.2	25.2

Total Zone Performance

Denied Del/Veh (s)	0.7
Total Del/Veh (s)	252.7

1: Missouri Flat Road & WB Ramps Performance by approach

Approach	WB	NB	SB	All
Denied Del/Veh (s)	1.2	0.0	0.0	0.4
Total Del/Veh (s)	22.8	20.6	11.8	18.9

2: Missouri Flat Road & EB Ramps Performance by approach

Approach	EB	NB	SB	All
Denied Del/Veh (s)	1.3	0.0	0.0	0.3
Total Del/Veh (s)	25.4	16.4	13.1	17.5

3: Missouri Flat Road & Mother Lode Drive Performance by approach

Approach	EB	NB	SB	All
Denied Del/Veh (s)	2.1	0.0	0.0	0.1
Total Del/Veh (s)	45.3	20.4	5.0	13.9

4: Missouri Flat Road & Forni Road Performance by approach

Approach	EB	WB	NB	SB	All
Denied Del/Veh (s)	3.0	0.0	0.0	0.0	0.4
Total Del/Veh (s)	40.7	21.3	29.4	29.3	30.2

5: Missouri Flat Road & Golden Center Drive Performance by approach

Approach	EB	WB	NB	SB	All
Denied Del/Veh (s)	0.1	0.2	0.0	0.0	0.0
Total Del/Veh (s)	28.7	39.0	17.4	28.9	22.8

6: Missouri Flat Road & Missouri Flat Rd/Diamond Springs Parkway Performance by approach

Approach	EB	WB	NB	All
Denied Del/Veh (s)	0.0	0.0	0.0	0.0
Total Del/Veh (s)	16.7	10.9	14.1	14.1

10: Pleasant Valley Rd & Missouri Flat Rd Performance by approach

Approach	EB	WB	SB	All
Denied Del/Veh (s)	20.9	0.6	0.0	6.8
Total Del/Veh (s)	112.7	17.6	8.7	45.1

Total Zone Performance

Denied Del/Veh (s)	6.8
Total Del/Veh (s)	529.7

Intersection	
Int Delay, s/veh	0.8

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Vol, veh/h	0	0	5	0	0	30	5	855	115	80	710	0
Conflicting Peds, #/hr	0	0	0	0	0	0	0	0	0	0	0	0
Sign Control	Stop	Stop	Stop	Stop	Stop	Stop	Free	Free	Free	Free	Free	Free
RT Channelized	-	-	None	-	-	None	-	-	None	-	-	None
Storage Length	-	-	0	-	-	0	1	-	-	190	-	-
Veh in Median Storage, #	-	0	-	-	0	-	-	0	-	-	0	-
Grade, %	-	0	-	-	0	-	-	0	-	-	0	-
Peak Hour Factor	92	92	92	92	92	92	92	92	92	92	92	92
Heavy Vehicles, %	2	2	2	2	2	2	2	2	2	2	2	2
Mvmt Flow	0	0	5	0	0	33	5	929	125	87	772	0

Major/Minor	Minor2			Minor1			Major1			Major2		
Conflicting Flow All	1949	2011	772	1949	1949	992	772	0	0	1054	0	0
Stage 1	946	946	-	1003	1003	-	-	-	-	-	-	-
Stage 2	1003	1065	-	946	946	-	-	-	-	-	-	-
Critical Hdwy	7.12	6.52	6.22	7.12	6.52	6.22	4.12	-	-	4.12	-	-
Critical Hdwy Stg 1	6.12	5.52	-	6.12	5.52	-	-	-	-	-	-	-
Critical Hdwy Stg 2	6.12	5.52	-	6.12	5.52	-	-	-	-	-	-	-
Follow-up Hdwy	3.518	4.018	3.318	3.518	4.018	3.318	2.218	-	-	2.218	-	-
Pot Cap-1 Maneuver	49	59	400	49	64	298	843	-	-	661	-	-
Stage 1	314	340	-	292	320	-	-	-	-	-	-	-
Stage 2	292	299	-	314	340	-	-	-	-	-	-	-
Platoon blocked, %								-	-		-	-
Mov Cap-1 Maneuver	39	51	400	43	55	298	843	-	-	661	-	-
Mov Cap-2 Maneuver	39	51	-	43	55	-	-	-	-	-	-	-
Stage 1	312	295	-	290	318	-	-	-	-	-	-	-
Stage 2	259	297	-	269	295	-	-	-	-	-	-	-

Approach	EB	WB	NB	SB
HCM Control Delay, s	14.1	18.6	0	1.1
HCM LOS	B	C		

Minor Lane/Major Mvmt	NBL	NBT	NBR	EBLn1	WBLn1	SBL	SBT	SBR
Capacity (veh/h)	843	-	-	400	298	661	-	-
HCM Lane V/C Ratio	0.006	-	-	0.014	0.109	0.132	-	-
HCM Control Delay (s)	9.3	-	-	14.1	18.6	11.3	-	-
HCM Lane LOS	A	-	-	B	C	B	-	-
HCM 95th %tile Q(veh)	0	-	-	0	0.4	0.5	-	-

1: Missouri Flat Road & WB Ramps Performance by approach

Approach	WB	NB	SB	All
Denied Del/Veh (s)	1.2	0.0	0.0	0.3
Total Del/Veh (s)	30.5	11.2	15.4	18.3

2: Missouri Flat Road & EB Ramps Performance by approach

Approach	EB	NB	SB	All
Denied Del/Veh (s)	1.6	0.0	0.0	0.4
Total Del/Veh (s)	41.3	19.0	23.8	26.9

3: Missouri Flat Road & Mother Lode Drive Performance by approach

Approach	EB	NB	SB	All
Denied Del/Veh (s)	2.7	0.0	0.2	0.1
Total Del/Veh (s)	48.6	17.9	6.4	12.4

4: Missouri Flat Road & Forni Road Performance by approach

Approach	EB	WB	NB	SB	All
Denied Del/Veh (s)	97.0	0.0	0.0	0.1	18.1
Total Del/Veh (s)	198.2	16.0	32.8	35.9	63.3

5: Missouri Flat Road & Golden Center Drive Performance by approach

Approach	EB	WB	NB	SB	All
Denied Del/Veh (s)	0.2	0.3	1.6	0.1	0.7
Total Del/Veh (s)	35.5	46.7	25.6	37.9	33.4

6: Missouri Flat Road & Missouri Flat Rd/Diamond Springs Parkway Performance by approach

Approach	EB	WB	NB	All
Denied Del/Veh (s)	0.0	0.0	0.0	0.0
Total Del/Veh (s)	21.9	6.9	14.1	15.7

7: Missouri Flat Road & China Garden Rd Performance by approach

Approach	EB	WB	NB	SB	All
Denied Del/Veh (s)	0.1	0.2	0.1	0.0	0.1
Total Del/Veh (s)	16.1	20.5	10.3	12.9	12.7

8: Missouri Flat Road & Industrial Dr Performance by approach

Approach	EB	NB	SB	All
Denied Del/Veh (s)	0.2	0.0	0.0	0.0
Total Del/Veh (s)	45.6	6.1	12.2	12.9

9: Missouri Flat Road & Enterprise Dr Performance by approach

Approach	EB	WB	NB	SB	All
Denied Del/Veh (s)	0.0	0.1	0.0	0.0	0.0
Total Del/Veh (s)	35.1	5.7	6.1	15.7	14.6

10: Pleasant Valley Rd & Missouri Flat Rd Performance by approach

Approach	EB	WB	SB	All
Denied Del/Veh (s)	1.9	0.0	0.0	0.6
Total Del/Veh (s)	42.7	13.8	9.5	21.0

12: SR 49 & Pleasant Valley Rd Performance by approach

Approach	EB	WB	NB	All
Denied Del/Veh (s)	5.5	0.9	0.7	2.8
Total Del/Veh (s)	46.7	47.6	43.7	46.4

Total Zone Performance

Denied Del/Veh (s)	17.7
Total Del/Veh (s)	538.6

Intersection: 1: Missouri Flat Road & WB Ramps

Movement	WB	WB	WB	WB	NB	NB	NB	NB	SB	SB
Directions Served	L	LT	R	R	L	L	T	T	T	T
Maximum Queue (ft)	309	312	189	158	135	145	181	133	304	252
Average Queue (ft)	173	181	105	46	86	100	70	61	160	138
95th Queue (ft)	281	289	166	112	154	150	138	114	264	229
Link Distance (ft)	983	983					395	395	459	459
Upstream Blk Time (%)										
Queuing Penalty (veh)										
Storage Bay Dist (ft)			400	400	125	125				
Storage Blk Time (%)		0			0	1	0			
Queuing Penalty (veh)		0			1	5	1			

Intersection: 2: Missouri Flat Road & EB Ramps

Movement	EB	EB	EB	NB	NB	NB	SB	SB	SB	SB
Directions Served	L	LTR	R	T	T	R	L	L	T	T
Maximum Queue (ft)	339	390	427	172	179	40	161	174	396	407
Average Queue (ft)	137	215	221	157	151	5	101	128	152	169
95th Queue (ft)	275	343	359	177	187	25	166	188	327	337
Link Distance (ft)		1460		138	138	138			395	395
Upstream Blk Time (%)				29	20				0	0
Queuing Penalty (veh)				115	79				1	2
Storage Bay Dist (ft)	700		550				150	150		
Storage Blk Time (%)							0	4	8	
Queuing Penalty (veh)							2	23	26	

Intersection: 3: Missouri Flat Road & Mother Lode Drive

Movement	EB	EB	EB	NB	NB	NB	NB	B24	B24	SB	SB	SB
Directions Served	L	L	R	L	T	T	R	T	T	T	T	R
Maximum Queue (ft)	5	84	89	158	390	361	137	111	267	174	179	28
Average Queue (ft)	0	25	31	37	172	103	12	4	13	121	131	2
95th Queue (ft)	6	64	71	107	339	250	103	67	126	199	202	32
Link Distance (ft)		633			1949	1949		368	368	138	138	
Upstream Blk Time (%)								0	0	10	13	0
Queuing Penalty (veh)								0	1	101	124	0
Storage Bay Dist (ft)	200		200	150			250					200
Storage Blk Time (%)					15	1	0				13	0
Queuing Penalty (veh)					5	4	0				3	0

Intersection: 4: Missouri Flat Road & Forni Road

Movement	EB	EB	EB	EB	WB	WB	NB	NB	NB	NB	B25	B25
Directions Served	L	L	T	R	L	T	L	T	T	R	T	T
Maximum Queue (ft)	207	220	1225	84	59	94	273	394	397	175	156	150
Average Queue (ft)	204	218	1028	34	17	35	103	235	247	18	14	16
95th Queue (ft)	214	223	1498	72	49	78	232	421	441	102	77	84
Link Distance (ft)			1180			275		317	317		652	652
Upstream Blk Time (%)			46					6	8			
Queuing Penalty (veh)			0					37	47			
Storage Bay Dist (ft)	195	195		150	190		250			150		
Storage Blk Time (%)	23	61				0	0	11	22	0		
Queuing Penalty (veh)	37	98				0	0	11	6	0		

Intersection: 4: Missouri Flat Road & Forni Road

Movement	SB	SB	SB	SB	B24	B24
Directions Served	L	T	T	R	T	T
Maximum Queue (ft)	324	456	467	175	875	948
Average Queue (ft)	202	364	404	154	273	345
95th Queue (ft)	356	538	543	230	839	925
Link Distance (ft)		368	368		1949	1949
Upstream Blk Time (%)		14	28			
Queuing Penalty (veh)		138	282			
Storage Bay Dist (ft)	300			150		
Storage Blk Time (%)	1	16	34	2		
Queuing Penalty (veh)	5	28	157	13		

Intersection: 5: Missouri Flat Road & Golden Center Drive

Movement	EB	WB	NB	NB	NB	B43	B43	SB	SB	SB	SB	B25
Directions Served	LTR	LTR	L	T	TR	T	T	L	T	T	R	T
Maximum Queue (ft)	150	282	174	298	293	155	171	199	665	704	372	108
Average Queue (ft)	62	148	96	209	217	21	24	74	353	423	19	5
95th Queue (ft)	122	244	180	326	326	100	102	170	686	741	171	58
Link Distance (ft)	184	367		216	216	1592	1592		652	652		317
Upstream Blk Time (%)	0	0		11	12				1	2		0
Queuing Penalty (veh)	0	0		68	70				4	17		0
Storage Bay Dist (ft)			150					175			500	
Storage Blk Time (%)			7	18				1	16	11	0	
Queuing Penalty (veh)			38	15				4	11	1	0	

Intersection: 5: Missouri Flat Road & Golden Center Drive

Movement	B25
Directions Served	T
Maximum Queue (ft)	156
Average Queue (ft)	12
95th Queue (ft)	110
Link Distance (ft)	317
Upstream Blk Time (%)	0
Queuing Penalty (veh)	0
Storage Bay Dist (ft)	
Storage Blk Time (%)	
Queuing Penalty (veh)	

Intersection: 6: Missouri Flat Road & Missouri Flat Rd/Diamond Springs Parkway

Movement	EB	EB	EB	B43	B43	WB	WB	WB	NB	NB	NB
Directions Served	T	T	R	T	T	L	T	T	L	L	R
Maximum Queue (ft)	178	389	275	2	19	94	106	93	206	217	67
Average Queue (ft)	88	111	132	0	1	39	47	48	110	121	29
95th Queue (ft)	151	245	281	2	9	74	89	84	180	189	57
Link Distance (ft)	1592	1592		216	216		2033	2033		451	451
Upstream Blk Time (%)											
Queuing Penalty (veh)											
Storage Bay Dist (ft)			250			500			275		
Storage Blk Time (%)			2						0	0	
Queuing Penalty (veh)			5						0	0	

Intersection: 7: Missouri Flat Road & China Garden Rd

Movement	EB	WB	NB	NB	SB	SB
Directions Served	LTR	LTR	L	TR	L	TR
Maximum Queue (ft)	37	206	29	340	160	492
Average Queue (ft)	6	89	4	141	20	186
95th Queue (ft)	25	167	20	293	87	405
Link Distance (ft)	158	1431		558		451
Upstream Blk Time (%)						1
Queuing Penalty (veh)						7
Storage Bay Dist (ft)			1		190	
Storage Blk Time (%)			6	13		6
Queuing Penalty (veh)			42	1		1

Intersection: 8: Missouri Flat Road & Industrial Dr

Movement	EB	NB	NB	SB
Directions Served	LR	L	T	TR
Maximum Queue (ft)	200	29	234	435
Average Queue (ft)	93	8	52	182
95th Queue (ft)	165	28	172	355
Link Distance (ft)	527		796	558
Upstream Blk Time (%)				
Queuing Penalty (veh)				
Storage Bay Dist (ft)		1		
Storage Blk Time (%)		12	4	
Queuing Penalty (veh)		68	0	

Intersection: 9: Missouri Flat Road & Enterprise Dr

Movement	EB	WB	NB	NB	SB	SB
Directions Served	LTR	LTR	L	TR	L	TR
Maximum Queue (ft)	161	33	29	198	29	508
Average Queue (ft)	87	3	10	59	6	188
95th Queue (ft)	141	18	29	149	25	391
Link Distance (ft)	2614	218		624		796
Upstream Blk Time (%)						
Queuing Penalty (veh)						
Storage Bay Dist (ft)			1		1	
Storage Blk Time (%)			15	8	8	16
Queuing Penalty (veh)			71	1	75	1

Intersection: 10: Pleasant Valley Rd & Missouri Flat Rd

Movement	EB	EB	EB	WB	WB	SB	SB	B68	B68
Directions Served	L	L	T	T	R	L	R	T	T
Maximum Queue (ft)	142	154	563	222	175	201	160	126	2
Average Queue (ft)	110	93	216	113	40	140	64	12	0
95th Queue (ft)	159	196	526	186	103	212	126	64	2
Link Distance (ft)			658	1506		127	127	419	419
Upstream Blk Time (%)			2			11	1		
Queuing Penalty (veh)			10			50	4		
Storage Bay Dist (ft)	130	130			200				
Storage Blk Time (%)	22	14	7	1	0				
Queuing Penalty (veh)	88	58	18	1	0				

Intersection: 12: SR 49 & Pleasant Valley Rd

Movement	EB	WB	WB	NB
Directions Served	TR	L	T	LR
Maximum Queue (ft)	798	104	679	431
Average Queue (ft)	409	100	345	198
95th Queue (ft)	788	115	698	389
Link Distance (ft)	797		700	576
Upstream Blk Time (%)	8		3	1
Queuing Penalty (veh)	0		22	0
Storage Bay Dist (ft)		80		
Storage Blk Time (%)		52	2	
Queuing Penalty (veh)		192	5	

Zone Summary

Zone wide Queuing Penalty: 2301

1: Missouri Flat Road & WB Ramps Performance by approach

Approach	WB	NB	SB	All
Denied Del/Veh (s)	1.2	0.0	0.0	0.3
Total Del/Veh (s)	29.2	11.3	15.7	18.0

2: Missouri Flat Road & EB Ramps Performance by approach

Approach	EB	NB	SB	All
Denied Del/Veh (s)	1.6	0.0	0.0	0.4
Total Del/Veh (s)	35.2	19.3	23.0	25.0

3: Missouri Flat Road & Mother Lode Drive Performance by approach

Approach	EB	NB	SB	All
Denied Del/Veh (s)	2.7	0.0	0.1	0.1
Total Del/Veh (s)	46.9	19.1	5.9	12.8

4: Missouri Flat Road & Forni Road Performance by approach

Approach	EB	WB	NB	SB	All
Denied Del/Veh (s)	68.2	0.0	0.0	0.1	12.5
Total Del/Veh (s)	188.9	14.8	32.1	33.5	60.0

5: Missouri Flat Road & Golden Center Drive Performance by approach

Approach	EB	WB	NB	SB	All
Denied Del/Veh (s)	0.2	0.3	2.3	0.1	1.0
Total Del/Veh (s)	39.8	45.9	25.7	43.0	35.9

6: Missouri Flat Road & Missouri Flat Rd/Diamond Springs Parkway Performance by approach

Approach	EB	WB	NB	All
Denied Del/Veh (s)	0.0	0.0	0.0	0.0
Total Del/Veh (s)	22.7	6.8	12.9	15.7

7: Missouri Flat Road & China Garden Rd Performance by approach

Approach	EB	WB	NB	SB	All
Denied Del/Veh (s)	0.1	0.1	0.1	0.0	0.1
Total Del/Veh (s)	11.5	8.4	2.9	5.2	4.6

8: Missouri Flat Road & Industrial Dr Performance by approach

Approach	EB	NB	SB	All
Denied Del/Veh (s)	0.2	0.0	0.0	0.0
Total Del/Veh (s)	48.5	4.9	7.2	9.7

9: Missouri Flat Road & Enterprise Dr Performance by approach

Approach	EB	WB	NB	SB	All
Denied Del/Veh (s)	0.0	0.1	0.0	0.0	0.0
Total Del/Veh (s)	35.0	4.5	5.2	14.3	13.3

10: Pleasant Valley Rd & Missouri Flat Rd Performance by approach

Approach	EB	WB	SB	All
Denied Del/Veh (s)	2.7	0.0	0.0	0.8
Total Del/Veh (s)	46.5	14.5	10.1	22.6

12: SR 49 & Pleasant Valley Rd Performance by approach

Approach	EB	WB	NB	All
Denied Del/Veh (s)	5.4	2.1	0.4	3.1
Total Del/Veh (s)	49.5	57.4	48.7	52.4

Total Zone Performance

Denied Del/Veh (s)	13.6
Total Del/Veh (s)	540.8

Intersection	
Int Delay, s/veh	2.3

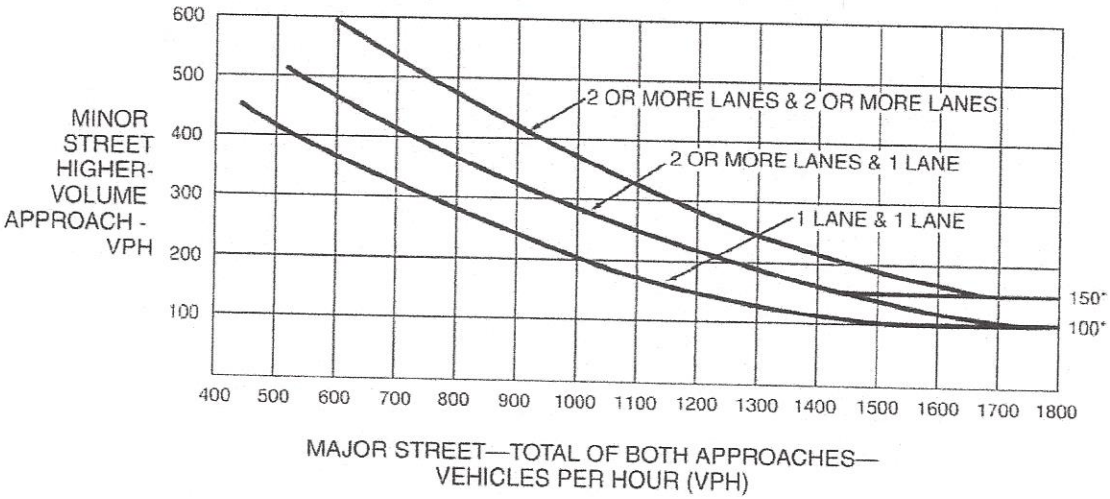
Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Vol, veh/h	0	0	5	0	0	180	5	730	10	15	1031	0
Conflicting Peds, #/hr	0	0	0	0	0	0	0	0	0	0	0	0
Sign Control	Stop	Stop	Stop	Stop	Stop	Stop	Free	Free	Free	Free	Free	Free
RT Channelized	-	-	None	-	-	None	-	-	None	-	-	None
Storage Length	-	-	0	-	-	0	1	-	-	190	-	-
Veh in Median Storage, #	-	0	-	-	0	-	-	0	-	-	0	-
Grade, %	-	0	-	-	0	-	-	0	-	-	0	-
Peak Hour Factor	92	92	92	92	92	92	92	92	92	92	92	92
Heavy Vehicles, %	2	2	2	2	2	2	2	2	2	2	2	2
Mvmt Flow	0	0	5	0	0	196	5	793	11	16	1121	0

Major/Minor	Minor2			Minor1			Major1			Major2		
Conflicting Flow All	1963	1968	1121	1963	1963	799	1121	0	0	804	0	0
Stage 1	1153	1153	-	810	810	-	-	-	-	-	-	-
Stage 2	810	815	-	1153	1153	-	-	-	-	-	-	-
Critical Hdwy	7.12	6.52	6.22	7.12	6.52	6.22	4.12	-	-	4.12	-	-
Critical Hdwy Stg 1	6.12	5.52	-	6.12	5.52	-	-	-	-	-	-	-
Critical Hdwy Stg 2	6.12	5.52	-	6.12	5.52	-	-	-	-	-	-	-
Follow-up Hdwy	3.518	4.018	3.318	3.518	4.018	3.318	2.218	-	-	2.218	-	-
Pot Cap-1 Maneuver	47	63	251	47	63	386	623	-	-	820	-	-
Stage 1	240	272	-	374	393	-	-	-	-	-	-	-
Stage 2	374	391	-	240	272	-	-	-	-	-	-	-
Platoon blocked, %								-	-		-	-
Mov Cap-1 Maneuver	23	61	251	45	61	386	623	-	-	820	-	-
Mov Cap-2 Maneuver	23	61	-	45	61	-	-	-	-	-	-	-
Stage 1	238	267	-	371	390	-	-	-	-	-	-	-
Stage 2	183	388	-	230	267	-	-	-	-	-	-	-

Approach	EB	WB	NB	SB
HCM Control Delay, s	19.7	23.5	0.1	0.1
HCM LOS	C	C		

Minor Lane/Major Mvmt	NBL	NBT	NBR	EBLn1	WBLn1	SBL	SBT	SBR
Capacity (veh/h)	623	-	-	251	386	820	-	-
HCM Lane V/C Ratio	0.009	-	-	0.022	0.507	0.02	-	-
HCM Control Delay (s)	10.8	-	-	19.7	23.5	9.5	-	-
HCM Lane LOS	B	-	-	C	C	A	-	-
HCM 95th %tile Q(veh)	0	-	-	0.1	2.8	0.1	-	-

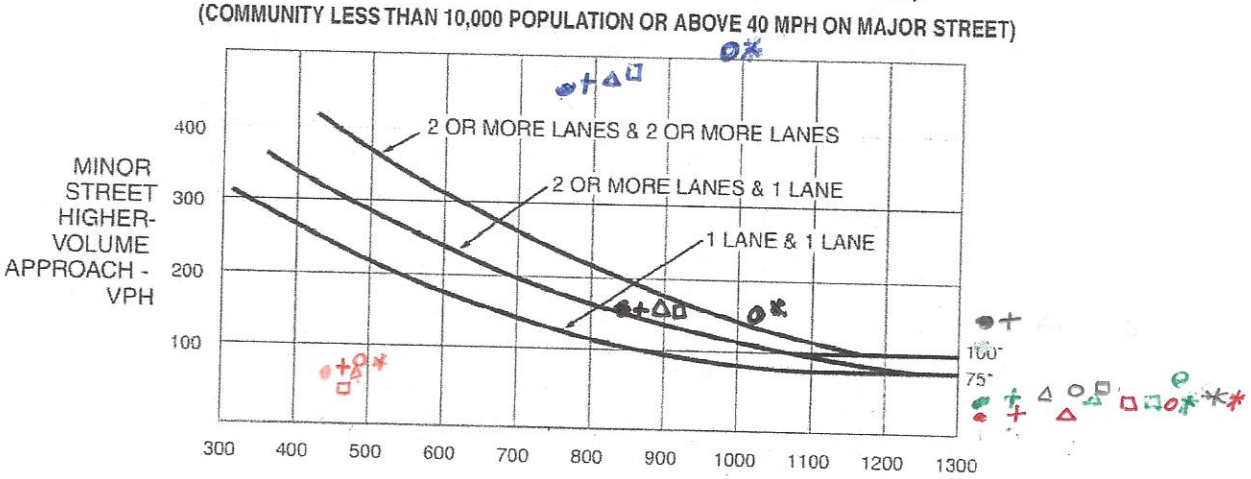
Figure 4C-3. Warrant 3, Peak Hour



*Note: 150 vph applies as the lower threshold volume for a minor-street approach with two or more lanes and 100 vph applies as the lower threshold volume for a minor-street approach with one lane.

Figure 4C-4. Warrant 3, Peak Hour (70% Factor)

(COMMUNITY LESS THAN 10,000 POPULATION OR ABOVE 40 MPH ON MAJOR STREET)



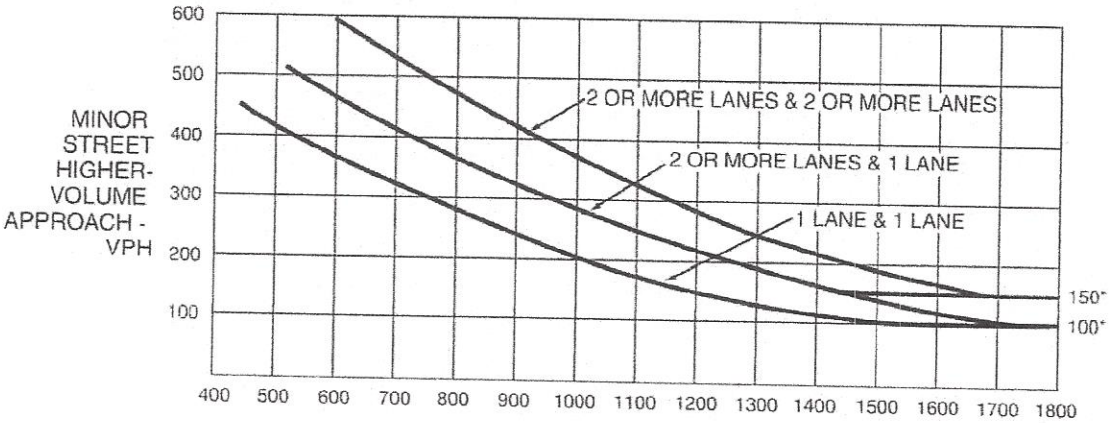
*Note: 100 vph applies as the lower threshold volume for a minor-street approach with two or more lanes and 75 vph applies as the lower threshold volume for a minor-street approach with one lane.

• EXISTING
+ EXISTING + PROJECT
△ 2019
□ 2019 + PROJECT
○ 2035
* 2035 + PROJECT

MISSOURI FLAT / CHINA GARDEN
MISSOURI FLAT / INDUSTRIAL
MISSOURI FLAT / ENTERPRISE
PLEASANT VALLEY / SR49
PLEASANT VALLEY / FORNI
ENTERPRISE / FORNI

AM

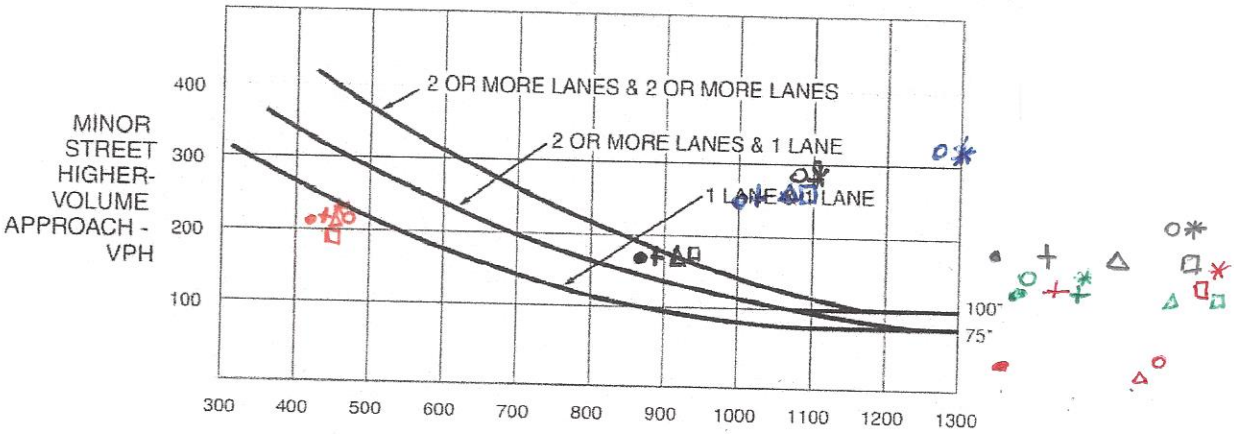
Figure 4C-3. Warrant 3, Peak Hour



*Note: 150 vph applies as the lower threshold volume for a minor-street approach with two or more lanes and 100 vph applies as the lower threshold volume for a minor-street approach with one lane.

Figure 4C-4. Warrant 3, Peak Hour (70% Factor)

(COMMUNITY LESS THAN 10,000 POPULATION OR ABOVE 40 MPH ON MAJOR STREET)



*Note: 100 vph applies as the lower threshold volume for a minor-street approach with two or more lanes and 75 vph applies as the lower threshold volume for a minor-street approach with one lane.

• EXISTING
+ EXISTING + PROJECT
△ 2019
□ 2019 + PROJECT
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✱ 2035 + PROJECT

MISSOURI FLAT / CHINA GARDEN
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PLEASANT VALLEY / FORNI
ENTERPRISE / FORNI

PM