Initial Study/Proposed Mitigated Negative Declaration

First Street
Trunk Line Project:
Technical Appendices

Los Angeles Department of Water and Power
Environmental Services
111 North Hope Street, Room 1044
Los Angeles, California 90012

October 2005

Contents

Technical Appendices

*The full EDR Report is available for inspection at the Los Angeles Department of Water and Power, Environmental Affairs and Economic Development– Environmental Assessment, 111 North Hope Street; Room 1044; Los Angeles, CA 90012.

APPENDIX A
Air Quality Tables

Table A-1

State and Federal Ambient Air Quality Standards

Pollutant	Averaging Time	NAAQS[1]		CAAQS[2]
		Primary[3]	Secondary[4]	Concentration[5]
Ozone (O_3)[6]	1-Hour	0.12 ppm (235 $\mu g/m^3$)	Same as Primary Standard	0.09 ppm (180 $\mu g/m^3$)
	8-Hour	0.08 ppm (157 $\mu g/m^3$)		0.070 ppm (137 $\mu g/m^3$) [9]
Carbon Monoxide (CO)	8-Hour	9.0 ppm (10 mg/m^3)	None	9.0 ppm (10 mg/m^3)
	1-Hour	35 ppm (40 mg/m^3)		20 ppm (23 mg/m^3)
Nitrogen Dioxide (NO_2)	Annual Average	0.053 ppm (100 $\mu g/m^3$)	Same as Primary Standard	-
	1-Hour	-		0.25 ppm (470 $\mu g/m^3$)
Sulfur Dioxide (SO_2)	Annual Average	0.03 ppm (80 $\mu g/m^3$)	-	-
	24-Hour	0.14 ppm (365 $\mu g/m^3$)	-	0.04 ppm (105 $\mu g/m^3$)
	3-Hour	-	0.5 ppm (1300 $\mu g/m^3$)	-
	1-Hour	-	-	0.25 ppm (655 $\mu g/m^3$)
Suspended Particulate Matter (PM_{10})	24-Hour	150 $\mu g/m^3$	Same as Primary Standard	50 $\mu g/m^3$
	Annual Arithmetic Mean	50 $\mu g/m^3$		20 $\mu g/m^3$ note 7
Fine Particulate Matter ($PM_{2.5}$)[6]	24-Hour	65 $\mu g/m^3$	Same as Primary Standard	-
	Annual Arithmetic Mean	15 $\mu g/m^3$		12 $\mu g/m^3$ note 7
Lead (Pb)[8]	30-Day Average	-	-	1.5 $\mu g/m^3$
	Calendar Quarter	1.5 $\mu g/m^3$	Same as Primary Standard	-
Hydrogen Sulfide (HS)	1-Hour	No Federal Standards		0.03 ppm (42 $\mu g/m^3$)
Sulfates (SO_4)	24-Hour			25 $\mu g/m^3$
Visibility Reducing Particles	8-Hour (10 am to 6 pm, Pacific Standard Time)			In sufficient amount to produce an extinction coefficient of 0.23 per km due to particles when the relative humidity is less than 70 percent.
Vinyl chloride[8]	24 Hour			0.01 ppm (26 $\mu g/m^3$)

[1] NAAQS (other than O_3, particulate matter, and those based on annual averages or annual arithmetic mean) are not to be exceeded more than once a year. The O_3 standard is attained when the fourth highest 8-hour concentration in a year, averaged over 3 years, is equal to or less than the standard. For PM_{10}, the 24-hour standard is attained when 99 percent of the daily concentrations, averaged over 3 years, are equal to or less than the standard. For $PM_{2.5}$, the 24-hour standard is attained when 98 percent of the daily concentrations, averaged over 3 years, are equal to or less than the standard. Contact the USEPA for further clarification and current federal policies.

[2] California Ambient Air Quality Standards for O_3, CO (except Lake Tahoe), SO_2 (1- and 24-hour), NO_2, PM_{10}, and visibility reducing particles, are values that are not to be exceeded. All others are not to be equaled or exceeded.

[3] National Primary Standards: The levels of air quality necessary, with an adequate margin of safety, to protect the public health.

[4] National Secondary Standards: The levels of air quality necessary to protect the public welfare from any known or anticipated adverse effects of a pollutant.

[5] Concentration expressed first in units in which it was promulgated. Ppm in this table refers to ppm by volume or micromoles of pollutant per mole of gas.

[6] New federal 8-hour ozone and fine particulate matter standards were promulgated by USEPA on 18 July 1997. The federal 1-hour O_3 standard continues to apply in areas that violated the standard. On April 15, 2004 the USEPA issued attainment designations for the 8-hour standard and described plans for the phase out of the 1-hour standard (USEPA 2004).

[7] On 5 June 2003, the Office of Administrative Law approved the amendments to the regulations for the state ambient air quality standards for particulate matter and sulfates. Those amendments established a new annual average standard for $PM_{2.5}$ of 12 $\mu g/m^3$ and reduced the level of the annual average standard for PM_{10} to 20 $\mu g/m^3$. The approved amendments were filed with the Secretary of State on 5 June 2003. The regulations became effective on 5 July 2003.

[8] The ARB has identified lead and vinyl chloride as 'toxic air contaminants' with no threshold level of exposure for adverse health effects determined. These actions allow for the implementation of control measures at levels below the ambient concentrations specified for these pollutants.

[9] The Air Resources Board approved this concentration on April 28, 2005 and it is expected to become effective in early 2006.

ppm = parts per million; $\mu g/m^3$ = micrograms per cubic meter; mg/m^3 = milligrams per cubic meter

Source: CARB 2005, USEPA 2004

Table A-2 Attainment Designations for Los Angeles County

Pollutant	Attainment Designation	
	Federal[b]	**State**[c]
Carbon Monoxide	Nonattainment – Serious	Nonattainment – Transitional[a]
Nitrogen Dioxide	Attainment	Attainment
Ozone – 8-hour standard	Nonattainment – Severe 17	Nonattainment
Ozone – 1-hour standard	Nonattainment – Extreme	
PM_{10}	Nonattainment – Serious	Nonattainment
$PM_{2.5}$	Nonattainment	Nonattainment
Sulfur Dioxide	Attainment	Attainment
Lead	Attainment	Attainment
Sulfates	No federal standard	Attainment
Hydrogen Sulfide		Unclassified
Visibility Reducing Particles		Unclassified

a On January 20, 2005, the Air Resources Board adopted changes to the State area designations for carbon monoxide (CO), based on air quality data collected during 2001 through 2003. The adopted CO designation for Los Angeles County is Attainment. The designation change will not be effective until approved through the State administrative process, which is expected in the Summer of 2005[25].

b http://www.epa.gov/oar/oaqps/greenbk/ancl.html#california

c California Air Resources Board http://www.arb.ca.gov/desig/adm/adm.htm

Table A-3
Ambient Air Quality Monitoring Summary
Central Los Angeles Monitoring Station, 2002-2004

Pollutant Standards	2002	2003	2004
Ozone (O_3)			
Maximum 1-hour concentration (ppm)	0.122	0.152	0.110
Maximum 8-hour concentration (ppm)	0.079	0.088	0.079
Number of Days Standard Exceeded			
NAAQS 1-hour (>0.12 ppm)	0	1	0
CAAQS 1-hour (>0.09 ppm)	8	11	7
NAAQS 8-hour (>0.08 ppm)	0	2	1
Carbon Monoxide (CO)			
Maximum 8-hour concentration (ppm)	3.8	4.5	3.2
Maximum 1-hour concentration (ppm)	5.3	5.5	4.2
Number of Days Standard Exceeded			
NAAQS 8-hour (≥9.0 ppm)	0	0	0
CAAQS 8-hour (≥9.0 ppm)	0	0	0
NAAQS 1-hour (≥35 ppm)	0	0	0
CAAQS 1-hour (≥20 ppm)	0	0	0
Particulate Matter (PM_{10})[a]			
National maximum 24-hour concentration ($\mu g/m^3$)	65.0	81	72.0
National second highest 24-hour concentration ($\mu g/m^3$)	61.0	76.0	64.0
State maximum 24-hour concentration ($\mu g/m^3$)	64.0	80.0	72.0
State second highest 24-hour concentration ($\mu g/m^3$)	59.0	75.0	63.0
National[b] annual average concentration ($\mu g/m^3$)	-	34.7	32.7
State[c] annual average concentration ($\mu g/m^3$)	-	34.3	32.5
Number of Days Standard Exceeded			
NAAQS 24-hour (>150 $\mu g/m^3$)[d]	0	0	0
CAAQS 24-hour (>50 $\mu g/m^3$)[d]	7	6	5
Particulate Matter ($PM_{2.5}$)			
Maximum 24-hour concentration ($\mu g/m^3$)	66.3	83.7	75.0
Second highest 24-hour concentration ($\mu g/m^3$)	62.1	73.2	75.0
National [b] annual average concentration ($\mu g/m^3$)	22.0	22.0	21.0
State[c] annual average concentration ($\mu g/m^3$)	-	-	-
Number of Days Standard Exceeded			
NAAQS 24-hour (>65 $\mu g/m^3$)	1	4	2

Notes:

CAAQS = California Ambient Air Quality Standards.
NAAQS = National Ambient Air Quality Standards.
NA = Insufficient data available to determine the value.
Measurements usually collected every six days.
National annual average based on arithmetic mean.
State annual average based on geometric mean.
Based on an estimate of how many days concentrations would have been greater than the standard.
Sources: California Air Resources Board 2005; Environmental Protection Agency 2005.**{** TC "California Air Resources Board 2004; Environmental Protection Agency 2004." \f C \l "1" **}**

Table A-4
Anticipated Construction Equipment by Construction Phase for a Pipeline Unit

Construction Phase and Equipment	Number of Equipment Pieces
Site Preparation, Excavation, and Shoring	
Excavators	1
Rubber-Tired Loaders	1
Backhoe	1
Signal Board	2
Installation and Backfilling	
Rubber-Tired Loaders	1
Crane	1
Other Equipment	1
Worker Vehicles	24
Signal Board	2
Street Restoration	
Paver	1
Signal Board	2
Roller	1
Compactor	1
Notes: Anticipated construction equipment is based on information in the project description.	

Table A-5
Anticipated Construction Equipment by Construction Phase for relief station

Construction Phase and Equipment	Number of Equipment Pieces
Excavation	
Excavators	1
Rubber-Tired Loaders	1
Crane	1
Other Equipment	1
Installation and Backfilling	
Compactor	1
Crane	1
Other Equipment	6
Worker Vehicles	4
Backhoe	1
Street Restoration	
Paver	1
Roller	1
Notes: Anticipated construction equipment is based on information in the project description.	

APPENDIX B
Air Quality Calculations

Road Construction Emissions Model

Version 5.1

Data Entry Worksheet

Note: Required data input sections have a yellow background.
Optional data input sections have a blue background. Only areas with a
yellow or blue background can be modified. Program defaults have a white background.
The user is required to enter information in cells C10 through C28.

SACRAMENTO METROPOLITAN AIR QUALITY MANAGEMENT DISTRICT

Input Type		
Project Name	Pipeline 2 units	
Construction Start Year	2006	Enter a Year between 2000 and 2010 inclusive
Project Type	1	1 New Road Construction 2 Road Widening 3 Bridge/Overpass Construction
Project Construction Time	16.00	months
Predominate Soil/Site Type: Enter 1, 2, or 3	2	1. Sand Gravel 2. Weathered Rock-Earth 3. Blasted Rock
On-Road Emission Factors: Enter 1, 2, or 3	4	1. Emfac7fv1.1 4. Emfac2002 2. Emfac7G 3. Emfac2001
Project Length	2	miles
Total Project Area	2	acres
Maximum Area Disturbed/Day	0	acres
Water Trucks Used?	2	1. Yes 2. No
Soil Imported		yd^3/day
Soil Exported		yd^3/day
Average Truck Capacity	20	yd^3 (assume 20 if unknown)

To begin a new project, click this button to clear data previously entered. This button will only work if you opted not to disable macros when loading this spreadsheet.

Construction Periods	User Override of Construction Months	Program Calculated Months	2000	%	
Grubbing/Land Clearing	0.00	1.60	0.00		0.00
Grading/Excavation	8.80	7.20	0.00		0.00
Drainage/Utilities/Sub-Grade	4.80	4.80	0.00		0.00
Paving	2.40	2.40	0.00		0.00
Totals	16.00	16.00			

Hauling emission default values can be overridden in cells C48 through C50.

Soil Hauling Emissions	User Override of Soil Hauling Defaults	Default Values			
User Input					
Miles/round trip	20.00	30.00			
Round trips/day	6.00	0.00			
Vehicle miles traveled/day (calculated)	120.00	0.00			
Hauling Emissions	**ROG**	**NOx**	**CO**	**PM10**	
Emission rate (grams/mile)	0.85	10.00	8.59	0.30	
Pounds per day	0.2	2.6	2.3	0.1	
Tons per contruction period	0.02	0.26	0.22	0.01	

Worker commute default values can be overridden in cells C62 through C67.

Worker Commute Emissions	User Override of Worker Commute Default Values	Default Values
Miles/ one-way trip	20	20
One-way trips/day	2	2
No. of employees: Grubbing/Land Clearing	8	8
No. of employees: Grading/Excavation	10	10
No. of employees: Drainage/Utilities/Sub-Grade	10	10
No. of employees: Paving	9	9

Worker Commute Emissions	User Override of Worker Commute Default Values	Default Values
Miles/ one-way trip	20	20
One-way trips/day	2	2
No. of employees: Grubbing/Land Clearing	8	8
No. of employees: Grading/Excavation	10	10
No. of employees: Drainage/Utilities/Sub-Grade	10	10
No. of employees: Paving	9	9

	ROG	NOx	CO	PM10
Emission rate (grams/mile)	0.36	0.67	7.41	0.04
Emission rate (grams/trip)	1.86	0.82	18.48	0.02
Pounds per day - Grubbing/Land Clearing	0.4	0.5	6.5	0.0
Tons per const. Period - Grub/Land Clear	0.0	0.0	0.1	0.0
Pounds per day - Grading/Excavation	0.5	0.7	8.2	0.0
Tons per const. Period - Grading/Excavation	0.0	0.1	0.8	0.0
Pounds per day - Drainage/Utilities/Sub-Grade	0.5	0.7	8.2	0.0
Tons per const. Period - Drain/Util/Sub-Grade	0.0	0.0	0.4	0.0
Pounds per day - Paving	0.4	0.6	7.3	0.0
Tons per const. Period - Paving	0.0	0.0	0.2	0.0
tons per construction period	0.1	0.1	1.5	0.0

Water truck default values can be overriden in cells C87 through C89 and E87 through E89.

Water Truck Emissions	Number of Water Trucks	Program Estimate of Number of Water Trucks	User Override of Water Truck Miles Traveled	Default Values Miles Traveled/Day
Grubbing/Land Clearing - Exhaust	0	0	0	0
Grading/Excavation - Exhaust	1	0	0	0
Drainage/Utilities/Subgrade	1	0	0	0

	ROG	NOx	CO	PM10
Emission rate (grams/mile)	0.85	10.00	8.59	0.30
Pounds per day - Grubbing/Land Clearing	0.0	0.0	0.0	0.0
Tons per const. Period - Grub/Land Clear	0.00	0.00	0.00	0.00
Pound per day - Grading/Excavation	0.0	0.0	0.0	0.0
Tons per const. Period - Grading/Excavation	0.00	0.00	0.00	0.00
Pound per day - Drainage/Utilities/Subgrade	0.0	0.0	0.0	0.0
Tons per const. Period - Drainage/Utilities/Subgrade	0.00	0.00	0.00	0.00

Fugitive dust default values can be overridden in cells C104 and C105.

Fugitive PM10 Dust	User Override of Max Acrerage/Day	Default Maximum Acreage/Day	pounds/day	tons/per period
Fugitive Dust - Grubbing/Land Clearing	0	0.12	0.0	0.0
Fugitive Dust - Grading/Excavation	0	0.12	1.2	0.1
Fugitive Dust - Drainage/Utilities/Subgrade		0	1.2	0.1

Off-Road Equipment Emissions

Grubbing/Land Clearing Override of Default Number of Vehicles	Default Number of Vehicles *Program-estimate*	Type	ROG pounds/day	CO pounds/day	NOx pounds/day	PM10 pounds/day
		Backhoes	0.00	0.00	0.00	0.00
		Bore/Drill Rigs	0.00	0.00	0.00	0.00
		Concrete/Industrial Saws	0.00	0.00	0.00	0.00
		Compactor	0.00	0.00	0.00	0.00
		Cranes	0.00	0.00	0.00	0.00
		Crawler Tractors	0.00	0.00	0.00	0.00
		Crushing/Proc. Equipment	0.00	0.00	0.00	0.00
0	1	Dozer	0.00	0.00	0.00	0.00
		Excavator	0.00	0.00	0.00	0.00
		Forklifts, Rough Terrain	0.00	0.00	0.00	0.00
		Grader	0.00	0.00	0.00	0.00
		Loaders, Rubber Tired	0.00	0.00	0.00	0.00
		Off-Highway Trucks	0.00	0.00	0.00	0.00
		Other Construction Equip.	0.00	0.00	0.00	0.00
		Pavers	0.00	0.00	0.00	0.00
		Paving Equipment	0.00	0.00	0.00	0.00
		Rollers	0.00	0.00	0.00	0.00
0	1	Scrapper	0.00	0.00	0.00	0.00
0	4	Signal Boards	0.00	0.00	0.00	0.00
		Skid Steer Loaders	0.00	0.00	0.00	0.00
		Surfacing Equipment	0.00	0.00	0.00	0.00
		Tractors	0.00	0.00	0.00	0.00
		Trenchers	0.00	0.00	0.00	0.00
		pounds per day	0.0	0.0	0.0	0.0
		tons per period	0.0	0.0	0.0	0.0

Grading/Excavation	Number of Vehicles		ROG	CO	NOx	PM10
Override of Default Number of Vehicles	*Program-estimate*	Type	pounds/day	pounds/day	pounds/day	pounds/day
2		Backhoes	1.04	3.65	7.72	0.63
		Bore/Drill Rigs	0.00	0.00	0.00	0.00
		Concrete/Industrial Saws	0.00	0.00	0.00	0.00
		Compactor	0.00	0.00	0.00	0.00
0	0	Cranes	0.00	0.00	0.00	0.00
		Crawler Tractors	0.00	0.00	0.00	0.00
		Crushing/Proc. Equipment	0.00	0.00	0.00	0.00
		Dozer	0.00	0.00	0.00	0.00
2	1	Excavator	2.76	14.16	13.57	0.71
		Forklifts, Rough Terrain	0.00	0.00	0.00	0.00
0	1	Grader	0.00	0.00	0.00	0.00
2	1	Loaders, Rubber Tired	0.69	6.25	12.50	0.65
		Off-Highway Trucks	0.00	0.00	0.00	0.00
	0	Other Construction Equip.	0.00	0.00	0.00	0.00
		Pavers	0.00	0.00	0.00	0.00
		Paving Equipment	0.00	0.00	0.00	0.00
		Rollers	0.00	0.00	0.00	0.00
0	1	Scrapper	0.00	0.00	0.00	0.00
4	4	Signal Boards	2.61	6.57	9.71	0.94
		Skid Steer Loaders	0.00	0.00	0.00	0.00
		Surfacing Equipment	0.00	0.00	0.00	0.00
		Tractors	0.00	0.00	0.00	0.00
		Trenchers	0.00	0.00	0.00	0.00
		max pounds per day	7.1	30.6	43.5	2.9
		tons per period	0.7	3.0	4.2	0.3

Drainage/Utilities/Subgrade Override of Default Number of Vehicles	Number of Vehicles *Program-estimate*	Type	ROG pounds/day	CO pounds/day	NOx pounds/day	PM10 pounds/day
		Backhoes	0.00	0.00	0.00	0.00
		Bore/Drill Rigs	0.00	0.00	0.00	0.00
		Concrete/Industrial Saws	0.00	0.00	0.00	0.00
0	1	Compactor	0.00	0.00	0.00	0.00
2		Cranes	2.16	12.25	11.20	0.61
		Crawler Tractors	0.00	0.00	0.00	0.00
		Crushing/Proc. Equipment	0.00	0.00	0.00	0.00
		Dozer	0.00	0.00	0.00	0.00
		Excavator	0.00	0.00	0.00	0.00
		Forklifts, Rough Terrain	0.00	0.00	0.00	0.00
0	1	Grader	0.00	0.00	0.00	0.00
2		Loaders, Rubber Tired	1.38	6.33	12.17	0.64
		Off-Highway Trucks	0.00	0.00	0.00	0.00
2		Other Construction Equip.	3.12	18.55	16.69	0.91
		Pavers	0.00	0.00	0.00	0.00
		Paving Equipment	0.00	0.00	0.00	0.00
		Rollers	0.00	0.00	0.00	0.00
0	1	Scrapper	0.00	0.00	0.00	0.00
4	4	Signal Boards	2.61	6.55	9.67	0.93
		Skid Steer Loaders	0.00	0.00	0.00	0.00
		Surfacing Equipment	0.00	0.00	0.00	0.00
		Tractors	0.00	0.00	0.00	0.00
0	1	Trenchers	0.00	0.00	0.00	0.00
		max pounds per day	9.3	43.7	49.7	3.1
		tons per period	0.5	2.3	2.6	0.2

Paving Override of Default Number of Vehicles	Number of Vehicles *Program-estimate*	Type	ROG pounds/day	CO pounds/day	NOx pounds/day	PM10 pounds/day
		Backhoes	0.00	0.00	0.00	0.00
		Bore/Drill Rigs	0.00	0.00	0.00	0.00
		Concrete/Industrial Saws	0.00	0.00	0.00	0.00
2		Compactor	3.12	17.32	15.67	0.86
		Cranes	0.00	0.00	0.00	0.00
		Crawler Tractors	0.00	0.00	0.00	0.00
		Crushing/Proc. Equipment	0.00	0.00	0.00	0.00
		Dozer	0.00	0.00	0.00	0.00
		Excavator	0.00	0.00	0.00	0.00
		Forklifts, Rough Terrain	0.00	0.00	0.00	0.00
		Grader	0.00	0.00	0.00	0.00
		Loaders, Rubber Tired	0.00	0.00	0.00	0.00
		Off-Highway Trucks	0.00	0.00	0.00	0.00
		Other Construction Equip.	0.00	0.00	0.00	0.00
2	1	Pavers	1.39	6.56	11.62	0.62
0	1	Paving Equipment	0.00	0.00	0.00	0.00
2	1	Rollers	1.17	5.52	9.78	0.52
		Scrapper	0.00	0.00	0.00	0.00
4	4	Signal Boards	2.61	6.49	9.59	0.91
		Skid Steer Loaders	0.00	0.00	0.00	0.00
		Surfacing Equipment	0.00	0.00	0.00	0.00
		Tractors	0.00	0.00	0.00	0.00
		Trenchers	0.00	0.00	0.00	0.00
		pounds per day	8.3	35.9	46.6	2.9
		tons per period	0.2	0.9	1.2	0.1
Total Emissions (tons per construction period)			1.4	6.2	8.1	0.5

Equipment		Default Values Horsepower		Default Values Load Factor		Default Values Hours/day
Bore/Drill Rigs		218		0.75		8
Concrete/Industrial Saws		84		0.73		8
Cranes		190		0.43	6	8
Crawler Tractors		143		0.575		8
Crushing/Proc. Equipment		154		0.78		8
Excavators		180		0.58	6	8
Graders		174		0.575		8
Off-Highway Tractors		255		0.41		8
Off-Highway Trucks		417		0.49		8
Other Construction Equipment		190		0.62	6	8
Pavers		132		0.59	6	8
Paving Equipment		111		0.53		8
Rollers		114		0.43		8
Rough Terrain Forklifts		94		0.475	6	8
Rubber Tired Dozers		352		0.59		8
Rubber Tired Loaders		165		0.465	6	8
Scrapers		313		0.66		8
Signal Boards		25		0.82		8
Skid Steer Loaders		62		0.515		8
Surfacing Equipment		437		0.49		8
Tractors/Loaders/Backhoes		79		0.465	6	8
Trenchers		82		0.695		8

Default load factors from SCAQMD CEQA Handbook, 1993.

Default horsepower values from Appendix B, California Air Resources Board's Offroad Model (see also Appendix B of this spreadsheet).

Signal board horsepower based on: U.S. EPA, 1998. Final Regulatory Impact Analysis: Control of Emissions from Nonroad Diesel Engines (EPA420-R-98-016).

Road Construction Emissions Model, Version 5.1

Emission Estimates for -> Pipeline 2 units

Project Phases (English Units)	ROG (lbs/day)	CO (lbs/day)	NOx (lbs/day)	PM10 (lbs/day)	Exhaust PM10 (lbs/day)	Fugitive Dust PM10 (lbs/day)	
Grubbing/Land Clearing	0	7	1	0	0	0	
Grading/Excavation	8	41	47	4	3	1	
Drainage/Utilities/Sub-Grade	10	52	50	4	3	1	
Paving	9	43	47	3	3	0	
Maximum (pounds/day)	10	52	50	4	3	1	
Total (tons/construction project)	2	7	10	1	1	0	<-tons

Notes:
Project Start Year -> 2006
Project Length (months) -> 16
Total Project Area (acres) -> 2
Maximum Area Disturbed/Day (acres) -> 0
Total Soil Imported/Exported (yd^3/day)-> 0

PM10 estimates assume 50% control of fugitive dust from watering and associated dust control measures if a minimum number of water trucks are specified.

Total PM10 emissions shown in column F are the sum of exhaust and fugitive dust emissions shown in columns H and I.

Emission Estimates for -> Pipeline 2 units

Project Phases (Metric Units)	ROG (kgs/day)	CO (kgs/day)	NOx (kgs/day)	PM10 (kgs/day)	Exhaust PM10 (kgs/day)	Fugitive Dust PM10 (kgs/day)	
Grubbing/Land Clearing	0	3	0	0	0	0	
Grading/Excavation	4	19	21	2	1	1	
Drainage/Utilities/Sub-Grade	4	24	23	2	1	1	
Paving	4	20	21	1	1	0	
Maximum (kilograms/day)	4	24	23	2	1	1	
Total (megagrams/construction project)	1	6	9	1	0	0	<-megagrams

Notes:
Project Start Year -> 2006
Project Length (months) -> 16
Total Project Area (hectares) -> 1
Maximum Area Disturbed/Day (hectares) -> 0
Total Soil Imported/Exported ($meters^3$/day)-> 0

PM10 estimates assume 50% control of fugitive dust from watering and associated dust control measures if a minimum number of water trucks are specified.

Total PM10 emissions shown in column F are the sum of exhaust and fugitive dust emissions shown in columns H and I.

Road Construction Emissions Model

Version 5.1

Data Entry Worksheet

Note: Required data input sections have a yellow background.
Optional data input sections have a blue background. Only areas with a
yellow or blue background can be modified. Program defaults have a white background.
The user is required to enter information in cells C10 through C28.

SACRAMENTO METROPOLITAN AIR QUALITY MANAGEMENT DISTRICT

Input Type		
Project Name	Regulator Vault	
Construction Start Year	2006	Enter a Year between 2000 and 2010 inclusive
Project Type	1	1 New Road Construction 2 Road Widening 3 Bridge/Overpass Construction
Project Construction Time	8.50	months
Predominate Soil/Site Type: Enter 1, 2, or 3	2	1. Sand Gravel 2. Weathered Rock-Earth 3. Blasted Rock
On-Road Emission Factors: Enter 1, 2, or 3	4	1. Emfac7fv1.1 4. Emfac2002 2. Emfac7G 3. Emfac2001
Project Length	0.5	miles
Total Project Area	1	acre
Maximum Area Disturbed/Day	0	acres
Water Trucks Used?	1	1. Yes 2. No
Soil Imported	9000	yd^3/day
Soil Exported	0	yd^3/day
Average Truck Capacity	12	yd^3 (assume 20 if unknown)

To begin a new project, click this button to clear data previously entered. This button will only work if you opted not to disable macros when loading this spreadsheet.

Construction Periods	User Override of Construction Months	Program Calculated Months	2000	%		2001
Grubbing/Land Clearing	0.00	0.85	0.00		0.00	0.00
Grading/Excavation	5.00	3.83	0.00		0.00	0.00
Drainage/Utilities/Sub-Grade	1.30	2.55	0.00		0.00	0.00
Paving	2.20	1.28	0.00		0.00	0.00
Totals	8.50	8.50				

Hauling emission default values can be overridden in cells C48 through C50.

Soil Hauling Emissions	User Override of Soil Hauling Defaults	Default Values
User Input		
Miles/round trip	20.00	30.00
Round trips/day	55.00	750.00
Vehicle miles traveled/day (calculated)	1100.00	22500.00

Hauling Emissions	**ROG**	**NOx**	**CO**	**PM10**
Emission rate (grams/mile)	0.85	10.00	8.59	0.30
Pounds per day	2.1	24.2	20.8	0.7
Tons per contruction period	0.11	1.33	1.14	0.04

Worker commute default values can be overridden in cells C62 through C67.

Worker Commute Emissions	User Override of Worker Commute Default Values	Default Values
Miles/ one-way trip		20
One-way trips/day		2
No. of employees: Grubbing/Land Clearing		4
No. of employees: Grading/Excavation		6
No. of employees: Drainage/Utilities/Sub-Grade		6
No. of employees: Paving		5

Water Truck Emissions	Number of Water Trucks	Program Estimate of Number of Water Trucks	User Override of Water Truck Miles Traveled	Default Values Miles Traveled/Day
Grubbing/Land Clearing - Exhaust	0	1	0	40
Grading/Excavation - Exhaust	1	1	0	40
Drainage/Utilities/Subgrade	1	1	0	40
	ROG	**NOx**	**CO**	**PM10**
Emission rate (grams/mile)	0.85	10.00	8.59	0.30
Pounds per day - Grubbing/Land Clearing	0.0	0.0	0.0	0.0
Tons per const. Period - Grub/Land Clear	0.00	0.00	0.00	0.00
Pound per day - Grading/Excavation	0.0	0.0	0.0	0.0
Tons per const. Period - Grading/Excavation	0.00	0.00	0.00	0.00
Pound per day - Drainage/Utilities/Subgrade	0.1	0.0	0.0	0.0
Tons per const. Period - Drainage/Utilities/Subgrade	0.00	0.00	0.00	0.00

Fugitive dust default values can be overridden in cells C104 and C105.

Fugitive PM10 Dust	User Override of Max Acrerage/Day	Default Maximum Acreage/Day	pounds/day	tons/per period
Fugitive Dust - Grubbing/Land Clearing	0	0.1	0.0	0.0
Fugitive Dust - Grading/Excavation	0	0.1	0.6	0.0
Fugitive Dust - Drainage/Utilities/Subgrade		0	0.5	0.0

Off-Road Equipment Emissions

Grubbing/Land Clearing Override of Default Number of Vehicles	Default Number of Vehicles *Program-estimate*	Type	ROG pounds/day	CO pounds/day	NOx pounds/day	PM10 pounds/day
		Backhoes	0.00	0.00	0.00	0.00
		Bore/Drill Rigs	0.00	0.00	0.00	0.00
		Concrete/Industrial Saws	0.00	0.00	0.00	0.00
		Compactor	0.00	0.00	0.00	0.00
		Cranes	0.00	0.00	0.00	0.00
		Crawler Tractors	0.00	0.00	0.00	0.00
		Crushing/Proc. Equipment	0.00	0.00	0.00	0.00
0	1	Dozer	0.00	0.00	0.00	0.00
		Excavator	0.00	0.00	0.00	0.00
		Forklifts, Rough Terrain	0.00	0.00	0.00	0.00
		Grader	0.00	0.00	0.00	0.00
		Loaders, Rubber Tired	0.00	0.00	0.00	0.00
		Off-Highway Trucks	0.00	0.00	0.00	0.00
		Other Construction Equip.	0.00	0.00	0.00	0.00
		Pavers	0.00	0.00	0.00	0.00
		Paving Equipment	0.00	0.00	0.00	0.00
		Rollers	0.00	0.00	0.00	0.00
0	1	Scrapper	0.00	0.00	0.00	0.00
0	1	Signal Boards	0.00	0.00	0.00	0.00
		Skid Steer Loaders	0.00	0.00	0.00	0.00
		Surfacing Equipment	0.00	0.00	0.00	0.00
		Tractors	0.00	0.00	0.00	0.00
		Trenchers	0.00	0.00	0.00	0.00
		pounds per day	0.0	0.0	0.0	0.0
		tons per period	0.0	0.0	0.0	0.0

Grading/Excavation Override of Default Number of Vehicles	Number of Vehicles *Program-estimate*	Type	ROG pounds/day	CO pounds/day	NOx pounds/day	PM10 pounds/day
		Backhoes	0.00	0.00	0.00	0.00
		Bore/Drill Rigs	0.00	0.00	0.00	0.00
		Concrete/Industrial Saws	0.00	0.00	0.00	0.00
		Compactor	0.00	0.00	0.00	0.00
1	0	Cranes	1.08	6.36	5.80	0.31
		Crawler Tractors	0.00	0.00	0.00	0.00
		Crushing/Proc. Equipment	0.00	0.00	0.00	0.00
		Dozer	0.00	0.00	0.00	0.00
1	1	Excavator	1.38	7.08	6.78	0.35
		Forklifts, Rough Terrain	0.00	0.00	0.00	0.00
0	1	Grader	0.00	0.00	0.00	0.00
1	1	Loaders, Rubber Tired	0.69	3.12	6.25	0.33
		Off-Highway Trucks	0.00	0.00	0.00	0.00
1	0	Other Construction Equip.	1.56	9.58	8.60	0.47
		Pavers	0.00	0.00	0.00	0.00
		Paving Equipment	0.00	0.00	0.00	0.00
		Rollers	0.00	0.00	0.00	0.00
0	1	Scrapper	0.00	0.00	0.00	0.00
0	1	Signal Boards	0.00	0.00	0.00	0.00
		Skid Steer Loaders	0.00	0.00	0.00	0.00
		Surfacing Equipment	0.00	0.00	0.00	0.00
		Tractors	0.00	0.00	0.00	0.00
		Trenchers	0.00	0.00	0.00	0.00
		max pounds per day	4.7	26.1	27.4	1.5
		tons per period	0.3	1.4	1.5	0.1

Drainage/Utilities/Subgrade	Number of Vehicles		ROG	CO	NOx	PM10
Override of Default Number of Vehicles	*Program-estimate*	Type	pounds/day	pounds/day	pounds/day	pounds/day
1		Backhoes	0.52	1.82	3.86	0.31
		Bore/Drill Rigs	0.00	0.00	0.00	0.00
		Concrete/Industrial Saws	0.00	0.00	0.00	0.00
0	1	Compactor	0.00	0.00	0.00	0.00
1		Cranes	1.08	6.36	5.80	0.31
		Crawler Tractors	0.00	0.00	0.00	0.00
		Crushing/Proc. Equipment	0.00	0.00	0.00	0.00
		Dozer	0.00	0.00	0.00	0.00
		Excavator	0.00	0.00	0.00	0.00
		Forklifts, Rough Terrain	0.00	0.00	0.00	0.00
1	1	Grader	0.90	3.97	8.33	0.44
		Loaders, Rubber Tired	0.00	0.00	0.00	0.00
		Off-Highway Trucks	0.00	0.00	0.00	0.00
		Other Construction Equip.	0.00	0.00	0.00	0.00
		Pavers	0.00	0.00	0.00	0.00
		Paving Equipment	0.00	0.00	0.00	0.00
		Rollers	0.00	0.00	0.00	0.00
0	1	Scrapper	0.00	0.00	0.00	0.00
0	1	Signal Boards	0.00	0.00	0.00	0.00
		Skid Steer Loaders	0.00	0.00	0.00	0.00
		Surfacing Equipment	0.00	0.00	0.00	0.00
		Tractors	0.00	0.00	0.00	0.00
0	1	Trenchers	0.00	0.00	0.00	0.00
		max pounds per day	2.5	12.2	18.0	1.1
		tons per period	0.0	0.2	0.3	0.0

Paving Override of Default Number of Vehicles	Number of Vehicles *Program-estimate*	Type	ROG pounds/day	CO pounds/day	NOx pounds/day	PM10 pounds/day
		Backhoes	0.00	0.00	0.00	0.00
		Bore/Drill Rigs	0.00	0.00	0.00	0.00
		Concrete/Industrial Saws	0.00	0.00	0.00	0.00
		Compactor	0.00	0.00	0.00	0.00
		Cranes	0.00	0.00	0.00	0.00
		Crawler Tractors	0.00	0.00	0.00	0.00
		Crushing/Proc. Equipment	0.00	0.00	0.00	0.00
		Dozer	0.00	0.00	0.00	0.00
		Excavator	0.00	0.00	0.00	0.00
		Forklifts, Rough Terrain	0.00	0.00	0.00	0.00
		Grader	0.00	0.00	0.00	0.00
		Loaders, Rubber Tired	0.00	0.00	0.00	0.00
		Off-Highway Trucks	0.00	0.00	0.00	0.00
		Other Construction Equip.	0.00	0.00	0.00	0.00
1	1	Pavers	0.70	3.15	6.31	0.33
0	1	Paving Equipment	0.00	0.00	0.00	0.00
1	1	Rollers	0.44	1.99	3.98	0.21
		Scrapper	0.00	0.00	0.00	0.00
0	1	Signal Boards	0.00	0.00	0.00	0.00
		Skid Steer Loaders	0.00	0.00	0.00	0.00
		Surfacing Equipment	0.00	0.00	0.00	0.00
		Tractors	0.00	0.00	0.00	0.00
		Trenchers	0.00	0.00	0.00	0.00
		pounds per day	1.1	5.1	10.3	0.5
		tons per period	0.0	0.1	0.2	0.0
Total Emissions (tons per construction period)			0.3	1.7	2.0	0.1

Equipment		Default Values Horsepower		Default Values Load Factor		Default Values Hours/day
Bore/Drill Rigs		218		0.75	6	8
Concrete/Industrial Saws		84		0.73	6	8
Cranes		190		0.43	6	8
Crawler Tractors		143		0.575	6	8
Crushing/Proc. Equipment		154		0.78	6	8
Excavators		180		0.58	6	8
Graders		174		0.575	6	8
Off-Highway Tractors		255		0.41	6	8
Off-Highway Trucks		417		0.49	6	8
Other Construction Equipment		190		0.62	6	8
Pavers		132		0.59	6	8
Paving Equipment		111		0.53	6	8
Rollers		114		0.43	6	8
Rough Terrain Forklifts		94		0.475	6	8
Rubber Tired Dozers		352		0.59	6	8
Rubber Tired Loaders		165		0.465	6	8
Scrapers		313		0.66	6	8
Signal Boards		25		0.82	6	8
Skid Steer Loaders		62		0.515	6	8
Surfacing Equipment		437		0.49	6	8
Tractors/Loaders/Backhoes		79		0.465	6	8
Trenchers		82		0.695	6	8

Default load factors from SCAQMD CEQA Handbook, 1993.

Default horsepower values from Appendix B, California Air Resources Board's Offroad Model (see also Appendix B of this spreadsheet).

Signal board horsepower based on: U.S. EPA, 1998. Final Regulatory Impact Analysis: Control of Emissions from Nonroad Diesel Engines (EPA420-R-98-016).

URBEMIS 2002 For Windows 7.5.0

File Name: C:\Program Files\URBEMIS 2002 For Windows\Projects2k2\Worker Trips.urb
Project Name: Worker Trips
Project Location: San Diego County
On-Road Motor Vehicle Emissions Based on EMFAC2002 version 2.2

SUMMARY REPORT
(Pounds/Day - Summer)

OPERATIONAL (VEHICLE) EMISSION ESTIMATES

	ROG	NOx	CO	SO2	PM10
TOTALS (lbs/day,unmitigated)	0.88	0.82	13.40	0.01	1.44

URBEMIS 2002 For Windows 7.5.0

File Name: C:\Program Files\URBEMIS 2002 For Windows\Projects2k2\Worker Trips.urb
Project Name: Worker Trips
Project Location: San Diego County
On-Road Motor Vehicle Emissions Based on EMFAC2002 version 2.2

DETAIL REPORT
(Pounds/Day - Summer)

UNMITIGATED OPERATIONAL EMISSIONS

	ROG	NOx	CO	SO2	PM10
Worker Trips	0.88	0.82	13.40	0.01	1.44
TOTAL EMISSIONS (lbs/day)	0.88	0.82	13.40	0.01	1.44

Does not include correction for passby trips.
Does not include double counting adjustment for internal trips.

OPERATIONAL (Vehicle) EMISSION ESTIMATES

Analysis Year: 2007 Temperature (F): 85 Season: Summer

EMFAC Version: EMFAC2002 (9/2002)

Summary of Land Uses:

Unit Type	Trip Rate	Size	Total Trips
Worker Trips	48.00 trips / Employeed	1.00	48.00

Vehicle Assumptions:

Fleet Mix:

Vehicle Type	Percent Type	Non-Catalyst	Catalyst	Diesel
Light Auto	80.00	1.80	97.80	0.40
Light Truck < 3,750 lbs	18.50	3.30	94.00	2.70
Light Truck 3,751- 5,750	0.00	1.90	96.90	1.20
Med Truck 5,751- 8,500	0.00	1.40	95.80	2.80
Lite-Heavy 8,501-10,000	0.00	0.00	81.80	18.20
Lite-Heavy 10,001-14,000	0.00	0.00	50.00	50.00
Med-Heavy 14,001-33,000	0.00	0.00	20.00	80.00
Heavy-Heavy 33,001-60,000	0.00	0.00	11.10	88.90
Line Haul > 60,000 lbs	0.00	0.00	0.00	100.00
Urban Bus	0.00	0.00	0.00	100.00
Motorcycle	1.50	82.40	17.60	0.00
School Bus	0.00	0.00	0.00	100.00
Motor Home	0.00	8.30	83.30	8.40

Travel Conditions

	Residential			Commercial		
	Home-Work	Home-Shop	Home-Other	Commute	Non-Work	Customer
Urban Trip Length (miles)	0.0	0.0	0.0	20.0	0.0	0.0
Rural Trip Length (miles)	0.0	0.0	0.0	0.0	0.0	0.0
Trip Speeds (mph)	35.0	35.0	35.0	35.0	35.0	35.0
% of Trips - Residential	100.0	0.0	0.0			
% of Trips - Commercial (by land use)						
Worker Trips				100.0	0.0	0.0

Changes made to the default values for Land Use Trip Percentages

The Primary Trip % for Blank changed from 90 to 100
The Diverted Trip % for Blank changed from 10 to 0

Changes made to the default values for Operations

The light auto percentage changed from 55.2 to 80.
The light truck < 3750 lbs percentage changed from 15.1 to 18.5.
The light truck 3751-5750 percentage changed from 16.1 to .
The med truck 5751-8500 percentage changed from 7.1 to .
The lite-heavy truck 8501-10000 percentage changed from 1.1 to .
The lite-heavy truck 10001-14000 percentage changed from 0.4 to .
The med-heavy truck 14001-33000 percentage changed from 1.0 to .
The heavy-heavy truck 33001-60000 percentage changed from 0.9 to .
The urban bus percentage changed from 0.1 to .
The motorcycle percentage changed from 1.7 to 1.5.
The school bus percentage changed from 0.1 to .
The motorhome percentage changed from 1.2 to .
The operational emission year changed from 2004 to 2007.
The home based work selection item changed from 8 to 7.
The home based work trip percentage changed from 27.3 to 100.
The home based work urban trip length changed from 10.8 to 0.
The home based work rural trip length changed from 15 to 0.
The home based shopping selection item changed from 8 to 7.
The home based shopping trip percentage changed from 21.2 to 0.
The home based shopping urban trip length changed from 7.3 to 0.
The home based shopping rural trip length changed from 10 to 0.
The home based other selection item changed from 8 to 7.
The home based other trip percentage changed from 51.5 to 0.
The home based other urban trip length changed from 7.5 to 0.
The home based other rural trip length changed from 10 to 0.
The commercial based commute selection item changed from 8 to 7.
The commercial based commute urban trip length changed from 10.8 to 20.
The commercial based commute rural trip length changed from 15 to 0.
The commercial based non-work selection item changed from 8 to 7.
The commercial based non-work urban trip length changed from 7.3 to 0.
The commercial based non-work rural trip length changed from 10 to 0.
The commercial based customer selection item changed from 8 to 7.
The commercial based customer urban trip length changed from 7.3 to 0.
The commercial based customer rural trip length changed from 10 to 0.
The double counting other trip limit changed from to -24.

First Street Trunkline Construction Mitigation Analysis 9/6/05

Pipe Line Construction

	ROG	CO	Nox	PM10
Site/Clearing & Excavation	8	48	48	4
Onsite-Pipeline Construction	10	52	50	4
Street Restoration	9	43	47	3

Additonal Regulator Station

	ROG	CO	Nox	PM10
Site/Clear	7	53	52	3
Onsite-Pi	3	16	18	2
Paving	1	8	11	1

Pipeline Construction Mitigation Using Aqueos Diesel Fuel

	ROG	CO	14% reduction Nox		63% reduction PM10	
Site/Clearing & Excavation	8	48	7	41	2.52	1
Onsite-Pipeline Construction	10	52	7	43	2.52	1
Street Restoration	9	43	7	40	1.89	1

Additonal Regulator Station Construction Mitigation Using Aqueos Diesel Fuel

	ROG	CO	14% reduction Nox		63% reduction PM10	
Site/Clearing & Excavation	7	53	7	45	1.89	1
Onsite-Pipeline Construction	3	16	3	15	1.26	1
Street Restoration	1	8	2	9	0.63	0
TOTAL MAX	17	105		88		3

Sheduled Overlapping Analysis

	ROG	CO	Nox	PM10
Site Preparation/Excavation and Shoring Phase from Pipeline Construction overlapping with Excavation phase of the Regulator Vault	15	101	100	7
Site Preparation/Excavation and Shoring Phase from Pipeline Construction overlapping with Install Pipe line phase of the Regulator Vault	11	64	66	6
Site Preparation/Excavation and Shoring Phase from Pipeline Construction overlapping with Street Restoration phase of the Regulator Vault	9	56	59	5
Onsite pipeline construction Phase from Pipeline Construction overlapping with Street Restoration phase of the Regulator Vault	11	60	61	5
WORST CASE Maximum Emmisions for each phase	17	105	102	7

	ROG	CO	14% reduction Nox		63% reduction PM10	
Mitigation Using Aquous Diesel Fuel	17	105	14	88	4.41	3

APPENDIX C
Cultural Resources Survey

CULTURAL RESOURCES SURVEY
FOR THE
LOS ANGELES DEPARTMENT OF WATER AND POWER
FIRST STREET TRUNK LINE PROJECT,
LOS ANGELES, CALIFORNIA

Prepared by:

Garcia and Associates
104 South C Street
Lompoc, CA 93436
(805) 740-1946

Authors:
T. Beth Snyder, B.A.
Carole A. Denardo, M.A., RPA

Prepared for:

EDAW, INC.
3780 Wilshire Boulevard
Suite 250
Los Angeles, California 90010
(213) 368-1608

Confidential Information- Limited Distribution

June 2005; revised September 2005
J-406/2

National Archaeological Data Base Information

Authors: T. Beth Snyder, B.A., Carole A. Denardo, M.A., RPA

Consulting firm: Garcia and Associates
1 Saunders Avenue
San Anselmo, California 94960
(415) 458-5803

Report Date: September 20, 2005

Report Title: *Cultural Resources Survey for the Los Angeles Department of Water and Power First Street Trunk Line Project, Los Angeles, California.*

Submitted by: Garcia and Associates
104 South C Street, Ste. G, Lompoc, CA 93436
(805) 740-1946

Submitted to: EDAW, Inc.
3780 Wilshire Boulevard
Suite 250
Los Angeles, California 90010
(213) 368-1608

Contract No: Job 406/2

U.S.G.S. Quads: Hollywood, CA

Acreage: Approx. two linear miles

Key words: Los Angeles Department of Water and Power, First Street Trunk Line, Hollywood, CA quadrangle, 1st Street, Dillon, Beverly, Commonwealth, Madison, Bimini, Vermont, Catalina, Alexandria, Normandie, Harvard, Oxford, Western, Wilton Place, Van Ness, Gramercy, Ardmore, Kingsley, Hobart, Berrendo, London, Silver Lake

Table of Contents

Figures

Appendices

SUMMARY OF FINDINGS

This report presents findings of an archaeological survey and cultural resource records search conducted by Garcia and Associates (GANDA) for the First Street Trunk Line (FSTL) project proposed by the City of Los Angeles Department of Water and Power (LADWP). The FSTL water pipeline route and Silver Lake Pressure Relief Station are within city easements on existing public streets in the City of Los Angeles, California. T. Beth Snyder, B.A., performed the archaeological survey on 4 June and 19 September 2005.

The purpose of the survey was to identify and record cultural resources within and immediately adjacent to the FSTL project Area of Potential Effects (APE). Fieldwork for the study involved a vehicular and pedestrian survey of existing streets along an approximately two mile-long corridor and a non-contiguous section of the FSTL located north of the Hollywood Freeway. Unpaved areas within and immediately adjacent to the APE were inspected for the presence of cultural materials.

No prior archaeological investigations have been conducted within the project area, but the cultural resource records search identified one recorded historical resource property (CHRIS Primary Number 19-186728) a short distance south of the FSTL waterline route. Segments of the FSTL route lie within the Windsor Square Historic Preservation Overlay Zone (HPOZ) and the National Register of Historic Places (NRHP) Historic Districts of South Serrano Avenue and Wilton Place. Although no cultural resources were found during the archaeological survey, subsurface resources may be present within the FSTL APE. Areas in proximity to the site of the former Bimini Baths, the Bimini Slough, and their associated geothermal springs (now capped off) could contain buried cultural resources. Remnants of street railways might also be found below the ground surface. Lastly, archaeological deposits associated with domestic structures that previously existed or are present today along the FSTL may be exposed during construction. Given that the FSTL APE is obscured almost entirely with paved streets initially constructed prior to and early in the twentieth century, it is impossible to discern if subsurface archaeological deposits are present through archaeological survey. As such, GANDA recommends archaeological spot check monitoring in areas with the greatest potential for cultural resources. These areas include the former Bimini Baths, Bimini Slough, and street railway locales.

In addition, it is recommended that a plan be developed and distributed to field personnel so they are familiar with the protocol in the event cultural resources are discovered. Prior to construction a qualified archaeologist shall meet with construction personnel to discuss the types of cultural materials that might be unearthed during construction, and laws protecting archaeological sites and penalties for violations. If construction personnel locate buried cultural materials, work shall be halted or shifted to another area and a qualified archaeologist shall be contacted immediately to determine proper treatment of the find.

In the event that human remains are discovered, all work should cease. The county coroner should be contacted immediately. If the remains are identified as Native American, the Native American Heritage Commission should be contacted within 48 hours. They will provide a Most Likely Descendent (MLD), and it is the MLD who will then determine reburial practices for the remains.

1.0 INTRODUCTION

The Los Angeles Department of Water and Power (LADWP) has proposed the construction of the First Street Trunk Line (FSTL) to improve delivery and reliability of potable water within the City of Los Angeles, and to provide a viable alternative supply for the communities dependent upon the Elysian and Hollywood Reservoirs. A complete description of the proposed project is provided in *Initial Study/Proposed Mitigated Negative Declaration: First Street Trunk Line Project,* Los Angeles Department of Water and Power Environmental Services (2005).

Garcia and Associates (GANDA) has completed this cultural resources study for the project pursuant to the requirements of Los Angeles County and the California Environmental Quality Act (CEQA). CEQA requires a review of projects sponsored by public agencies to determine the effects of the project on historical resources. According to CEQA, "historical resources" comprise buildings, structures, objects, districts, or sites that may possess prehistoric or historical archaeological, architectural, cultural, or scientific importance. For the purposes of this study, the focus was on prehistoric and historical archaeological resources. However, no prehistoric resources or historic buildings or structures were noted in the project Area of Potential Effects (APE).

GANDA researcher T. Beth Snyder, B.A., conducted the archaeological survey, and cultural resources archival search under the direction of Carole Denardo, M.A., R.P.A, Principal Investigator and Project Manager. The results of the survey and cultural resources archival search are presented in this report *Cultural Resources Survey for the Los Angeles Department of Water and Power First Street Trunk Line Project, Los Angeles, California.* It is composed of a summary of findings and following sections: Introduction (1.0); Project Description (2.0); Project Context (3.0, 3.1, 3.2); Previous Research (4.0, 4.1, 4.2); Survey Field Methods and Results (5.0, 5.1, 5.2); Management Recommendations (6.0); and References Cited (7.0).

2.0 PROJECT DESCRIPTION

The Los Angeles Department of Water and Power (LADWP) proposes to construct a 60 inch-diameter, concrete-lined, welded steel pipeline along a two-mile corridor of city easements within existing public streets in the City of Los Angeles (Figures 1 and 2). The proposed First Street Trunk Line (FSTL) alignment commences at the Hollywood Reservoir Outlet at First Street and Van Ness Avenue, and proceeds east along First Street to Western Avenue. The FSTL then extends north along Western Avenue before turning east again along First Street. From the northern intersection of Western Avenue and First Street, the FSTL runs east along First Street to Normandie Avenue. The FSTL route then continues south along Normandie Avenue before turning east again along First Street. From the southern intersection of Normandie Avenue and First Street, the FSTL runs east along First Street towards Beverly Boulevard and Commonwealth Avenue. The proposed FSTL alignment then proceeds along First Street in a southeastern direction until it terminates at the Silverlake Reservoir Outlet Line (Figure 3).

Construction through the existing streetscape will involve trench and jacking excavation along the alignment using backhoes, excavators, or other types of excavation equipment, although, in some cases, portions of the trench adjacent to some utilities could be manually excavated. The size of the trench for the proposed 60-inch diameter pipeline would be approximately 8 feet wide. In addition, depending on the depth of adjacent substructures along the alignment, the depth of the trench construction operations would range from approximately 7 feet to 30 feet below the ground surface. Staging areas for this project have not yet been selected.

Structures associated with the operation of the FSTL pipeline will also be constructed. These structures will consist of three water vaults located at First Street and Van Ness Avenue, First Street and Normandie Avenue, and First Street and Dillon Street. One regulator station (sited at Dillon Street), cabinets, flow meters and manholes are proposed for the FSTL. Other appurtenant structures include maintenance/access holes, flow meters, vents, valves, cabinets, vaults, a regulator station, and a pressure relief station. Specifically, a underground regulator station, the Beverly/Robinson regulator station, would be constructed near Beverly Boulevard/Robinson Street, and an underground pressure relief station, the Silver Lake pressure relief station, would be constructed near Dillon Street/London Street. Four additional underground vault locations are proposed along the project alignment: near First Street/Van Ness Avenue (for isolation valves), near First Street/Normandie Avenue (for isolation valves), at two locations near Beverly Boulevard/Dillon Street (for a flow meter and for valves). An above ground cabinet, measuring approximately 1 foot by 3 feet and 5 feet tall, will also be installed within the sidewalk right-of-way near each underground vault. The existing streetscape will be restored at the completion of construction.

Figure 1. Project Vicinity Map.

Cultural Resources Survey Report
LADWP First Street Trunk Line Project
Los Angeles, California

0 50
miles
Approximate scale

GANDA

Prepared by Garcia and Associates

406_1 LADWP_Fig 1 03.25.04

Figure 2. Project Location Map.

Cultural Resources Survey Report
LADWP First Street Trunk Line Project
Los Angeles, California

0 1/2
miles

Base Map: USGS 7.5 Minute-series
Hollywood, California, quadrangle

GANDA

Prepared by Garcia and Associates

406-2_Fig2_LADWP_Loc_06,28,05

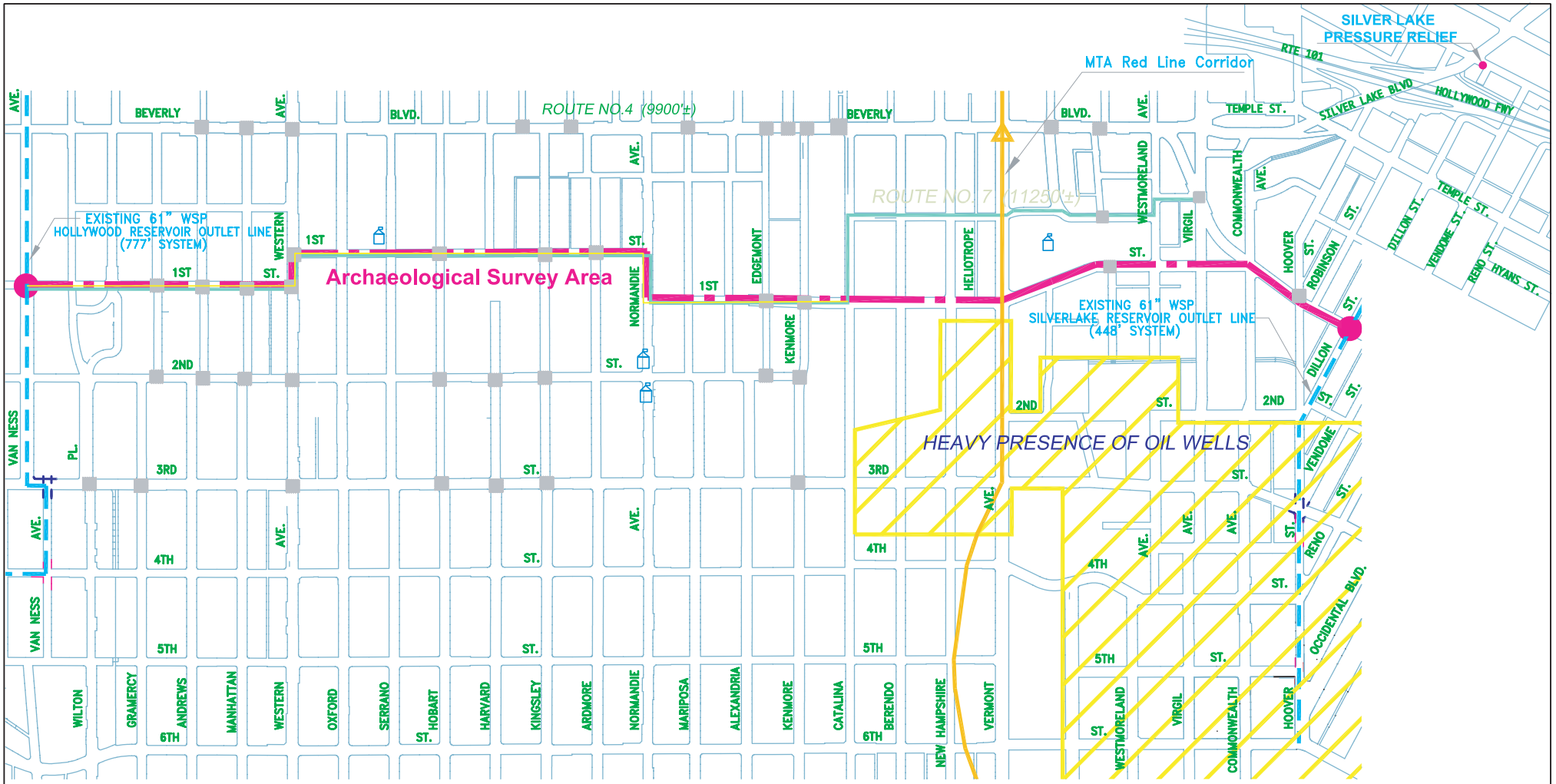

Figure 3. Project Area Map.

Cultural Resources Survey Report
LADWP First Street Trunk Line Project
Los Angeles, California

M.T.A. STATION
SCHOOLS
STORM DRAIN CROSSING
M.T.A. TUNNEL
ARCHAEOLOGICAL SURVEY AREA

GANDA

Base Map Provided By LA Department of Water and Power

Prepared by Garcia and Associates

3.0 PROJECT CONTEXT

3.1 ENVIRONMENTAL SETTING

The FSTL project area lies within the Los Angeles Basin, an alluvial plain bounded by the mountainous terrain of the Central Transverse and Peninsular Ranges. The Arroyo de la Sacatella crossed present-day Vermont Avenue; the Arroyo de la Brea lies to the east (City of Los Angeles Bureau of Engineering 1923 [map]). Water in these arroyos derived from aquifers in the San Fernando Valley, and flowed into Ballona Creek forming part of the Ballona Watershed (Loomis 2005; van de Hoek 2003:2).

Prior to urban development, both prairie and riparian habitats were present in the FSTL vicinity. Extending from Bimini Place to the Arroyo de la Sacatella, a riverine marsh known as Bimini Slough existed between First Street and Wilshire Boulevard (Rasmussen 1992:1; van de Hoek 2003:1). In 1906, Alice Eastwood, Curator of Botany and the California Academy of Sciences, conducted a botanical survey of the Bimini Slough ecosystem and observed both prairie and wetland floristic elements. The inventory (van de Hoek 2003:3) identified prairie indicators such as lupine (*Lupinus* sp.), fiddleneck (*Amsinckia intermedia*), Douglass microseris (*Microseris douglasii*), and owls clover (*Castilleja* sp. [*Orthocarpus*]); wetland indicators noted included muhly grass (*Muhlenbergia* sp.), rabbit-foot grass (*Polypogon monspeliensis*), duck fern (*Azolla filiculoides*), yerba mansa (*Anemopsis californica*), dock (*Rumex* spp.), wild celery (*Apium graveolens*), water milfoil (*Myriophyllum* sp.), possibly southern tarplant (*Centromadia* sp. [*Deinandra*]), seaside heliotrope (*Heliotropium curassavicum*), verbena (*Verbena* sp.), saltbush (*Atriplex* sp.), water primrose (*Ludwigia* sp. [*Jussiaea*]), nettle (*Urtica* sp.), American bulrush (*Scirpus americanus*), sea lite (*Suaeda* sp. [Samphire]), pickleplant (*Arthrocnemum subterminale* [*Dondia*]), alkali heath (*Frankenia salina*), water cress (*Nasturtium officinale*), and marsh pennyroyal (*Hydrocotyle* sp.). This vegetation profile suggests the Bimini Slough and greater Ballona Creek Watershed supported a diverse fauna of mammals, reptiles, amphibians, freshwater mollusks, and insects (van de Hoek 2003:1).

3.2 CULTURAL SETTING

3.2.1 Prehistoric Context

The archaeological record identifies human occupation in the coastal region of Los Angeles County for at least 9,000 years. Although there is always ongoing research and debate among archaeologists regarding the prehistory of the Los Angeles area, the chronological framework proposed by William Wallace fifty years ago (Wallace 1955) is still applicable. For the purposes of this report, the chronological framework postulated by Wallace (1955) is used to discuss the Early, Millingstone, Intermediate, and Late Prehistoric periods of cultural development in Los Angeles County.

Early Period (11,000-8000 B.P.)

Southwest of the FSTL APE, the La Brea Tar Pits just north of Wilshire Boulevard have yielded the oldest human physical remains found within the City of Los Angeles. Discovered in 1914 and reported by C. Merriam, the partial skeleton (named "La Brea Woman"), subsequently dated to 9000 ± 80 B.P. (Moratto 1984), was uncovered in association with a grinding stone (mano) and butchered animal bone. It has been postulated that "big game" hunting was the dominant subsistence focus of humans during this late Pleistocene/early Holocene time period, though large shell middens of comparable age occur along the coast (Moratto 1984; Wallace 1955).

Millingstone Period (8,000-3,000 B.P.)

Climatic change from a cooler, generally wetter environment during the late Pleistocene to more temperate (warmer, drier) Holocene conditions is believed to have contributed to increased exploitation of plant resources, as evidenced by greater frequencies of ground-stone implements in the regional archaeological record. Subsistence also began to diversify, depending on the regional availability of marine and terrestrial fauna resources. Archaeological sites dating to this period are widespread across Los Angeles (Wallace 1955).

Intermediate Period (3,000-1,500 B.P.)

Beginning about 3,000 B.P., there is a subsistence shift from hard seeds and plants to a more widespread adaptation of hunting, gathering, and marine foraging. Archaeological evidence suggests intensifying hunting and gathering subsistence practices and a settlement pattern of sedentary villages and seasonal camps (Wallace 1955). Coinciding with the stress of increased population densities and subsistence shifts are technological advancements, including the development of the mortar and pestle for processing acorns, and the inception of dart points for hunting and shell fishhooks for fishing (Erlandson 1994).

Late Prehistoric Period (Post-1,500 B.P.)

The late prehistoric period in Los Angeles Basin is characterized by increasingly sedentary occupation of riparian habitats across the region. These people, who would become known to the Spanish as the Gabrielino, possessed a sophisticated social structure and maintained cultural and economic ties with their neighbors and kin groups in settlements along the coast and on the Channel Islands (Wallace 1955). As with the neighboring Chumash of the Santa Barbara Channel, the emergence of plank canoes opened up offshore fishing for the Gabrielino inhabitants. A well-developed maritime subsistence system ensued, with intensification of hook-and-line fishing, harpooning, netting, and water fowling to complement shellfish gathering (Bean and Smith 1978; Moratto 1984). Inland settlements, strategically placed near water sources and plentiful food resources that included deer, rabbit, acorns, and various plants, were linked to coastal villages.

3.2.2 Historic Context

In July 1769, Gaspar de Portolá led an expedition from Mexico north into the Los Angeles vicinity. On the second of August that year he arrived at the Los Angeles River and named the area immediately to the west as "El Pueblo de Nuestra Senora la Reina de Los Angeles" (Mayer 1978:2). The next day the expedition began its trek westward, crossing through the FSTL project locality. On the west side of the Los Angeles River, Father Crespi reported

> *... a large vineyard of wild grapes and an infinity of rosebushes in full bloom. All soil is black and loamy, and is capable of producing every kind of grain and fruit, which may be planted. We went west, continually over good land well covered with grass* [Bolton 1927:48].

On the same day the expedition passed the La Brea Tar Pits and camped at Ballona Creek where Father Crespi observed that the "banks were grassy and covered with fragrant herbs and water cress" [Bolton 1927:48]. Father Crespi also described native inhabitants encountered that day (3 August) during the trip from the Los Angeles River to Ballona Creek.

> [We] *came to the village of this region, the people of which, upon seeing us, came out into the road. As they drew near us they began to howl like wolves; they greeted us and wished to give us seeds, but as we had nothing at hand in which to carry them we did not accept them. Seeing this, they threw some handfuls of them on the ground and the rest in the air* [Bolton 1927:148].

Two historic villages, "Yaanga" (in downtown Los Angeles), and "Maawnga" (on Rancho Los Feliz) lie east and north of the FSTL APE (McCawley 1996:55). The people inhabiting Maawnga and the lands to the south (including the FSTL area) were known as the "Komiivet" (McCawley 1996:10). The Komiivet and other native groups in the region who became affiliated with the San Gabriel Mission, founded in 1771, are collectively referred to as the Gabrielino (McCawley 1996:3).

In 1781, the governor of California, Felipe de Neve, founded El Pueblo de Nuestra Senora la Reina de Los Angeles as an agricultural village. Los Angeles was settled at a spot next to the Los Angeles River, which was thought suitable for farming. The pueblo was part of the Spanish frontier system that supported the missions San Gabriel (established 1771) and San Fernando (established 1797) (Ovnick 1994:34; Fogelson 1967:7).

Spain lost control of California to Mexico in 1823 (Mayer 1978:4). The greatest change in Los Angeles during Mexican rule was the secularization of the Missions in the 1830s (Ovnick 1994:27). During this time, large tracts of ex-mission lands were granted, and new ranchos were formed (Fogelson 1967:7).

Los Angeles became an American city in 1847 at the end of the Mexican American war (Mayer 1978:12). The California gold rush of 1849 created a market for Southern California beef.

Consequently, the period of the 1850s was a prosperous time for Los Angeles agriculture (Dumke 1944:3). During this time, the FSTL area would have been range land and forage for cattle and sheep belonging to Rancho La Brea to the west, Rancho Las Cienegas to the south, and Rancho Los Feliz to the north. Livestock moved freely between Rancho lands and open range. Several times a year, round-ups were held so that ranchers could reclaim their livestock (Newmark 1970:182).

A series of droughts, floods and other economic pressures devastated the Southern California livestock industry in the 1860s. The Spanish-Mexican agricultural system collapsed, and was replaced by the more American pattern of small family farms (Dumke 1944:4). The majority of land was cultivated by a dry farming system that relied on natural rainfall. Crops such as wheat, barley and corn that were grown in the rural areas of Los Angeles were probably grown in the FSTL area as well (Cole 1908:240; Fogelson 1967:20).

The ranchos functioned as self-sufficient entities. What could not be produced locally was obtained through trade with merchants who shopped at an international market place (Fogelson 1967:9). The American farmers were more insular, and expected to buy supplies at the nearest settlement. The rural character of the city of Los Angeles charged in response to the demands of this new population; the city became an incipient urban center (Fogelson 1967:21).

The Southern Pacific Railroad reached Los Angeles in the 1870s, and the Santa Fe Railroad followed in 1884 (Fogelson 1967:5, 61). Land speculators platted their subdivisions along the railroad routes in anticipation of an increasing populations demand for housing (Newmark 1970:570).

Los Angeles and its environs were subdivided aggressively during the 1880s. Before 1885, development had only taken place within a two-mile radius of downtown Los Angeles, but in 1887, Los Angeles County recorded thirty-eight million dollars in real estate transactions during a three-month period (Dumke 1944:9; Fogelson 1967:137). The population of Los Angeles increased five hundred percent by the end of the 1880s (Dumke 1944:4). The only transportation available was carriage, horseback or pedestrian. The need for reliable public transportation was acute, as most residents worked outside the home (Fogelson 1967:40). Twenty-seven street railway franchises were granted in the late 1880s to provide transport for the city's residents (Easlon 1973:8).

The Cahuenga Valley Railroad, which ran between Hollywood and Los Angeles, was a narrow gauge steam line completed in 1888. The route entered the FSTL project area at the intersection of Virgil Avenue and First Street. It terminated on Bimini Place near the Eco Village and Eco Park. The two-mile Cahuenga Valley Railroad served the West Field oil wells after 1900. In 1908 it became part of the electric street railway system; the line was dismantled in 1915 (Carpenter 2004:E-34; http://www.erha.org 2005; Moaveni 2004:B-4 U.S.G.S. map 1902).

The FSTL area around Beverly Boulevard and Dillon Street and on London Street between Dillon Street and Silver Lake Boulevard was part of the original incorporation (April 4,1850) and patent (August 9, 1866) of the city of Los Angeles (City of Los Angeles Bureau of Engineering [maps date] 1923). Subdivision took place in the FSTL project vicinity during the

real estate boom of the late 1880's. Early developments included Ivanhoe to the north and Edendale to the east (http://www.silverlake.org; http://www.historicechopark.org). Although streets had been laid out prior to 1900, the area remained rural and no construction had taken place as of 1906 (Sanborn map 1906:v1, s1). The developments later evolved into the neighborhoods of Silver Lake (named for Los Angeles Water Commissioner, Harry Silver) and Echo Park (http://www.silverlake.org; http://www.historicechopark.org).

On April 2, 1896, the FSTL area between Hoover Avenue and Vermont Boulevard was annexed to the City of Los Angeles. The Western Addition added 10.18 square miles of land to the city (City of Los Angeles Bureau of Engineering [maps date] 1896; Ordinance No. 3393). This land included a portion of the Los Angeles oil field, which paralleled the FSTL route between Second and Third Street (Redpath 1900:39). In 1899, the West Field (Baptist Field) (Figure B-1) accounted for one-third of the oil produced from the entire Los Angeles Field (Redpath 1900:40, 42). The area between First Street and Second Street, between Juanita Avenue and Virgil Avenue, known as the Maltman Tract (Figure B-3), was also in production at this time (Redpath 1900:41).

Geothermal springs were discovered during oil explorations in the area south of First Street and Bimini Place. The Bimini Water Company was formed to take advantage of the waters that flowed from the springs. The company served the surrounding community until City of Los Angeles water was available in 1915 (Rasmussen 1992:1, 2004:2). The Bimini Baths (Figure B-4) opened in 1903, just adjacent to the Bimini Slough. The original bathhouse was destroyed in 1905, and rebuilt in a grander style in 1906 (Rasmussen 1992:1). The resort had three pools, two private party tanks, and five hundred changing rooms within an enclosed Mission Eclectic style space. In 1921, an outdoor-pool was constructed (Rasmussen 2004:2).

Ten years later, in 1931, the Bimini Slough was redeveloped, and a layer of dirt and fill was spread across the once marshy area. The grading was completed in anticipation of a fifteen million dollar residential development to be built at the site. Twenty years later, Bimini Baths closed, due to a variety of factors that included the polio epidemic of the 1940s; the site was finally demolished in 1956 (Rasmussen 2004: 2-4).

The Colegrove Addition of October 27, 1909 added 8.72 square miles to the City of Los Angeles. The area included the FSTL route from Vermont Avenue to Van Ness Avenue (Figure B-5) (City of Los Angeles Bureau of Engineering [maps date] 1909; Ordinance No.18795). The Ridgewood Park and Wilton Place neighborhoods were already settled at the time of annexation. Felix Viole's 1914 map provides a view of the neighborhoods; today many of the original buildings in these neighborhoods are still extant (Figure B-6).

The 1921 U.S. Army Santa Monica Quadrangle map shows a highly urbanized City of Los Angeles (Figure B-7). In sharp contrast, the U.S.G.S. 1902 Santa Monica Quadrangle map (Figure B-2) presents a very different view of a centralized core of the city surrounded by sparsely developed areas. These two maps show the impact of the growth of Los Angeles in only twenty years; most apparent is the almost complete urbanization of the landscape in the vicinity of the FSTL route.

The Los Angeles urban landscape is very complex. Issues affecting the historic context of twentieth century Los Angeles are covered in depth by Banham 2001, Davis 1992, Dear 2001, Dear et al. 1996, Gebhard and Winter 1994, Fogelson 1967, Fulton 2001, Moore et al. 1998, and Ovnick 1994. The best bibliographic treatments of twentieth century Los Angles are still Nunis 1973 and Rudd 1996.

4.0 PREVIOUS RESEARCH

4.1 RECORDS SEARCH RESULTS

Records searches for the First Street Trunk Line Project were conducted on 01 June and 19 September 2005 at the South-Central Coast Information Center (SCCIC), California State University, Fullerton, (regional branch for Los Angeles, Orange, and Ventura counties) of the California Historical Resources Information System (CHRIS). The searches identified available SCCIC information relating to recorded cultural resources and studies within a 0.5-mile radius of the FSTL APE. Cultural-historical resource listings consulted in the records search included:

- National Register of Historic Places (NRHP), Index of Listed Properties
- California State Office of Historic Preservation, Historic Property Directory for Los Angeles County
- California Historical Landmarks
- California Points of Historical Interest

According to the information at the SCCIC, eleven cultural resource studies have been conducted within a 0.5-mile radius of the FSTL APE (Anonymous 1976, Duke 1999a, 1999b, 2000, 2001a, 2001b, 2001c, 2001d, 2001e, Duke and Marvin 2002; Sylvia 2001. Additionally, one recorded historical resource (CHRIS Primary Number 19-186728), the Charles Dunn Building, is located at 240 South Western Avenue, approximately one and one-half blocks south of the FSTL APE. This four-story, brick masonry structure was built in 1925 by E. M. Frasier.

The City of Los Angeles Department of Public Works completed a historic property survey of Wilton Place between Third Street and First Street in 1976. No cultural resources were identified as a result of this survey. Three years later, in 1979, the area was listed in the NRHP as part of the Wilton Historic District (Reference Number 79000490).

4.2 HISTORIC BACKGROUND RESEARCH

Further archival research was undertaken to assess the potential for additional historical resources within the FSTL APE. The City of Los Angeles Department of Planning provided information regarding the FSTL project area, including city and federal (NRHP) monuments, sites, and districts (City of Los Angeles Department of City Planning 2003, 2005a, 2005b, 2005c). There are a dozen City of Los Angeles-declared monuments, two NRHP-registered sites, and two NRHP Historic Districts within 0.5-mile of the FSTL APE; however, none of these are within the project area. The twelve City monuments include:

248 Crocker Bank Building (269-273 Western Avenue, 4359-4363 West Third Street)
310 Fire Station No. 29 (158 South Western Avenue)
415 Wilshire Branch Library (149 North Saint Andrews Place)

518 Thomas A Churchill Residence (215 South Wilton Place)
588 Janss Investment Company Uptown Branch Office Building, Sokol Hall (4761-4775 Maplewood, 500-508 North Western Avenue)
643 Superba Apartments Incandescent Roof Sign (335 South Berendo)
647 Cora B Henderson House (132 South Wilton Place)
684 Heart House (112 North Harvard Boulevard)
706 First Congregational Church of Los Angeles (540 South Commonwealth)
792 B. H. Hiss House (215 South Manhattan Place)
804 Gless Apartments (357 South Kenmore Avenue)
805 J. A. Howsley House (221 Manhattan Place South)

One of these monuments, the Wilshire Branch Library at 149 North Saint Andrews Place, is also listed in the NRHP (LA 2375). The second NRHP-listed site within a half-mile radius of the FSTL APE consists of the Granada Shopper and Studios Building at 672 South LaFayette (LA 2337). The South Serrano Historic District and the Wilton Historic District comprise the two NRHP-listed districts and are located three blocks south of and immediately adjacent to the southern boundary of the FSTL APE.

Located between 400 and 575 South Serrano Avenue, the South Serrano Historic District (NRHP Reference Number 870002407) features structures built between 1920 and 1924. Architectural style consists primarily of Prairie School design. The Wilton Historic District (NRHP 79000490) is divided into two sections: Ridgewood Park (200-269 South Wilton Place), and Wilton (101-169 South Wilton Place). Its period of significance dates between 1900 and 1940. Architectural styles are a mixture of Craftsman bungalows and Colonial Revival structures.

The western terminus of the FSTL at Van Ness Avenue and First Street falls within a portion of the Windsor Square Historic Preservation Overlay Zone. Structures within this area have a period of significance between 1911 and 1925 (Windsor Square Association 2005).

Research for the present study involved visits to the City of Los Angeles Department of City Planning, the Bureau of Engineering Highway Dedication, Mapping, and Index sections, and the Engineering Vault. The Office of the City Clerk, Records Management Division, was also visited. Additional research was conducted at the City of Los Angeles Central Library, the Doheny Library at the University of Southern California, and YRL Library at the University of California, Los Angeles. Websites of the Society of Architectural Historians (Southern California Chapter), the Los Angeles Forum for Architecture and Urban Design; the Historical Society of Southern California, the Echo Park Historical Society and the Silver Lake Resident's Association were consulted as well.

An examination of historic maps housed at the City of Los Angeles Bureau of Engineering (maps dated 1896, 1909, 1923), the University of California, Los Angeles, YRL Library (U.S.G.S. 1902, 1913, 1926, 1994; U.S. Army 1919, 1921), and the Los Angeles Central Library (Stevenson 1884; Wright 1898; Rueger's 1902; Whitlock 1906; Jacobs and Rock 1907; Violé 1914; Donald 1921; Bridewell's 1929; Clason Map Company 1931; Hosking's 1934; Los Angeles Railway Corp 1938; Sanborn Fire Insurance 1888, 1894, 1900, 1906, 1907) was conducted to determine the presence or absence of mapped structures within the FSTL APE.

The only structural feature identified from these maps was trackage for street railway cars (U.S.G.S. 1902; Los Angeles Railway Corp 1938).

Research undertaken at the City of Los Angeles Bureau of Engineering and the Office of the City Clerk, Records Management Division, determined that the current alignment of First Street, Western Avenue, Normandie Avenue, and Beverly Boulevard between Van Ness Avenue and Dillon Street has not changed since 1911 (City of Los Angeles Ordinance 3393, 4792, 9626, 13251, 18795, 19526, 20564, 20956, 21115, 23081, 23082, 23132, 24584, 26505, 28762, 31933, 36593, 36597, 36598, 38759, 39274, 58516, 75934; City of Los Angeles Bureau of Engineering [maps dated] 1986, 2005).

Most of London Street, including the FSTL project area between Dillon Street and Silver Lake Boulevard, was in use by 1917 (City of Los Angeles Ordinance 4093, 10301, 36805, 36798). London Street closures, which took place as a result of the construction of the Hollywood Freeway, did not affect the FSTL (City of Los Angeles Ordinance 110082; City of Los Angeles Bureau of Engineering card no 045310).

In summary, with the exception of street railway trackage, no historical archaeological resources were identified in the project APE.

5.0 SURVEY FIELD METHODS AND RESULTS

5.1 FIELD METHODS

As the First Street (FSTL) and Silver Lake Pressure Relief Station lie entirely within the built environment of a streetscape, a vehicular survey was conducted to identify areas of open space adjacent to the project area. The APE was driven from the eastern terminus of the FSTL alignment at Beverly Boulevard and Dillon Street, to the western terminus at First Street and Van Ness Avenue. A reconnaissance was also made of the London Street Silver Lake Pressure Relief Station between Silver Lake Boulevard and Dillon Street.

A pedestrian survey was undertaken to determine whether cultural resources were present within the identified areas of open space. Identified open space consisted of areas of denuded and disturbed vegetation occurring between the curbs and sidewalks on both the north and south sides of First Street, a construction site located at the northwest corner of Vermont Avenue and First Street, and a vacant lot located on the southeast corner of London and Dillon Streets.

The First Street Trunk Line alignment APE was photographed, sequentially from east to west. The Silver Lake Pressure Relief Station was photographed from south to north, north to south, and west to east. Additionally, selected photographs were made of the architectural setting adjacent to the APE. Digital photo images and a photographic record, and field notes are filed at Garcia and Associates' Lompoc office with other records relating to Job 406/2.

5.2 SURVEY RESULTS FOR THE FIRST STREET TRUNK LINE

The survey was limited to areas of urban blight and construction activity immediately adjacent to the FSTL APE, because most areas were paved. No prehistoric or historical archaeological resources were observed in these areas.

Numerous architecturally substantial structures are present along the FSTL APE. The structures are a mixture of several design periods dating from ca. 1880 to 1930 (see McAlester 1984:320-371, 408-429, 438-463): Mission Eclectic (1890-1920); Spanish Eclectic (1915-1940); Tudor Eclectic (1890-1940); Neo Classical (1895-1950); Colonial Revival (1880-1955); Prairie (1900-1920); and Craftsman (1905-1930). There is also a "Pattern Book" house (circa late 1880s) at the intersection of Harvard Boulevard and First Street (Ovnick 1994:99). All of these structures were noted as part of the architectural setting, but not evaluated. None of the buildings are in the APE and they will not be affected by the FSTL project.

6.0 MANAGEMENT RECOMMENDATIONS

Although no cultural resources were found during the archaeological survey, subsurface resources may be present within the FSTL APE. The areas in proximity to the site of the former Bimini Baths, the Bimini Slough, and their associated geothermal springs (now capped off) could contain buried cultural resources. Remnants of street railways might also be found below the ground surface. Lastly, archaeological deposits associated with domestic structures that previously existed or are present today along the FSTL may be exposed during construction.

Given that the FSTL APE is obscured almost entirely with paved streets initially constructed early in the twentieth century, it is impossible to discern if subsurface archaeological deposits are present through archaeological survey. As such, GANDA recommends archaeological spot check monitoring in areas with the greatest potential for cultural resources. These areas include the former Bimini Baths, Bimini Slough, and street railway locales.

In addition, it is recommended that a plan be developed and distributed to field personnel so they are familiar with the protocol in the event cultural resources are discovered. Prior to construction a qualified archaeologist shall meet with construction personnel to discuss the types of cultural materials that might be unearthed during construction, and laws protecting archaeological sites and penalties for violations. If construction personnel locate buried cultural materials, work shall be halted or shifted to another area and a qualified archaeologist shall be contacted immediately to determine proper treatment of the find.

In the event that human remains are discovered, all work should cease. The county coroner should be contacted immediately. If the remains are identified as Native American, the Native American Heritage Commission should be contacted within 48 hours. They will provide a Most Likely Descendent (MLD), and it is the MLD who will then determine reburial practices for the remains.

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1913 U.S.G.S. Santa Monica Quadrangle map
1926 U.S.G.S. Hollywood Quadrangle map
1994 U.S.G.S. Hollywood Quadrangle map

1919 U.S. Army Santa Monica Quadrangle Grid Zone 1G
1921 U.S. Army Santa Monica Quadrangle Grid Zone G

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1906 Sanborn Fire Insurance Maps
1907 Sanborn Fire Insurance Maps

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The Electric Railway Historical Association of Southern California <http://www.erha.org> 18 JUN 2005

Windsor Square Association <http://www.windsorsquare.org> 12 JUN 2005

Echo Park Historical Society
http://www.historicechopark.org 16 SEP 2005

Silver Lake Resident's Association
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Silver Lake Resident's Association
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APPENDIX A

PHOTOGRAPHS

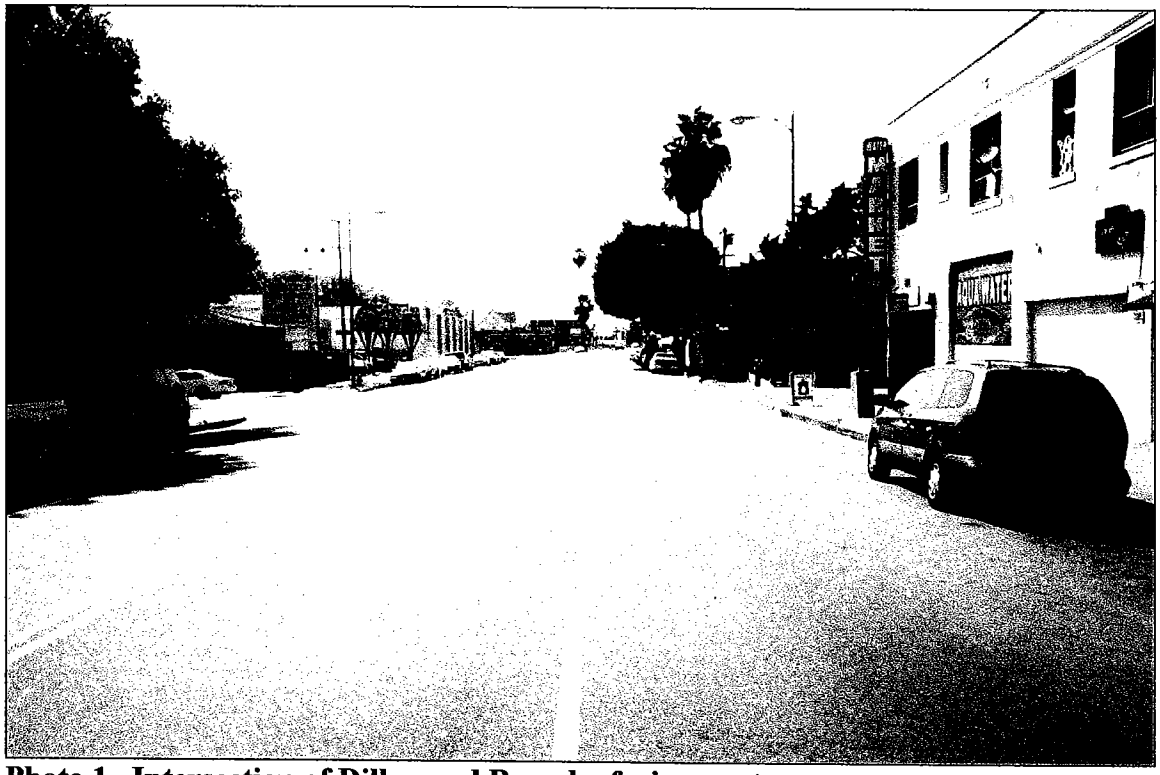

Photo 1. Intersection of Dillon and Beverly, facing west

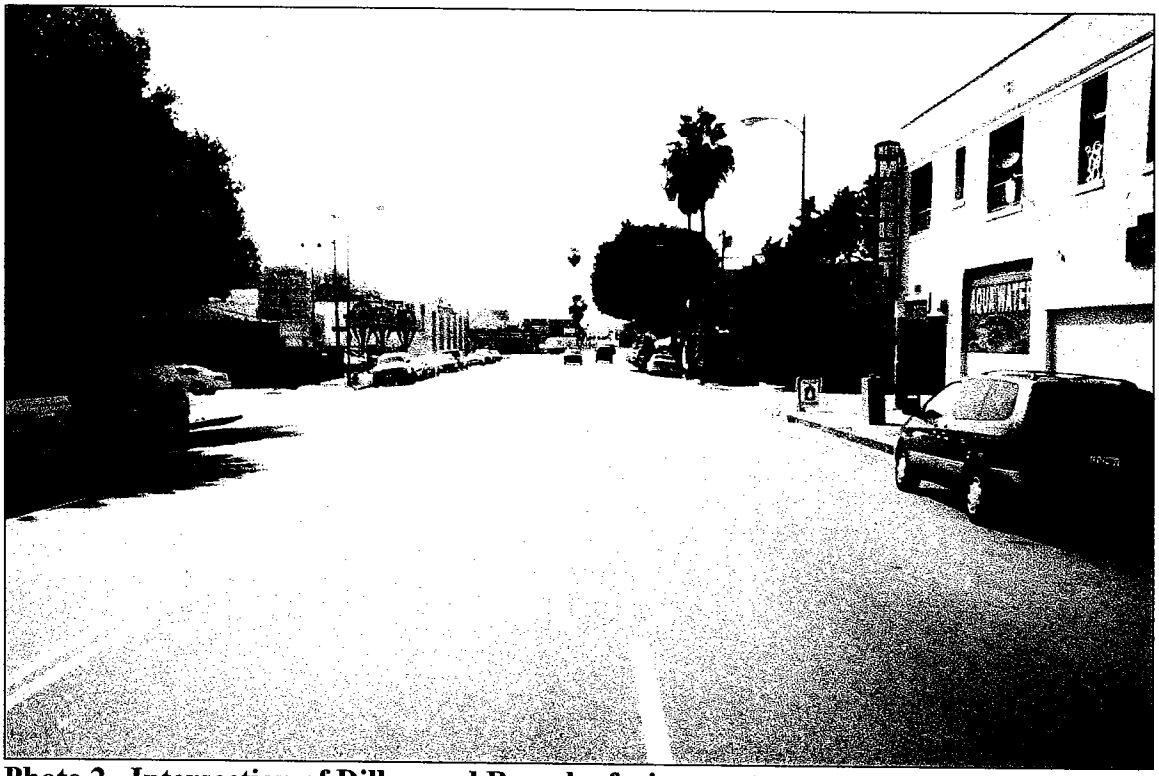

Photo 2. Intersection of Dillon and Beverly, facing west

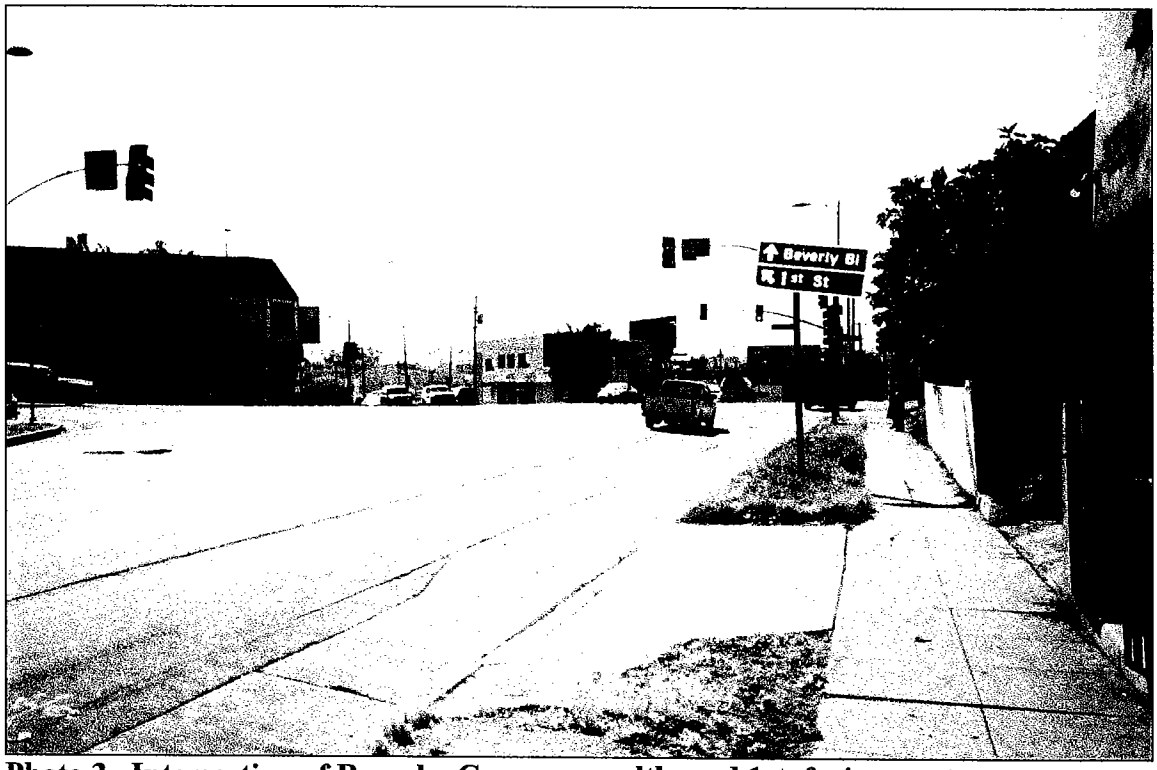

Photo 3. Intersection of Beverly, Commonwealth, and 1st, facing west

Photo 4. Along 1st Street from intersection of Beverly, Commonwealth, and 1st

Photo 5. 1st Street from Madison to Bimini (school on north side of 1st), facing west

Photo 6. Along 1st Street from intersection of 1st and Vermont, facing west

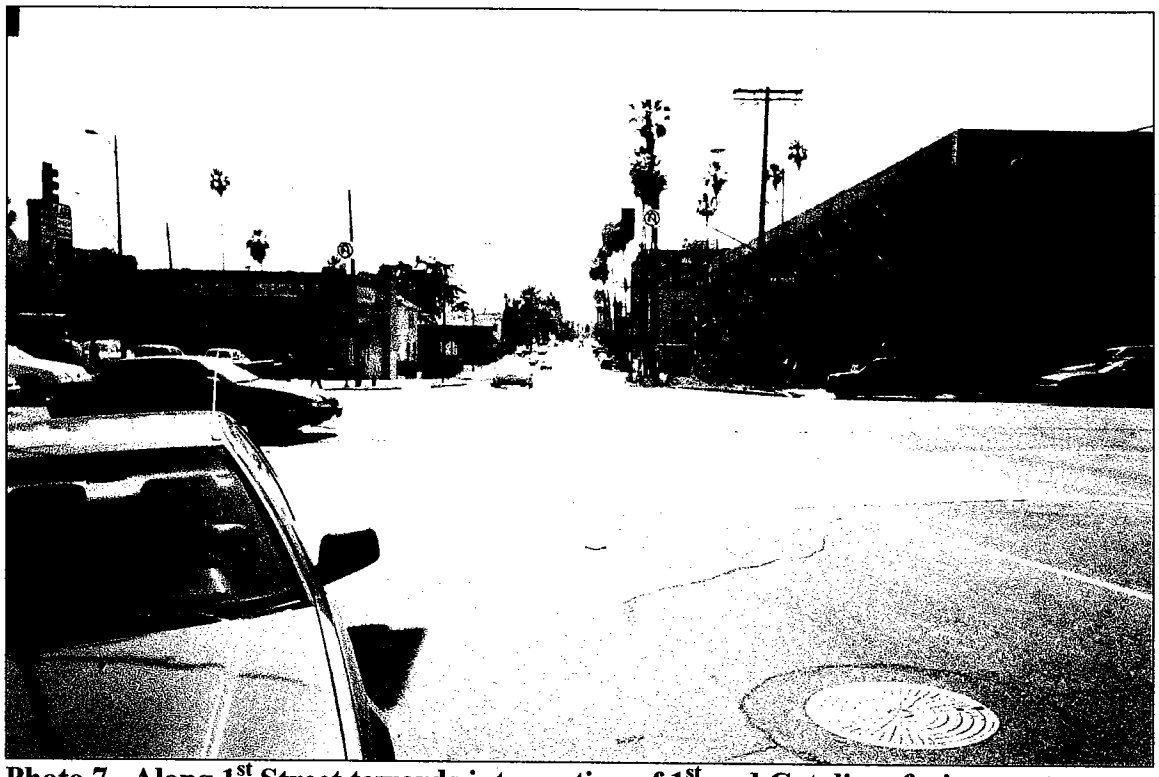

Photo 7. Along 1st Street towards intersection of 1st and Catalina, facing west

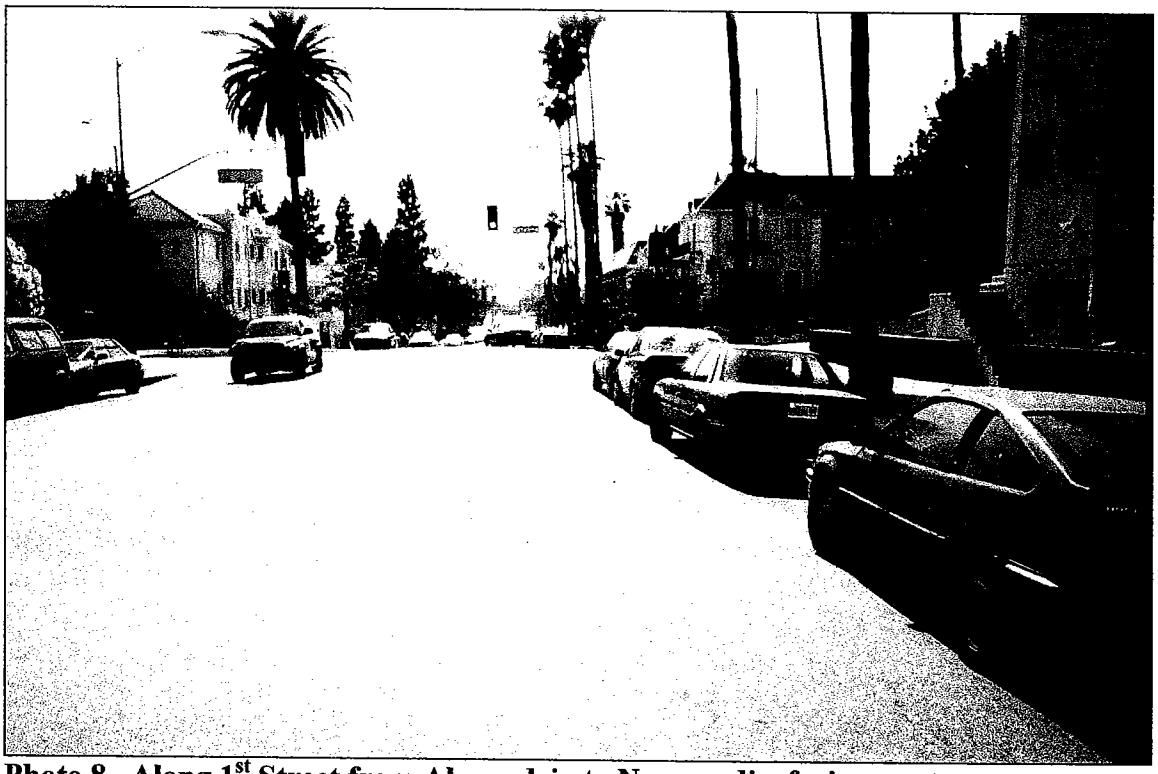

Photo 8. Along 1st Street from Alexandria to Normandie, facing west

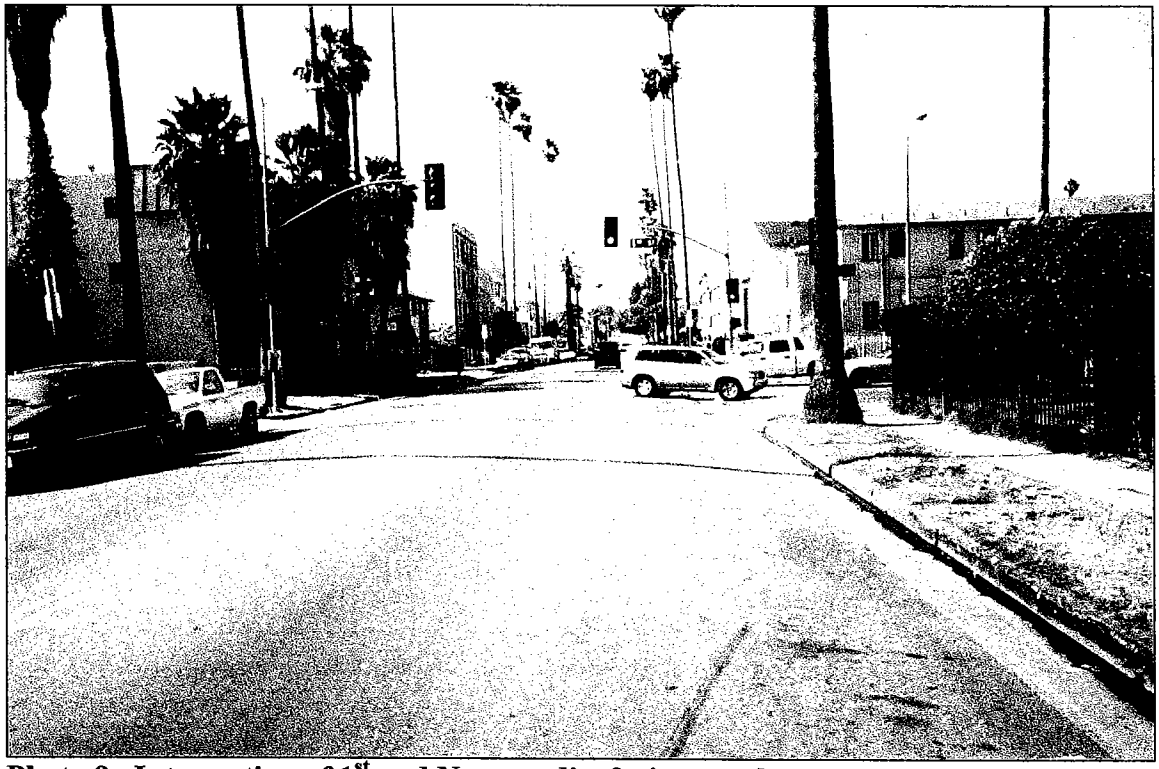

Photo 9. Intersection of 1st and Normandie, facing north

Photo 10. Along 1st Street from the intersection of 1st and Normandie, facing west

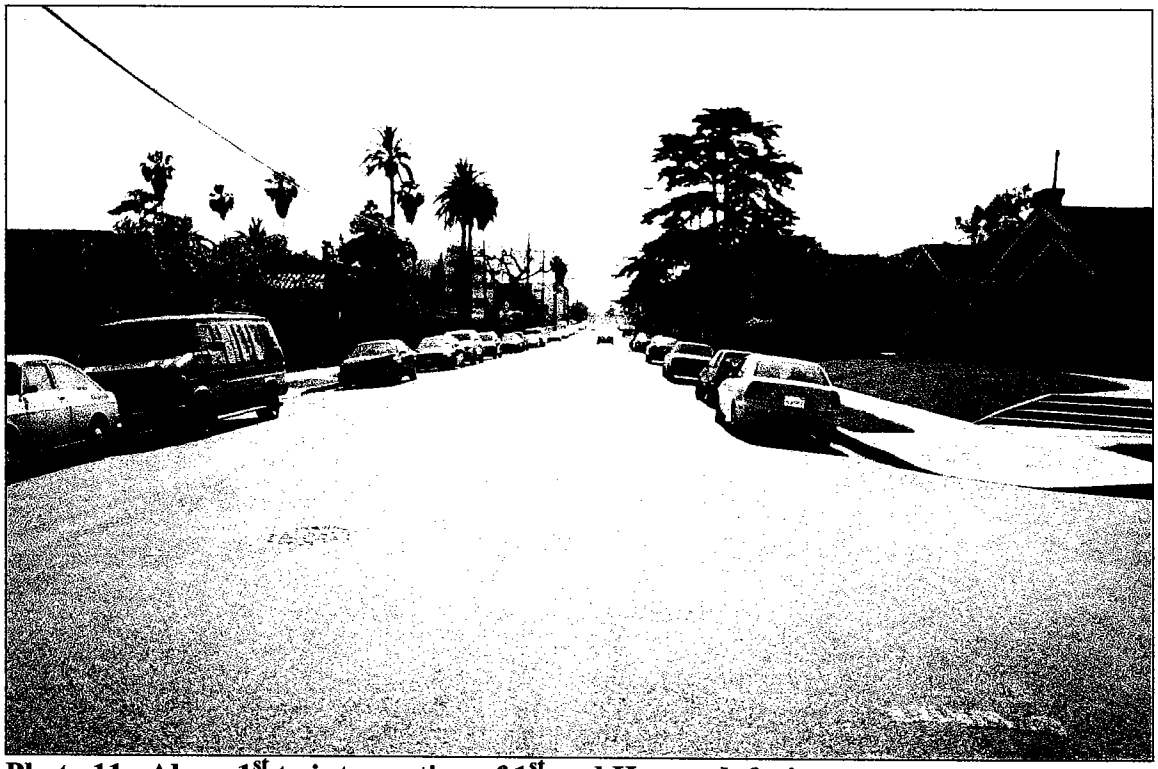

Photo 11. Along 1st to intersection of 1st and Harvard, facing west

Photo 12. On 1st towards Western from intersection of 1st and Oxford, facing west

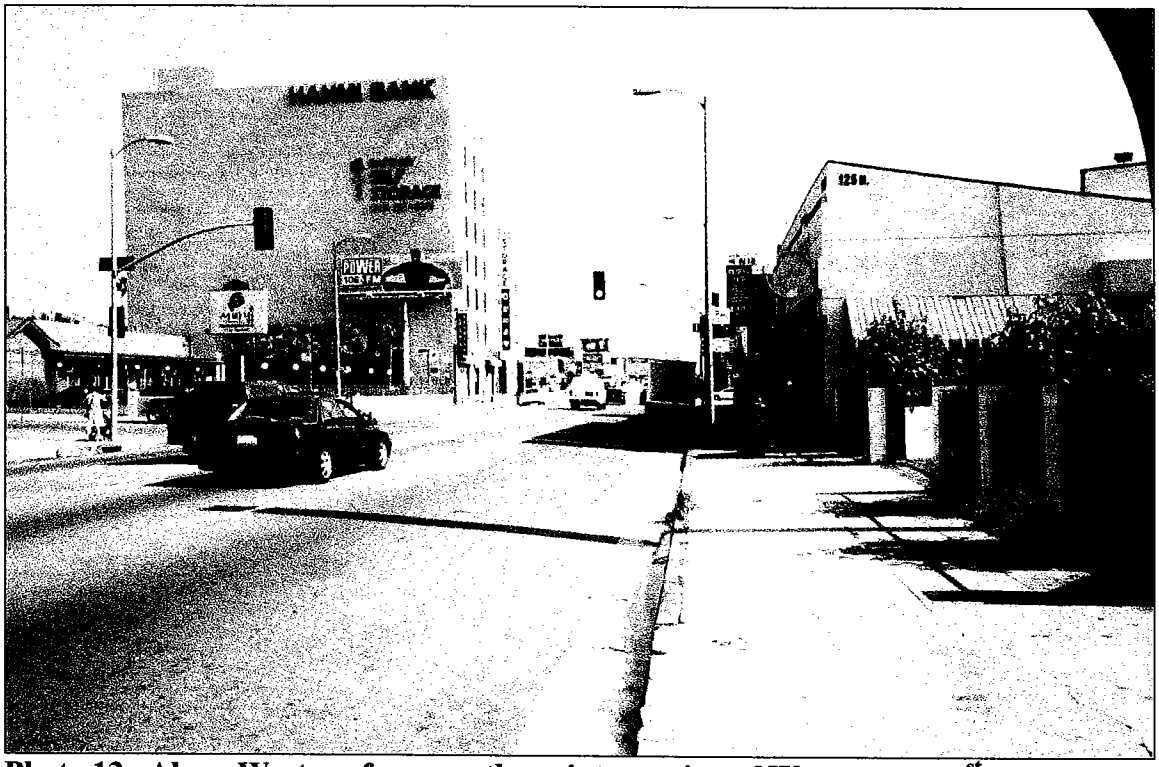

Photo 13. Along Western from northern intersection of Western and 1st to southern intersection of Western and 1st, facing south

Photo 14. Along 1st from southern intersection of Western and 1st, facing west

Photo 15. Along 1st from Wilton Place to Van Ness, facing west

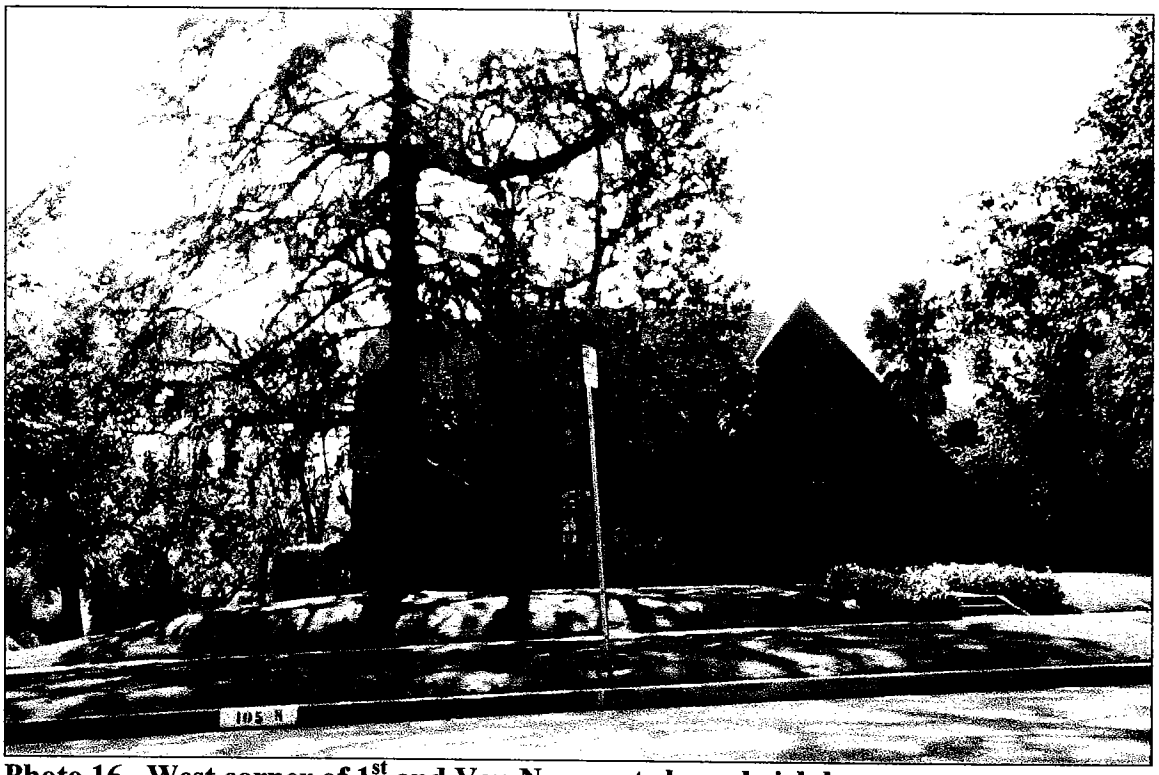

Photo 16. West corner of 1st and Van Ness; note large brick house

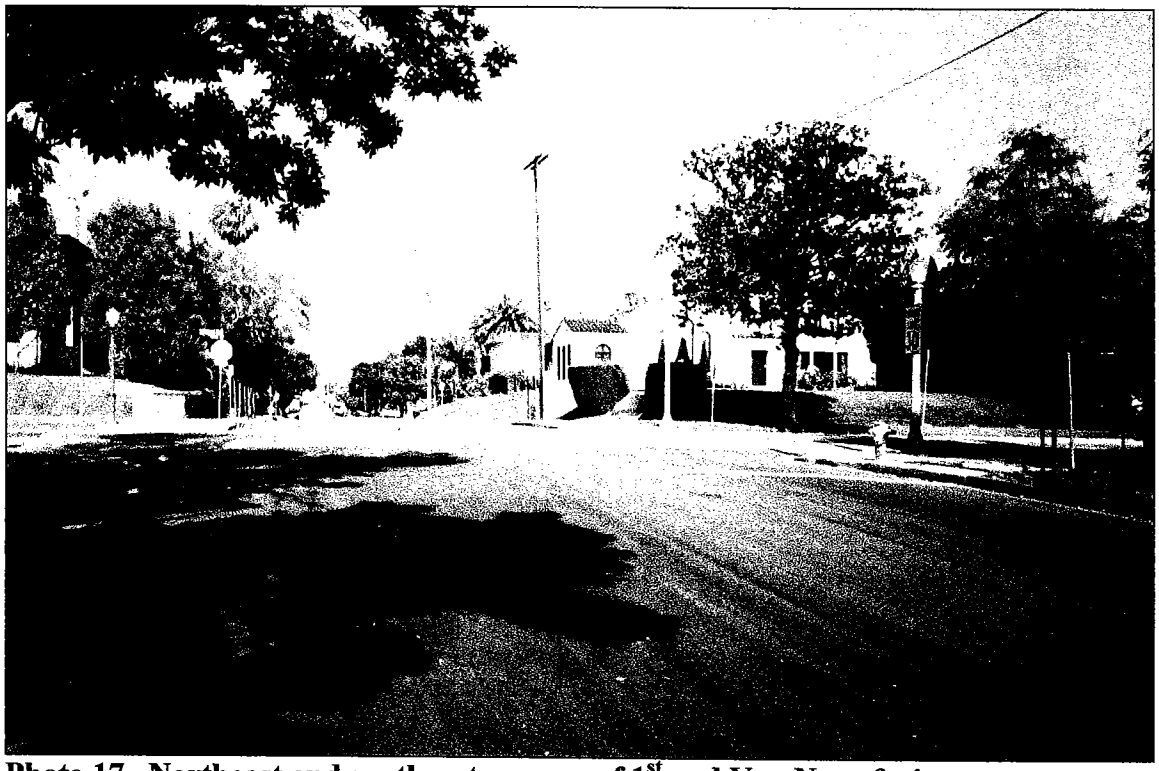

Photo 17. Northeast and southeast corners of 1st and Van Ness, facing east

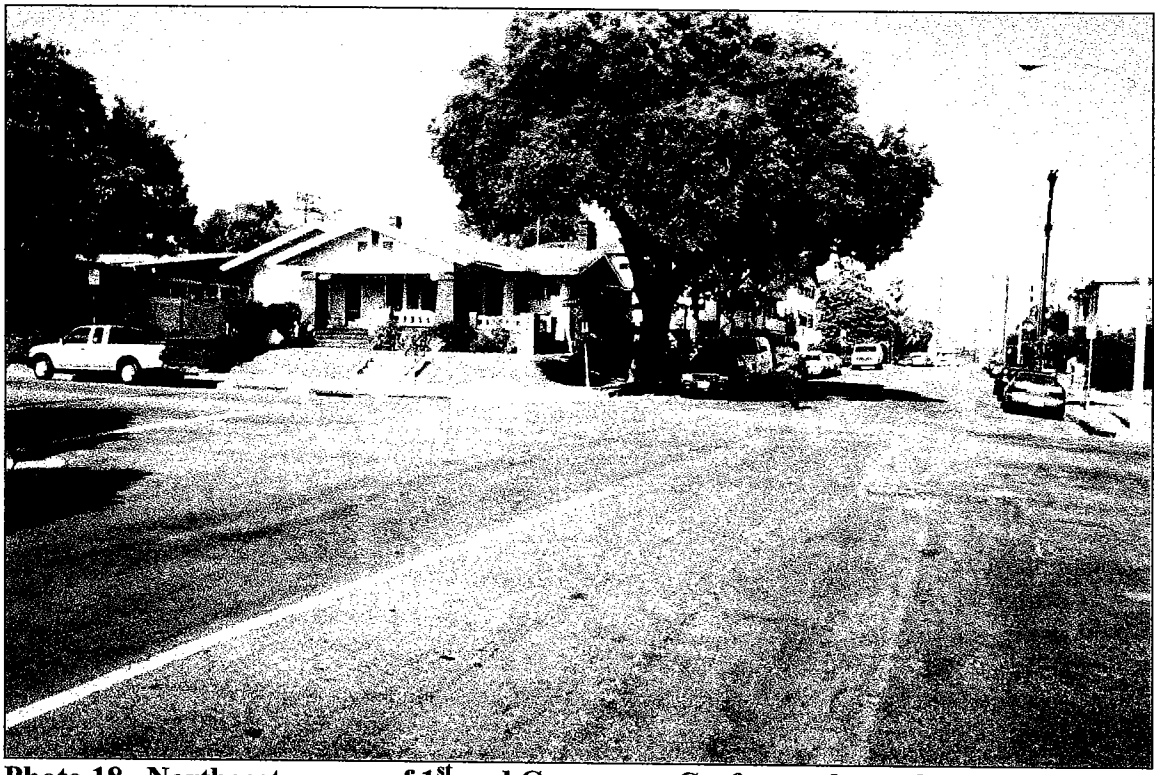

Photo 18. Northeast corner of 1st and Gramercy; Craftsman bungalow on corner

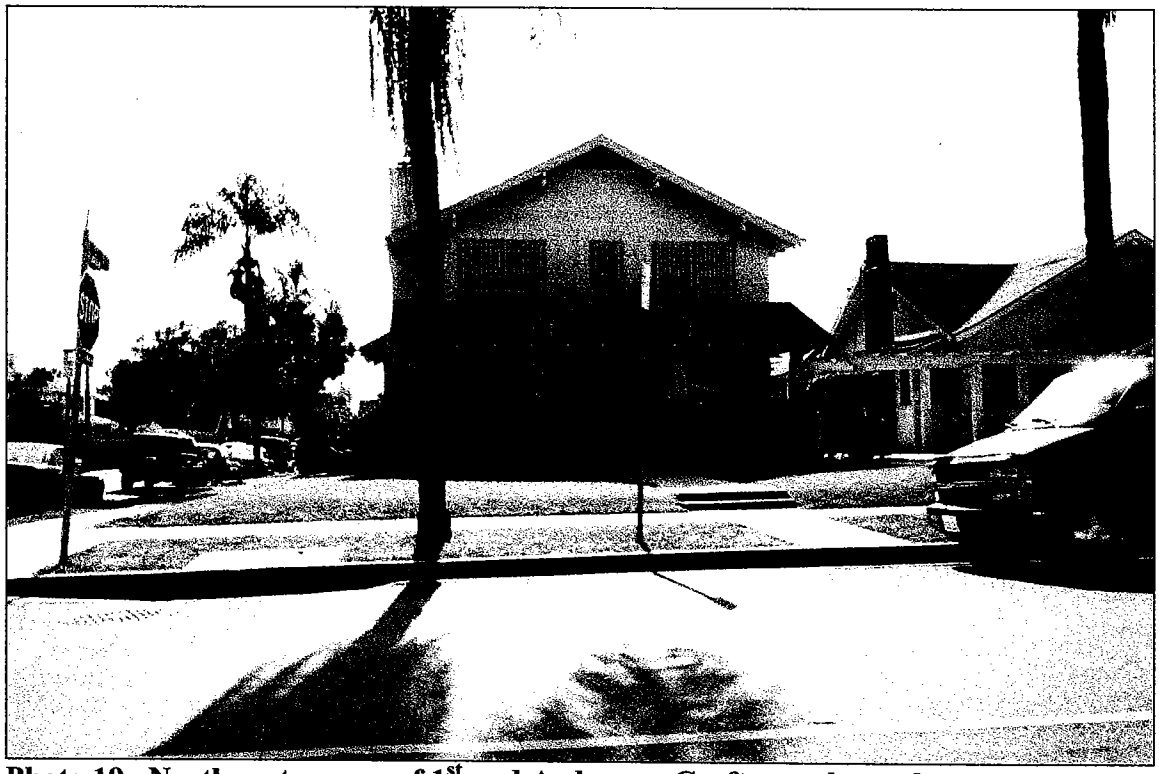

Photo 19. Northwest corner of 1st and Ardmore; Craftsman bungalow on corner

Photo 20. Northwest corner of 1st and Kingley; house with Mission architectural detailing on corner

Photo 21. Northwest corner of 1st and Harvard, facing northwest

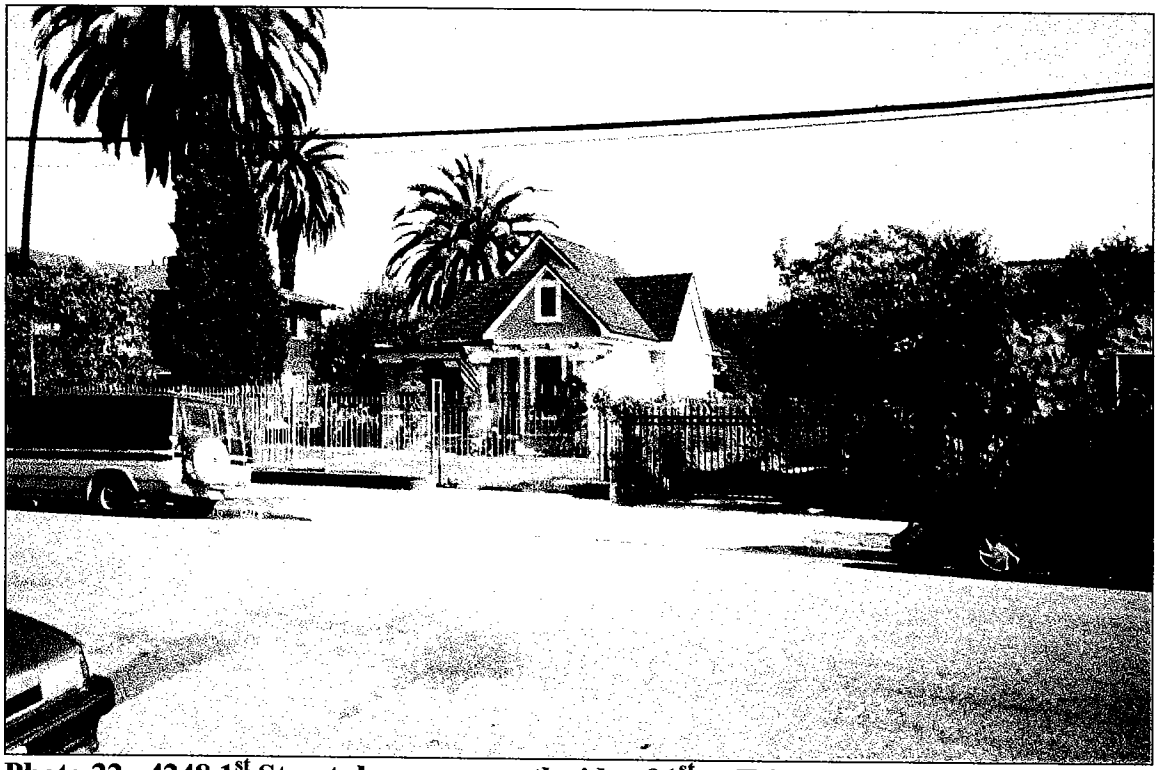

Photo 22. 4248 1st Street; house on south side of 1st at T-intersection with Harvard

Photo 23. "Espana" Apartment Court (4252-4278 1st Street)

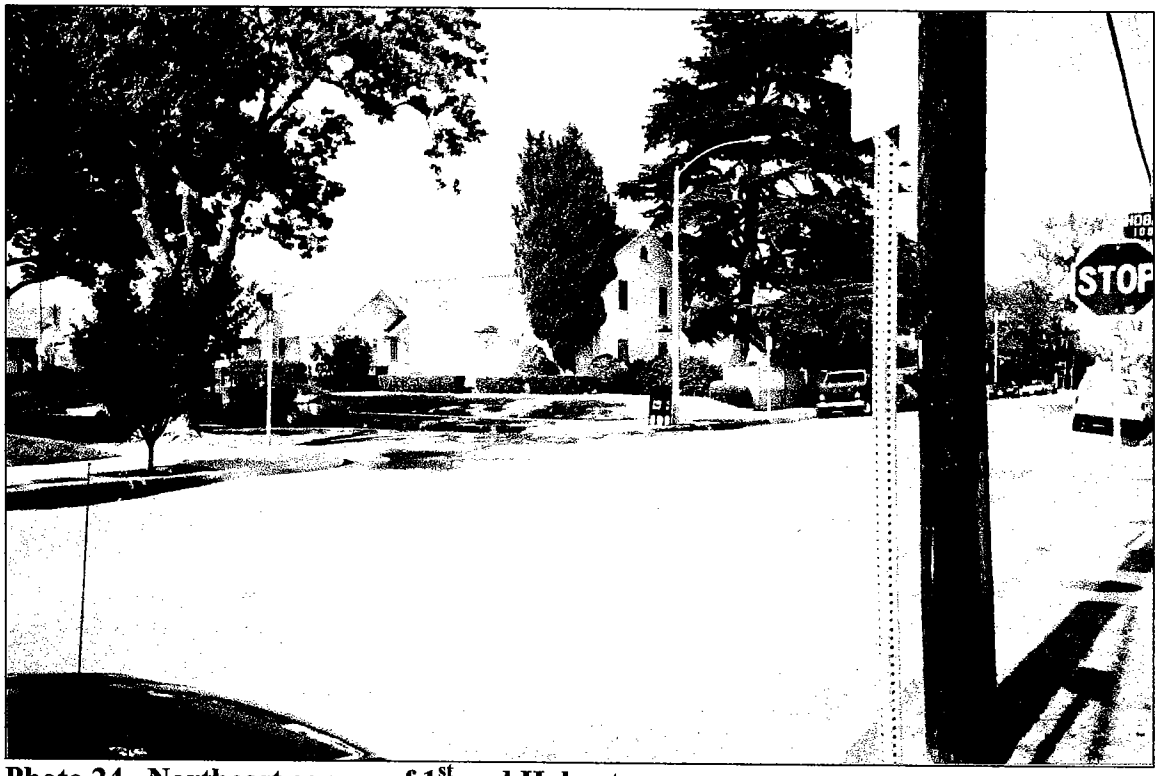

Photo 24. Northeast corner of 1st and Hobart

Photo 25. Northeast corner of 1st and Berrendo; brick apartments at 3715 1st Street

APPENDIX B
HISTORIC MAPS

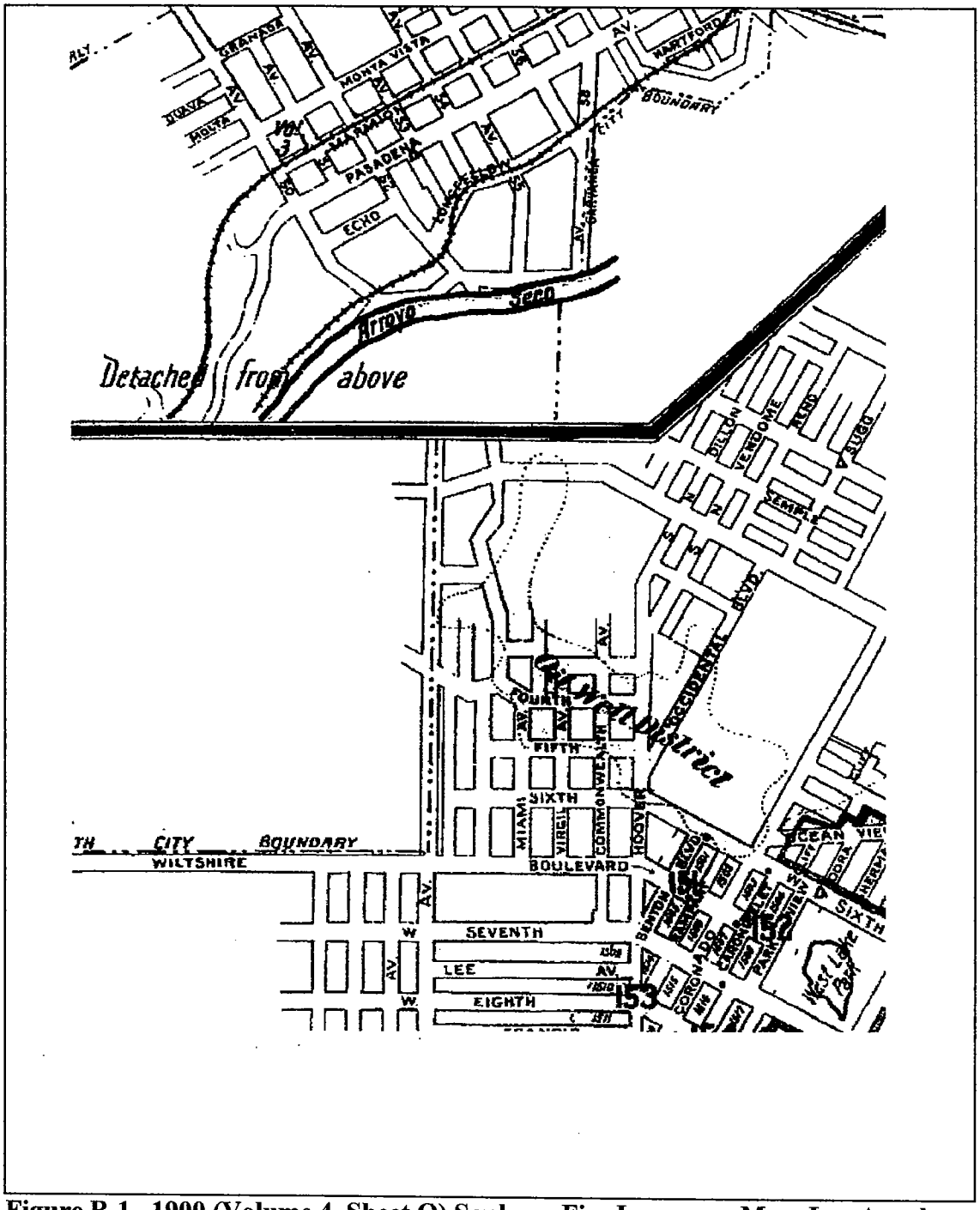

Figure B-1. 1900 (Volume 4, Sheet O) Sanborn Fire Insurance Map, Los Angeles

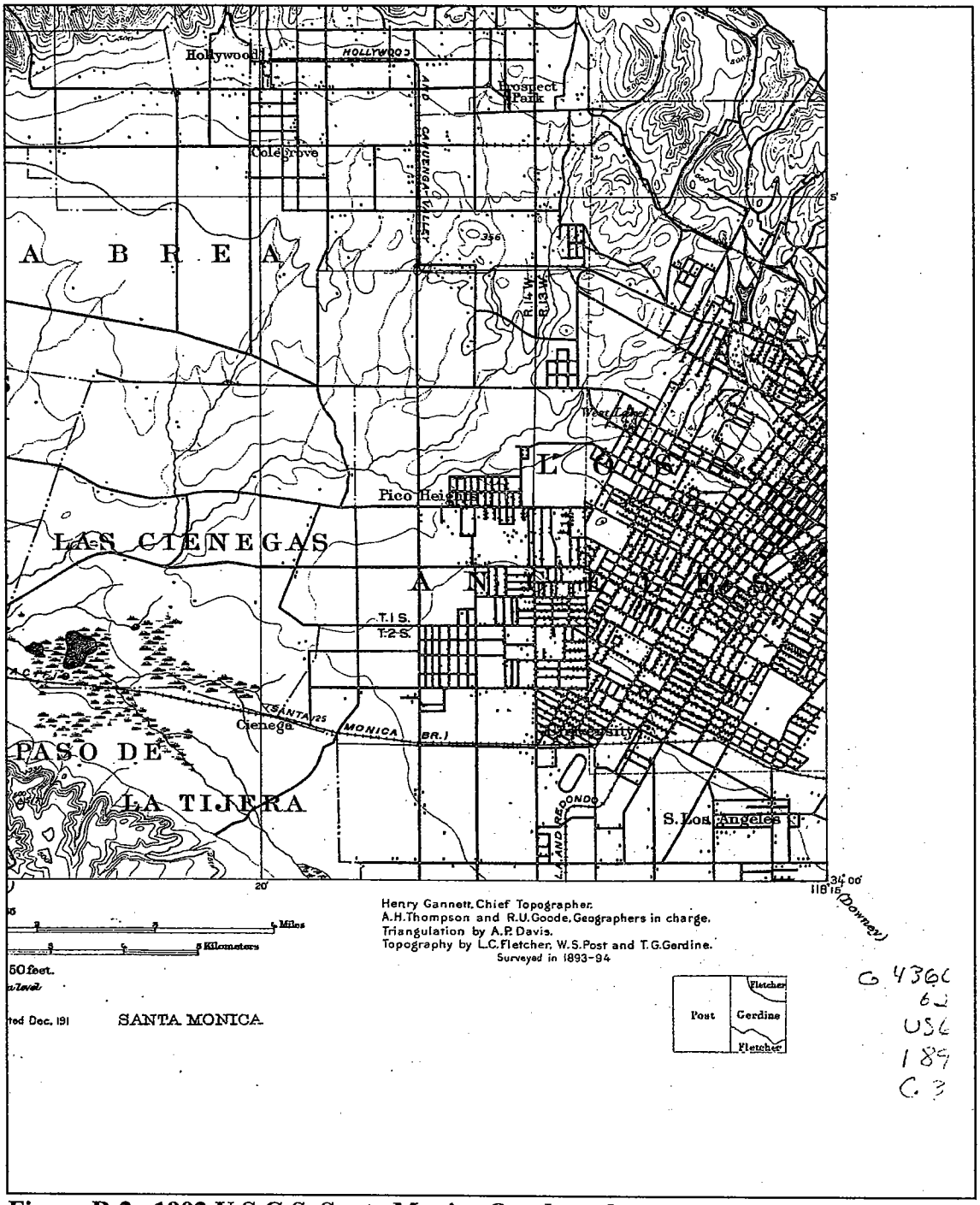

Figure B-2. 1902 U.S.G.S. Santa Monica Quadrangle map

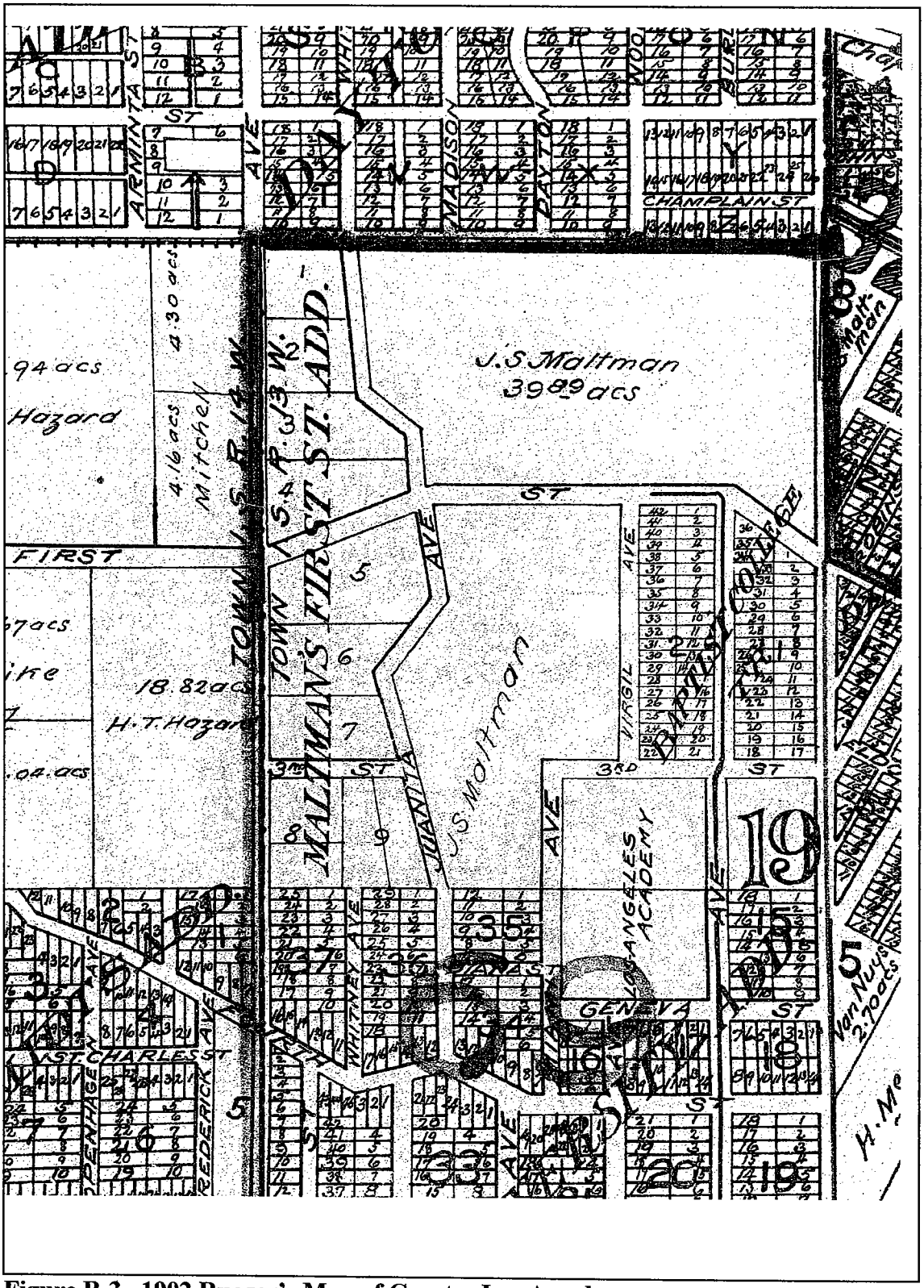

Figure B-3. 1902 Rueger's Map of Greater Los Angeles

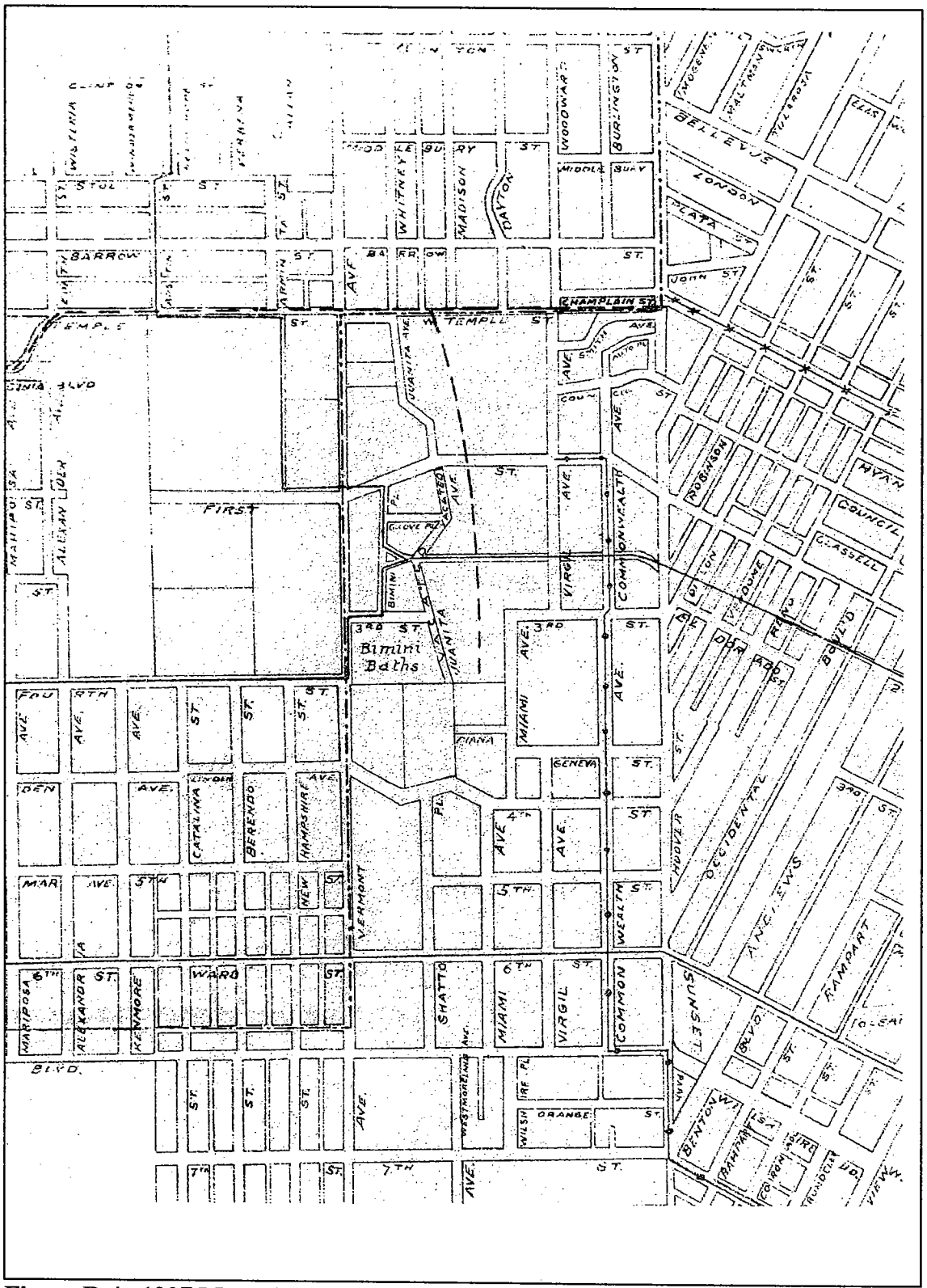

Figure B-4. 1907 Map of the City of Los Angeles and Vicinity, California (Jacobs and Rock)

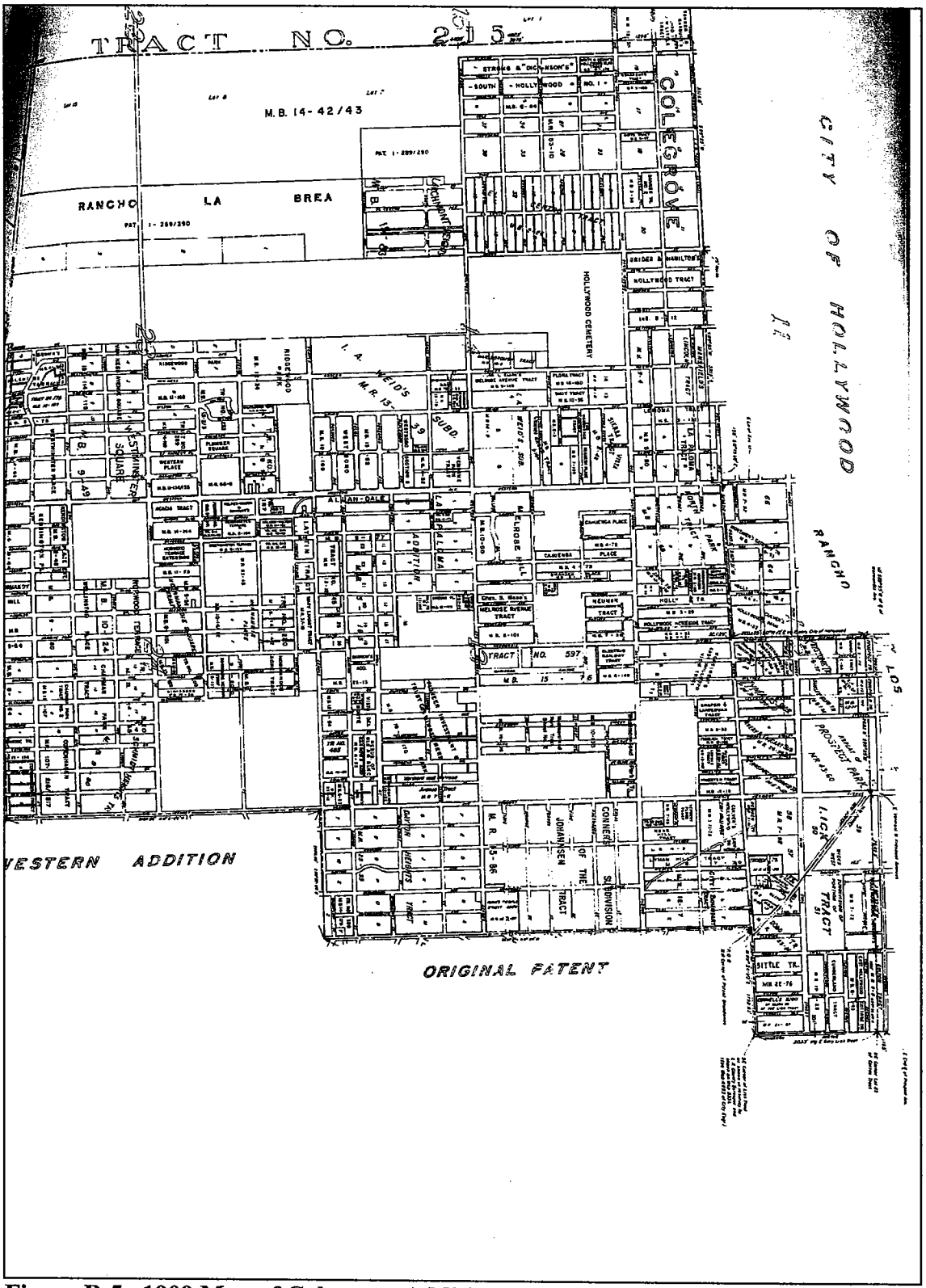

Figure B-5. 1909 Map of Colegrove Addition (City of Los Angeles Bureau of Engineering)

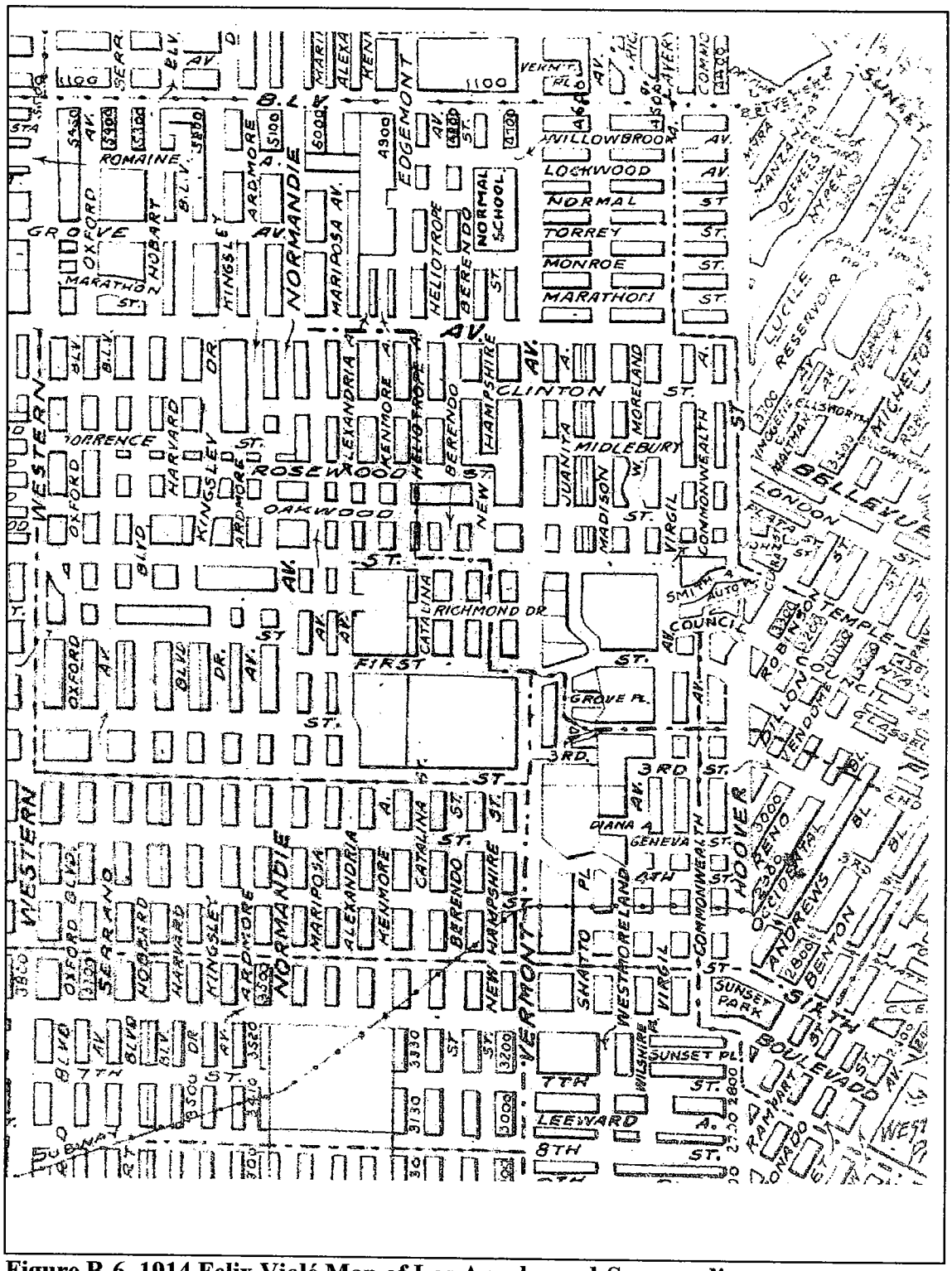

Figure B-6. 1914 Felix Violé Map of Los Angeles and Surroundings

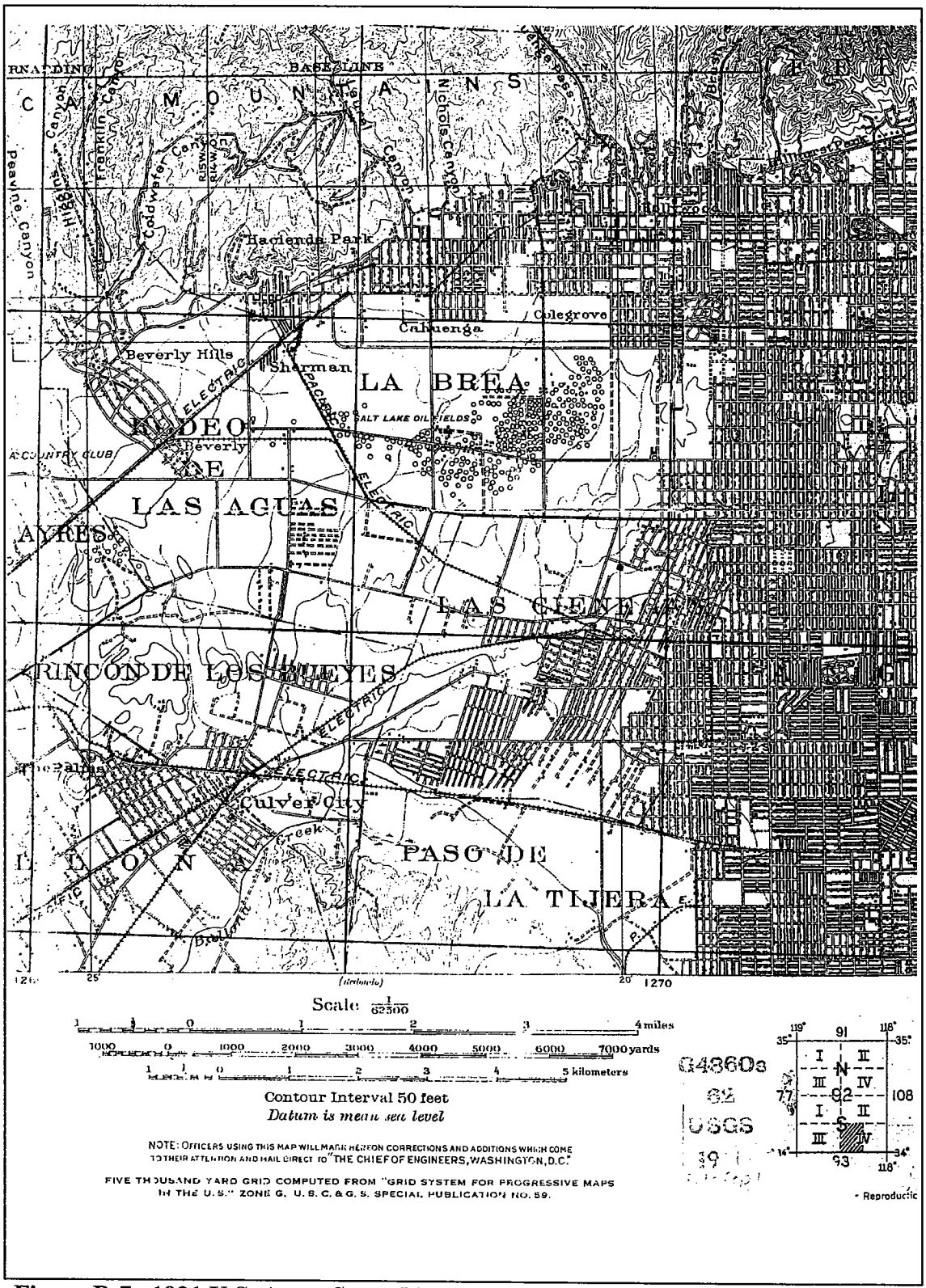

Figure B-7. 1921 U.S. Army Santa Monica Quadrangle Grid Zone G

APPENDIX C

CORRESPONDENCE

GANDA

GARCIA AND ASSOCIATES 104 SOUTH C STREET, SUITE G PHONE 805.740-1946
LOMPOC, CALIFORNIA 93436 FAX 805.740-2046

VIA EMAIL

June 29, 2005; revised September 20, 2005

EDAW, INC.
Attn.: Lainie Herrera
3780 Wilshire Boulevard
Suite 250
Los Angeles, California 90010

RE: Cultural Resources Survey for the LADWP First Street Trunk Line Project, Los Angeles, California

Dear Ms. Herrera;

Garcia and Associates (GANDA) were sub-contracted by EDAW to perform a cultural resources survey for the First Street Trunk Line Project. No known cultural resources were identified in the First Street Trunk Line (FSTL) APE during our record search and historic background research task, nor were they observed during a subsequent pedestrian survey. However, the technical report demonstrates that there is potential for previously unidentified significant cultural resources to be present in the APE.

This memorandum addresses the following questions:

Would the Project:

A) Cause a substantial adverse change in the significance of a historical resource as defined in Section 15064.5?

This project will not cause a substantial adverse change in the significance of any historic resources

B) Cause a substantial adverse change in the significance of an archaeological resource pursuant to Section 15064.5?

No archaeological resources have been identified in the project area, but there is potential for significant cultural resources to exist, and impacts could occur. If potentially significant cultural resources are identified during construction, then impacts will be mitigated through recommendations made in the technical report.

C) Disturb any human remains, including those interred outside of formal cemeteries?

No prehistoric or historical archaeological sites have been identified within the project area, and there is no evidence that human remains are located within the APE.

It has been a pleasure to work with EDAW on this project. Please don't hesitate to contact Carole Denardo at (805) 350-3134 if there are questions.

Sincerely,

Carole Denardo

Carole Denardo, M.A., RPA
Cultural Resources Manager
GARCIA AND ASSOCIATES

South Central Coastal Information Center (SCCIC)
Orange, Los Angeles, Ventura Counties
California Historical Resources Inventory System

California State University, Fullerton, Department of Anthropology, 800 North State College, Fullerton, CA 92834
Telephone: (714) 278-5395 - FAX: (714) 278-5542 – E-mail : sccic@fullerton.edu

July 12, 2005

Garcia and Associates
146 Hekili Street
Suite 101
Kailua, HI 96734
808-262-1384

Attention: Carol Denardo

Re: In-house Records Search

Ms. Denardo:

Please note that T. Beth Snyder conducted a ¼ mile records search for the First Street Trunk Line Project – LADWP. The records search was conducted on June 1, 2005.

If you have any questions or concerns, please contact the Information Center Monday through Thursday, 8:00am to 3:30pm at 714-278-5395.

Thank you,

Margaret Lopez
Coordinator

South Central Coastal Information Center
California Historical Resources Information System
California State University, Fullerton
Department of Anthropology
800 North State College Boulevard
Fullerton, CA 92834-6846
714.278.5395 / FAX 714.278.5542
anthro.fullerton.edu/sccic.html - sccic@fullerton.edu

Ventura
Los Angeles
Orange

September 19, 2005

Re: In-house Records Search for 406-2 FSTL Hollywood

To Whom It May Concern:

T. Beth Snyder conducted a records search of materials on file at the South Central Coastal Information Center on September 19, 2005 for the above referenced project. Ms. Snyder conducted research for a one-half mile radius.

Sincerely,

Margaret López
Coordinator

APPENDIX D
Paleontological Resource Assessment

PALEONTOLOGICAL RESOURCES ASSESSMENT REPORT FOR THE FIRST STREET TRUNK LINE PROJECT, CITY OF LOS ANGELES, CALIFORNIA

Submitted to:
EDAW
3780 Wilshire Blvd., Suite 250
Los Angeles, CA 90010

Prepared by:
Cogstone Resource Management Inc.
1801 Parkcourt Place, Bldg. B, Suite 102
Santa Ana, California 92701
(714) 245-0264 admin@cogstone.com

Authors:
Kim Scott and Sherri Gust

Principal Investigator:
Sherri Gust
Qualified Paleontologist

Cogstone Project Number: 05-1196

Revised August 2005

NATIONAL DATA BASE (NDB) INFORMATION SHEET

Paleontological Resources Assessment Report for the First Street Trunk Line Project, City of Los Angeles, California

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Cogstone Project Number: 05-1196
Type of Study: Paleontological Assessment Report
Sites: None
USGS Quadrangle: Hollywood 7.5'
Area: approximately 2 miles
Key Words: Los Angeles, Upper Miocene, Puente Formation, Quaternary older alluvium

TABLE OF CONTENTS

LIST OF FIGURES

LIST OF TABLES

EXECUTIVE SUMMARY

Cogstone Resource Management Inc. was retained by EDAW to provide paleontological assessment services for the First Street Trunk Line Project, City of Los Angeles, Los Angeles Department of Water and Power, California. This study was requested by the City of Los Angeles to meet their responsibility as the lead agency under the California Environmental Quality Act (CEQA).

The project area is comprised of approximately 2 linear miles along First Street between Van Ness and Beverly Blvd., as well as along Beverly Blvd. from First Street to North Dillon Street in the City of Los Angeles, California. Proposed impacts to the area are a large scale excavation to put in a large potable water pipeline.

A search for paleontological records was completed at the Los Angeles County Museum of Natural History and in published materials. The project area and a ten-mile radius were searched for resources. Although no localities have been previously collected from the project alignment, the Museum has five fossil localities near the project, one in Late Miocene marine Puente Formation, and four others in Pleistocene nonmarine deposits. Both formations are well known for fossils in the Los Angeles area.

Although no fossils were observed on the survey, known information indicates that the Puente Formation and the Pleistocene alluvium are fossiliferous. The Puente Formation has the potential for fossils at any depth, while Pleistocene alluvium has the potential for fossils at greater than 5 feet deep.

Grading, excavation and other surface and subsurface excavation work have the potential to impact significant, nonrenewable fossil resources of Upper Miocene to Pleistocene age. All excavation, grading and other earthmoving activities in the Miocene Puente Formation and Quaternary older alluvium require monitoring by a qualified paleontological monitor working under the supervision of a qualified principal investigator for paleontology. The alluvium will require occasional spot checking by a qualified paleontological monitor to check whether the excavation has extended into older deposits.

INTRODUCTION

PURPOSE OF STUDY

Cogstone Resource Management Inc. was retained by EDAW to provide a paleontological assessment and report for the First Street Trunk Line project, City of Los Angeles, Los Angeles Department of Water and Power, California. This assessment report was required by the City of Los Angeles, Department of Water and Power to meet their responsibility as the lead agency under the California Environmental Quality Act (CEQA).

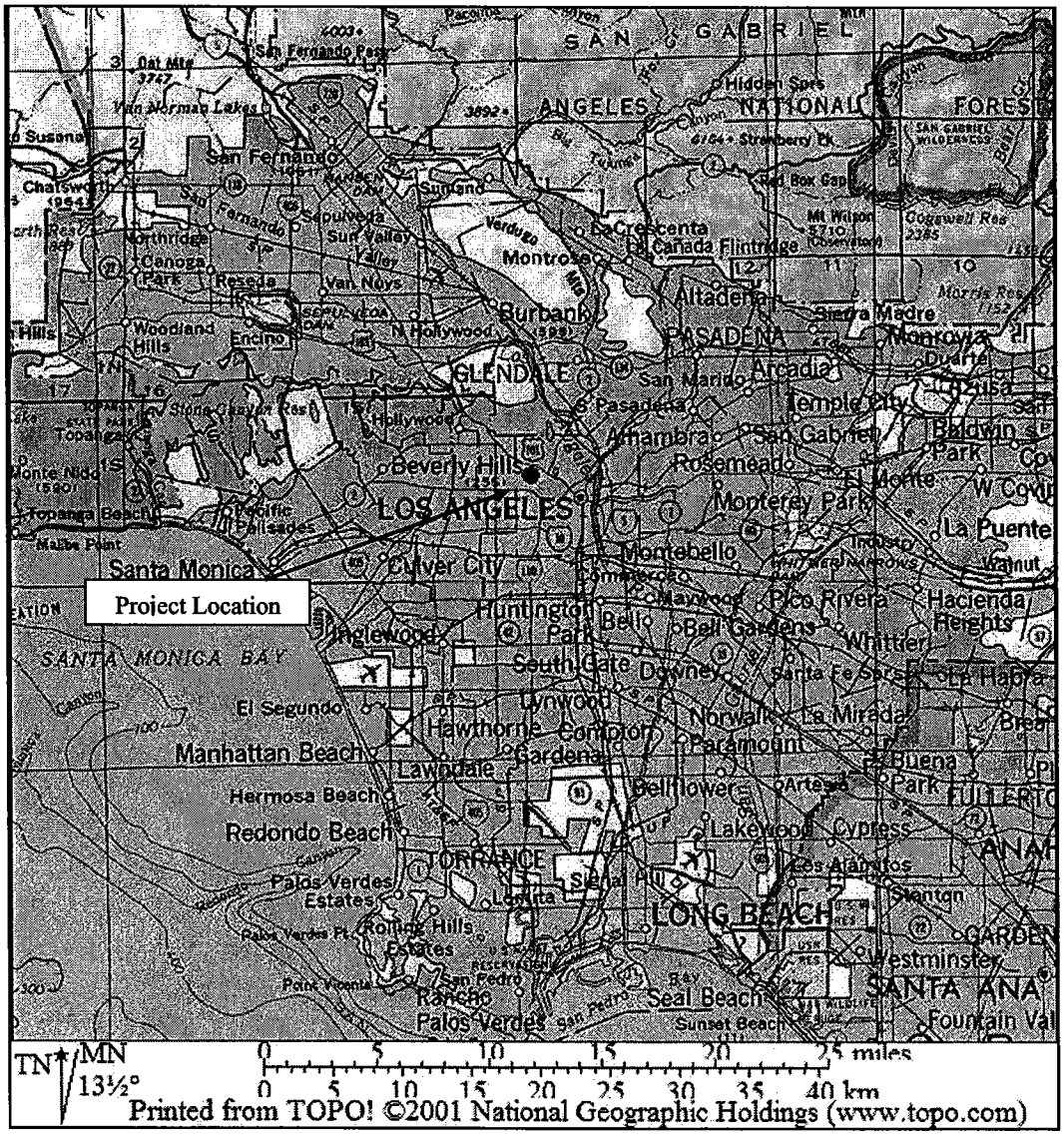

Figure 1. Regional Location Map.

PROJECT DESCRIPTION

The project area is comprised of approximately 2.8 linear miles along First Street between Van Ness and Beverly Blvd., along Beverly Blvd. from First Street to North Dillon Street and includes a pressure relief station on Silver Lake Blvd. in the City of Los Angeles, California (Figure 2). The property crosses Section 24 and 25 of Township 1 South, Range 14 West, as well as a portion of Section 19 of Township 1 South, Range 13 West in the Hollywood 7.5' quadrangle.

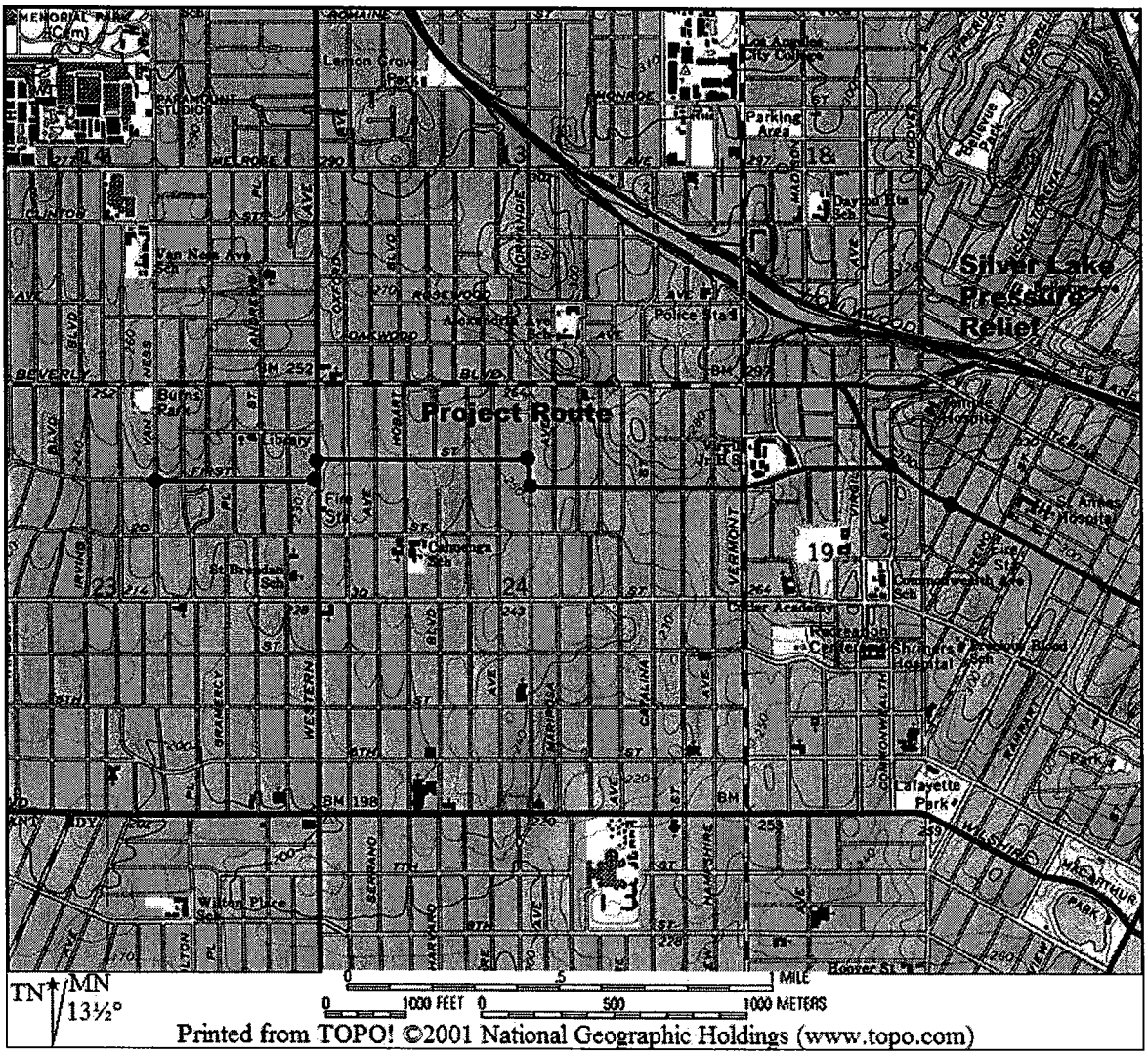

Figure 2. Project Location Map.

The Los Angeles Department of Water and Power (LADWP) is proposing to construct approximately 11,000 linear feet of 60-inch diameter concrete-lined welded steel potable water pipeline along existing street rights-of way. The proposed project would include the construction of appurtenant structures such as maintenance/access holes, flow meters, valves, cabinets, vaults, and a regulator station.

PROJECT PERSONNEL

Cogstone Resource Management, Inc. conducted the paleontological survey, literature review, and report preparation for the First Street Trunk Line project. Sherri Gust served as Principal Investigator for the project and supervised all work. She is a Qualified Paleontologist with an M.S. in Anatomy (Evolutionary Morphology) from the University of Southern California, a B.A. in Anthropology from the University of California, Davis and over twenty-five years of experience in California. Gust holds a BLM permit for paleontology and is certified/qualified in all southern California cities and counties that maintain paleontology consultant lists. Gust edited the report. Kim Scott conducted the literature search, survey and wrote the majority of the report. Scott holds a B.S. in Geology with an emphasis in Paleontology from the University of California, Los Angeles. Qualifications of principal project personnel are provided elsewhere (Appendix A).

LAWS AND REGULATIONS

The following discussion of applicable state laws has been excerpted and reordered from the California Department of Transportation's on-line Environmental Handbook,Volume 1, Chapter 8 on Paleontology (Caltrans 2003). The First Street Trunk Line Project is subject to state and local legislation regarding paleontological resources.

California Environmental Quality Act of 1970 (CEQA) (PRC § Section 21000 *et seq.*)

CEQA declares that it is state policy to "take all action necessary to provide the people of this state with...historic environmental qualities." It further states that public or private projects

financed or approved by the state are subject to environmental review by the state. All such projects, unless entitled to an exemption, may proceed only after this requirement has been satisfied. CEQA requires detailed studies that analyze the environmental effects of a proposed project. In the event that a project is determined to have a potential significant environmental effect, the act requires that alternative plans and mitigation measures be considered.

CEQA includes historic and archaeological resources as integral features of the environment. If paleontological resources are identified as being within the proposed project area, the sponsoring agency must take those resources into consideration when evaluating project effects. The level of consideration may vary with the importance of the resource.

BACKGROUND

The geological, physiographical, and ecological zones represented in the project area are best described as alluvial valleys of the Los Angeles Basin. The basin is bounded to the north by the Santa Monica Mountains, to the east by the Santa Ana Mountains and associated hills (Puente/Chino, San Jose, and Repetto), to the south by the San Joaquin Hills and the Pacific Ocean, and to the west by the Palos Verdes Hills and the Pacific Ocean.

GEOLOGIC SETTING

The Los Angeles Basin exists as a portion of the Pacific Plate within the California Geomorphic Province known as the Transverse Ranges (Figure 3). The Transverse Ranges are a result of these two plates grinding past each other and "catching" along the bend in the San Andreas Fault Zone. The Transverse Range Province includes the San Bernardino, San Gabriel, and Santa Monica Mountains among others.

The Transverse Range Province (Figure 3) is described as:

> The Transverse Ranges are an east-west trending series of steep mountain ranges and valleys. The east-west structure of the Transverse Ranges is oblique to the normal northwest trend of coastal California, hence the name "Transverse." The province

extends offshore to include San Miguel, Santa Rosa, and Santa Cruz islands. Its eastern extension, the San Bernardino Mountains, has been displaced to the south along the San Andreas Fault. Intense north-south compression is squeezing the Transverse Ranges. As a result this is one of the most rapidly rising regions of the earth (Wagner 2002).

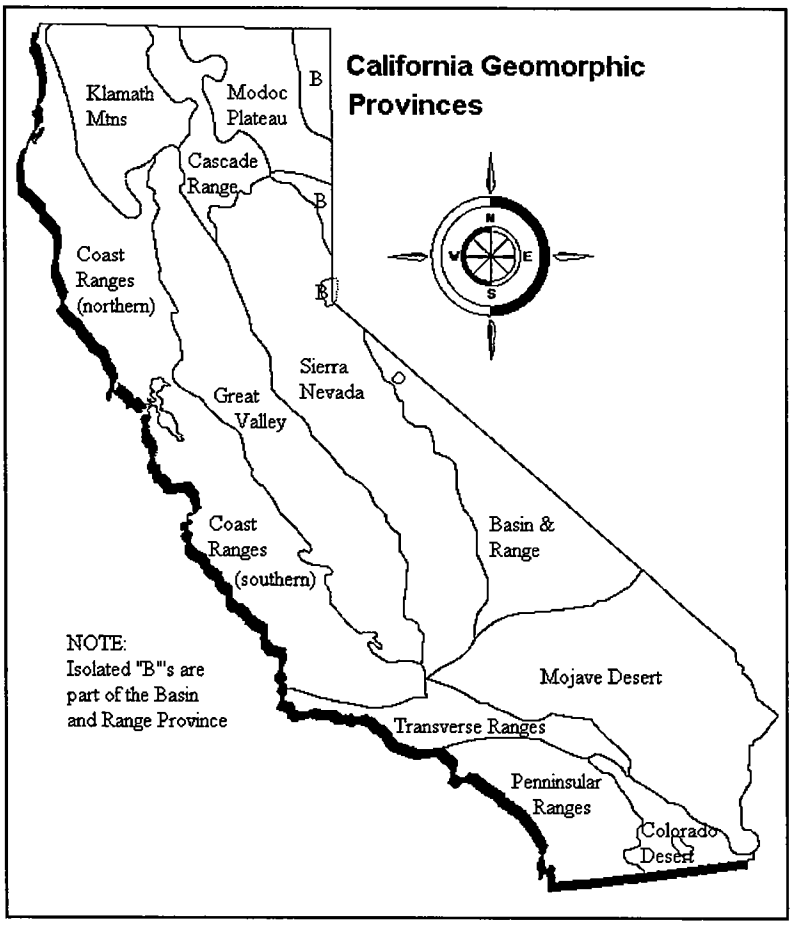

Figure 3. California Geomorphic Provinces showing the Transverse Ranges wedged between the Mojave Desert, the Penninsular Ranges and the southern Coast Ranges (Wagner 2002)

STRATIGRAPHY

The project is mapped as Late Miocene marine Puente Formation, also known locally as the Upper Modelo Formation (Mu) which is overlain in part by Pleistocene nonmarine (Qc) deposits (Jennings and Strand 1969; McLeod 2005, Figure 4).

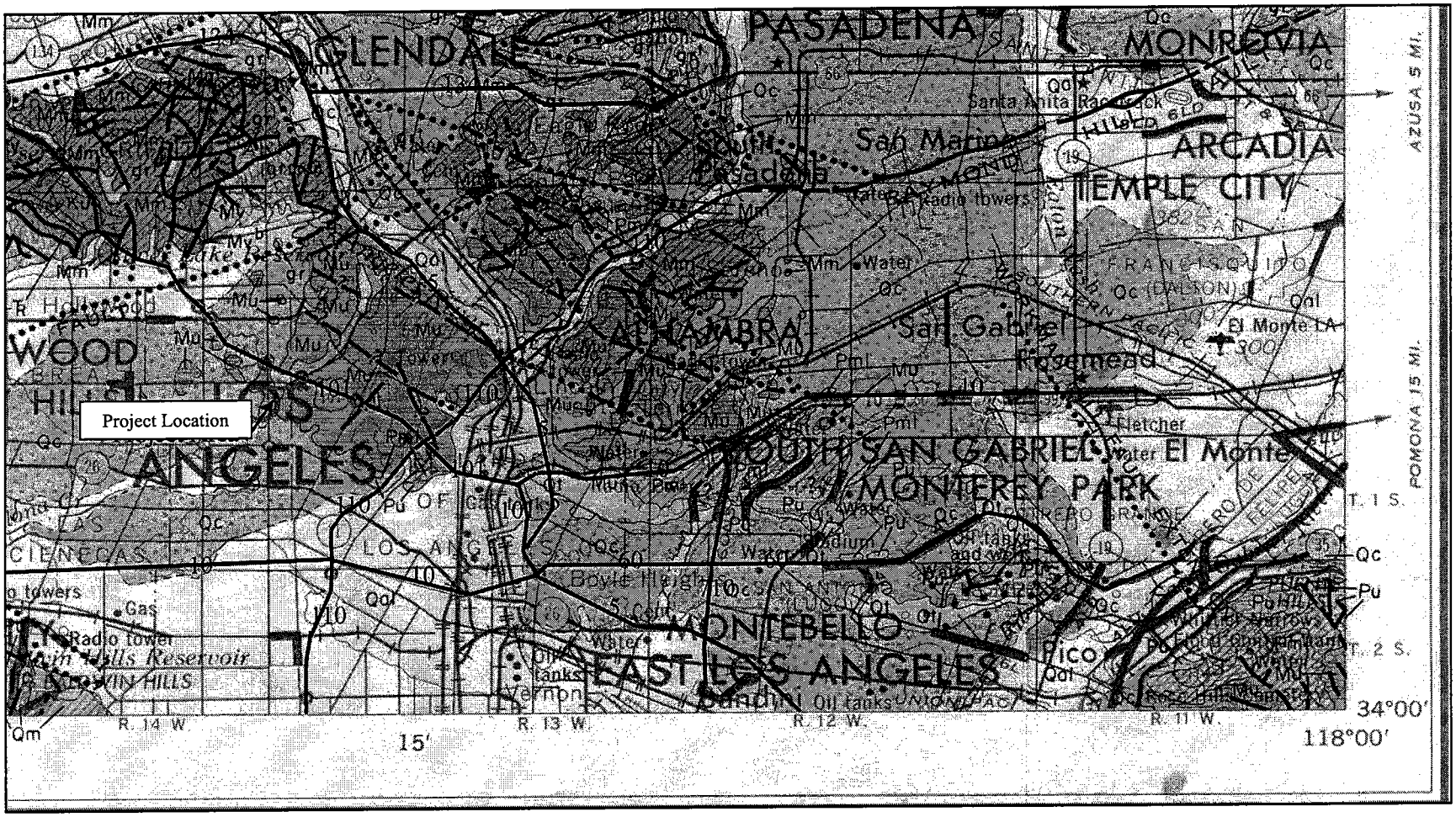

Figure 4. Project Area Geology. The project is highlighted in bright green while local freeways are highlighted in blue. Mu refers to Upper Miocene marine deposits while Qc refers to Pleistocene nonmarine sediments. Base map from Jennings and Strand 1969.

Upper Miocene Marine Puente Formation

Also occasionally referred to as the Upper Modelo Formation in the Hollywood area (McLeod 2005), these sediments locally consist of siltstones, diatomaceous and siliceous shale, sandstone, and conglomerate (Jennings and Strand 1969). Although these sediments are poorly represented in the Los Angeles area, they have been well studied in the Puente Hills to the east of the project. Here the formation has been divided into four members; from oldest to youngest they are the La Vida Member, the Soquel Member, the Yorba Member, and the Sycamore Canyon Member.

The various depositional environments common to the coast of California are illustrated (Figure 5). Of particular interest to understanding the Puente Formation are the submarine canyon and submarine fan in association with the continental shelf (denoted by shelf edge) and the basin plain (denoted as basin). Between the shelf and the basin is the continental slope (Figure 6).

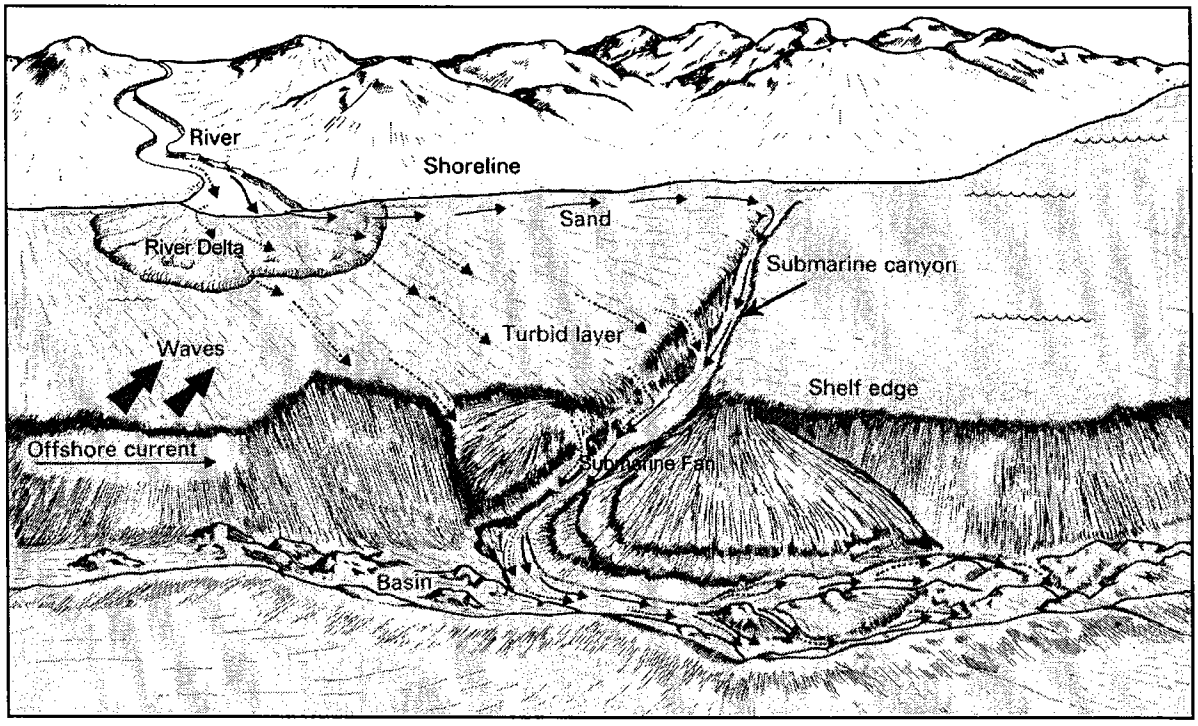

Figure 5. Submarine environments common to coastal California. Marine environments are blue. Note location of the submarine canyon, submarine fan, the continental shelf (shelf edge), and the basin plain (basin).

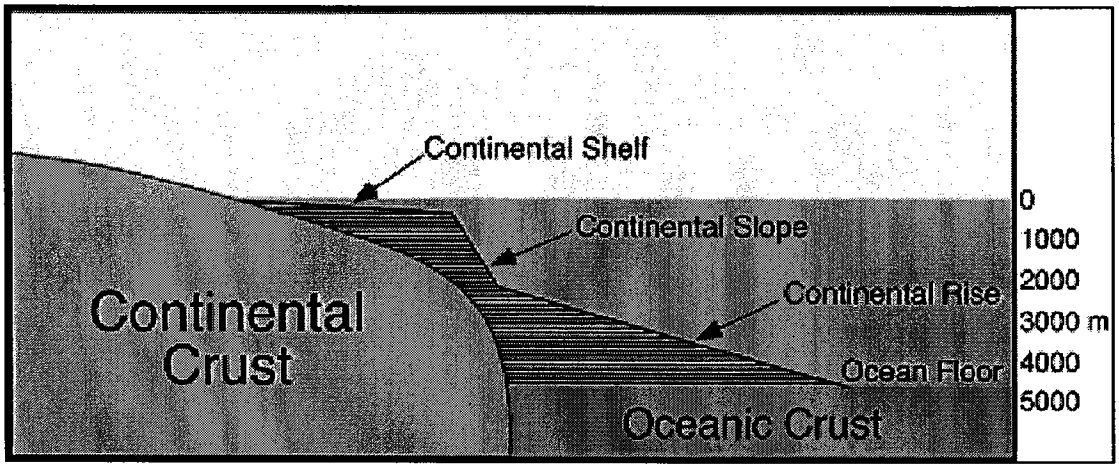

Figure 6. Relationships between the continental shelf and slope.

Most information on the Puente Formation is derived from the eastern Puente Hills (Cooper 1981) and the western Puente Hills (Yerkes 1972). The members of the Puente have been interpreted as representing different portions of a submarine fan (Figure 7).

Puente Formation, La Vida Member

The La Vida Member consists of siltstone, shale, sandstone, dolomite, and tuff. In the western Puente Hills this member attains a maximum thickness of approximately 2000 feet and was deposited in a deep marine environment. In the eastern Puente Hills, the member is up to 3800 feet thick (Durham and Yerkes 1964 as cited in Cooper 1981) and the sediments have been interpreted as being deposited on a marine basin slope to outer submarine fan facies.

Puente Formation, Soquel Member

Sediments of the Soquel Member consist of mudstone, siltstone, and sandstone, with conglomerate lenses in the upper 250 feet. In the western Puente Hills, theses deposits are approximately 2000 feet thick while in the eastern Puente Hills these deposits are up to 3100 feet thick. Some of the sandstones from this member are poorly lithified so they are easily eroded into steep slopes by rainfall. Sediments of this member have been interpreted as being from inner to middle submarine fan facies in the eastern Puente Hills.

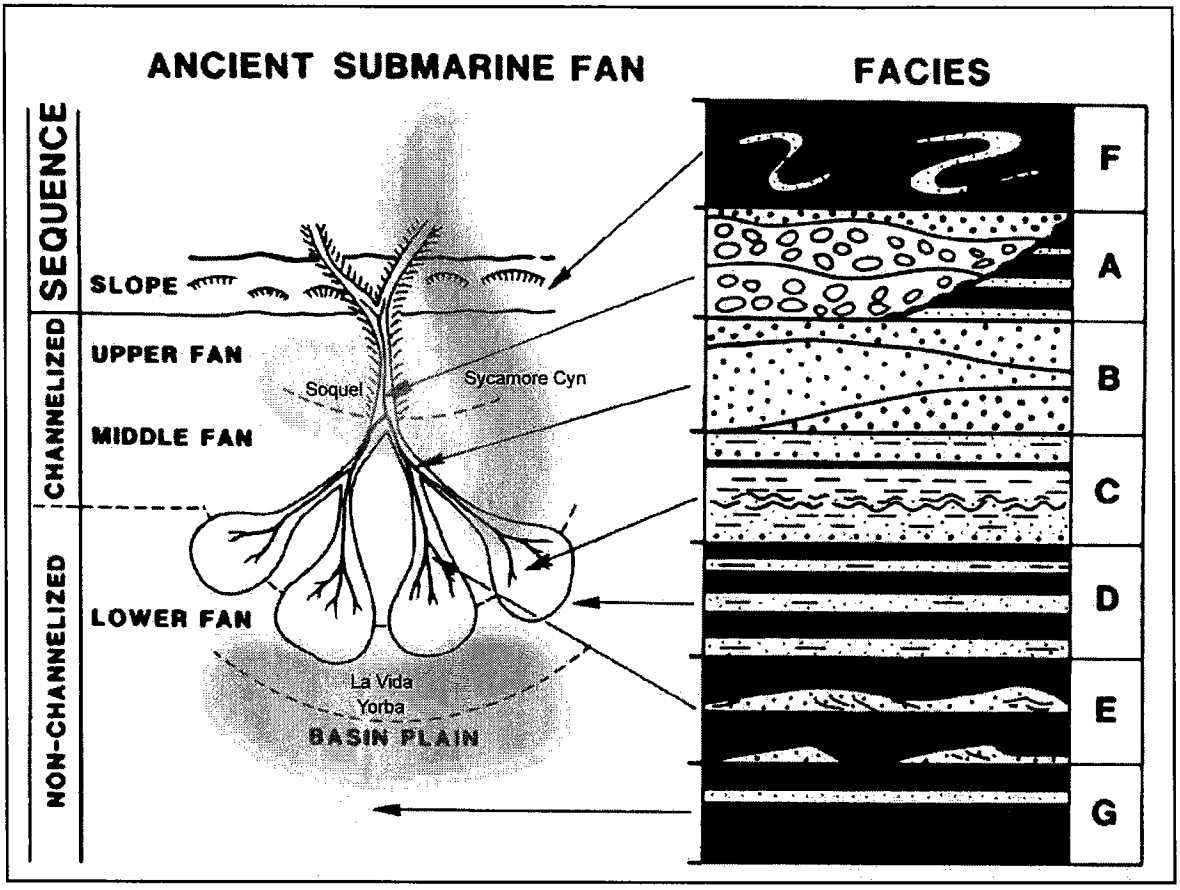

Figure 7. A submarine fan and its various parts. Note that the Puente Formation members from oldest to youngest are the La Vida (blue), the Soquel (yellow), the Yorba (blue), and the Sycamore Canyon (green).

Puente Formation, Yorba Member

In the Puente Hills, the Yorba Member consists of a maximum of 3000 feet of siltstone and sandy siltstone interbedded with sandstone and dolomite. In the eastern Puente Hills this member has been interpreted as marine basin slope to outer submarine fan to basin plain deposits.

Puente Formation, Sycamore Canyon Member

Sediments of the Sycamore Canyon Member consist of sandstone and conglomerates and attain a maximum thickness of about 3500 feet thick in the Puente Hills. The member has been interpreted as numerous paleoenvironments in the eastern Puente Hills ranging from inner to middle submarine fan to basin slope, shelf and nearshore marine.

Pleistocene Nonmarine

Deposited from 2 million to 10,000 years ago, these sediments are common in the Los Angeles area and were deposited primarily by rivers, streams, ponds, alluvial fans, soil horizons, and occasionally wind. Sediments can range from clays to conglomerates and can range from a few inches to dozens of feet thick.

Recent Alluvium

Although Jennings and Strand (1969) do not map Recent Alluvium in the project area, it does occur as a mantle of various thickness over most of the Los Angeles Basin. These deposits consist of sediments less than 10,000 years old and are comprised of clays to conglomerates depending on the local depositional environment and sediment sources.

RECORDS SEARCH RESULTS

A search for paleontological records was completed at the Los Angeles County Museum of Natural History (LACM) Department of Vertebrate Paleontology (Appendix B), online at the LACM Department of Invertebrate Paleontology, and in published materials. The project area and a one-mile radius were searched for resources. No fossil localities are known from the project alignment. However, McLeod (2005) records three vertebrate fossil localities near the project while Jefferson (1971) records another two vertebrate fossil localities, and Lander (2000) records an invertebrate locality not mentioned by the other two authors (Table 1, Figure 8,9). Both the Puente Formation and the Pleistocene alluvium are well known for fossils in the Los

Angeles area. Almost 2100 fossils were recovered from the Puente Formation when the Metro Red Line was constructed in the 1990's. Puente Formation (mapped as Tumsh) and Pleistocene alluvium localities are known near the project area (Figure 8, 9; Lander 2000).

Table 1. Fossils recovered from the Puente Formation and Pleistocene alluvium near to the project.

Formation	Common Name	Taxa	Reference
Puente	mollusks	unknown	LACMIP 17137; Lander 2000
Puente	deep sea smelt	*Bathylagus* sp.	LACMVP 6946; McLeod 2005; Lander 2000
Puente	bristlemouth	*Cyclothone* sp.	same
Puente	herring	*Xyne grex*	same
Puente	mackerel	Scombridae	same
Puente	lanternfish	Myctophidae	same
Pleistocene alluvium	mastodon	*Mammut* sp.	LACMVP 5854; McLeod 2005
Pleistocene alluvium	mammoth	*Mammuthus* sp.	LACMVP 3250; McLeod 2005
Pleistocene alluvium	ground sloth	*Glossotherium* sp.	SBCM 9.3.2; Jefferson 1991
Pleistocene alluvium	pocket gopher	*Thomomys bottae*	same
Pleistocene alluvium	horse	*Equus* sp.	same
Pleistocene alluvium	long-horned bison	*Bison latifrons*	same
Pleistocene alluvium	long-horned bison	*Bison latifrons*	LACMVP 2030; Jefferson 1991

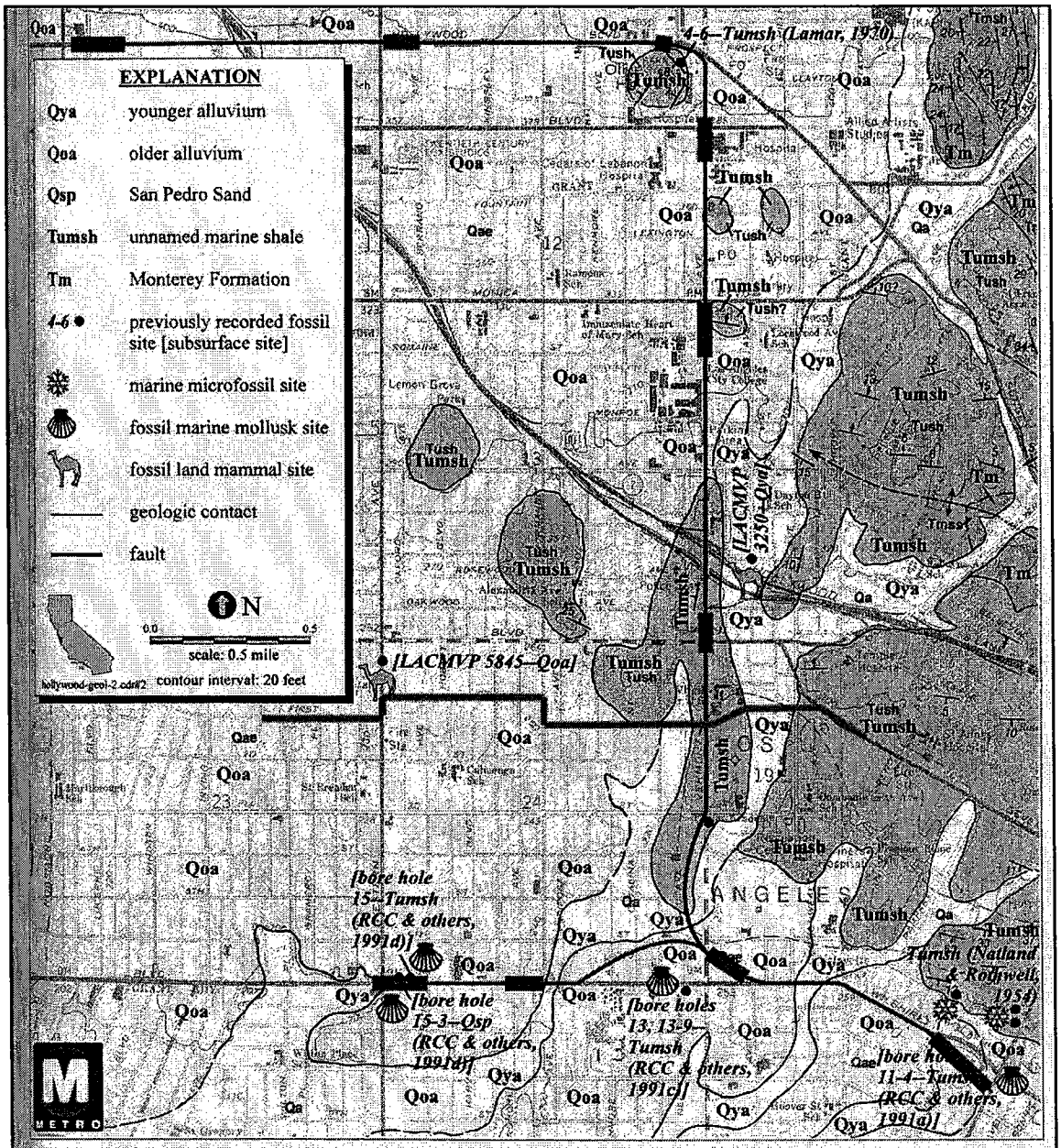

Figure 2.—Surficial geology and distribution of fossil taxa by rock unit and previously recorded fossil site, Los Angeles Metro Red Line Segment 2 construction zone and vicinity, Los Angeles, California. Base map: U.S. Geological Survey Hollywood 7.5-minute Quadrangle. Geology after Dibblee (1991a). Fossil site locations after CWDD and others (1981), Lamar (1970), Lander (1995), Natland and Rothwell (1954), RCC and others (1991a, c, d), and Reynolds (1987). See Figure 1. LACMVP: Natural History Museum of Los Angeles County Vertebrate Paleontology Section; SM-H-RHFZ: Santa Monica-Hollywood-Raymond Hill Fault Zone.

Figure 8. First Street trunk line route in green with LACMVP 5845 and 3250 labeled. Local fossil land mammal sites were recovered from the Pleistocene nonmarine sediments (Qoa) while marine fossil sites were recovered from the Puente Formation (Tumsh). Figure records fossil localities near the Metro Red Line prior to excavations there in the 1990's. Lander (2000; Base Map Dibblee 1991)

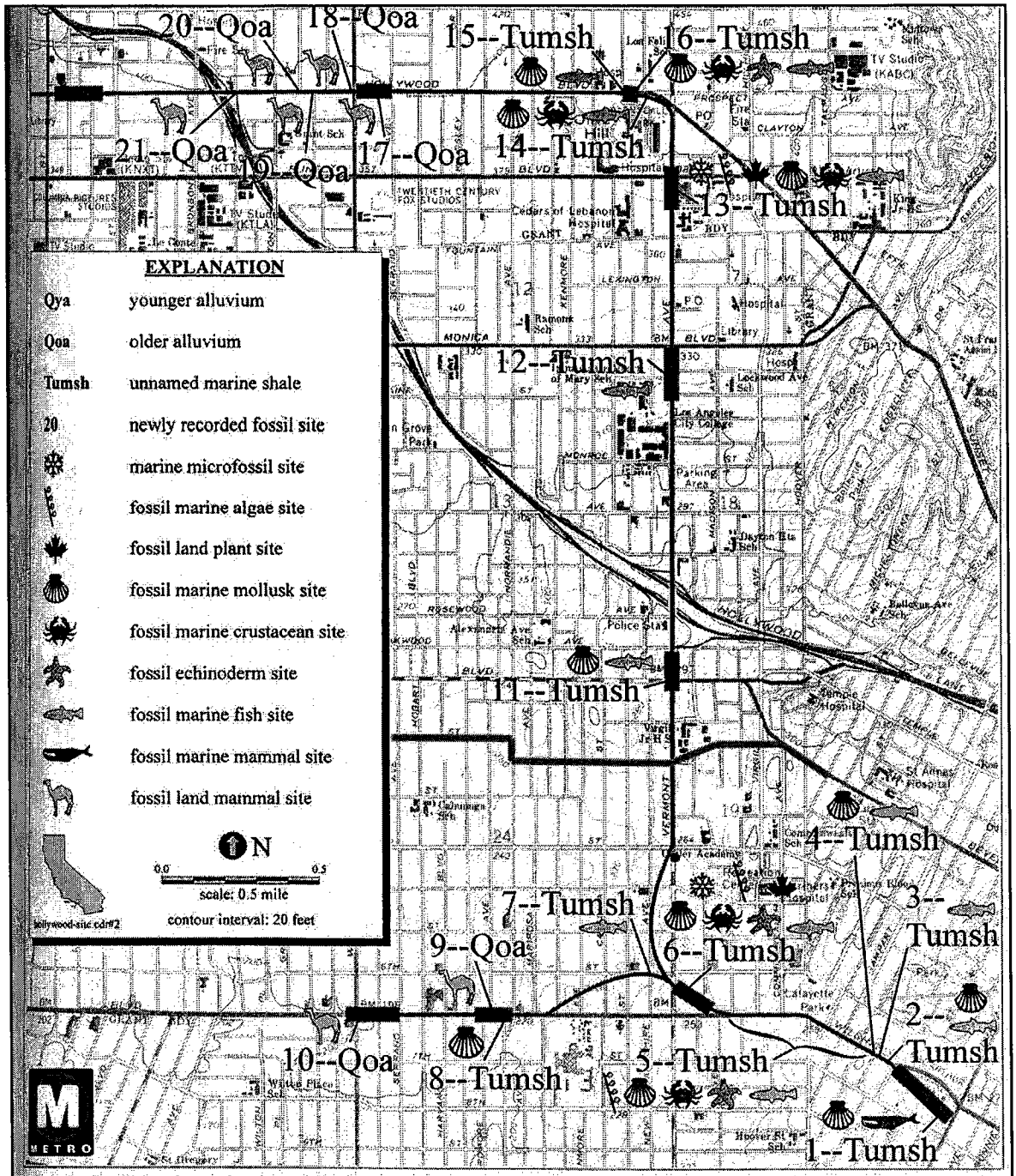

Figure 5.–Fossil-bearing rock units and distribution of fossil taxa by rock unit and newly recorded fossil site, Los Angeles Metro Red Line Segment 2 construction zone, Los Angeles, California. Base map: U.S. Geological Survey Hollywood 7.5-minute Quadrangle. Geology after CWDD and others (1981), Dibblee (1991a), Lamar (1970), RCC and others (1991a to d, 1992, 1993a to c, 1994a, b), and WESTEC Services, Inc. (1983). See Table 3, Figure 6, Appendices L, M, N.

Figure 9. First Street trunk line route in green with LACMVP 6946 and LACMIP 17137 labeled as Tumsh 11. Local fossil land mammal sites were recovered from the Pleistocene nonmarine sediments (Qoa) while marine fossil sites were recovered from the Puente Formation (Tumsh). Figure records fossil localities near the Metro Red Line prior to excavations there in the 1990's. Lander (2000, Base Map Dibblee 1991)

RECONNAISSANCE SURVEY

Survey Methods

Kim Scott of Cogstone Resource Management Inc. conducted the paleontological reconnaissance of the proposed project site on May 31, 2005. The survey consisted of a single person driving the lineation and looking for outcrops of exposed sediments along the roadway. When outcrops were located, they were intensively inspected for sediment type and the presence of fossils.

Survey Results

Most of the project area is urban and highly developed (Figure 10). At the northeastern corner of Beverly, First, and Commonwealth, was a slope mapped as Puente Formation. Although judging by the amount of local development it is probable that the slope had been impacted previously, sediments were visible to approximately 1 foot in depth and consisted of unsorted silts and clays (Figure 11). Both the color and consistency of the deposit is typical of soil formation over marine deposits seen around southern California.

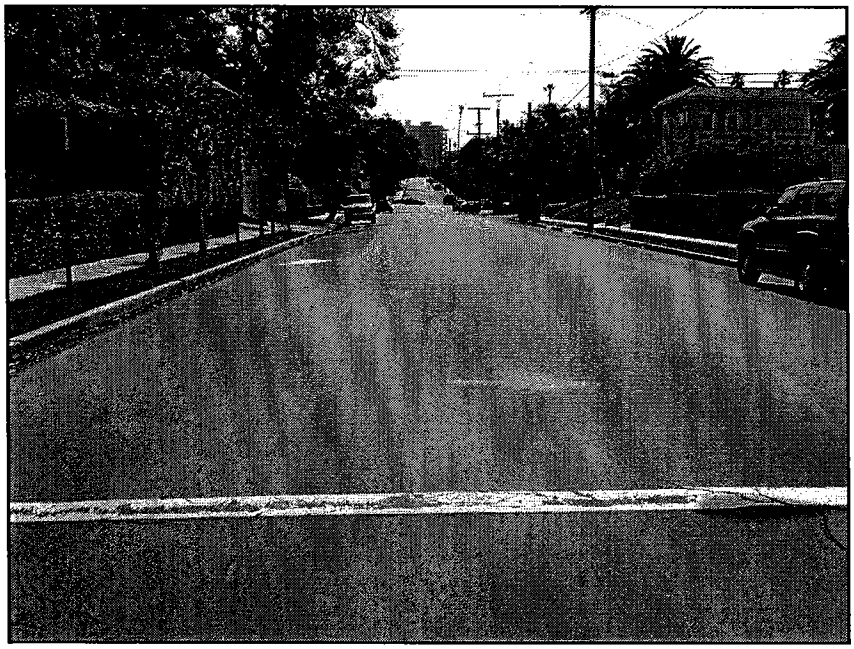

Figure 10. A typical view of First Street.

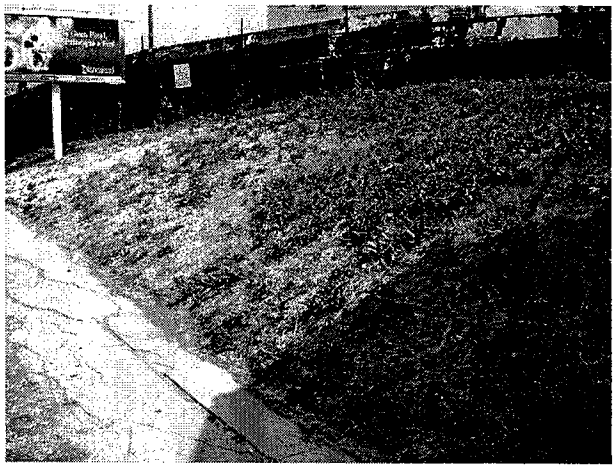

Figure 11. Slope at Beverly, First, and Commonwealth (left) and sediment observed (right).

POTENTIAL PALEONTOLOGICAL RESOURCES

The Puente Formation has the potential to yield significant fossils at any depth and the Pleistocene alluvium has the potential to yield significant fossils at greater than 5 feet deep in the project area (McLeod 2005). Recent alluvium is unlikely to contain significant fossil material, however fossils may be present as detritus from older formations in the area. Proposed excavation for pipe of five foot diameter will certainly impact both formations.

MITIGATION PLAN

Grading, excavation and other surface and subsurface excavation work have the potential to impact significant nonrenewable fossil resources of Upper Miocene to Pleistocene age. All impacts on the Miocene Puente Hills Formation and Quaternary older alluvium require monitoring by a qualified paleontological monitor working under the supervision of a qualified principal investigator for paleontology. Recent alluvium will require occasional spot checking by a qualified paleontological monitor to determine whether the excavation has extended into older deposits.

The following mitigation measures have been developed to reduce the adverse impacts of project construction on cultural resources to an acceptable level. The measures are derived from the guidelines of the Society of Vertebrate Paleontologists and the meet requirements of the City of Los Angeles and CEQA. These general mitigation measures have been used throughout southern California and have been demonstrated to be successful in protecting resources while allowing timely completion of construction.

1. A qualified principal investigator for paleontology will be retained to provide professional services. The principal investigator will be responsible to implement the mitigation plan and maintain professional standards of work.

2. Qualified monitors will perform full-time monitoring of construction grading and excavation in native sediments. Monitoring will include inspection of exposed surfaces and microscopic examination of matrix. The monitor will have authority to divert grading away from exposed resources temporarily in order to recover the specimens. Cooperation and assistance from on-site personnel will greatly assist timely resumption of work in the area of the discovery.

3. If the discovery meets the criteria for a fossil locality, then work will be diverted until the Paleontology Field Supervisor or Principal Investigator evaluates the discovery. Localities require documentation including location and stratigraphic information. Decisions about testing and data recovery will be made in consultation with the client and the lead agency.

4. If microfossil localities are discovered, the monitor will collect matrix for processing. In order to limit downtime, the monitor may request heavy machinery assistance to move large quantities of matrix out of the path of construction to designated stockpile areas. Testing of stockpiles will consist of screen washing small samples (200 pounds) to determine if fossils are present. Productive tests will result in screen washing of additional matrix from the stockpiles to a maximum of 6000 pounds per locality.

5. Specimens and fossils recovered will be prepared, identified, and cataloged before donation to the accredited repository designated by the lead agency. The Natural History Museum of Los Angeles County is suggested as the most appropriate repository. Any resources determined not to meet significance criteria will be offered to local schools for use in educational programs.

6. The principal investigator will prepare monthly progress reports to be filed with the client and the lead agency. The principal investigator will prepare a final report to be filed with the client and the lead agency. The report will include a list of resources recovered, documentation of each locality, interpretation of resources recovered and will include all specialist's reports as appendices.

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APPENDIX A: QUALIFICATIONS

SHERRI GUST

Qualified Paleontologist and Registered Professional Archaeologist
Cogstone Resource Management Inc.

EDUCATION

1994	M. S., Anatomy and Cell Biology (Evolutionary Morphology), University of Southern California, Los Angeles
1979	B. S., Anthropology (Physical), University of California, Davis

SELECTED PROJECTS

Identification, analysis and report on over 10 thousand fossils recovered from the Inland Empire Utilities Plant Number 5 project.

Literature review, survey and report on paleontological resources from a housing development project in Arroyo Grande.

Mitigation plan and archaeo/paleo monitoring of the Eastside Gold Line Subway Extension Project for MTA.

SELECTED REPORTS AND PUBLICATIONS

2004 Gust, S. and V. Mirro. Archaeological and Paleontological Monitoring Report for the Grand Avenue Realignment Project, Los Angeles, California. Sapphos Environmental Inc.

2003 Gust, S. and S. Alarcon. Archaeological and Paleontological Evaluation Report and Mitigation Plan for the Interstate 605 Soundwall Project, From Whittier to Baldwin Park, Los Angeles County, California. On file, Parsons, Brinckerhoff, Quade & Douglass Inc., Caltrans, and the County of Los Angeles.

2003 Gust, S. Paleontological Assessment Report and Mitigation Plan for the Owens Valley Project, Inyo County, California. Sapphos Environmental, Inc.

1997 Gust, S. Size and Sexual Dimorphism in *Smilodon* from Rancho La Brea. *PaleoBios* 15(4).

1992 Gust, S. Taphonomy and Chronology at Rancho La Brea. *Journal of Vertebrate Paleontology* 12(3, Supplement).

PROFESSIONAL RECOGNITION

-Qualified Paleontologist, Bureau of Land Management

-Qualified/Certified Paleontologist, Counties of Orange, Los Angeles, San Luis Obispo, Ventura, Riverside, Santa Barbara

-Associate, Vertebrate Paleontology and Rancho La Brea Sections, Los Angeles County Museum of Natural History

Kim M. Scott

Paleontologist, Geologist

Professional Experience

2002–pres. Geologist and Paleontology Field Supervisor for Cogstone Resource Management Inc. Write paleontologic proposals and reports, stratigraphic representation of fossils recovered from mitigation projects, site mapping of fossil quarries, field training of paleontology personnel, and fossil preparation.

2000–2003 Geologist/ paleontologist for L&L Environmental and PaleoEnvironmental Associates. Responsible for portions paleontologic environmental mitigation reports, stratigraphic representation of fossils recovered from mitigation projects, site mapping of fossil quarries, field training of paleontology personnel, cataloguing of fossils recovered in the field, and fossil preparation. Also responsible for field work and reports on Phase 1 studies.

1999-2002 Consultant for Orange County, CA. Responsible for development and testing of database for the archaeology and paleontology collections of Orange County.

1999-2000 Lab technician for RMW Paleo Associates, Inc. Responsible for preparation of recovered fossils, collections organization, and review of field crews notes for completeness.

1995-1999 Assistant Collections Manager and Field Paleontologist for the San Bernardino County Museum. Responsible for and recovery of fossils from job sites, geologic descriptions, stratigraphic mapping, mapping of fossil quarries, site photography, and surveys of new areas for paleontological potential. Also preparation of recovered fossils, collections organization, cataloging and accessioning of recovered material, plotting sites on topographic maps, assigning locality numbers, review of field crews notes for completeness, and scientific illustrations of fossils for reports, professional publications, and taphonomic reference.

Selected Projects

2004-pres. Numerous paleontological assessment and monitoring reports for Cogstone RMI.

2004. Paleontological assessment report for Camp Roberts and Camp San Luis Obispo, San Luis Obispo County, California

2003. Paleontological assessment report and mitigation plan for the Biddle Ranch subdivision, west cluster San Luis Obispo County, California

2003. Paleontological Assessment of Owens Lake, Owens Valley PM10 Planning Area, Inyo County, California. Also paleontological section of environmental document.

1995-1999. Diamond Valley Lake/Eastside Reservoir Project. Field work and cataloguing of several thousand specimens.

Education

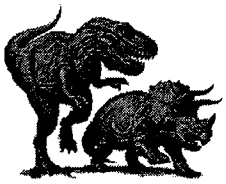
2000. B. S., Geology with an emphasis in Paleontology, University of California, Los Angeles

2001- pres. Working on M. S., Biology with an emphasis in Paleontology, California State University, San Bernardino

Affiliations

Society of Vertebrate Paleontology
Geological Society of America

APPENDIX B: LITERATURE SEARCH



NATURAL HISTORY MUSEUM
OF LOS ANGELES COUNTY

Vertebrate Paleontology Section
Telephone: (213) 763-3325
FAX: (213) 746-7431
e-mail: smcleod@nhm.org

31 March 2005

Cogstone Resource Management, Inc.
1801 East Parkcourt Place, Bldg. B, Suite 102
Santa Ana, CA 92701

Attn: Kim Scott

re: Vertebrate Paleontology Records Search for paleontological resources for the proposed First Street trunk line, Project # 05-1196, project area

Dear Kim:

I have conducted a thorough search of our paleontology collection records for the locality and specimen data for the proposed First Street trunk line, Project # 05-1196, project area located on the Hollywood USGS topographic quadrangle map as illustrated in your e-mail to me on 28 March 2005. We do not have any vertebrate fossil localities that lie directly within the proposed project boundaries, but we do have localities nearby in the same sediments that occur as surficial deposits in the proposed project area.

On the very eastern end of the proposed project area, from Virgil Avenue eastward, and on both sides of Vermont Avenue and possibly just west of there around Catalina Street, there are exposures of the marine Late Miocene Puente Formation (also sometimes called the upper Modelo Formation in this area). Between those exposures of the Puente Formation, from Berendo Street eastward, there are surface deposits of younger Quaternary Alluvium. West of Berendo Street or Catalina Street the surface deposits consist entirely of older Quaternary alluvial or fan deposits. Our closest fossil vertebrate locality in the older Quaternary sediments is LACM 5845, near the intersection of Western Avenue and Council Street just north of the western portion of the proposed project area, that produced a specimen of fossil mastodon, Mammutidae, at a depth of only 5-6 feet below the surface. Our next closest vertebrate fossil locality in the older Quaternary sediments is LACM 3250, immediately north of the eastern end of the proposed project area at about the intersection of Madison Avenue and Middlebury Street on the northern side of the Hollywood Freeway (Highway 101), that produced a fossil specimen of mammoth, *Mammuthus*, at a depth of about eight feet below street level. Our closest locality in the Puente Formation is LACM 6946, also immediately north of the eastern end of the proposed project area at about the intersection of Vermont Avenue and Beverly Boulevard south of the Hollywood Freeway (Highway 101), that

900 Exposition Boulevard Los Angeles, CA 90007

produced fossil fish specimens of deep-sea smelt, *Bathylagus*, bristlemouth, *Cyclothone*, herring, *Xyne grex*, mackerel, Scombridae, and lanternfish, Myctophidae.

Any excavations in the older Quaternary Alluvium deposits or in the Puente Formation exposures in the proposed project area, as well as any excavations in the younger Quaternary Alluvium below the uppermost few feet, may well encounter significant vertebrate fossils. Any substantial subsurface excavations in the proposed project area, therefore, should be monitored closely to quickly and professionally recover any fossil remains discovered while not impeding development. Any fossils recovered during mitigation should be deposited in an accredited and permanent scientific institution for the benefit of current and future generations.

This records search covers only the vertebrate paleontology records of the Natural History Museum of Los Angeles County. It is not intended to be a thorough paleontological survey of the proposed project area covering other institutional records, a literature survey, or any potential on-site survey.

Sincerely,

Samuel A. McLeod, Ph.D.
Vertebrate Paleontology

enclosure: invoice

APPENDIX E
Geotechnical Reconnaissance Report

GEOTECHNICAL RECONNAISSANCE REPORT (TECHNICAL REPORT) FIRST STREET TRUNK LINE PROJECT (LOS ANGELES DEPARTMENT OF WATER AND POWER) LOS ANGELES, CALIFORNIA

PREPARED FOR:
EDAW, Incorporated
3780 Wilshire Boulevard, Suite 250
Los Angeles, California 90010

PREPARED BY:
Ninyo & Moore
Geotechnical and Environmental Sciences Consultants
5710 Ruffin Road
San Diego, California 92123

June 29, 2005
(Revised September 7, 2005)
Project No. 105284002

June 29, 2005
(Revised September 7, 2005)
Project No. 105284002

Ms. Lainie Herrera
EDAW, Incorporated
3780 Wilshire Boulevard, Suite 250
Los Angeles, California 90010

Subject: Revised Geotechnical Reconnaissance Report (Technical Report)
First Street Trunk Line Project (Los Angeles Department of Water and Power)
Los Angeles, California

Dear Ms. Herrera:

Transmitted herein are the results of Ninyo & Moore's revised Geotechnical Reconnaissance Report (Technical Report) for the First Street Trunk Line Project, in Los Angeles, California. Our initial report, dated June 29, 2005 was revised to include the Silver Lake Pressure Relief Station. This study included review and analysis of available geologic and geotechnical background data, and performance of a geologic reconnaissance of the proposed project alignment. We understand that this evaluation will be included in the Initial Study/Proposed Mitigated Negative Declaration to be prepared by the Los Angeles Department of Water and Power (LADWP).

We appreciate the opportunity to be of service. Should you have any questions or comments regarding this report, please contact the undersigned at your convenience.

Respectfully submitted,
NINYO & MOORE

Robert T. Wheeler
Project Geologist

Gregory T. Farrand, C.E.G.
Principal Geologist

CAT/RTW/GTF/gg

Distribution: (4) Addressee

TABLE OF CONTENTS

Illustrations

1. INTRODUCTION

In accordance with your request, Ninyo & Moore has performed a geotechnical reconnaissance report (technical report) for the First Street Trunk Line and Silver Lake Pressure Relief Station Project, in Los Angeles, California (Figure 1). The purpose(s) of this study was to assess the geologic hazards and geotechnical conditions along the proposed pipeline alignment and pressure relief station for inclusion in the Initial Study/Proposed Mitigated Negative Declaration to be prepared by Los Angeles Department of Water and Power (LADWP). Subsurface exploration and laboratory testing of materials were not included in the scope of this evaluation.

2. SCOPE OF SERVICES

Ninyo & Moore's scope of services has included review of background material, and geologic reconnaissance of the site area. Specifically, we have performed the following tasks:

- Review of pertinent, available geotechnical literature including topographic maps, geologic maps, and geologic and seismic hazard reports. Documents pertaining to the site vicinity, as well as documents reviewed for our site evaluation are listed in the Selected References section of this report.
- Geologic reconnaissance of the project study area, which included written and photographic documentation of the observed site conditions. These materials are on file at the offices of Ninyo & Moore and are available for review upon request.
- Compilation and analysis of the data obtained.
- Preparation of this report to present our findings, conclusions, and preliminary recommendations.

3. PROJECT DESCRIPTION

We understand that the LADWP is proposing to construct a 60-inch diameter concrete-lined welded steel potable water pipeline in the Wilshire and Westlake Community Plan areas in Los Angeles, California (Figure 1). The proposed project would include the installation of approximately 11,000 linear feet of new pipe and construction of associated appurtenant structures including; flow meters, valves, cabinets, vaults, maintenance/access holes, and a regulator station.

The proposed project would be located within an urbanized area of the City of Los Angeles, and would traverse residential, commercial, and industrial areas (Figure 2). Review of topographic data indicate that the elevations along the alignment generally range from approximately 230 feet above mean sea level (MSL) near the west portion of the alignment, to approximately 300 feet above MSL on the east portion of the project at the Silver Lake Pressure Relief station. Specifically, from west to east, the proposed project alignment would begin at the intersection of First Street and Van Ness Avenue (Hollywood Reservoir Outlet Line), and continue east to Western Avenue. The proposed alignment then turns north onto Western Avenue, then turns back east again on First Street until it reaches Normandie Avenue. The alignment turns south on Normandie Avenue, and then back east again on First Street until it reaches the intersection with Beverly Boulevard and Commonwealth Avenue. From Beverly Boulevard/Commonwealth Avenue, the alignment turns southeast and continues to Dillon Street, where it will reportedly connect with The Silverlake Reservoir Outlet Line. The proposed pipeline alignment will cross over the Los Angles County Metropolitan Transportation Authority's Red Line subway tunnel, near the intersection of First Street and Vermont Avenue.

The proposed Silver Lake Pressure Relief Station would be located at London Street, just east of its intersection with Silver Lake Boulevard and west of Dillon Street (Figure 1). The vault for the pressure relief station would be approximately 16 feet long, 11.5 feet wide and 11.5 feet high and would be built with open trench/open excavation methods. The vault would connect with the existing Silver Lake Outlet Line in Silver Lake Boulevard.

4. GEOLOGY AND SUBSURFACE CONDITIONS

Our findings relative to regional geology, site geology, faulting and seismicity, groundwater conditions, and mineral resources are provided in the following sections.

4.1. Regional Geologic Setting

The project area is situated in the Los Angeles Basin section of the Transverse Ranges Geomorphic Province. This geomorphic province consists of an east-west trending mountain

range that extends approximately 320 miles from San Miguel Island on the west to Joshua Tree National Monument on the east (Norris and Webb, 1990). The San Andreas Fault forms the northern boundary of the province. In general, plate movement along a bend in the San Andreas Fault has caused compression of rocks on both sides of the fault, resulting in individual ranges with intervening valleys. The province varies in width from approximately 40 to 60 miles. The province generally consists of marine and non-marine sedimentary rocks, and granitic, volcanic, and metamorphic rocks, which reportedly range in age from Proterozoic to Holocene. Geophysical data indicate that the Los Angeles Basin may be underlain by sediments to depths on the order of 30,000 feet below sea level (Norris and Web, 1990).

The Los Angeles Basin is a well known petroleum producing region. Oil fields in Signal Hill, Huntington Beach, Wilmington, and Santa Fe Springs, have historically produced millions of barrels of oil. During our background review, oil wells were mapped just south of the proposed project alignment (Figure 2).

Our review of the referenced geologic data indicate that the Los Angeles Basin has been divided into four regions or blocks including the northeastern, northwestern, southwestern, and central blocks. The blocks contain both uplifted ranges and synclinal depressions. The subject project alignment site is located within the central block, which is bounded by the Santa Monica and Raymond Hill faults on the northwest, central Orange County on the southeast, the Newport-Inglewood zone of deformation on the southwest, and the Elysian and Repetto hills/Whittier fault zone on the northeast. The central block generally consists of deposits of recent alluvium, and uplifted Holocene to Cretaceous-age rocks.

The Los Angeles Basin has been subjected to a very complicated tectonic past, including periods of up-lift and substantial subsidence, and faults that exhibit significant vertical and horizontal movement. Our review of referenced geologic fault maps, nearby active faults include the Hollywood fault, located north of the alignment, the Newport-Inglewood fault, located south-southwest of the alignment, and the Raymond fault, located north-northeast of the alignment (Jennings, 1994). Further discussion of faulting relative to the site is provided in the Faulting and Seismicity section of this report.

4.2. Site Geology

Based on our review of referenced geologic maps and data, and on our site reconnaissance, the subject alignment is generally underlain by recent to older alluvial deposits and the late Miocene-age Puente Formation (Figure 2). In addition, fill material associated with utility trenches or street grading may be expected along the proposed alignment.

4.2.1. Fill (Not a Mapped Unit)

Fill materials were not observed along the alignment during our site reconnaissance nor are they depicted on the geologic maps reviewed. However, fill materials associated with utility trench backfill, and/or street grading, should be expected along the proposed alignment. The fill may or may not be suitable for reuse as trench backfill.

4.2.2. Alluvium (Map Symbol-Qal)

Based on our review of geologic data, recent alluvium is mapped crossing the proposed alignment in two areas, including an area near the west portion of the proposed alignment approximately between the intersections of Andrews Street and Western Avenue, and on the east portion of the alignment roughly between the intersections with Commonwealth Avenue and Virgil Jr. High School. Recent alluvium is also mapped underlying the Silver Lake Pressure Relief Station. The recent alluvium is expected to generally consist of relatively loose, sand and gravel, silt, and clay.

4.2.3. Older Alluvium (Map Symbol-Qalo)

Based on our review of referenced geologic maps, Pleistocene-aged older alluvium is present across much of the Los Angeles basin. With the exception of the recent alluvium described above, the older alluvium is mapped underlying the proposed alignment from the western terminus to just west of the intersection of Vermont Avenue, where it is in contact with the Puente Formation. The older alluvium is expected to generally consist of relatively loose to medium dense, sand and gravel, silt, and clay. Cobble to boulder-size rock clasts may also be present.

4.2.4. Puente Formation (Map Symbol-Tpsl)

The late Miocene-age Puente Formation is mapped underlying the proposed alignment from approximately just west of the intersection of Vermont Avenue to near the east side of Virgil Jr. High School, and from approximately Commonwealth Avenue, east to the easternmost terminus of the alignment. The Puente Formation underlying the proposed alignment is described as light brown and light gray, well bedded siltstone. The Puente Formation is also known to contain units of diatomaceous shale (claystone), sandstone, and conglomerate. Accordingly, highly expansive shale and strongly cemented sandstones and conglomerates may be encountered along the proposed alignment.

4.3. Groundwater

The subject alignment is located west of the Los Angeles River drainage. Based on our review of referenced groundwater maps and boring data, areas of shallow groundwater may be encountered, particularly near the westerly portion of the alignment. Groundwater levels can fluctuate due to seasonal variations, irrigation, groundwater withdrawal or injection, and other factors. Accordingly, groundwater dewatering should be anticipated during construction activities.

4.4. Faulting and Seismicity

The subject project is located in a very tectonically complex area. In general, the project is situated near the southern edge of the Transverse Ranges, the project area is bounded by east-west trending reverse, oblique-slip, and left lateral strike-slip faults (Dolan et al., 1997) on the north, and right-lateral strike-slip faults to the east and west. In addition, geomorphic and surficial expressions of fault-related features have been reduced or have been lost due to the urbanization/development across the Los Angeles basin, making it difficult to evaluate seismic hazards in the region. Accordingly, up-dates regarding seismic hazards in the subject area will be needed as additional fault and seismic data is obtained.

Based on our review of the referenced geologic maps, as well as on our geologic field reconnaissance, the subject site is not underlain by known active faults (i.e., faults that exhibit evidence of ground displacement in the last 11,000 years). Figure 3 is a regional fault map.

As discussed, major known active faults in the region include the Hollywood fault, located approximately 3 miles north of the alignment, the Newport-Inglewood fault, located approximately 5 miles south-southwest of the alignment, and the Raymond fault, located approximately 7 miles north-northeast of the alignment (Jennings, 1994). The closest known active fault is the Hollywood fault, which is mapped less than 3 miles north of the project.

4.5. Strong Ground Motion and Ground Surface Rupture

Based on our field observations and review of the referenced geologic data, known active faults have not been mapped underlying the proposed project alignment, and the alignment is not within a State of California Special Studies Zone for earthquake faults. Accordingly, ground surface rupture due to active faulting is considered unlikely in the project area. However, lurching or cracking of the ground surface as a result of nearby or distant seismic events is a possibility.

A significant seismic event likely to affect the proposed alignment would be a major earthquake on the Hollywood fault which can generate a moment magnitude 6.5 earthquake (California Geological Survey [CGS], 1998). According to parameters provided in the 2001 California Building Code (CBC) (International Conference of Building Officials, 2001), the Hollywood fault is classified as a "B" seismic source type. The proposed alignment is within a CBC Near-Source Zone for active faults and is within CBC Seismic Zone 4.

Based on a Probabilistic Seismic Hazard Assessment for California, issued by the California Geological Survey (2003), the project site is located in a zone where the horizontal peak ground acceleration (HPGA) having a 10 percent probability of exceedance in 50 years for Soft Rock conditions is 0.52 (52 percent of the acceleration of gravity).

4.6. Liquefaction and Seismically Induced Settlement

Liquefaction of cohesionless soils can be caused by strong vibratory motion due to earthquakes. Research and historical data indicate that loose granular soils and non-plastic silts that are saturated by a relatively shallow groundwater table are susceptible to liquefaction.

Based on our review of the State of California Seismic Hazard Zones map for the Hollywood quadrangle, the proposed alignment is not located within an area with a historic occurrence of liquefaction or ground displacements. However, based on possible seismic accelerations, the potential for relatively shallow groundwater, and the potential for relatively loose, sandy alluvium underlying portions of the alignment, there is a potential for liquefaction and seismically induced settlement.

4.7. Tsunamis

Tsunamis are long wavelength seismic sea waves (long compared to the ocean depth) generated by sudden movements of the ocean bottom during submarine earthquakes, landslides, or volcanic activity. Based on the inland location of the site, the potential hazard of tsunamis is not considered a constraint to the project.

4.8. Landsliding

Landsliding at the site was not indicated during our field reconnaissance. In addition, our review of State of California Seismic Hazard Zones map for the Hollywood Quadrangle did not indicate the presence of previous landslide movement along the proposed alignment. Accordingly, the potential for significant large-scale slope instability at the site is not considered a constraint to the project.

4.9. Mineral Resources

Based on our review of reference data, the proposed site is in an area where no significant mineral deposits are present, or are considered likely to exist. Therefore the potential for loss of mineral deposits due to further development of the study area is considered low. In addition, due to the high urbanization along the alignment, soil erosion or loss of topsoil is not considered a constraint to the project.

5. CONCLUSIONS

Based on the results of our study for the Initial Study/Proposed Mitigated Negative Declaration of the First Street Trunk Line Project, it is our preliminary opinion that construction of the project outlined by the LADWP, is feasible from a geotechnical perspective. Based on our review of published geologic maps and aerial photographs, and our site reconnaissance, no active faults or landslides have been mapped, or were observed underlying the study area. Several major faults are present in the region north, east, and west of the proposed alignment, the closest of which is the Hollywood fault, located less than 3 miles to the north. Accordingly, the site has a relatively high potential for strong ground motions due to earthquakes on nearby active faults.

Due to possible areas with relatively high groundwater and relatively loose, sandy material, there is a slight potential for liquefaction and associated dynamic settlement along portions of the subject alignment.

We recommend that a comprehensive geotechnical evaluation, including project-specific subsurface exploration and laboratory testing, be conducted prior to design and construction of the proposed pipeline. The purpose of the subsurface evaluation would be to further evaluate the subsurface conditions and to provide site specific information pertaining to the engineering characteristics of earth materials and groundwater conditions along the proposed alignment. From these data, recommendations for grading/earthwork, pavement structural sections, and other pertinent geotechnical design considerations may be formulated.

5.1. Geologic and Geotechnical Constraints and Possible Mitigation Measures

In our opinion, the following geotechnical factors will need to be considered in the planning and implementation of the project.

- We recommend that a baseline geotechnical reconnaissance be performed at settlement sensitive structures, or structures that would be near to the proposed excavations, including the tunnel associated with the Metropolitan Transit Authority's Red Line subway where it crosses the proposed alignment. The purpose of the geotechnical reconnaissance would be to document the existing geotechnical conditions prior to, during, and after, construction activities. Such an evaluation may include manometer surveys, crack measurements, and photographic/video documentation. If significant

movement is observed, construction activities should stop until the movement has been evaluated and mitigated.

- Highly expansive soils, gravel, and/or oversize materials may be encountered during trenching activities. These materials, if encountered, may be difficult to excavate and may not be suitable for reuse as fill material.

- Groundwater depths below the proposed ground surface are likely to fluctuate due to topography, seasonal variations, nearby dewatering, etc. Therefore, some dewatering may be anticipated during construction along portions of the alignment.

- Liquefiable soils may be present on portions of the alignment. Their presence (or absence) can be evaluated through subsurface exploration (e.g. drilling) and laboratory testing.

- The project has a potential for strong ground motions as a result of nearby earthquakes. Accordingly, the potential for relatively strong seismic accelerations will need to be considered in the design of proposed improvements.

6. LIMITATIONS

The field evaluation and geotechnical analyses presented in this report have been conducted in accordance with current engineering practice and the standard of care exercised by reputable geotechnical consultants performing similar tasks in this area. No warranty, implied or expressed, is made regarding the conclusions, recommendations, and professional opinions expressed in this report. Variations may exist and conditions not observed or described in this report may be encountered. Our preliminary conclusions and recommendations are based on an analysis of the observed conditions and the referenced background information.

The purpose of this study was to evaluate geologic and geotechnical conditions within the project site and to provide a geotechnical reconnaissance report to assist in the preparation of environmental impact documents for the project. A comprehensive geotechnical evaluation, including subsurface exploration and laboratory testing, should be performed prior to design and construction of structural improvements.

7. SELECTED REFERENCES

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REFERENCE: 2005 THOMAS GUIDE FOR LOS ANGELES AND ORANGE COUNTIES, STREET GUIDE AND DIRECTORY.

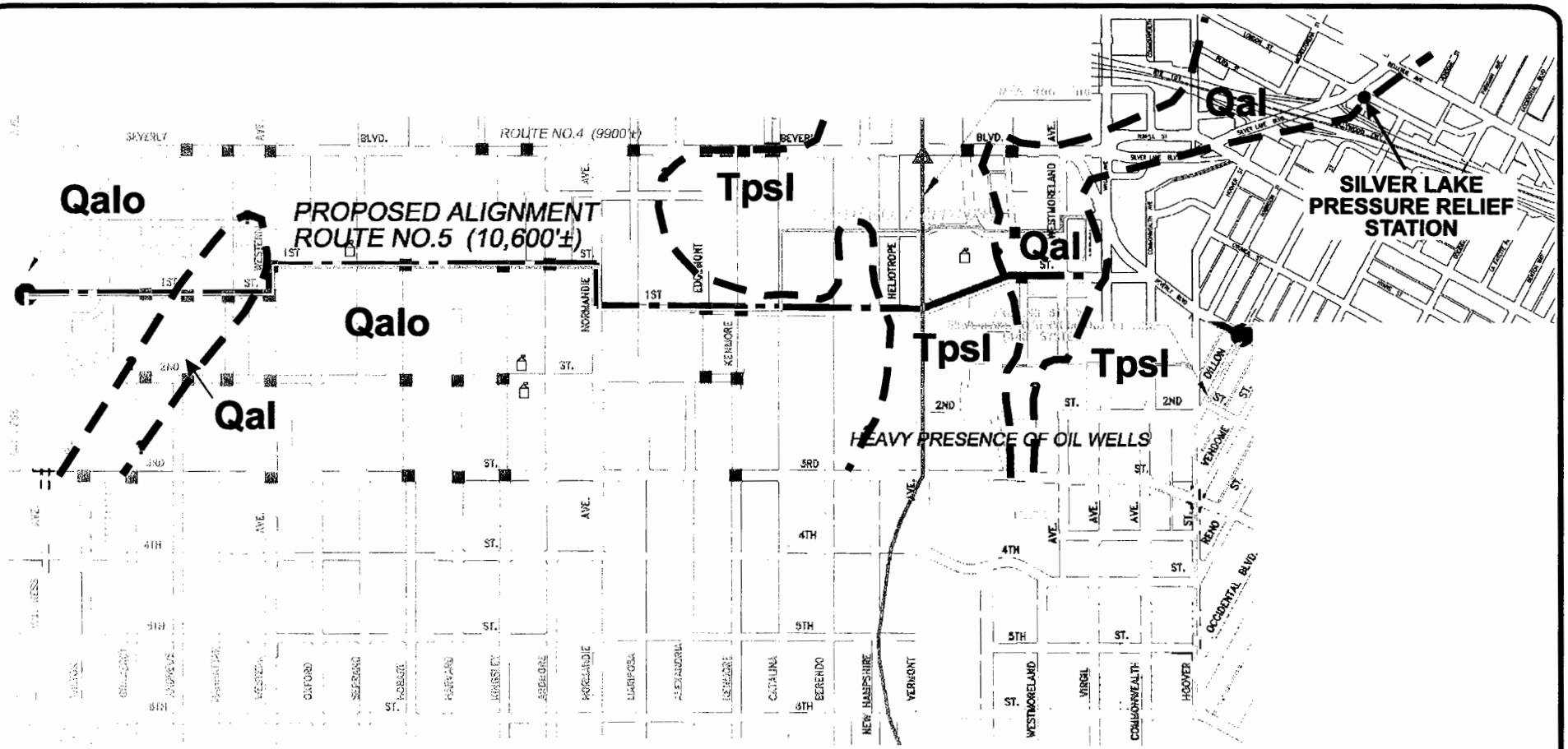
105284002 slm Fig 1

Ninyo & Moore

SITE LOCATION MAP

FIRST STREET TRUNK LINE PROJECT
LOS ANGELES, CALIFORNIA

PROJECT NO.	DATE	FIGURE
105284002	9/05	1



LEGEND

Qal	Alluvium	?	Approximate location of geologic contact
Qalo	Older Alluvium		
Tpsl	Puente Formation		

- N.T.A. STATION
- SCHOOLS
- STORM DRAIN CROSSING
- M.T.A. TUNNEL

N

Not to Scale

Ninyo & Moore

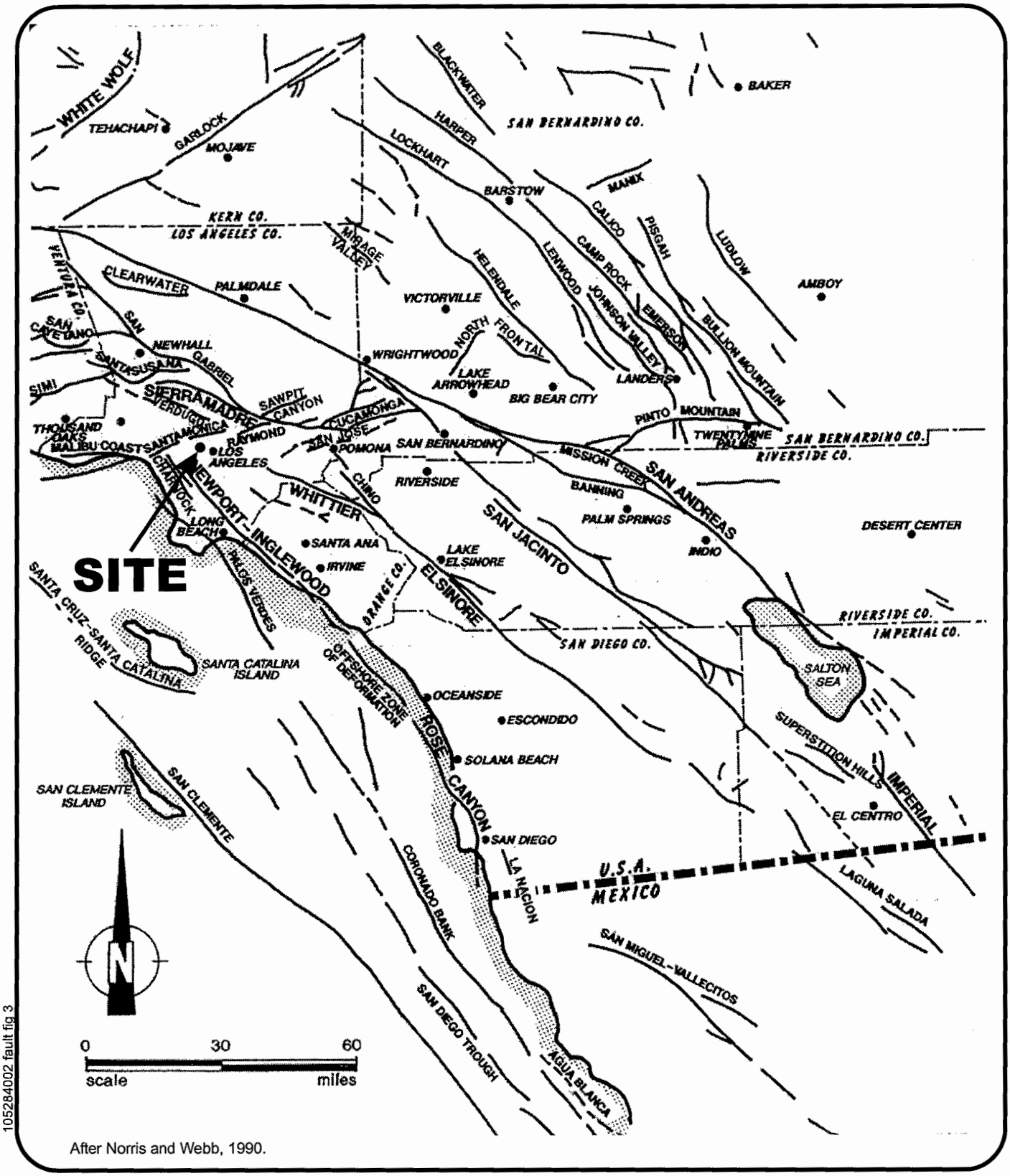
GEOTECHNICAL MAP

FIRST STREET TRUNK LINE PROJECT
LOS ANGELES, CALIFORNIA

PROJECT NO.	DATE	FIGURE
105284002	9/05	2

REFERENCE: LOS ANGELES DEPARTMENT OF WATER & POWER, FIRST STREET TRUNK LINE, PROPOSED ALIGNMENT, DATED MARCH 2004

105284002 geo Fig 2



After Norris and Webb, 1990.

105284002 fault fig 3

Ninyo & Moore

FAULT LOCATION MAP

FIRST STREET TRUNK LINE PROJECT
LOS ANGELES, CALIFORNIA

PROJECT NO.	DATE	FIGURE
105284002	9/05	3

APPENDIX F
Traffic Memorandum

Katz, Okitsu & Associates
Planning and Engineering

MEMORANDUM

To: Lainie Herrera
Environmental Analyst
EDAW, Inc.

From: Joel Falter
Katz, Okitsu & Associates

Date: September 7, 2005

JA4988

Subject: **First Street Trunk Line Project, Los Angeles, California**
Traffic Impact Assessment

MEMORANDUM PURPOSE

This memorandum is intended to service as the traffic analysis for the proposed construction activities associated with the First Street Trunk Line Project. Analysis of conditions after the completion of the project was not deemed necessary since the pipeline will not reduce roadway capacity in any way.

The traffic impact assessment of construction conditions provided in this report was developed in consultation with the Los Angeles Department of Transportation (LADOT). LADOT did not feel that a standard traffic study, based on LADOT guidelines, was required for the construction activities since the construction activities would occur in twenty-two (22) separate construction zones, with each construction in each zone occurring over a relatively short period of time (several weeks to several months). Instead, LADOT requested that the traffic assessment describe the project area, define the proposed construction zones, identify the construction "footprint" in each construction zone and provide LADOT's preliminary recommendation regarding the roadways lanes that should be designated to remain open during construction.

INTRODUCTION

The Los Angeles Department of Water and Power (LADWP) is proposing to construct approximately 11,000 linear feet (about two miles) of 60-inch diameter concrete-lined welded steel potable water pipeline along existing street rights-of way. The proposed project would include the construction of appurtenant structures such as maintenance/access holes, flow meters, valves, cabinets, vaults, and a regulator station.

PROJECT LOCATION

The proposed pipeline would be located within paved city streets passing through highly urbanized residential, commercial and industrial areas in central Los Angeles.

The linear alignment of the proposed project, beginning at the western end, is as follows:

- First Street from Van Ness Avenue (Hollywood Reservoir Outlet Line) east to Western Avenue;
- Western Avenue from First Street north to First Street;
- First Street from Western Avenue east to Normandie Avenue;
- Normandie Avenue from First Street south to First Street again;
- First Street from Normandie Avenue east to Beverly Boulevard/Commonwealth Avenue;
- Beverly Boulevard from First Street southeast to Dillon Street (Silverlake Reservoir Outlet Line).

The project will also construct a pressure relief station along the south side of London Street just north of the Hollywood Freeway and just southeast of Silver Lake Boulevard.

GENERAL SETTING

The proposed project would be located within an urbanized area in the City of Los Angeles. Land use in the vicinity of the proposed pipeline is predominantly single and multifamily residential with some small-scale commercial uses. Public facilities, including schools, a day care center and churches, occur intermittently along the approximate two-mile project alignment. The proposed alignment passes over the Los Angeles County Metropolitan Transportation Authority's Red Line subway tunnel. A portion of the proposed linear alignment lies within the Windsor Square Historic Preservation Overlay Zone, and a portion would pass through an area included within the Vermont/Western Transit Oriented Development Specific Plan Area. In addition to residential and commercial uses, public and private facilities that exist within a ¼ mile radius of the proposed alignment include additional schools, day care centers, churches, a nursing home, a small park, a recreation center, a library and a post office.

PROJECT DESCRIPTION

The proposed project would involve the construction of approximately 11,000 linear feet (about 2 miles) of 60-inch diameter concrete-lined welded steel pipeline. Construction of the proposed project would occur along existing street rights-of-way primarily using an open-trench construction method, but a jacking construction method would be used at three two busy intersections:, namely (1) First Street/Western Avenue, (2) at First Street/Vermont Avenue and (3) at First Street/Beverly Boulevard/Commonwealth Avenue, as well as at three additional location to accommodate existing utilities located under the street: near First Street/Manhattan Avenue, at First Street/Madison Street, and at Beverly Boulevard/Hoover Street, where the pipeline would need to be installed beneath two existing ten-foot diameter sewage pipes. The proposed project would also include the construction of appurtenant structures, such as maintenance/access holes, flow meters, vents, valves, cabinets, vaults and a regulator station, and a pressure relief station. Specifically, an underground regulator station, the Beverly/Robinson regulator station, would be constructed near Beverly Boulevard/Robinson Street, and an underground pressure relief station, the Silver Lake pressure relief station, would be constructed near Dillon Street/London Street. Four additional underground vault locations are proposed along

the project alignment: near First Street/Van Ness Avenue (for isolation valves), near First Street/Normandie Avenue (for isolation valves), and at two locations near Beverly Boulevard/Dillon Street (for a flow meter and for valves). An above ground cabinet, measuring approximately 1 foot by 3 feet and 5 feet tall, will also be installed within the sidewalk right-of-way near each underground vault. An underground pressure regulator station, measuring approximately 18 feet by 22 feet and 15 feet deep, would be installed near the east end of the alignment at Beverly Boulevard/Dillon Street.

Greater system flexibility and reliability would be achieved through the proposed project by the connection of two previously unconnected trunk lines, the Hollywood Reservoir Outlet Line and the Silver Lake Outlet Line, within the LADWP system. Under emergency conditions, the shallow grade of the proposed pipeline will allow for water flow in the east/west or the west/east directions depending on system pressures. This bi-directional option will increase system reliability in the Hollywood area and allow for emergency back up supply and supplemental source to the Hollywood and Elysian Reservoir systems.

CONSTRUCTION METHODS

Construction of the proposed project would generally occur within delineated work areas Monday through Friday from 7:00 a.m. and 6:00 p.m. and Saturday from 8:00 a.m. and 6:00 p.m. Any construction in areas within existing street rights-of-way not within delineated work areas would occur Monday through Saturday from 9:00 a.m. through 3:30 p.m.. Delineated work areas are work areas within the street right-of way which have been temporarily striped to exclude traffic during the duration (usually several weeks to a couple of months) of the construction operation within a particular area. The construction would proceed primarily using an open-trench construction method, but, where necessary, some portions of the pipeline would be installed using a jacking method. In sequence, the general process for both methods consists of site preparation, excavation and shoring, pipe (and/or appurtenant structure) installation, backfilling if necessary, and street restoration. Both construction methods would require an off-site staging area(s) to temporarily store supplies and materials. The site of the staging area(s) is still to be determined.

Open-Trench

An open-trench construction method is typically utilized to install pipelines and their appurtenant structures, including maintenance/access holes, flow meters, valves, cabinets, vaults and regulator stations. In general, the process consists of site preparation, excavation and shoring, pipe installation and backfilling and street restoration. Construction usually progresses along the alignment with a maximum length of open trench at one time being approximately 500 feet in length with a work area of no more than 2,000 linear feet. The following is a description of the phases of construction for open-trench excavation:

Site Preparation

Traffic control plans would be prepared in coordination with the Los Angeles Department of Transportation to detour and delineate the traffic lanes around the work area. The existing pavement along the pipeline alignment would be cut with a concrete saw or otherwise broken and removed using jackhammers, pavement breakers, loaders, or other similar equipment. The pavement would be removed from the project site and recycled or disposed of at an appropriate facility.

Excavation and Shoring

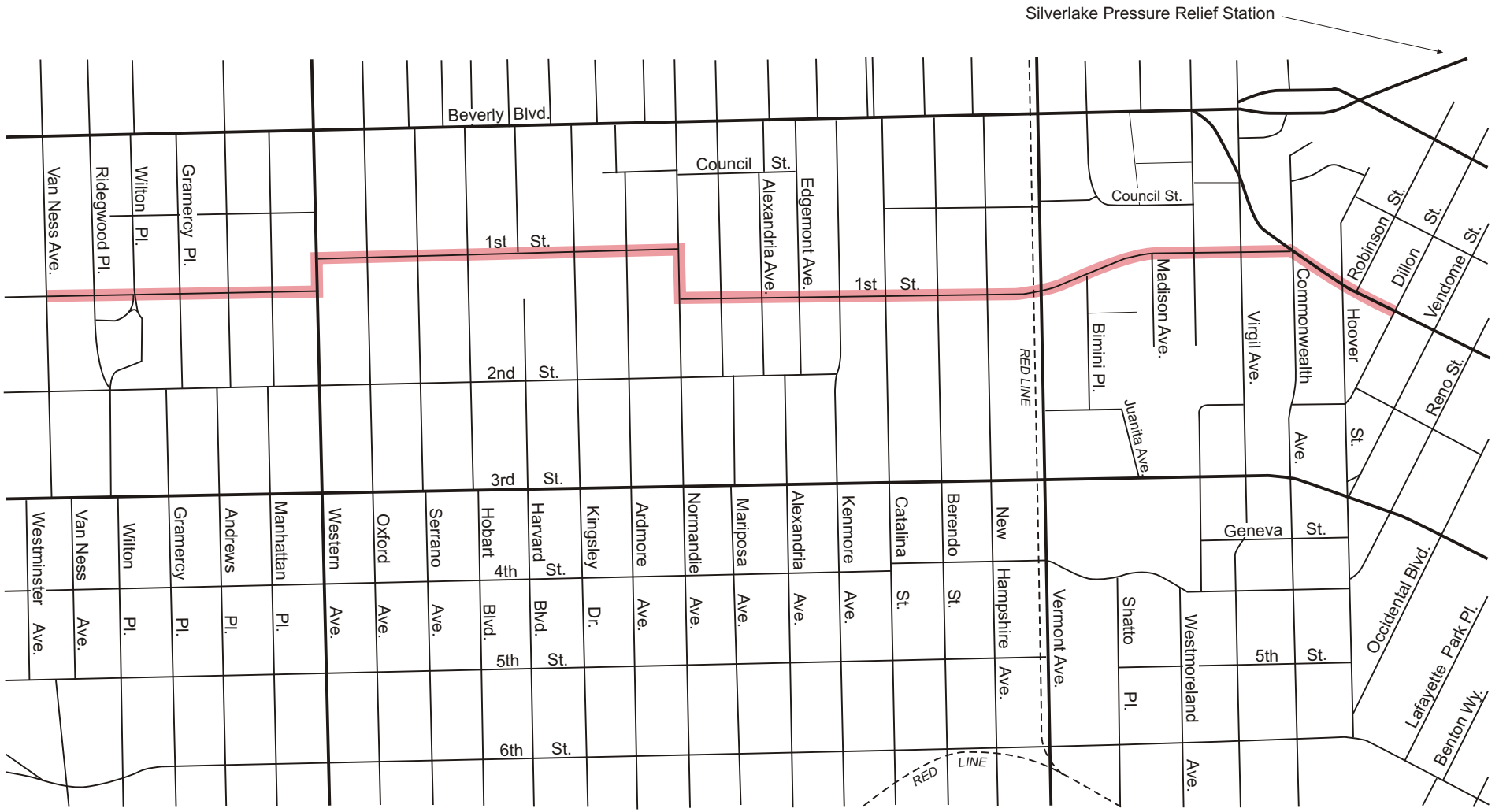
A trench would be excavated along the alignment using backhoes, excavators, or other types of excavation equipment. Portions of the trench adjacent to some utilities could be manually excavated. The excavated soil would be temporarily stored in single rows adjacent to the trenches, stored at off-site staging areas, or immediately hauled away off-site to an approved disposal facility.

The size of the trench for the proposed 60-inch diameter pipeline would be approximately 8 feet wide. In addition, depending on the depth of adjacent substructures along the alignment, the depth of the trench would range from approximately 10 feet to 30 feet below the ground surface**.** As the trench is excavated, the trench walls would be supported, or shored, typically with hydraulic jacks or trench boxes. Steel or wood sheeting between H-beams (e.g., beam and plate) or other similar shoring methods may also be used. Utilities not relocated prior to trenching would be supported in place as excavation and shoring occurs.

If construction is to occur in an area of high groundwater, the groundwater would be removed during trench excavation, typically by being pumped through a hose. The extracted groundwater would be treated for any contaminants, if present, as required before being discharged to the storm drain system under permit issued by the Regional Water Quality Control Board.

Pipe Installation and Backfilling

Once a trench has been excavated and shored, pipe laying would begin. Bedding material, such as sand or slurry, would be placed in the bottom of the trench. Pipe segments would be lowered into the trench and placed on the bedding. The segments would be welded to one another at the joints. The amount of pipe installed in a single day would vary, but is expected to range from 40 to 120 feet per day. Prior to backfilling, appurtenant structures would be installed as necessitated by design. After laying the pipe and welding the joints, the trench would be immediately backfilled with native soils, crushed miscellaneous base, or cement slurry. The maximum trench length left unbackfilled at any time is either 500 feet of trench or the amount of trench that can be completed in one day, which ever is greater.



LEGEND

First Street Trunk Line Alignment

Note: The Project will also include the construction of a pressure relief station on the south side of London Street, just north of the Hollywood Freeway and just southeast of Silver Lake Boulevard.

Katz, Okitsu & Associates
Planning & Engineering

First Street Trunk Line Project - Traffic Study

Figure 1

Location of Project

Street Restoration

Any portion of the roadway damaged as a result of proposed construction activities would be repaved and restored in accordance with all applicable City of Los Angeles Department of Public Works standards. Once the pavement has been restored, traffic delineation (lane striping) would also be restored. Typically, an intersection would be affected by open-trench construction for approximately two weeks, but connection points at Van Ness Avenue/First Street and Dillon Street/Beverly Boulevard may take three weeks.

Jacking

A jacking construction method, which utilizes pipe-jacking, a form of tunneling, would be used to avoid traffic disruptions to heavily traveled intersections (at First Street/Vermont Avenue and at First Street/Beverly Boulevard/ Commonwealth Avenue) or to avoid substructure utilities (near First Street/ Manhattan Avenue, at First Street/Madison Avenue and at Beverly Boulevard/Hoover Street). Pipe-jacking is an operation in which the soil ahead of a steel casing is excavated and brought out through the casing barrel while the casing is simultaneously being pushed forward by a horizontal hydraulic jack placed at the rear of the casing. Once the casing is in place underground, pipe is installed within the casing. Jacking and receiving pits are located at either end of a pipe-jacking operation to accommodate equipment operation and soil removal.

Although installation of pipeline using this method avoids the continuous surface disruption common to open-trench construction, some surface disruption would be unavoidable as jacking and receiving pits located in street rights-of-way, with an average size of 12 by 40 feet and 12 by 15 feet respectively, would be necessary. The following is a description of the phases of construction for jacking:

Site Preparation

Traffic control plans would be prepared in coordination with the Los Angeles Department of Transportation to detour and delineate the traffic lanes around the work area and then implemented. In preparation to construct the jacking and receiving pits, the pavement would be cut using a concrete saw or pavement breaker. As with open-trench excavation, the pavement would be removed from the project site and recycled, reused as a backfill material, or disposed of at an appropriate facility.

Excavation and Shoring

A jacking pit and a receiving pit would be used for each jacking location, one at each end of the jacked pipe segment at either side of the intersecting street. The distance between the pits typically ranges from 200 to 300 feet, but could be longer or shorter depending on site conditions.

For the proposed project, the size of jacking pits would be approximately 12 by 40 feet with an average depth of 30 feet, and the size of receiving pits would be approximately 12 by 15 feet also with an average depth of 30 feet. The pits would be excavated with backhoes, cranes, and/or other excavation equipment. The excavated soil would be immediately hauled away. As excavation occurs, the pits would be shored utilizing a beam and plate shoring system.

Pipe Installation

Once the pits are constructed and shored, a horizontal hydraulic jack would be placed at the bottom of the jacking pit. A 72-inch diameter steel casing would be lowered into the pit with a crane and placed on the jack. A simple cutting shield would be placed in front of the pipe segment to cut through the soil more easily. As the jack pushes the steel casing and cutting shield into the soil, soil would be removed from within the leading casing with an auger or boring machine, either by hand or on a conveyor. Once the casing segment has been pushed into the soil, a new segment would be lowered, set in place, and attached to the casing that has been previously pushed. Installation of the 72-inch diameter steel casing would be expected to progress at approximately 20 feet per day. Once the casing has been installed, the 60-inch diameter carrier pipe would be lowered and placed on the jacks, which would then push the pipe into the steel casing. Installation of the carrier pipe would be expected to progress at approximately 40 feet per day.

Site Restoration

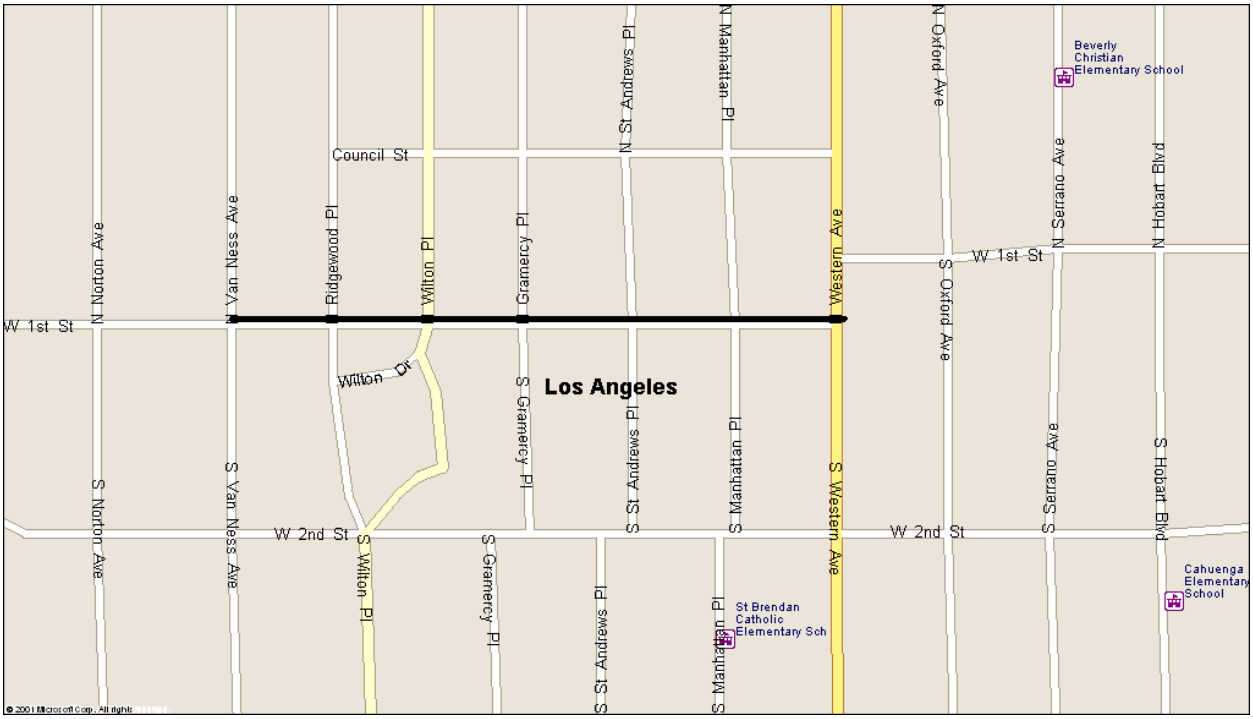
After completion of the pipe installation along the jacking location, the shoring system would be disassembled as the pits are backfilled, the soil compacted and the pavement above replaced. Any portion of the roadway damaged as a result of proposed construction activities would be repaved and restored in accordance with all applicable City of Los Angeles Department of Public Works standards. Once the pavement has been restored, traffic delineation (lane striping) would also be restored. Typically, an intersection would be affected by jacking construction for a total of approximately three months.

CONSTRUCTION SCHEDULE

If approved, the construction of the proposed project is anticipated to commence on or about June 2006 and take approximately 16 months to complete.

DESCRIPTION OF PROPOSED CONSTRUCTION ROUTE

Segment 1 - First Street from Van Ness Avenue (Hollywood Reservoir Outlet Line) east to Western Avenue



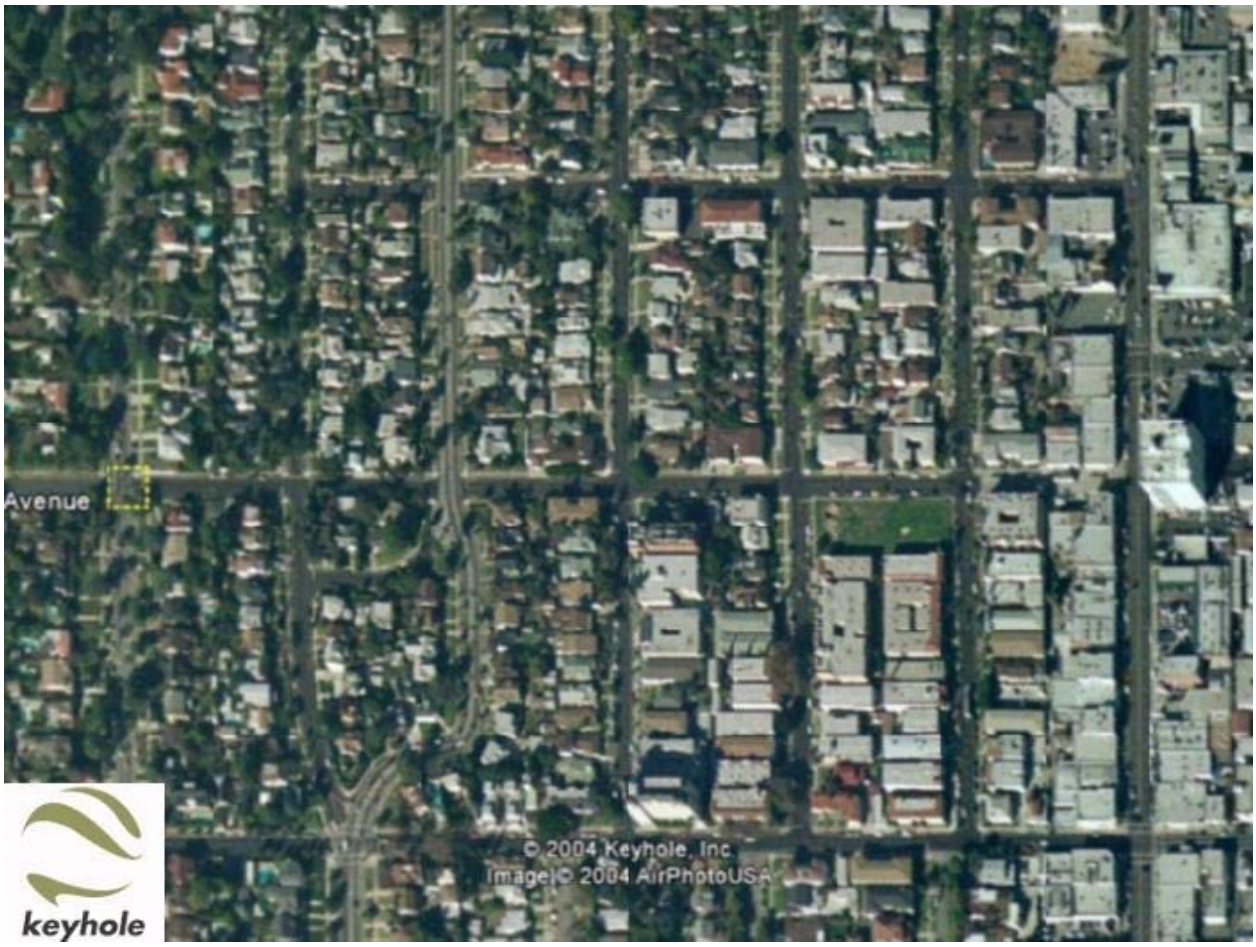

Avenue
keyhole
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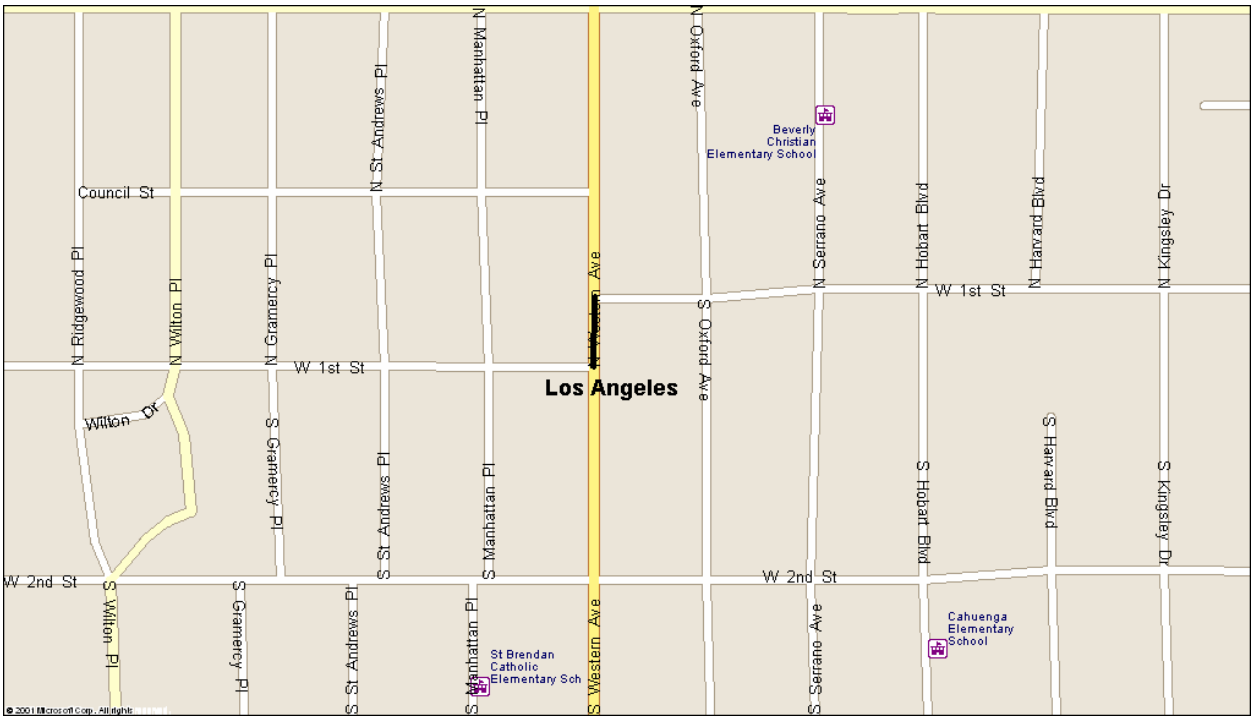
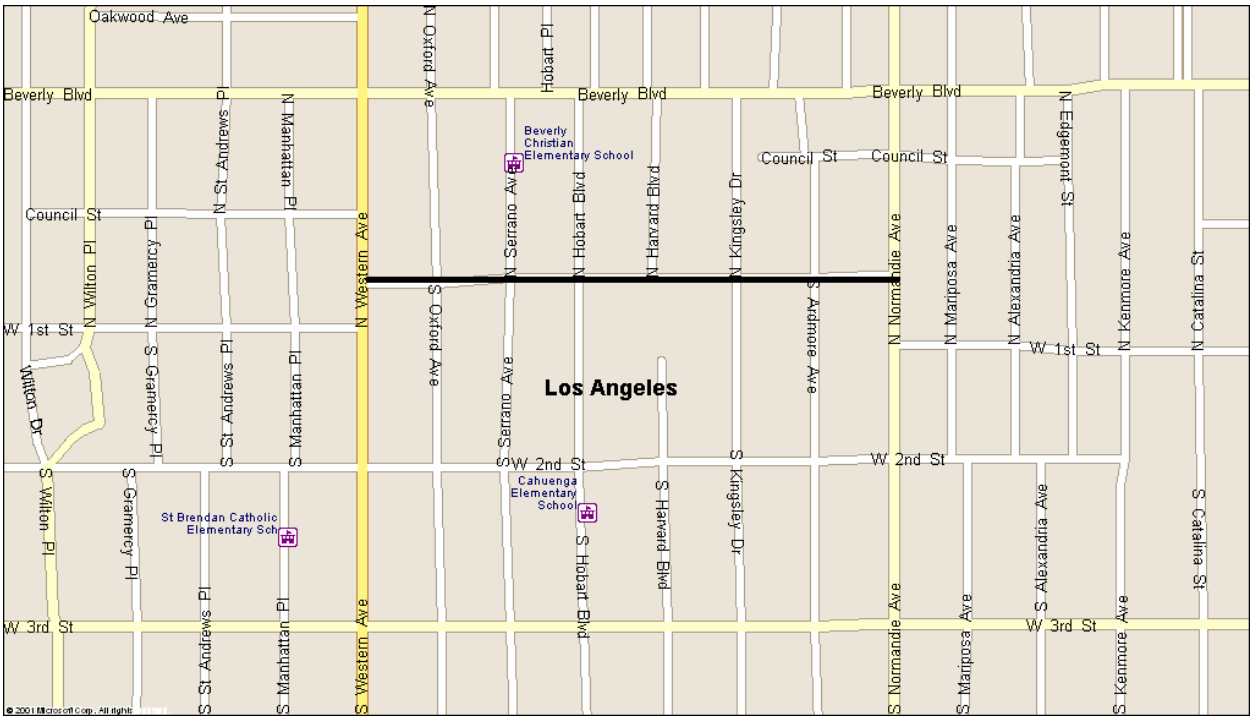
Image © 2004 AirPhotoUSA

Segment 2 - Western Avenue from First Street north to First Street



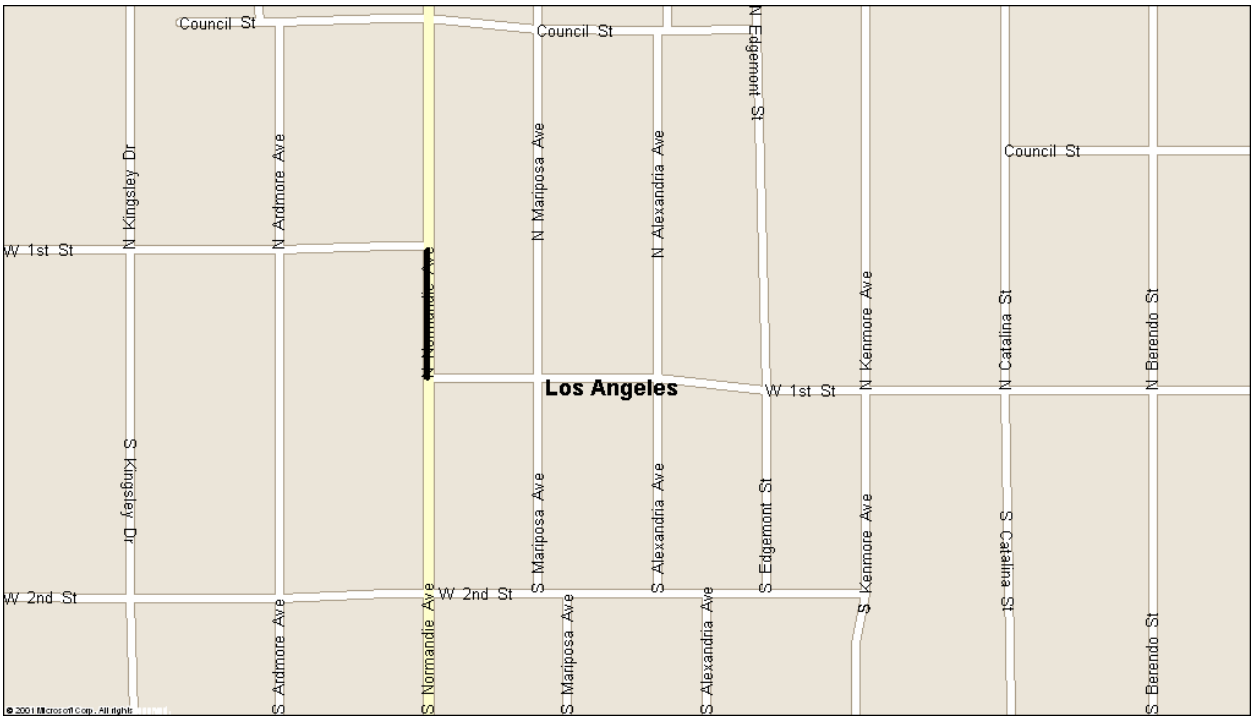

keyhole
©2004 Keyhole, Inc.
Image © 2004 AirPhotoUSA

Segment 3 - First Street from Western Avenue east to Normandie Avenue




Beverly Blvd
N Normandie Ave
Council St
N Kingsley Dr
N Ardmore Ave
N Serrano Ave
W 1ST St
keyhole
©2004 Keyhole, Inc.
Image ©2004 AirPhotoUSA

Segment 4 - Normandie Avenue from First Street south to First Street




W 1ST St
N Alexandria Ave
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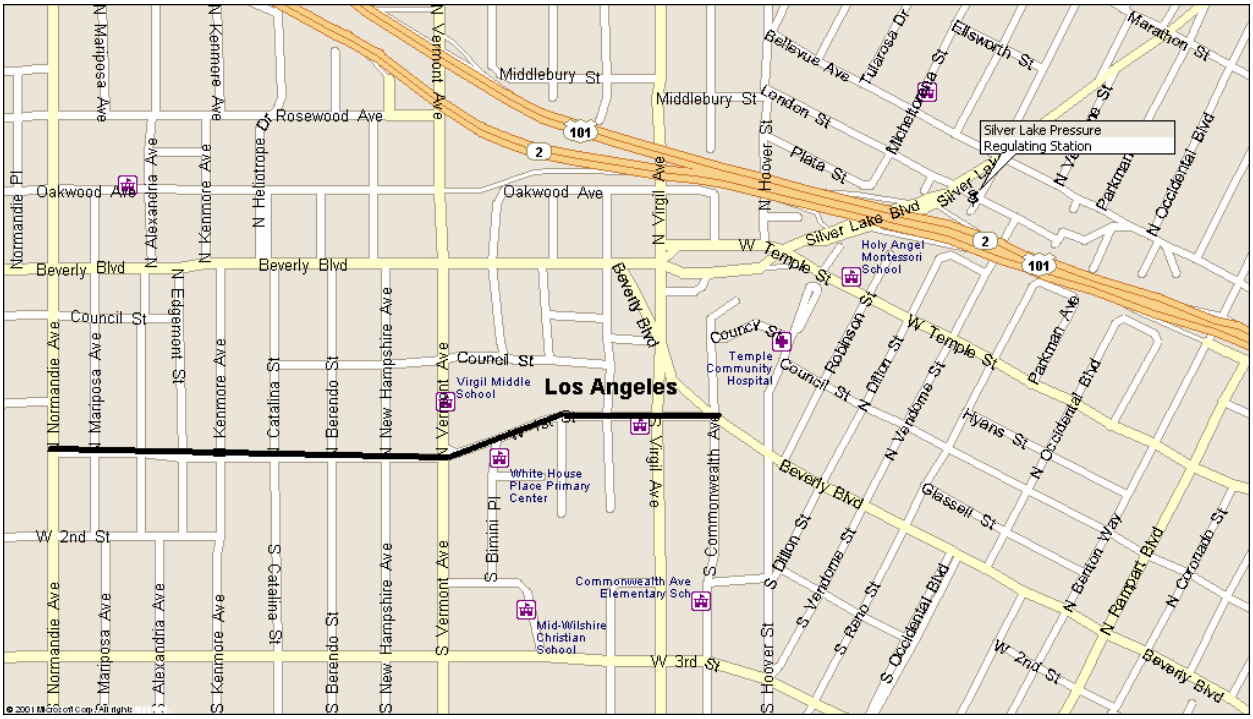
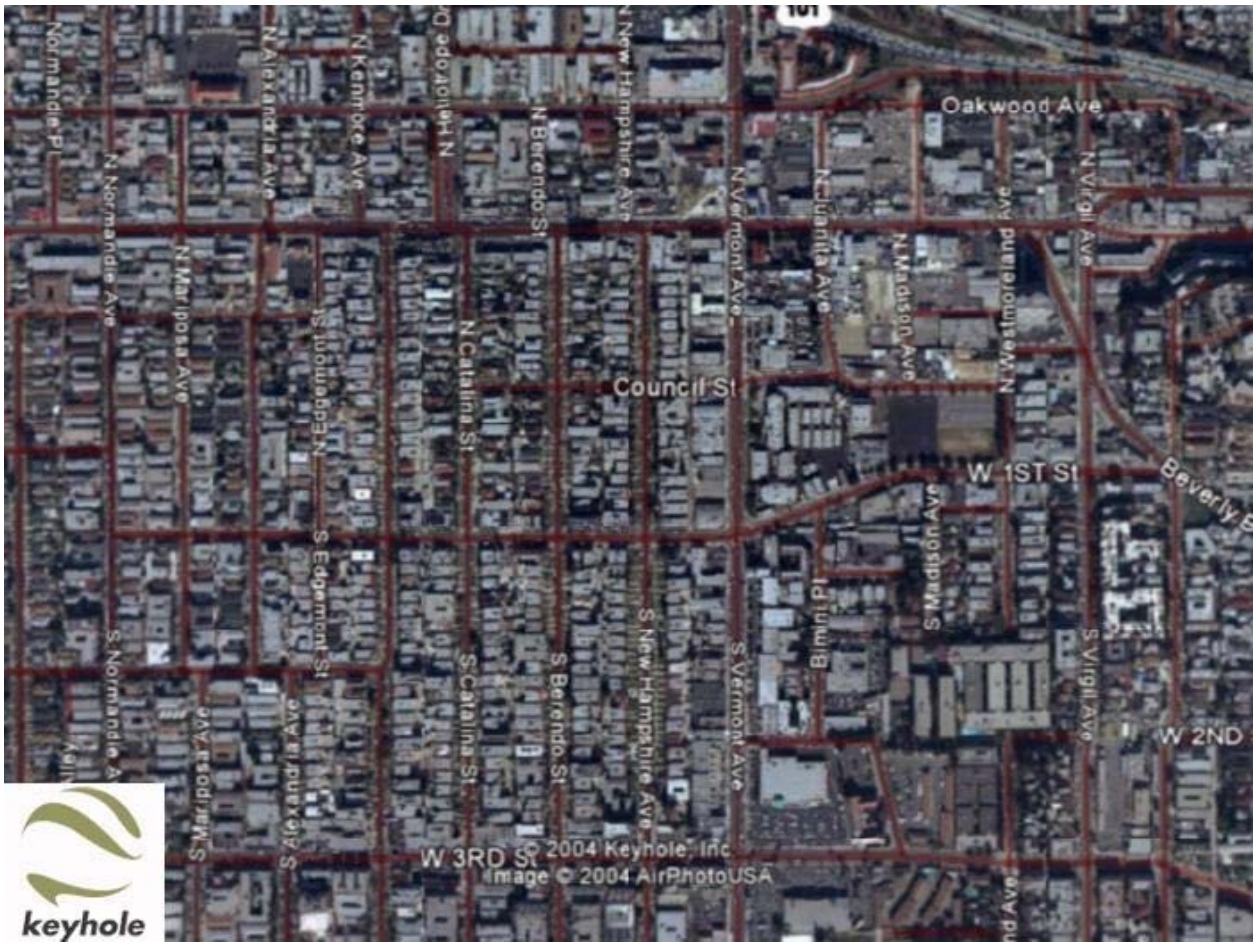
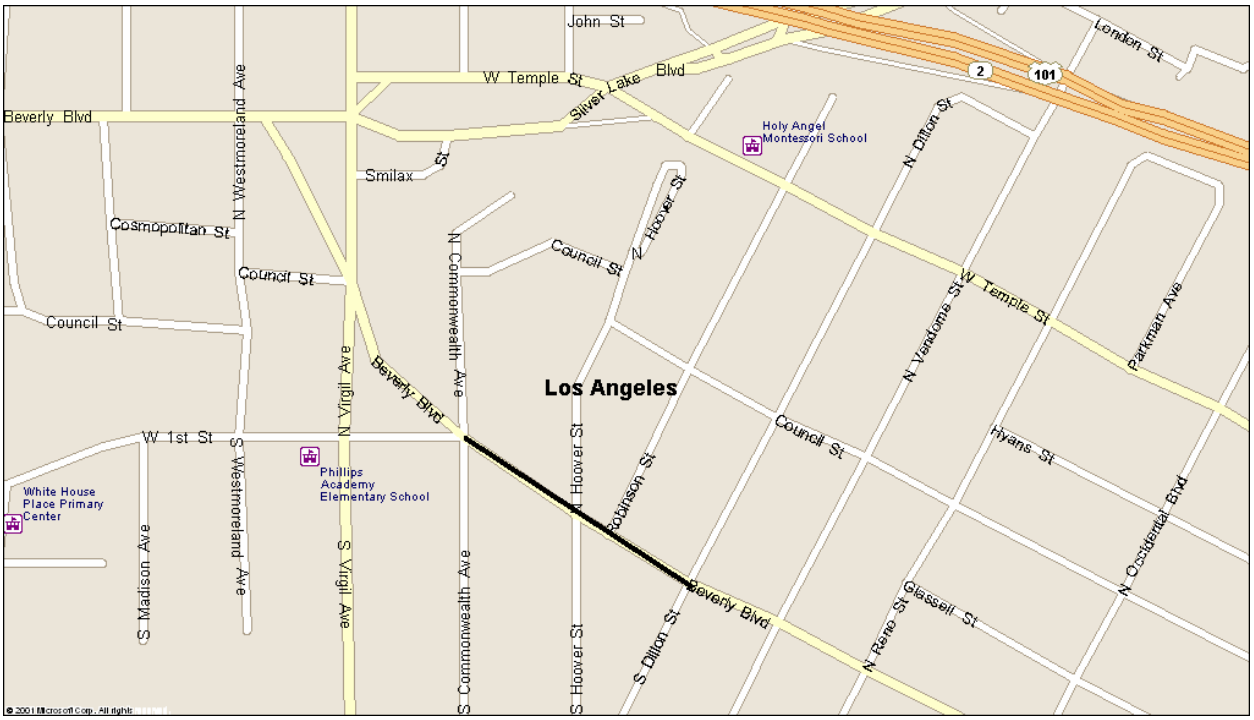
Segment 5 - First Street from Normandie Avenue east to Beverly Boulevard/Commonwealth Avenue




Oakwood Ave
Council St
W 1ST St
W 2ND
W 3RD St
N Normandie Ave
N Mariposa Ave
N Catalina St
N Berendo St
N New Hampshire Ave
N Vermont Ave
N Madison Ave
N Westmoreland Ave
N Virgil Ave
S Normandie Ave
S Mariposa Ave
S Catalina St
S Berendo St
S New Hampshire Ave
S Vermont Ave
S Virgil Ave
© 2004 Keyhole, Inc
Image © 2004 AirPhotoUSA
keyhole

Segment 6 - Beverly Boulevard from First Street southeast to Dillon Street (Silverlake Reservoir Outlet Line)




Beverly Blvd
Alley
S Dillon St
© 2004 Keyhole, Inc
Image © 2004 AirPhotoUSA
keyhole

CONSTRUCTION WORK AREAS

Work Area No. 1 – East side of Van Ness Avenue at First Street

Construction activity in this work area will take 3 weeks to complete to allow for the connection to existing pipelines. A partial road closure will be in place at all times. A detour plan will be developed to enhance traffic flow in the area. Construction activity in this work area will run concurrent with work area 21.

Work Area No. 2 – First Street between Van Ness Avenue and just west of Ridgewood Place

Construction will begin in this work area first to provide connections to existing pipelines. There will be a full closure in this work area with local access only. All driveways will be bridged.

Work Area No. 3 – First Street from just west of Ridgewood Place to just west of Gramercy Place

There will be a full closure in this work area with local access only. All driveways will be bridged.

Work Area No. 4 – First Street from just west of Gramercy Place to west of Manhattan Place

There will be a full closure in this work area with local access only. All driveways will be bridged.

Work Area No. 5 – First Street from west of Manhattan Place to west of Western Avenue

There will be a full closure in this work area with local access only. All driveways will be bridged.

Work Area No. 6 – First Street at Western Avenue and Western Avenue between First Street west of Western Avenue and First Street east of Western Avenue

Activity in this work area will require extensive construction activity, as the pipeline must dive under a north-south running storm line. Activity in this work area will run concurrent with work area number 7. LADOT staff has determined that one lane must be open at all times. The construction program will require 56 feet of roadway width. There will only be 14 feet of roadway width, total available for through traffic. Based on a review of traffic in the Western Avenue corridor, a northbound travel lane will be maintained. A temporary traffic signal modification plan will be required at the intersection of First Street and Western Avenue. Detour plans will be required and signage established at Beverly Boulevard and at Third Street.

Work Area No. 7 – Western Avenue north of First Street east of Western Avenue

Activity in this work area will require extensive construction activity, as the pipeline must dive under a north-south running storm line. Activity in this work area will run concurrent with work area number 6. LADOT staff has determined that one lane must be open at all times. The construction program will require 56 feet of roadway width. There will only be 14 feet of roadway width, total available for through traffic. Based on a review of traffic in the Western

Avenue corridor, a northbound travel lane will be maintained. A temporary traffic signal modification plan will be required at the intersection of First Street and Western Avenue. Detour plans will be required and signage established at Beverly Boulevard and at Third Street.

Work Area No. 8 – First Street from Western Avenue to west of Serrano Avenue

Work in Area No. 8 will require a full street closure with local access only. All driveways will be bridged.

Work Area No. 9 – First Street from west of Serrano Avenue to Normandie Avenue

There is a vault east of the major work area with only 9 to 10 feet available on the south side of the street. Construction in this area will require use of the entire roadway width. LADOT is requiring that at least on north-south intersecting street remain open at all times to provide for local circulation. In addition, LADOT is requiring the remaining closures be subject to a maximum period for all work.

There is a school on Hobart south of First Street. As such the preparation of a safe route to school plan for review and approval for the construction period will be required.

Work Area No. 10 – Normandie Avenue from First Street (north) to First Street (south)

Plans for this work area have not been finalized. LADWP is considering that it is possible that work in this area will require a full street closure. Detour plans will be required and signage established at Beverly Boulevard and at Third Street.

Work Area No. 11 – First Street from Normandie Avenue to west of Catalina Street

This work area will require a full roadway closure. LADOT is requiring that at least on north-south intersecting street remain open at all times to provide for local circulation. In addition, LADOT is requiring the remaining closures be subject to a maximum period for all work.

Work Area No. 12 – First Street from west of Catalina Street to midway between Hampshire Avenue and Vermont Avenue

Construction activity in this area may require a full street closure. LADWP will check to see if it is possible that a lane will be available on the north side of the street for either westbound or eastbound flow. Local property access will be maintained LADOT will require at least one north-south roadway be open at all times and the remaining closures be subject to a maximum period for all work.

Work Area No. 13 – First Street from midway between Hampshire Avenue and Vermont Avenue to midway between Vermont Avenue and Bimini Place

There will be heavy truck activity at this location because there will be a receiving pit on the west side of Vermont Avenue. LADWP may be able to provide one eastbound or one westbound lane. Detour plans will be required and signage established at Beverly Boulevard and at Third Street.

Work Area No. 14 – First Street between midway between Vermont Avenue and Bimini Place west of Madison Avenue

It may be possible to maintain one or two travel lanes (total) in this work area. Local property access will be maintained LADOT will require at least one north-south roadway be open at all times and the remaining closures be subject to a maximum period for all work.

Work Area No. 15 – First Street from just west of Madison Avenue to just west of Westmoreland Avenue

Construction activity in this area may require a full street closure. LADWP will check to see if it is possible that a lane will be available on the south side of the street for either westbound or eastbound flow. Local property access will be maintained LADOT will require at least one north-south roadway be open at all times and the remaining closures be subject to a maximum period for all work.

Work Area No. 16 – First Street from west of Westmoreland Avenue to west of Commonwealth Avenue

It will be possible to maintain one eastbound and one westbound lane on First Street. It is recommended that traffic flow one way eastbound between Virgil and Beverly/Commonwealth due to the complexity of traffic operations at these intersections. Virgil Avenue will have one lane open in each direction at all times.

Work Area No. 17 – First Street at Beverly Boulevard/Commonwealth Avenue

It may be possible to maintain one lane from Virgil Avenue to Commonwealth Avenue. It is recommended that traffic flow one way eastbound between Virgil and Beverly/Commonwealth due to the complexity of traffic operations at these intersections.

Work Area No. 18 – Beverly Boulevard from just east of Commonwealth Avenue and Robinson Street

LADWP would like a full closure of this work area. However, this would result in significant areawide traffic congestion. LADOT would like to see at least one lane be maintained in each direction at all times. Areawide detour plans and signage will have to be developed for this closure.

Work Area No. 19 – Beverly Boulevard just west of Robinson Avenue

Due to the narrowness of the right-of-way, there will only be about nineteen feet available after the pit is established. As such, it may not be possible to provide more than one lane in each direction. LADOT is requesting LADWP revisit their construction plans to see if a minimum of one lane in each direction can be provided at all times.

Work Area 20 – Beverly Boulevard from east of Robinson Street to Dillon Street

Due to the narrowness of the right-of-way, there will only be about nineteen feet available after the pit is established. As such, it may not be possible to provide more than one lane in each direction. LADOT is requesting LADWP revisit their construction plans to see if a minimum of one lane in each direction can be provided at all times.

Work Area No. 21 – Beverly Boulevard at Dillon Street

Construction activity in this work area will take 3 weeks to complete to allow for the connection to existing pipelines. A partial road closure will be in place at all times. A detour plan will be developed to enhance traffic flow in the area. Construction activity in this work area will run concurrent with work area 20.

Work Area No. 22 – Silver Lake Pressure Relief Station

The relief station will be located along the south side of London Street, just north of the Hollywood Freeway and just southeast of Silver Lake Boulevard. Construction will require the complete closure of London Street for up to four months. Construction in Work Area 23 will occur simultaneously with work in a maximum of one other work area only, with that work area to be determined. A detour plan will be developed to enhance traffic flow in the area and to provide local access.

CEQA CHECKLIST QUESTION RESPONSES

The following section of this memorandum is intended to respond to the standard California Environmental Quality Act (CEQA).

Would the project:

A. Cause an increase in traffic which is substantial in relation to the existing traffic load and capacity of the street system (i.e., result a substantial increase in either the number of vehicle trips, the volume to capacity ratio on roads, or congestion at intersections)?

Response: The project construction activities will for brief periods of time result in increased traffic from construction activities and reduced roadway capacities. This will occur for several weeks to several months at each of the twenty-two (22) defined work areas. The increased traffic and reduced roadway capacities will be temporary and traffic conditions would go back to normal after the sixteen (16) month construction period.

LADOT is requesting that the project proponent prepared worksite traffic control and detour plans to best mitigate traffic impacts during construction activities. However, it would be anticipated that project impacts would be significant during various construction phases, albeit for relatively short time periods (several weeks to several months) at some or all of the twenty-two (22) defined work areas.

B. Exceed, either individually or cumulatively, a level-of-service threshold established by the county congestion management agency for designated roadways or highways?

Response: The project traffic impacts will occur during construction activities only. No traffic impacts are anticipated upon project completion. The country construction management agency level-of-service impact thresholds are not intended to be applied to construction activities. As such, the project is not forecast to exceed the significant impact thresholds defined by the county congestion management agency.

C. Result in a change in air traffic patterns, including either an increase in traffic levels or a change in location that results in substantial safety risks?

Response: The project will not result in any changes to air traffic patterns.

D. Substantially increase hazards due to a design feature (e.g., sharp curves or dangerous intersections) or incompatible uses (e.g. farm equipment)?

Response: The project construction activities will be performed in compliance with applicable city, county, state and federal codes. Worksite traffic control plans and detour plans will be designed in compliance with LADOT standards. As such, project construction or the project will not include any known safety hazards resulting from the design of the project.

E. Result in inadequate parking capacity?

Response: The project, upon completion, will not result in a reduction of parking in the project vicinity. During construction, curbside parking will be reduced in various work areas to

accommodate the construction "foot print". The reduction in parking supply will be temporary and should last for a few weeks to up to a few months, depending on the work area under construction.

LADOT WORKSITE TRAFFIC CONTROL PLANS AND DETOUR PLAN REQUIREMENTS

The project proponent will be required to prepare worksite traffic control plans and detour plans to provide the travel lanes specified to remain open during construction. The plans must be prepared by a registered traffic or civil engineer, as appropriate based on LADOT permit guidelines, for submittal to the LADOT for review and approval. It is anticipated that LADOT will work with the project proponent to refine the traffic control lane requirements presented in the memorandum prior to preparation of final traffic control plans. The preliminary roadway lane and detour requirement, by construction work area presented in this memorandum, were prepared in consultation with LADOT.

CONCLUSIONS

The First Street Pipeline Project, once complete, will not have any significant impacts to the area traffic circulation system. Traffic impacts, though temporary in nature, are anticipated during construction as roadway trenching will be required to install the new pipeline. The construction "footprint" will reduce roadway widths, thereby, in some cases, reduce the number of travel lanes and eliminate on-street parking.

In order to reduce the impacts of project construction, the project proponent has divided construction activities into twenty-two (22) work areas. LADOT will require that the project proponent prepare a project schedule and construction worksite traffic control and detour plans to reduce the temporary project construction impacts. LADOT requirements for this project are the same as those applied to similar projects in the project vicinity.

APPENDIX G
EDR Report Executive Summary

EDR DataMap™ Corridor Study

First Street Trunk Line
Los Angeles, CA 90004

February 02, 2005

Inquiry number 01352492.1r

The Standard in Environmental Risk Management Information

440 Wheelers Farms Road
Milford, Connecticut 06460

Nationwide Customer Service

Telephone: 1-800-352-0050
Fax: 1-800-231-6802
Internet: www.edrnet.com

EXECUTIVE SUMMARY

A search of available environmental records was conducted by Environmental Data Resources, Inc. (EDR).

TARGET PROPERTY INFORMATION

ADDRESS

LOS ANGELES, CA 90004
LOS ANGELES, CA 90004

DATABASES WITH NO MAPPED SITES

No mapped sites were found in EDR's search of available ("reasonably ascertainable ") government records within the requested search area for the following databases:

FEDERAL ASTM STANDARD

NPL	National Priority List
Proposed NPL	Proposed National Priority List Sites
CERCLIS	Comprehensive Environmental Response, Compensation, and Liability Information System
CORRACTS	Corrective Action Report
RCRA-TSDF	Resource Conservation and Recovery Act Information

STATE ASTM STANDARD

AWP	Annual Workplan Sites
Cal-Sites	Calsites Database
Toxic Pits	Toxic Pits Cleanup Act Sites
SWF/LF	Solid Waste Information System
CA BOND EXP. PLAN	Bond Expenditure Plan
INDIAN UST	Underground Storage Tanks on Indian Land
INDIAN LUST	Leaking Underground Storage Tanks on Indian Land

FEDERAL ASTM SUPPLEMENTAL

CONSENT	Superfund (CERCLA) Consent Decrees
ROD	Records Of Decision
Delisted NPL	National Priority List Deletions
MLTS	Material Licensing Tracking System
MINES	Mines Master Index File
NPL Liens	Federal Superfund Liens
UMTRA	Uranium Mill Tailings Sites
ODI	Open Dump Inventory
FUDS	Formerly Used Defense Sites
DOD	Department of Defense Sites
INDIAN RESERV	Indian Reservations

EXECUTIVE SUMMARY

RAATS ..... RCRA Administrative Action Tracking System
TRIS ..... Toxic Chemical Release Inventory System
TSCA ..... Toxic Substances Control Act
SSTS ..... Section 7 Tracking Systems

STATE OR LOCAL ASTM SUPPLEMENTAL

DEED ..... Deed Restriction Listing
NFE ..... Properties Needing Further Evaluation
NFA ..... No Further Action Determination

EDR PROPRIETARY HISTORICAL DATABASES

Coal Gas ..... Former Manufactured Gas (Coal Gas) Sites

BROWNFIELDS DATABASES

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

SURROUNDING SITES: SEARCH RESULTS

Surrounding sites were identified.

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.

FEDERAL ASTM STANDARD

CERCLIS-NFRAP: As of February 1995. CERCLIS sites designated "No Further Remedial Action Planned" (NFRAP) have been removed from CERCLIS. NFRAP sites may be sites where, following an initial investigation, no contamination was found, contamination was removed quickly without the need for the site to be placed on the NPL, or the contamination was not serious enough to require Federal Superfund Action or NPL consideration. EPA has removed approximately 25,000 NFRAP sites to lift the unintended barriers to the redevelopment of these properties and has archived them as historical records so EPA does not needlessly repeat the investigations in the future. This policy change is part of the EPA's Brownfields Redevelopment Program to help cities, states, private investors and affected citizens to promote economic redevelopment of unproductive urban sites.

A review of the CERC-NFRAP list, as provided by EDR, and dated 08/10/2004 has revealed that there are 2 CERC-NFRAP sites within the searched area.

Site	Address	Map ID	Page
CULLIGAN D I WATER SERV	315 N HOOVER ST	36	384
BERENDO SHOPPING CENTER	3301-3317 W. SIXTH ST.	64	751

EXECUTIVE SUMMARY

RCRAInfo: 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. RCRAInfo replaces the data recording and reporting abilities of the Resource Conservation and Recovery Information System(RCRIS). 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. Small quantity generators (SQGs) generate between 100 kg and 1,000 kg of hazardous waste per month Large quantity generators generate over 1,000 kilograms (kg) of hazardous waste, or over 1 kg of acutely hazardous waste per month. 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.

A review of the RCRA-LQG list, as provided by EDR, and dated 11/23/2004 has revealed that there are 16 RCRA-LQG sites within the searched area.

Site	Address	Map ID	Page
DAYTON HEIGHTS ELEM	***607 N WESTMORELAND AVE***	***16***	***107***
STREETLIGHT MAINTENANCE HQ - L	***611 NORTH HOOVER STREET***	***16***	***116***
PARAMOUNT PICTURES	5555 MELROSE AVE	21	156
EXXON MOBIL OIL CORP	4605 BEVERLY BLVD	34	213
ALEXANDRIA NEW E S NO 1	***330 N HARVARD BLVD***	***34***	***260***
BELMONT NEW P C NO 1	***610 MICHELTORENA ST***	***35***	***272***
BELMONT NEW ELEMENTARY NO 6	***101 N VERMONT AVE***	***36***	***283***
LOS ANGELES NEW P C NO 1	***4043 INGRAHAM ST***	***60***	***513***
BELMONT NEW E S NO 10	***3400 WILSHIRE BLVD***	***60***	***560***
CAHUENGA NEW E S NO 1	***225 S OXFORD AVE***	***60***	***658***
BELMONT NEW E S NO 9	***611 S HOBART BLVD***	***64***	***729***
BELMONT NEW P C NO 12	***135 N LAKE ST***	***69***	***883***
BELMONT HOLLYWOOD NEW P C NO 2	***310 S LAFAYETTE PARK PL***	***79***	***904***
ST VINCENT MEDICAL CENTER	***2131 WEST THIRD STREET***	***86***	***924***
OTIS NEW ES	***2401 WILSHIRE BOULEVARD***	***92***	***960***
L A U S D WILTON PL EL	***745 S WILTON PL***	***109***	***1044***

RCRAInfo: 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. RCRAInfo replaces the data recording and reporting abilities of the Resource Conservation and Recovery Information System(RCRIS). 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. Small quantity generators (SQGs) generate between 100 kg and 1,000 kg of hazardous waste per month Large quantity generators generate over 1,000 kilograms (kg) of hazardous waste, or over 1 kg of acutely hazardous waste per month. 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.

A review of the RCRA-SQG list, as provided by EDR, and dated 11/23/2004 has revealed that there are 148 RCRA-SQG sites within the searched area.

Site	Address	Map ID	Page
PEREZ BODY SHOP	***4256 BURNS AVE***	***1***	***3***
PARAMOUNT STUDIOS GARAGE TRANS	***5675 LEMON GROVE AVENUE***	***5***	***9***
ANDERSON TYPOGRAPHICS	***5059 MELROSE AVE***	***10***	***28***
PROFESSIONAL TIRE AND AUTO	***811 N WESTERN AVE***	***10***	***50***

EXECUTIVE SUMMARY

Site	Address	Map ID	Page
LOS ANGELES USD BLEND FRANCES	***5210 CLINTON ST***	***11***	***52***
DINOSAUR FILMS INC	650 N BRONSON AVE	11	53
DINOSAUR FILMS INC	***650 NORTH BRONSON AVENU***	***11***	***53***
SIMONS CAMERA	***720 NO VERMONT***	***13***	***87***
FRANKS AUTOSPA CARWASH	***655 NO. VIRGIL***	***16***	***119***
CIRCLE PRINTING	***4618 MELROSE AVE***	***18***	***129***
CHEVRON STATION 90905	***4590 MELROSE AV***	***18***	***138***
J H MADDOCKS PHOTOGRAPHY INC	***4766 MELROSE AVE***	***19***	***143***
NIFTY SVCS CORP	***4707 MELROSE AVE***	***19***	***144***
VT&A	***606 N LARCHMONT***	***21***	***146***
WOOLFLOKS V W REPAIR	***639 N LARCHMONT BLVD***	***21***	***149***
CHEVRON STATION NO 98304	***5700 MELROSE AVE***	***21***	***153***
UNITEL VIDEO INC	***5555 MELROSE AVE STUDIO***	***21***	***166***
KENS CARBURETOR SVC	***5600 MELROSE AVE***	***21***	***175***
LA HILLTOP CO-OP NURSERY	***3626 MARATHON ST***	***23***	***182***
LAUSD VAN NESS ELEM SCHOOL	***501 N VAN NESS AVE***	***31***	***197***
LA FIRE STATION 29	***158 S WESTERN AVE***	***34***	***202***
WESTERN AUTO CENTER	***150 S WESTERN AVE***	***34***	***204***
STAR DRAPERIES	***111 S WESTERN***	***34***	***206***
LA WILSHIRE BRANCH LIBRARY	***149 N ST ANDREWS PL***	***34***	***208***
LOS ANGELES PORTALS HOUSE	***269 MARIPOSA AVENUE***	***34***	***212***
SCHAEFER AMBULANCE SVC INC	***4627 BEVERLY BLVD***	***34***	***227***
UNIVERSAL CLEANERS	***4650 WEST BEVERLY BLVD***	***34***	***232***
YOUNG PHOTO	***4215 W BERVERLY BLVD***	***34***	***259***
BEVERLY 1 HOUR PHOTO	***314 N WESTER AVE***	***34***	***261***
THRIFTY CLEANERS	***482 N WESTERN AVE***	***34***	***269***
BIG 7 PHOTO	***205 S VERMONT AVE***	***36***	***272***
DAILY RACING FORM INC	***170 S BIMINI PL***	***36***	***278***
SEJIN AUTO REPAIR	***150 S BIMINI PL***	***36***	***280***
DIRT BUSTERS	***124 S VERMONT***	***36***	***282***
LOS ANGELES USD VIRGIL JR HG S	***152 N VERMONT AVE***	***36***	***292***
MIDWAY BODY SHOP	***200 N VERMONT***	***36***	***300***
BOGARZ INC	***137 NORTH VIRGIL AVE***	***36***	***304***
AMERICAN INDUSTRIAL	***201 N WESTMORLAND***	***36***	***307***
NEWELL COLOUR LAB	***221 N WESTMORELAND AVE***	***36***	***319***
MIDWAY FORD BODY SHOP	***206 N JUANITA AVE***	***36***	***320***
CHEVRON STATION 90373	***3631 BEVERLY***	***36***	***329***
DUNLEE CORP	***3644 BEVERLY BLVD***	***36***	***333***
DEWEY PEST CONTROL	***3711 BEVERLY BLVD***	***36***	***343***
PACIFIC BELL	316 N. JUANITA AVE	36	354
CHEVRON STATION LA00894	***3501 W TEMPLE BLVD***	***36***	***362***
PEAIRS ENGINEERS	***3521 TEMPLE ST***	***36***	***365***
SHELL SERVICE	***341 N VERMONT AVE***	***36***	***375***
GORE GRAPHICS	340 N MADISON AVE	36	379
WD MACHINE SHOP	***310 N HOOVER ST***	***36***	***383***
LEMUEL DATOR L D TRUCKING L A	***3459 PLATA ST***	***37***	***402***
TOPPERS	***505 N SILVERLAKE BLVD***	***39***	***403***
LARCHMONT PHOTO LAB	***216 N LARCHMONT BLVD***	***40***	***409***
RITZ 1HR DRY CLEANING	***306 LARCHMONT BLVD***	***40***	***413***
RITZ FRENCH HAND LAUNDRY	***306 N LARCHMONT BLVD***	***40***	***416***
LOS ANGELES USD ALEXANDRIA ELE	***4211 OAKWOOD AVE***	***41***	***425***
PACHECO TRANSPORT	301 N BRONSON ST	46	443
TEMPLE COMMUNITY HOSPITAL	***235 N HOOVER***	***49***	***448***
TEMPLE COMMUNITY HOSPITAL	***235 N HOOVER ST***	***49***	***450***
APOLLO MAGNETICS	***2720 W BEVERLY BLVD***	***50***	***451***
M CLEANERS	***2751 BEVERLY BLVD***	***50***	***452***

EXECUTIVE SUMMARY

EXECUTIVE SUMMARY

Site	Address	Map ID	Page
VERMONT CHEVROLET	***444 S VERMONT AVE***	***64***	***798***
AMERICAN ONE HOUR PHOTO	***3670 W 3RD STREET***	***64***	***818***
VELVETONE CLEANERS	***3580 W THIRD ST***	***64***	***820***
A 1 BODY SHOP & AUTO REPAIR	***3525 W 3RD ST***	***64***	***826***
HENRY A TICAS	***247 S KENMORE AVE APT 4***	***64***	***831***
U S A CLEANERS	***4052 W 3RD ST***	***66***	***836***
ONE HOUR PRIME CLEANERS	***4055-1/2 W 3RD ST***	***66***	***840***
TEXACO AUTO SERV	***3875 3RD ST***	***66***	***852***
SO CAL GAS CO JUANITA BASE	***3333 W 3RD ST***	***68***	***861***
TIME SERVICE INC	***2115 BEVERLY BLVD***	***69***	***880***
OTIS ELEVATOR CO	***2417 BEVERLY BLVD***	***69***	***886***
CASA DE CLEANERS	***2604 WEST THIRD ST***	***76***	***895***
AGAJANIAN RECYCLING CO	***405 S IRVING BLVD***	***77***	***902***
APOLLO MAGNETICS	***1900 W BEVERLY BLVD***	***84***	***911***
C T PARTNERS	***329 201 S ALVARADO ST***	***86***	***916***
L M S MEDICAL SERVICES	***311 201 S ALVARADO ST***	***86***	***917***
C L M G INC	***2222 OCEAN VIEW AVE***	***86***	***917***
MID-WILSHIRE MEDICAL GP	***201 S. ALVARADO ST STE***	***86***	***937***
HOUSE EAR INSTITUTE	***256 S LAKE ST***	***86***	***940***
LA PARKVIEW PHOTO CENTER	***412 S PARKVIEW ST***	***89***	***944***
PACIFIC BELL	***720/740 RAMPART***	***92***	***954***
LA ST BARNABUS CENTER	***675 S CARONDELT ST***	***92***	***959***
SHALOM VAN LEVY	***671 SOUTH CORONADO***	***92***	***966***
LA BEST CLEANERS	***610 S RAMPART BLVD***	***92***	***983***
LA BEST CLEANERS	***610 S RAMPART***	***92***	***984***
LA FELIPE DE NEVE LIBRARY	***2820 W 6TH ST***	***92***	***986***
PACIFIC BELL	***4201 WILSHIRE BLVD***	***96***	***994***
LA WESTLAKE NSA	***607 S PARK VIEW ST***	***98***	***998***
LA ALARM POLICE SIGNAL BUREAU	***2228 W 6TH ST***	***99***	***1006***
SHELL OIL CO	***700 S VERMONT***	***101***	***1020***
20/20 CLEANERS	***698 S IROLO ST***	***103***	***1034***
ZAMORA TRUCKING	***3198 W 7 ST***	***104***	***1038***

ERNS: The Emergency Response Notification System records and stores information on reported releases of oil and hazardous substances. The source of this database is the U.S. EPA.

A review of the ERNS list, as provided by EDR, and dated 12/31/2003 has revealed that there are 20 ERNS sites within the searched area.

Site	Address	Map ID	Page
4118 MELROSE AVE	4118 MELROSE AVE	13	81
4600 MELROSE AVE	4600 MELROSE AVE	18	132
5600 MILROSE AVE	5600 MILROSE AVE	21	156
866 N. OCCIDENTAL	866 N. OCCIDENTAL	26	188
BEVERLY BLVD & HOBART PLACE	BEVERLY BLVD & HOBART P	34	244
200 NORTH VERMONT AVE	200 NORTH VERMONT AVE	36	296
4032 BEVERLY BLVD	4032 BEVERLY BLVD	42	427
4100 BEVERLY BLVD	4100 BEVERLY BLVD	45	439
WISHIRE COUNTRY CLUB 301 N. RO	WISHIRE COUNTRY CLUB 30	47	447
2711 WEST BEVERLY BLVD	2711 WEST BEVERLY BLVD	50	451
207 NORTH KANEMORE	207 NORTH KANEMORE	51	496
3701 WILSHIRE BLVD SUITE 800 *	3701 WILSHIRE BLVD SUIT	60	611
3RD ST AND WESTERN AVE	3RD ST AND WESTERN AVE	60	647

EXECUTIVE SUMMARY

Site	Address	Map ID	Page
3423 W. 6TH ST	3423 W. 6TH ST	64	746
333 S CATALINA ST	333 S CATALINA ST	64	810
3834 3RD ST	3834 3RD ST	66	838
4005 WEST 3RD ST	4005 WEST 3RD ST	66	838
2041 W. BEVERLY BLVD	2041 W. BEVERLY BLVD	69	878
411 S. CATALINA STREET	411 S. CATALINA STREET	78	903
435 S. WINDSOR BLVD	435 S. WINDSOR BLVD	81	907

STATE ASTM STANDARD

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 12/31/2003 has revealed that there are 30 CHMIRS sites within the searched area.

Site	Address	Map ID	Page
LOS ANGELES CITY COLLEGE	***855 N VERMONT AVE***	***6***	***11***
Not reported	783 NORTH VAN NESS AVE	11	64
Not reported	657 NORTH VERMONT AVE	13	77
Not reported	611 NORTH LARCHMONT AVE	21	147
Not reported	5555 W. MELROSE AVE	21	163
Not reported	137 N. MANHATTAN PL.	34	206
VAHE G. SHAHINIAN	***4605 BEVERLY BLVD***	***34***	***217***
Not reported	***4605 BEVERLY BLVD.***	***34***	***219***
Not reported	310 N. ARDMORE AVE.	34	261
Not reported	4032 BEVERLY BLVD	42	431
Not reported	2608 WEST TEMPLE ST	50	474
Not reported	US 101 S/ALVARADO ST	54	502
1X EMMANUEL PRESBYTERIAN CHURC	***3300 WILSHIRE BLVD***	***60***	***569***
Not reported	3789 WILSHIRE BLVD	60	571
3875 WILSHIRE CO	***3875 WILSHIRE BLVD***	***60***	***582***
Not reported	4457 WEST SECOND STREET	60	663
Not reported	2017 W. TEMPLE ST.	62	673
Not reported	400 NORTH MOUNTAIN VIEW	62	675
Not reported	333 S. CATALINA ST	64	807
Not reported	301 SOUTH VERMONT AVE	64	818
Not reported	209 N. MOUNTAIN VIEW ST	73	887
Not reported	227 N. MOUNTAIN VIEW AV	73	888
Not reported	256 S RAMPART	76	901
Not reported	411 SOUTH CATALINA	78	903
Not reported	435 SOUTH WINDSOR BLVD.	81	907
Not reported	435 S. WINDSOR BLVD.	81	908
Not reported	2100 WEST 3RD ST.	86	917
Not reported	4221 WILSHIRE BLVD.	96	996
Not reported	2226 W. 6TH ST.	99	1004
ARMONY TRUST	***3003 LEEWARD AVE***	***102***	***1027***

EXECUTIVE SUMMARY

CORTESE: This database identifies public drinking water wells with detectable levels of contamination, hazardous substance sites selected for remedial action, sites with known toxic material identified through the abandoned site assessment program, sites with USTs having a reportable release and all solid waste disposal facilities from which there is known migration. The source is the California Environmental Protection Agency/Office of Emergency Information.

A review of the Cortese list, as provided by EDR, has revealed that there are 93 Cortese sites within the searched area.

Site	Address	Map ID	Page
VIRGIL AUTO BODY	***828 VIRGIL AVE N***	***7***	***15***
MOBIL #17-LFR	***655 WESTERN AVE N***	***10***	***20***
MELROSE CAR WASH	***5080 MELROSE AVE***	***10***	***28***
THRIFTY #037/CIRCLE K #78	***5175 MELROSE***	***10***	***32***
SUPER CAR WASH	***800 WESTERN AVE N***	***10***	***44***
UNIVISION'S KMEX STATION	5400 MELROSE AVE	11	62
CORPORATE FUND FOR HOUSIN	***625 NEW HAMPSHIRE***	***13***	***70***
MOBIL #18-G8X (FORMER #11	657 VERMONT	13	79
CHEVRON #9-3371 (FORMER)	***4166 MELROSE AVE***	***13***	***84***
BRAILLE INSTITUTE	***741 VERMONT AVE N***	***13***	***88***
HOLLYWOOD AUTO SERVICE	***655 ROSSMORE AVE N***	***15***	***93***
OHN'S TEXACO	***565 VIRGIL AVE N***	***16***	***103***
LADWP-STREETLIGHT MAINT.H	***611 HOOVER***	***16***	***111***
TUNE UP MASTERS SHOP #10	***4421 MELROSE AVE***	***17***	***120***
MELROSE SERVICE STATION	***4501 MELROSE AVE***	***17***	***124***
UNOCAL #0979	***4600 MELROSE AVE***	***18***	***134***
CHEVRON STATION 90905	***4590 MELROSE AV***	***18***	***138***
CHEVRON #9-8304	***5700 MELROSE AVE***	***21***	***151***
PARAMOUNT STUDIOS	5555 MELROSE AVE	21	166
AL ROSENSTEIN PROPERTY	5570 MELROSE AVE	21	169
UNOCAL #1886	5600 MELROSE AVE	21	179
LEO'S AUTO REPAIR	3100 SUNSET BLVD	22	179
FIRE STATION #29	***158 WESTERN AVE S***	***34***	***199***
MOBIL #11-LQG	***4605 BEVERLY BLVD W***	***34***	***222***
SCHAEFER AMBULANCE SVC INC	***4627 BEVERLY BLVD***	***34***	***227***
BEVERLY AUTO CENTER	***4474 BEVERLY BLVD***	***34***	***234***
G. M. AUTO	***4400 BEVERLY BLVD W***	***34***	***239***
76 PRODUCTS STATION #0929	***4700 BEVERLY BLVD***	***34***	***247***
KENTUCKY FRIED CHICKEN	***340 WESTERN AVE N***	***34***	***262***
CHEVRON (FORMER)	***401 WESTERN***	***34***	***265***
PEDUS SERVICES INC	***3500 001ST ST W***	***36***	***286***
COLUMBIA PEST CONTROL FAC	***101 VIRGIL***	***36***	***289***
MIDWAY FORD	***200 VERMONT AVE N***	***36***	***301***
AMERICAN INDUSTRIAL SERVI	***201 WESTMORELAND***	***36***	***307***
SILVERLAKE CAR WASH	***3595 BEVERLY BLVD***	***36***	***310***
MARY CARROLL TRUST	***218 JUANITA AVE N***	***36***	***320***
CHEVRON #9-0373	***3631 BEVERLY BLVD***	***36***	***326***
PANGLOSSIAN DEVELOP.CORP	240 VIRGIL	36	333
MCCLELLAND PROPERTY/ARCO	***3644 BEVERLY BLVD***	***36***	***333***
MCCLELLAND/WESTERN EXTERM	***3654 BEVERLY BLVD***	***36***	***336***
ARCO (FORMER)	***3737 BEVERLY BLVD***	***36***	***341***
UNOCAL #6377	***304 VERMONT AVE N***	***36***	***347***
PACIFIC BELL	***316 JUANITA AVE N***	***36***	***354***
CHEVRON STATION LA00894	***3501 W TEMPLE BLVD***	***36***	***362***
SHELL	***341 VERMONT AVE N***	***36***	***372***
MOBIL SERVICE STATION	***301 VIRGIL ST N***	***36***	***379***
PACIFIC BELL (G1-185)	***3804 OAKWOOD AVE***	***36***	***389***
DEPT OF TRANSPORTATION	***411 VERMONT AVE N***	***36***	***393***

EXECUTIVE SUMMARY

Site	Address	Map ID	Page
BUTTERFIELD PROPERTY	***301 LARCHMONT BLVD N***	***40***	***411***
ALEXANDRIA AVENUE SCHOOL	***4211 OAKWOOD AVE***	***41***	***425***
BEVERLY CATALINA CAR WASH	***4000 BEVERLY BLVD W***	***42***	***428***
STATE COMPENSATION INSUR	***600 LAFAYETTE PARK***	***44***	***436***
AUTO FUELING STATION (FOR	4100 BEVERLY	45	439
WILSHIRE COUNTRY CLUB	***301 ROSSMORE AVE N***	***47***	***444***
MIKE'S TIRE & SUPER SERVI	***2520 TEMPLE***	***50***	***467***
MOBIL #11-LM9	***2608 TEMPLE ST***	***50***	***472***
RAMPART POLICE STATION GARAGE	***2710 W TEMPLE ST***	***50***	***482***
ELLIS LEE & ASSOCIATES	***2915 TEMPLE ST W***	***50***	***492***
UNOCAL #0932	***4006 WILSHIRE BLVD***	***60***	***518***
AMBASSADOR HOTEL (FORMER)	***3400 WILSHIRE BLVD***	***60***	***555***
TEXACO STATION (FORMER)	***3855 WILSHIRE BLVD***	***60***	***578***
ARCO #5355	***3675 WILSHIRE BLVD***	***60***	***590***
TEXACO SVC STA	***3201 WILSHIRE BLVD***	***60***	***600***
76 PRODUCTS STATION #3900	4000 006TH ST W	60	615
CHEVRON #9-2748	***303 WESTERN AVE S***	***60***	***636***
SAV-MOR OIL CO. #359	***4217 003RD ST W***	***60***	***640***
SHELL #204-5432-4005	***270 WESTERN AVE S***	***60***	***650***
EXXON #7-8422	330 ALVARADO ST N	62	669
SHELL #204-4532-0607	400 ALVARADO ST N	62	680
ARCO #5054	2106 TEMPLE ST W	62	687
CHEVRON #9-0514 (FORMER)	***403 ALVARADO ST N***	***62***	***687***
SHERATON TOWN HOUSE	***2961 WILSHIRE BLVD***	***64***	***707***
HERTZ CORPORATION	***643 VERMONT AVE S***	***64***	***723***
ARCO #0020	***3325 006TH ST W***	***64***	***768***
CATELLUS DEVELOPMENT CORP	***3324 006TH ST W***	***64***	***770***
CHEVRON STATION 93674	***561 S VERMONT AVE***	***64***	***773***
CHEVRON STATION 9 5294	***549 S NORMANDIE AVE***	***64***	***777***
WILSHIRE CAR WASH	***505 VERMONT AVE S***	***64***	***794***
WON S. WOO	***310 BERENDO ST S***	***64***	***811***
LESLIE FAMILY TRUST	***3566 003RD ST W***	***64***	***823***
UNOCAL #0457	***4005 003RD ST W***	***66***	***846***
ARDMORE SERVICES	***4020 003RD ST W***	***66***	***849***
GAS S/S #3025 (FORMER UNO	***2036 BEVERLY***	***69***	***865***
ARCO #1092	***2041 BEVERLY BLVD W***	***69***	***873***
LOS ANGELES SHRINERS HOSP	***3169 GENEVA***	***74***	***892***
CHEVRON #9-1340	***280 RAMPART BLVD S***	***76***	***898***
SHELL #204-4532-4609	***230 ALVARADO ST S***	***86***	***929***
PACIFIC BELL	***720/740 RAMPART***	***92***	***954***
CHEVRON #9-1446	***2525 WILSHIRE BLVD***	***92***	***968***
ALRIGHT PARKING LOT	***4180 WILSHIRE***	***96***	***990***
TOSCO/76 PRODUCTS STATION	703 VERMONT	101	1012
SHELL #204-4539-5906	***700 VERMONT AVE S***	***101***	***1020***
CENTURY INDUSTRIES	***761 NORMANDIE AVE S***	***107***	***1040***

NOTIFY 65: Notify 65 records contain facility notifications about any release that could impact drinking water and thereby expose the public to a potential health risk. The data come from the State Water Resources Control Board's Proposition 65 database.

A review of the Notify 65 list, as provided by EDR, has revealed that there is 1 Notify 65 site

within the searched area.

Site	Address	Map ID	Page
CHEV ON USA INC.	4166 MELROSE AVE. #9337	13	83

WMUDS/SWAT: The Waste Management Unit Database System is used for program tracking and inventory of waste management units. The source is the State Water Resources Control Board.

A review of the WMUDS/SWAT list, as provided by EDR, has revealed that there is 1 WMUDS/SWAT site within the searched area.

Site	Address	Map ID	Page
2ND & UANITA AVENUE DUMP-LOS	2ND / JUANITA AVE	36	273

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 10/13/2004 has revealed that there are 105 LUST sites within the searched area.

Site	Address	Map ID	Page
VIRGIL AUTO BODY	***828 VIRGIL AVE N***	***7***	***15***
MOBIL #17-LFR	***655 WESTERN AVE N***	***10***	***20***
MELROSE CAR WASH	5080 MELROSE AVE	10	25
THRIFTY OIL CO #037	***5175 MELROSE AVE***	***10***	***29***
THRIFTY #037/ARCO #9530	5175 MELROSE AVE	10	34
SUPER CAR WASH	***800 WESTERN AVE N***	***10***	***44***
UNIVISION'S KMEX STATION	5400 MELROSE AVE	11	60
CORPORATE FUND FOR HOUSIN	***625 NEW HAMPSHIRE***	***13***	***70***
MOBIL #18-G8X (FORMER #11-G8X)	657 VERMONT AVE N	13	75
CHEVRON #9-3371 (FORMER)	***4166 MELROSE AVE***	***13***	***84***
BRAILLE INSTITUTE	***741 VERMONT AVE N***	***13***	***88***
HOLLYWOOD AUTO SERVICE	***655 ROSSMORE AVE N***	***15***	***93***
MELROSE ROSSMORE SHOPPING CENT	5782-5788 MELROSE AVE.	15	96
MELROSE ROSSMORE SHOPPING C	5782-578 MELROSE AVE.	15	97
OHN'S TEXACO	***565 VIRGIL AVE N***	***16***	***103***
LADWP-STREETLIGHT MAINT.H	***611 HOOVER***	***16***	***111***
TUNE UP MASTERS SHOP #10	***4421 MELROSE AVE***	***17***	***120***
MELROSE SERVICE STATION	***4501 MELROSE AVE***	***17***	***124***
76 STATION #0979	4600 MELROSE AVE W.	18	127
UNOCAL #0979	***4600 MELROSE AVE***	***18***	***134***
CHEVRON STATION 90905	***4590 MELROSE AV***	***18***	***138***
CHEVRON #9-8304	***5700 MELROSE AVE***	***21***	***151***
PARAMOUNT PICTURES CORP	***5555 MELROSE AVE***	***21***	***156***
AL ROSENSTEIN PROPERTY	5570 MELROSE AVE	21	169
UNOCAL #1886	5600 MELROSE AVE	21	176
LEO'S AUTO REPAIR	***3100 W SUNSET BLVD***	***22***	***179***
FIRE STATION #29	***158 WESTERN AVE S***	***34***	***199***
Not reported	***4605 BEVERLY BLVD.***	***34***	***219***
MOBIL #11-LQG	***4605 BEVERLY BLVD W***	***34***	***222***
SCHAEFER AMBULANCE SVC INC	***4627 BEVERLY BLVD***	***34***	***227***

EXECUTIVE SUMMARY

EXECUTIVE SUMMARY

Site	Address	Map ID	Page
WILSHIRE CAR WASH	***505 VERMONT AVE S***	***64***	***794***
WON S. WOO	***310 BERENDO ST S***	***64***	***811***
LESLIE FAMILY TRUST	***3566 003RD ST W***	***64***	***823***
UNOCAL #0457	***4005 003RD ST W***	***66***	***846***
ARDMORE SERVICES	***4020 003RD ST W***	***66***	***849***
GAS S/S #3025 (FORMER UNO	***2036 BEVERLY***	***69***	***865***
ARCO #1092	***2041 BEVERLY BLVD W***	***69***	***873***
LOS ANGELES SHRINERS HOSP	***3169 GENEVA***	***74***	***892***
CHEVRON #9-1340	***280 RAMPART BLVD S***	***76***	***898***
SHELL #204-4532-4609	***230 ALVARADO ST S***	***86***	***929***
PACIFIC BELL	***720/740 RAMPART***	***92***	***954***
CHEVRON #9-1446	***2525 WILSHIRE BLVD***	***92***	***968***
TIDES SENIOR APARTMENTS, LP	623 RAMPART BLVD S	92	979
ALRIGHT PARKING LOT	***4180 WILSHIRE***	***96***	***990***
MAC ARTHUR PARK	2230 6TH ST. W.	99	1006
HUMMING MOTORS	513-515 LAKE ST	99	1010
TOSCO - 76 STATION #5283 (FORM	703 VERMONT AVE S	101	1015
SHELL #204-4539-5906	***700 VERMONT AVE S***	***101***	***1020***
CENTURY INDUSTRIES	***761 NORMANDIE AVE S***	***107***	***1040***

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 10/13/2004 has revealed that there are 52 UST sites within the searched area.

Site	Address	Map ID	Page
LOS ANGELES CITY COLLEGE	***855 N VERMONT AVE***	***6***	***11***
MOBIL SERVICE STATION #18-LFR	655 N WESTERN AVE	10	20
ARCO #9530	5175 MELROSE AVE	10	28
LOS ANGELES FIRE STATION 52	4957 MELROSE AVE	10	39
UNITED OIL #48	800 N WESTERN AVE	10	43
AL SAL #31	591 N VERMONT AVE	13	68
DAD S MOBIL SS# 11-G8X	657 N VERMONT AVE	13	72
MELROSE & VINE MINI MART	655 N ROSSMORE AVE	15	92
STREETLIGHT MAINTENANCE HQ - L	***611 NORTH HOOVER STREET***	***16***	***116***
MINI MART SERVICE STATION	4501 MELROSE AVE	17	124
TOSCO CORPORATION #30366	4600 MELROSE AVE	18	129
CHEVRON PRIVATE OPERATOR	4590 MELROSE AVE	18	143
PARAMOUNT IMMOBILAIRE	5510 MELROSE AVE	20	144
PARAMOUNT PICTURES CORP	***5555 MELROSE AVE***	***21***	***156***
WESTERN AVENUE AUTO REPAIR	150 S WESTERN AVE	34	206
MOBIL SERVICE STATION LQG	4605 BEVERLY BLVD	34	214
BH - 126, INC.	3625 BEVERLY BLVD	36	325
DEWEY PEST CONTROL	***3711 BEVERLY BLVD***	***36***	***343***
PACIFIC BELL (G1-118)	***316 N JUANITA AVE***	***36***	***356***
LOS ANGELES FIRE STATION 6	326 N VIRGIL AVE	36	368
VERMONT SHELL FOOD MART	341 N VERMONT AVE	36	375
PACIFIC BELL	3804 OAKWOOD AVE	36	389
PARKING ENFORCEMENT	411 N VERMONT AVE	36	395
JACK HADADD	515 SILVER LAKE BLVD	39	405
FRED WOLF	3200 BEVERLY BLVD	50	468

EXECUTIVE SUMMARY

Site	Address	Map ID	Page
MOBIL SERVICE STATION LM9	2608 W TEMPLE ST	50	477
RAMPART POLICE STATION GARAGE	***2710 W TEMPLE ST***	***50***	***482***
WILSHIRE PARK PLACE LLC	3700 WILSHIRE BLVD STE	60	527
METROPLEX WILSHIRE	3530 WILSHIRE BLVD	60	540
AMBASSADOR HOTEL	3400 WILSHIRE BLVD	60	559
LOS ANGELES FIRE STATION 29	4029 WILSHIRE BLVD	60	572
ARCO SERVICE STATION 5355	3675 WILSHIRE BLVD	60	592
TEXACO REFINING	3201 WILSHIRE BLVD	60	604
DAKOTA INVESTMENT COMPANY	626 S BRONSON AVE	60	612
TOSCO CORPORATION #30584	4000 W 6TH ST	60	619
JIN S SHELL #3	270 S WESTERN AVE	60	647
LOS ANGELES PETROL, INC.	400 N ALVARADO ST	62	680
LOS ANGELES COUNTY MTA	3087 WILSHIRE BLVD	64	705
K F I INC	610 S ARDMORE AVE	64	731
ARCO AM PM MINI MARKET #20	3325 W 6TH ST	64	750
ARCO FACILITY NO 1860	3817 W 3RD ST	66	841
SOUTHERN CALIFORNIA GAS CO	***3333 W 3RD ST***	***68***	***857***
BEVERLY ARCO SERVICE--#1092	2041 BEVERLY BLVD	69	870
SHRINERS HOSPITALS FOR CHILDRE	3160 GENEVA ST	74	890
ST. VINCENT MEDICAL CENTER	2131 W 3RD ST	86	921
ST. VINCENT MEDICAL CENTER	2131 W 3RD ST	86	921
ST. VINCENT MEDICAL CENTER	201 S ALVARADO ST	86	934
AMERICAN RED CROSS	2614 W 7TH ST	92	954
PACIFIC BELL	720 S RAMPART BLVD	92	954
AMERICAN RED CROSS LA CHAPTER	2700 WILSHIRE BLVD	92	973
MACARTHUR PARK	2230 W 6TH ST	99	1006
VERMONT SHELL	700 S VERMONT AVE	101	1023

VCP: 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.

A review of the VCP list, as provided by EDR, and dated 11/09/2004 has revealed that there is 1 VCP site within the searched area.

Site	Address	Map ID	Page
TERMINIX	2828 LONDON STREET	44	433

CA FID: 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, has revealed that there are 165 CA FID UST sites within the searched area.

Site	Address	Map ID	Page
PICO INVESTMENT CO	***901 N WESTERN AVE***	***3***	***5***
WILLIAM LOUGHAN	905 N WESTERN AVE	3	5
LOS ANGELES CITY COLLEGE	***855 N VERMONT AVE***	***6***	***11***
CENTRAL AUTO SALES	828 N VIRGIL AVE	7	15

EXECUTIVE SUMMARY

Site	Address	Map ID	Page
DAVID KIM MOBIL	655 N WESTERN AVE	10	22
MELROSE CAR WASH	***5080 MELROSE AVE***	***10***	***28***
CIRCLE K FOOD STORES #7893	5175 MELROSE AVE	10	34
SINGER GAS	4954 MELROSE AVE	10	38
FIRE STATION 52	4957 MELROSE AVE	10	38
WESTERN COSTUME COMPANY INC	5335 MELROSE AVE	11	60
SPANISH INTERNATIONAL COMMUN	5420 MELROSE AVE	11	62
PARAMOUNT PICTURES CORPORATION	5451 MARATHON ST	11	64
EDUCATIONAL INSTITUTION	590 N VERMONT AVE	13	68
FAYEZ ALSKAF/BASSAM ABOUADAL	657 N VERMONT AVE	13	80
CHEVRON STATION 93371	4166 MELROSE AVE	13	83
LOS ANGELES CITY COLLEGE	4133 MARATHON ST	13	87
L A CITY COLLEGE	741 N BERENDO ST	14	91
HOLLYWOOD SUTO SERVICE	655 N ROSSMORE AVE	15	93
AMERICAN DEMO	722 N VINE ST	15	99
OHN'S TEXACO	***565 VIRGIL AVE N***	***16***	***103***
STREETLIGHT MAINTENANCE HQ - L	***611 NORTH HOOVER STREET***	***16***	***116***
T & M FINS'ERS R'MENT TRUSTFUN	700 N VIRGIL	16	119
TUNEUP MASTERS INC.	***4421 MELROSE AVE***	***17***	***119***
LA KOREAN METHODIST CHURCH	4465 MELROSE AVE	17	122
VAZGAN MARKET	4501 MELROSE AVE	17	123
UNION SERVICE STATION 0979	4600 MELROSE AVE	18	132
CHEVRON STATION 90905	***4590 MELROSE AV***	***18***	***138***
PARAMOUNT PICTURES CORP	***5555 MELROSE AVE***	***21***	***156***
AL ROSENSTEIN	5570 MELROSE AVE	21	169
CHEVRON STATION	5600 MELROSE AVE	21	175
MR. DOMENIC SCAVO	3100 SUNSET BLVD	22	179
VACANT	2501 W SUNSET BLVD	26	184
STATE OF CALIFORNIA DOT	620 HELIOTROPE DR	27	193
FIRE STATION 29	158 S WESTERN AVE	34	203
WESTERN AUTO CENTER	***150 S WESTERN AVE***	***34***	***204***
BEKINS	120 S WESTERN AVE	34	206
WERTZ BROTHERS FURNITURE INC	210 N WESTERN AVE	34	211
GEORGE'S MOBIL SERVICE	4605 BEVERLY BLVD	34	225
SCHAEFER AMBULANCE SVC INC	***4627 BEVERLY BLVD***	***34***	***227***
SERVICE STATION 0929	4700 BEVERLY BLVD	34	250
FIRESTONESTORE #2744	4305 BEVERLY BLVD	34	254
GOLDEN HANDS	3414 W 2ND ST	36	274
WESTBILT ENTERPRISES CORP	187 S VERMONT AVE	36	276
TRIANGLE PUBLICATIONS INC	170 S BIMINI PL	36	278
PEDUS BUILDING SERVICES INC	3500 W 1ST ST	36	286
COLUMBIA PEST CONTROL FAC	***101 VIRGIL***	***36***	***289***
KOREAN TIMES	155 N VERMONT AVE	36	294
PAULA E LUCIER	111 N VIRGIL AVE	36	295
MIDWAY FORD	***200 VERMONT AVE N***	***36***	***301***
AMERICAN INDUSTRIAL SERVICE IN	201 N WESTMORELAND AVE	36	307
SILVERLAKE CAR WASH	3595 BEVERLY BLVD	36	313
DAVID MILTON	3631 BEVERLY BLVD	36	325
UNIFIED DEVELOPMENT	240 N VIRGIL AVE	36	329
UNK	3654 W BEVERLY BLVD	36	335
CHANG Y LEE (SANDERS (BEO)	***3818 BEVERLY BLVD***	***36***	***339***
SOMCHAI DENCHARTPHAN	3737 BEVERLY BLVD	36	340
DEWEY PEST CONTROL	***3711 BEVERLY BLVD***	***36***	***343***
UNOCAL #6377	***304 VERMONT AVE N***	***36***	***347***
MOBIL OIL CORP	301 N VIRGIL AVE	36	351
P CARROLL COMPANY	310 N MADISON AVE	36	352

EXECUTIVE SUMMARY

EXECUTIVE SUMMARY

Site	Address	Map ID	Page
WILLIAM K SHIMABUKU	***3033 WILSHIRE BLVD***	***64***	***713***
HERTZ CORPORATION	***643 VERMONT AVE S***	***64***	***723***
K F I INC	610 S ARDMORE AVE	64	730
CENTRE PROPERTIES LIMITED	606 S OXFORD AVE	64	732
ARCO AM PM MINI MARKET	3325 W 6TH ST	64	755
UNK	3324 W 6TH ST	64	756
CEDER PETROLEUM COMPANY	3033 W 6TH ST	64	761
SHATTO SERVICE	3151 W 6TH ST	64	763
CARPENTERS PENSION TRUST BLDG	2951 W 6TH ST	64	764
93674-CHEVRON STATION	561 S VERMONT AVE	64	772
L.A. COUNTY FACILITIES MANGEME	***550 S VERMONT AVE***	***64***	***784***
PACIFIC BELL	501 VERMONT AVE	64	792
WILSHIRE CAR WASH	505 S VERMONT AVE	64	792
Z. KIRVEN PARRISH ARCHITECTS	444 S WESTMORELAND AVE	64	797
MCKINLEY MORTUARY	444 S VERMONT AVE	64	800
UNK	443 S VERMONT AVE	64	801
WARREN BIGGS LEASING	425 S VERMONT AVE	64	803
WON S. WOO	310 S BERENDO ST	64	814
A I TIRE MART/AUTOMOTIVE INC	3525 W 3RD ST	64	825
AMES YONG-IL KIM	3501 W 3RD ST	64	828
OHN T HIFUMI	260 S KENMORE AVE	64	830
MALECK T BADKOUBEI	300 S NORMANDIE AVE	66	834
PETER K L TAN	4020 W 3RD ST	66	836
SERVICE STATION 0457	***4005 W 3RD ST***	***66***	***839***
PRESTIGE STATIONS INC #609	3817 W 3RD ST	66	841
CHEVRON USA INC	270 S NORMANDIE AVE	66	853
SO CAL GAS CO JUANITA BASE	***3333 W 3RD ST***	***68***	***861***
UNION SERVICE STATION 3025	2036 BEVERLY BLVD	69	868
ARCO #1092	2041 BEVERLY BLVD	69	877
WILLIAM KATZ	2121 BEVERLY BLVD	69	880
SHRINERS HSPTL-CRPPLD CHLDRN	3160 GENEVA ST	74	891
91340-CHEVRON STATION	280 RAMPART BLVD	76	897
ALVARADO II INCORPORATED	2000 W 3RD ST	86	914
ST VINCENT MEDICAL CENTER	***2131 WEST THIRD STREET***	***86***	***924***
ST VINCENT MEDICAL CENTER INC	2021 MIRAMAR ST	86	927
UAN CORNE O/ARSHAG B. ATMA IA	230 S ALVARADO ST	86	928
SERM-DARIN SAELAK	174 S ALVARADO ST	86	939
DAUGHTERS OF CHARITY OF ST VIN	2201 MIRAMAR ST	86	940
AMERICAN RED CROSS /C	2614 W 7TH ST	92	954
PACIFIC BELL	***720/740 RAMPART***	***92***	***954***
91446-CHEVRON STATION	2525 WILSHIRE BLVD	92	968
AMERICAN RED CROSS LA CHAPTER	2700 WILSHIRE BLVD	92	976
MR FAYES N ENABE	***610 S RAMPART BLVD***	***92***	***982***
UNK	600 S LAFAYETTE PARK PL	92	985
HARBOR INSURANCE BUILDING	4201 WILSHIRE BLVD	96	995
MACARTHUR PARK	2230 W 6TH ST	99	1009
SERVICE STATION 5283	***703 S VERMONT AVE***	***101***	***1013***
CHO'S AUTO CENTER	700 S VERMONT AVE	101	1019
U-LOCK SELF STORAGE	761 S NORMANDIE AVE	107	1042

EXECUTIVE SUMMARY

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 100 HIST UST sites within the searched area.

Site	Address	Map ID	Page
LOS ANGELES CITY COLLEGE	***855 N VERMONT AVE***	***6***	***11***
HOVANNES Y. SAMUELIAN	655 N WESTERN AVE	10	24
THRIFTY OIL STN. #037	5175 MELROSE AVE	10	33
SINGER GAS	4954 MELROSE AVE	10	37
AVANTI #5 (SHELL)	800 N WESTERN AVE	10	46
KWIK #31	591 N VERMONT AVE	13	68
EMIL MIRZAYAN	657 N VERMONT AVE	13	78
93371	4166 MELROSE AVE	13	83
KING BEAR AUTO	655 N ROSSMORE AVE	15	92
KATSU ENOS	565 N VIRGIL AVE	16	102
DISTRIBUTING STATION 15	604 N COMMONWEALTH AVE	16	105
STREET LIGHT MAINT HQ.	611 N HOOVER ST	16	114
CALIF. DOCTORS LEASING	4465 MELROSE AVE	17	123
SEW-MART GAS	4501 MELROSE AVE	17	126
SERVICE STATION 0979	4600 MELROSE AVE	18	134
UNION OIL SERVICE STATION LEAS	4600 MELROSE AVE	18	138
90905	4590 MELROSE AVE	18	141
98304	5700 MELROSE AVE	21	155
PARAMOUNT PICTURES CORP	***5555 MELROSE AVE***	***21***	***156***
T SQUARE AUTO REAPIR	5570 MELROSE AVE	21	172
FIRE STATION 29	158 S WESTERN AVE	34	203
WERTZ BROTHERS FURNITURE INC.	210 N WESTERN AVE	34	210
VAHE G. SHAHINIAN	***4605 BEVERLY BLVD***	***34***	***217***
SCHAEFER AMBULANCE SVC INC	***4627 BEVERLY BLVD***	***34***	***227***
PETTY'S SERVICE	4455 BEVERLY BLVD	34	242
PETTY'S SERVICE	4455 BEVERLY BLVD	34	244
UNION OIL SERVICE STATION #929	4700 BEVERLY BLVD	34	250
SERVICE STATION 0929	***4700 BEVERLY BLVD***	***34***	***251***
WARREN BIGGS CHEVROLET	3415 W 2ND ST	36	274
COLUMBIA PEST CONTROL FAC	***101 VIRGIL***	***36***	***289***
STEINER CORPORATION	201 N WESTMORELAND AVE	36	306
SILVERLAKE CAR WASH	***3595 BEVERLY BLVD***	***36***	***310***
90373	3631 BEVERLY BLVD	36	325
DEWEY PEST CONTROL	***3711 BEVERLY BLVD***	***36***	***343***
DEWEY SERVICES INC	3711 BEVERLY BLVD	36	345
SERVICE STATION 6377	304 N VERMONT AVE	36	350
UNION OIL #6377	304 N VERMONT AVE	36	351
SAME AS ABOVE	310 N MADISON AVE	36	353
PACIFIC BELL (G1-118)	***316 N JUANITA AVE***	***36***	***356***
R & S #12	341 N VERMONT AVE	36	372
CAL WATER	315 N HOOVER ST	36	386
FIRST INTERSTATE BANK-DPO	411 N VERMONT AVE	36	392
CALIFORNIA HIGHWAY PATROL	4016 ROSEWOOD AVE	36	400
R & C SUNLAND SERVICE	515 SILVER LAKE BLVD	39	405
THRIFTY OIL STN. #280	4100 BEVERLY BLVD	45	440
WILSHIRE COUNTRY CLUB	5920 BEVERLY BLVD	48	448
WESTERN EXTERMINATOR COMPANY	3333 W TEMPLE ST	49	450
MIKE TIRE & SUPER SERVICE INC.	2520 W TEMPLE ST	50	462
ISAAC I. TAWIL	2608 W TEMPLE ST	50	476
RAMPART POLICE STATION GARAGE	***2710 W TEMPLE ST***	***50***	***482***
SERVICE STATION 932	4006 WILSHIRE BLVD	60	517
UNION OIL SERVICE STATION #932	4006 WILSHIRE BLVD	60	521

EXECUTIVE SUMMARY

EXECUTIVE SUMMARY

FEDERAL ASTM SUPPLEMENTAL

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 09/09/2004 has revealed that there are 175 FINDS sites within the searched area.

Site	Address	Map ID	Page
PEREZ BODY SHOP	***4256 BURNS AVE***	***1***	***3***
PARAMOUNT STUDIOS GARAGE TRANS	***5675 LEMON GROVE AVENUE***	***5***	***9***
LA CITY COLLEGE	***855 N VERMONT AV***	***6***	***11***
ANDERSON TYPOGRAPHICS	***5059 MELROSE AVE***	***10***	***28***
PROFESSIONAL TIRE AND AUTO	***811 N WESTERN AVE***	***10***	***50***
LOS ANGELES USD BLEND FRANCES	***5210 CLINTON ST***	***11***	***52***
DINOSAUR FILMS INC	***650 NORTH BRONSON AVENU***	***11***	***53***
SIMONS CAMERA	***720 NO VERMONT***	***13***	***87***
DAYTON HEIGHTS ELEM	***607 N WESTMORELAND AVE***	***16***	***107***
STREETLIGHT MAINTENANCE HQ - L	***611 NORTH HOOVER STREET***	***16***	***116***
FRANKS AUTOSPA CARWASH	***655 NO. VIRGIL***	***16***	***119***
CIRCLE PRINTING	***4618 MELROSE AVE***	***18***	***129***
CHEVRON STATION 90905	***4590 MELROSE AV***	***18***	***138***
J H MADDOCKS PHOTOGRAPHY INC	***4766 MELROSE AVE***	***19***	***143***
NIFTY SVCS CORP	***4707 MELROSE AVE***	***19***	***144***
VT&A	***606 N LARCHMONT***	***21***	***146***
WOOLFLOKS V W REPAIR	***639 N LARCHMONT BLVD***	***21***	***149***
CHEVRON STATION NO 98304	***5700 MELROSE AVE***	***21***	***153***
PARAMOUNT PICTURES	5555 MELROSE AVE.	21	166
UNITEL VIDEO INC	***5555 MELROSE AVE STUDIO***	***21***	***166***
KENS CARBURETOR SVC	***5600 MELROSE AVE***	***21***	***175***
LA HILLTOP CO-OP NURSERY	***3626 MARATHON ST***	***23***	***182***
LOS ANGELES AIR MONITORING SIT	608 NORTH HELIOTROPE	27	193
LAUSD VAN NESS ELEM SCHOOL	***501 N VAN NESS AVE***	***31***	***197***
LA FIRE STATION 29	***158 S WESTERN AVE***	***34***	***202***
WESTERN AUTO CENTER	***150 S WESTERN AVE***	***34***	***204***
STAR DRAPERIES	***111 S WESTERN***	***34***	***206***
LA WILSHIRE BRANCH LIBRARY	***149 N ST ANDREWS PL***	***34***	***208***
LOS ANGELES PORTALS HOUSE	***269 MARIPOSA AVENUE***	***34***	***212***
EXXON MOBIL OIL CORP	4605 BEVERLY BLVD	34	213
SCHAEFER AMBULANCE SVC INC	***4627 BEVERLY BLVD***	***34***	***227***
UNIVERSAL CLEANERS	***4650 WEST BEVERLY BLVD***	***34***	***232***
BEVERLY HOT SPRINGS	***308 N OXFORD AVE***	***34***	***258***
YOUNG PHOTO	***4215 W BERVERLY BLVD***	***34***	***259***
ALEXANDRIA NEW E S NO 1	***330 N HARVARD BLVD***	***34***	***260***
BEVERLY 1 HOUR PHOTO	***314 N WESTER AVE***	***34***	***261***
THRIFTY CLEANERS	***482 N WESTERN AVE***	***34***	***269***
BELMONT NEW P C NO 1	***610 MICHELTORENA ST***	***35***	***272***
BIG 7 PHOTO	***205 S VERMONT AVE***	***36***	***272***
DAILY RACING FORM INC	***170 S BIMINI PL***	***36***	***278***

EXECUTIVE SUMMARY

Site	Address	Map ID	Page
SEJIN AUTO REPAIR	***150 S BIMINI PL***	***36***	***280***
DIRT BUSTERS	***124 S VERMONT***	***36***	***282***
BELMONT NEW ELEMENTARY NO 6	***101 N VERMONT AVE***	***36***	***283***
LOS ANGELES USD VIRGIL JR HG S	***152 N VERMONT AVE***	***36***	***292***
MIDWAY BODY SHOP	***200 N VERMONT***	***36***	***300***
BOGARZ INC	***137 NORTH VIRGIL AVE***	***36***	***304***
AMERICAN INDUSTRIAL	***201 N WESTMORLAND***	***36***	***307***
NEWELL COLOUR LAB	***221 N WESTMORELAND AVE***	***36***	***319***
MIDWAY FORD BODY SHOP	***206 N JUANITA AVE***	***36***	***320***
CHEVRON STATION 90373	***3631 BEVERLY***	***36***	***329***
DUNLEE CORP	***3644 BEVERLY BLVD***	***36***	***333***
DEWEY PEST CONTROL	***3711 BEVERLY BLVD***	***36***	***343***
PACIFIC BELL	316 N. JUANITA AVE	36	354
CHEVRON STATION LA00894	***3501 W TEMPLE BLVD***	***36***	***362***
PEAIRS ENGINEERS	***3521 TEMPLE ST***	***36***	***365***
SHELL SERVICE	***341 N VERMONT AVE***	***36***	***375***
GORE GRAPHICS	340 NORTH MADISON AVENU	36	376
GORE GRAPHICS	340 N MADISON AVE	36	379
WD MACHINE SHOP	***310 N HOOVER ST***	***36***	***383***
DEPARTMENT OF CA HIGHWAY PATRO	***437 N VERMONT AVE***	***36***	***399***
LEMUEL DATOR L D TRUCKING L A	***3459 PLATA ST***	***37***	***402***
TOPPERS	***505 N SILVERLAKE BLVD***	***39***	***403***
LARCHMONT PHOTO LAB	***216 N LARCHMONT BLVD***	***40***	***409***
RITZ 1HR DRY CLEANING	***306 LARCHMONT BLVD***	***40***	***413***
LOS ANGELES USD ALEXANDRIA ELE	***4211 OAKWOOD AVE***	***41***	***425***
PACHECO TRANSPORT	301 N BRONSON ST	46	443
TEMPLE COMMUNITY HOSPITAL	***235 N HOOVER***	***49***	***448***
APOLLO MAGNETICS	***2720 W BEVERLY BLVD***	***50***	***451***
M CLEANERS	***2751 BEVERLY BLVD***	***50***	***452***
DREAM FLOWER	***2810 BEVERLY BLVD***	***50***	***455***
KONICA BUSINESS MACHINES USA	***2828 BEVERLY BLVD***	***50***	***456***
GESTETNER CORP	***3000 BEVERLY BLVD***	***50***	***457***
OCCIDENTAL STUDIOS	***201 N OCCIDENTAL BLVD***	***50***	***461***
MIKES TIRE AND SUPER SERVICE	***2520 TEMPLE ST***	***50***	***464***
DICKRAN COLOR LAB INC	***2745 W TEMPLE ST***	***50***	***487***
AMBASSADOR IND INC CAL	***2753 TEMPLE ST***	***50***	***489***
U S AUTO BODY & REPAIR SHOP	***2918 TEMPLE ST***	***50***	***495***
MORRIS MENU CO	***628 N ALVARADO ST***	***54***	***505***
WILLIAMS BROS, INC	***2210 W TEMPLE***	***59***	***507***
LOS ANGELES USD ROSEMONT ELEM	***421 N ROSEMONT AVE***	***59***	***511***
LOS ANGELES NEW P C NO 1	***4043 INGRAHAM ST***	***60***	***513***
J M K ENVIRONMENTAL SOLUTIONS	***3810 WILSHIRE BLVD***	***60***	***515***
BEGA TRADING CO	3850 WILSHIRE BLVD	60	524
WILSHIRE MAIL BOX & ETC	***3850 WILSHIRE BLVD #A***	***60***	***525***
CAR CONCIERGE THE	***3700 WILSHIRE BLVD***	***60***	***526***
THE ORIGINAL 23 MINUTE PHOTO	***650 S WESTERN AVE***	***60***	***528***
GREATER MEDIA STATIONS	***3580 WILSHIRE BLVD***	***60***	***533***
GARLIC RESEARCH LABS	3550 WILSHIRE BLVD #200	60	536
PARAMOUNT PLAZA	***3550 WILSHIRE BLVD SUIT***	***60***	***536***
STATE STREET BANK & TRUST	3731 WILSHIRE BLVD	60	538
PACIFIC BELL	***3470 WILSHIRE***	***60***	***545***
CENTRAL PLAZA	***3450 WILSHIRE BLVD SUIT***	***60***	***545***
RITE AID NO 5428	***3420 WILSHIRE***	***60***	***550***
BELMONT NEW E S NO 10	***3400 WILSHIRE BLVD***	***60***	***560***
O E F INC	***3699 WILSHIRE BLVD***	***60***	***588***
ARCO FACILITY NO 05355	***3675 WILSHIRE BLVD***	***60***	***595***

EXECUTIVE SUMMARY

Site	Address	Map ID	Page
LOPAPA INSTITUTE INC	***3435 WILSHIRE BLVD***	***60***	***600***
TEXACO SVC STA	***3201 WILSHIRE BLVD***	***60***	***600***
ORIGINAL 23 MINUTE PHOTO	***638 SO WESTERN AVE***	***60***	***611***
ST JAMES WILSHIRE ELEMENTARY S	625 S ST ANDREWS PL	60	611
LOS ANGELES MAYORS RESIDENCE	***605 SOUTH IRVING BLVD***	***60***	***615***
CINDERELLA CLEANERS	***4062-1/2 W 6TH ST ANDRE***	***60***	***616***
PEACOCK CLEANERS	***3980 WEST 6TH STREET***	***60***	***626***
IMPERIAL DRY CLEANERS	***502 S WESTER AVE***	***60***	***630***
TOWN MEDICAL CTR	***425 S WESTERN AVE STE 1***	***60***	***632***
ROCKET CLEANERS	***4205 W 3RD ST***	***60***	***644***
SHELL SERVICE STATION	***270 S WESTERN***	***60***	***648***
MOORE WHITE MEDICAL GRP	***266 S HARVARD***	***60***	***654***
CHAPMAN PARK AUTOMOTIVE	***249 S OXFORD AVE***	***60***	***657***
CAHUENGA NEW E S NO 1	***225 S OXFORD AVE***	***60***	***658***
LA USD CAHUENGA ELEM	***220 S HOBART BLVD***	***60***	***659***
WESTERN AUTO CLINIC	***215 S. WESTERN AVE***	***60***	***662***
LAUSD COMMONWEALTH ELEM SCHOOL	***215 S COMMONWEALTH AVE***	***63***	***694***
MOTCCH	***664 S CATALINA AVE***	***64***	***698***
PACIFIC BELL	***3020 WILSHIRE BLVD***	***64***	***701***
CANNELL & CHAFFIN, INC	***3000 WILSHIRE BLVD***	***64***	***702***
COMMUTER TRANSPORTATION SERVIC	***3550 WILSHIRE BL STE 30***	***64***	***705***
UNITED STATES BORAX & CHEM COR	***3075 WILSHIRE BOULEVARD***	***64***	***706***
O E F INC	***3055 WILSHIRE BLVD***	***64***	***706***
CAMPU	***4001 WILSHIRE BLVD UNIT***	***64***	***715***
YUNAN RADIOLOGY MEDICAL GRP	***3545 WILSHIRE BLVD 109***	***64***	***716***
PIERCE NATIONAL LIFE INS CO	***3807 WILSHIRE BLVD 314***	***64***	***717***
CONCORD CLEANERS	***3959 WILSHIRE BLVD UNIT***	***64***	***717***
MAX PHOTO	***3959 WILSHIRE BLVD STE***	***64***	***721***
UNOCAL	***3701 WILSHIRE BLVD STE***	***64***	***727***
BELMONT NEW E S NO 9	***611 S HOBART BLVD***	***64***	***729***
615 S VIRGIL	615 S VIRGIL AVE	64	734
ANDRESEN TYPOGRAPHICS	***3501 W 6TH ST***	***64***	***739***
SOUTHERN CALIFORNIA WATER COMP	3625 W 6TH ST	64	741
UNITED CHURCH OF RELIGIOUS SCI	***3251 W 6TH ST***	***64***	***747***
MASTER SYSTEM CLEANERS	***3311 W 6TH***	***64***	***752***
MYUNG SUP IM DBA DYNO AUTO CA	***3151 W 6TH ST***	***64***	***763***
EMBO CLEANERS	***3809 W SIXTH ST***	***64***	***764***
CHEVRON STATION 93674	***561 S VERMONT AVE***	***64***	***773***
CHEVRON STATION 9 5294	***549 S NORMANDIE AVE***	***64***	***777***
VERMONT CHEVROLET	***444 S VERMONT AVE***	***64***	***798***
AMERICAN ONE HOUR PHOTO	***3670 W 3RD STREET***	***64***	***818***
VELVETONE CLEANERS	***3580 W THIRD ST***	***64***	***820***
A 1 BODY SHOP & AUTO REPAIR	***3525 W 3RD ST***	***64***	***826***
HENRY A TICAS	***247 S KENMORE AVE APT 4***	***64***	***831***
U S A CLEANERS	***4052 W 3RD ST***	***66***	***836***
ONE HOUR PRIME CLEANERS	***4055-1/2 W 3RD ST***	***66***	***840***
TEXACO AUTO SERV	***3875 3RD ST***	***66***	***852***
MARLBOROUGH SCHOOL	250 S ROSSMORE AVE	67	856
SO CAL GAS CO JUANITA BASE	***3333 W 3RD ST***	***68***	***861***
TIME SERVICE INC	***2115 BEVERLY BLVD***	***69***	***880***
BELMONT NEW P C NO 12	***135 N LAKE ST***	***69***	***883***
OTIS ELEVATOR CO	***2417 BEVERLY BLVD***	***69***	***886***
OUR LADY OF LORETTO HIGH SCHOO	227 N LAKE ST	71	887
CASA DE CLEANERS	***2604 WEST THIRD ST***	***76***	***895***
AGAJANIAN RECYCLING CO	***405 S IRVING BLVD***	***77***	***902***
BELMONT HOLLYWOOD NEW P C NO 2	***310 S LAFAYETTE PARK PL***	***79***	***904***

EXECUTIVE SUMMARY

Site	Address	Map ID	Page
APOLLO MAGNETICS	***1900 W BEVERLY BLVD***	***84***	***911***
C T PARTNERS	***329 201 S ALVARADO ST***	***86***	***916***
L M S MEDICAL SERVICES	***311 201 S ALVARADO ST***	***86***	***917***
C L M G INC	***2222 OCEAN VIEW AVE***	***86***	***917***
ST VINCENT MEDICAL CENTER	***2131 WEST THIRD STREET***	***86***	***924***
MID-WILSHIRE MEDICAL GP	***201 S. ALVARADO ST STE***	***86***	***937***
HOUSE EAR INSTITUTE	***256 S LAKE ST***	***86***	***940***
LA PARKVIEW PHOTO CENTER	***412 S PARKVIEW ST***	***89***	***944***
PACIFIC BELL	***720/740 RAMPART***	***92***	***954***
LA ST BARNABUS CENTER	***675 S CARONDELT ST***	***92***	***959***
OTIS NEW ES	***2401 WILSHIRE BOULEVARD***	***92***	***960***
SHALOM VAN LEVY	***671 SOUTH CORONADO***	***92***	***966***
LA BEST CLEANERS	***610 S RAMPART BLVD***	***92***	***983***
LA FELIPE DE NEVE LIBRARY	***2820 W 6TH ST***	***92***	***986***
PACIFIC BELL	***4201 WILSHIRE BLVD***	***96***	***994***
LA WESTLAKE NSA	***607 S PARK VIEW ST***	***98***	***998***
LA ALARM POLICE SIGNAL BUREAU	***2228 W 6TH ST***	***99***	***1006***
SHELL OIL CO	***700 S VERMONT***	***101***	***1020***
20/20 CLEANERS	***698 S IROLO ST***	***103***	***1034***
LOS ANGELES APARTMENT BLDG	691 S IROLO ST	103	1038
ZAMORA TRUCKING	***3198 W 7 ST***	***104***	***1038***
L A U S D WILTON PL EL	***745 S WILTON PL***	***109***	***1044***
NANCY HYMAN	***739 S NORMANDIE AVE***	***111***	***1045***

HMIRS: The Hazardous Materials Incident Report System contains hazardous material spill incidents reported to the Department of Transportation. The source of this database is the U.S. EPA.

A review of the HMIRS list, as provided by EDR, and dated 09/08/2004 has revealed that there are 3 HMIRS sites within the searched area.

Site	Address	Map ID	Page
Not reported	4933 E BEVERLY BLVD	46	443
Not reported	2106 W. TEMPLE ST.	62	684
Not reported	6TH & CATALINA	64	746

PADS: The PCB Activity Database identifies generators, transporters, commercial storers and/or brokers and disposers of PCBs who are required to notify the United States Environmental Protection Agency of such activities. The source of this database is the U.S. EPA.

A review of the PADS list, as provided by EDR, and dated 09/30/2004 has revealed that there are 2 PADS sites within the searched area.

Site	Address	Map ID	Page
OEF, INC.	3699 WILSHIRE BLVD	60	588
OEF, INC.	3055 WILSHIRE BLVD	64	707

FTTS: 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) over the previous five years. To maintain currency, EDR contacts the Agency on a quarterly basis.

A review of the FTTS INSP list, as provided by EDR, and dated 04/13/2004 has revealed that there are 7 FTTS INSP sites within the searched area.

Site	Address	Map ID	Page
PARAMOUNT PICTURES	5555 MELROSE AVE	21	156
VAN NESS ELEMENTARY SCHOOL	501 N VAN NESS AVE	31	196
DEPARTMENT OF CA HIGHWAY PATRO	***437 N VERMONT AVE***	***36***	***399***
GREATER MEDIA STATIONS	***3580 WILSHIRE BLVD***	***60***	***533***
BEGA TRADING COMPANY	3850 WILSHIRE BLVD	60	538
OPERATING ENGINEERS FUND	3699 WILSHIRE BLVD	60	544
NANCY HYMAN	***739 S NORMANDIE AVE***	***111***	***1045***

STATE OR LOCAL ASTM SUPPLEMENTAL

AST: The Aboveground Storage Tank database contains registered ASTs. The data come from the State Water Resources Control Board's Hazardous Substance Storage Container Database.

A review of the AST list, as provided by EDR, and dated 12/01/2003 has revealed that there is 1 AST site within the searched area.

Site	Address	Map ID	Page
VERMONT CHEVROLET BUICK	444 SOUTH VERMONT AVENU	64	798

DRYCLEANERS: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 cleaners' agents; linen supply; coin-operated laundries and cleaning; drycleaning plants except rugs; carpet and upholster cleaning; industrial launderers; laundry and garment services.

A review of the CLEANERS list, as provided by EDR, has revealed that there are 42 CLEANERS sites within the searched area.

Site	Address	Map ID	Page
JESSE CLEANERS	650 N HOOVER ST	16	118
JESSE CLEANERS	650 N HOOVER	16	118
PARKMAN CLEANERS	2925 W SUNSET BLVD	26	188
PARKMAN CLEANERS	***2925 SUNSET BLVD***	***26***	***190***
UNIVERSAL CLEANERS	4650 BEVERLY BLVD	34	212
UNIVERSAL CLEANERS	4620 BEVERLY BLVD	34	213
UNIVERSAL CLEANERS	***4650 WEST BEVERLY BLVD***	***34***	***232***
THRIFTY DRY CLEANERS	***4222 BEVERLY BLVD***	***34***	***255***
THRIFTY CLEANERS	***482 N WESTERN AVE***	***34***	***269***
RITZ 1HR DRY CLEANING	***306 LARCHMONT BLVD***	***40***	***413***
M CLEANERS	***2751 BEVERLY BLVD***	***50***	***452***
MINI CLEEN CLEANERS	***2751 BEVERLY BLVD***	***50***	***455***
SEOUL CLEANERS	3959 WILSHIRE BLVD #B-1	60	534
SEOUL CLEANERS	3959 WILSHIRE BLVD #B-1	60	534
SEOUL CLEANERS	3959 WILSHIRE BLVD #B-1	60	535
SEOUL CLEANERS	3959 WILSHIRE BLVD #B-1	60	535

Site	Address	Map ID	Page
CAMPU CLEANERS	4001-D WILSHIRE BLVD	60	535
CINDERELLA CLEANERS	***4062-1/2 W 6TH ST ANDRE***	***60***	***616***
PEACOCK CLEANERS	***3980 W 6TH***	***60***	***620***
PEACOCK CLEANERS	***3980 W 6TH STREET***	***60***	***621***
H & K IMPERIAL CLEANERS INC	***502 S WESTER AVE***	***60***	***627***
WESTERN CLEANERS	***347 S WESTERN AVE***	***60***	***633***
ROCKET CLEANERS	***4205 W 3RD ST***	***60***	***644***
CONCORD CLEANERS	***3959 WILSHIRE BLVD UNIT***	***64***	***717***
CHAPMAN PARK CLEANERS	***3450 W 6TH ST***	***64***	***743***
MASTER SYSTEM CLEANERS	***3311 W 6TH***	***64***	***752***
EMBO CLEANERS	***3809 W SIXTH ST***	***64***	***764***
CHAPMAN PARK CLEANERS	3451 W 6TH ST	64	767
SHATTO CLEANERS	401 S VERMONT AVE #5	64	805
20TH CENTURY CLEANERS	3659 W 3RD ST	64	820
VELVETONE CLEANERS	***3580 W THIRD ST***	***64***	***820***
U S A CLEANERS	***4052 W 3RD ST***	***66***	***836***
ONE HOUR PRIME CLEANERS	***4055-1/2 W 3RD ST***	***66***	***840***
VICTORIA CLEANERS	268 S NORMANDIE AVE	66	852
CASA DE CLEANERS	***2604 WEST THIRD ST***	***76***	***895***
CLEANING STORE THE	***528 S OCCIDENTAL BLVD***	***85***	***911***
L A BEST CLEANERS	610 SO RAMPART	92	981
MR FAYES N ENABE	***610 S RAMPART BLVD***	***92***	***982***
LA BEST CLEANERS	***610 S RAMPART BLVD***	***92***	***983***
LA BEST CLEANERS	***610 S RAMPART***	***92***	***984***
20/20 CLEANERS	***698 S IROLO ST***	***103***	***1034***
20/20 CLEANERS	***698 IROLO ST***	***103***	***1035***

WDS: California Water Resources Control Board - Waste Discharge System.

A review of the CA WDS list, as provided by EDR, and dated 12/20/2004 has revealed that there are 15 CA WDS sites within the searched area.

Site	Address	Map ID	Page
BRAILLE INSTITUTE	***741 VERMONT AVE N***	***13***	***88***
MARATHON OFFICE BUILDING	5555 MELROSE AVE	21	168
585 NORTH ROSSMORE, LTD.	585 N ROSSMORE AVE	28	194
MAPLEWOOD APTS.	4664 MAPLEWOOD AVE	32	198
BEVERLY HOT SPRINGS	***308 N OXFORD AVE***	***34***	***258***
TRANSPORTAION YARD	124 S MADISON AVE	36	284
MIDWAY FORD	3737 BEVERLY BLVD	36	338
ROSSMORE APARTMENTS	445 N ROSSMORE AVE	38	403
HANCOCK PARK PLACE APTS	620 S GRAMERCY PL	60	613
IN SUNG KWAK	***270 S WESTERN AVE***	***60***	***652***
FORMER ARCO SERVICE STN. #1860	3817 W THIRD ST	66	843
RENO APARTMENTS	350 S RENO ST	75	894
INSTITUTE PLAZA	2200 W 3RD ST	86	926
HARBOR ASSOCIATES	4201 WILSHIRE BLVD	96	995
LOS ANGELES APARTMENT BLDG	691 S IROLO ST	103	1038

EXECUTIVE SUMMARY

SCH: 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.

A review of the SCH list, as provided by EDR, and dated 11/09/2004 has revealed that there are 13 SCH sites within the searched area.

Site	Address	Map ID	Page
HOLLYWOOD NEW CONTINUATION HS	HARVARD BLVD/LEMON GROV	4	6
BELMONT/HOLLYWOOD #5	LEMON GROVE AVENUE/KING	8	17
SANTA MONICA/VINE PRIMARY SITE	MELROSE AVENUE/GRAMERCY	10	40
DAYTON HEIGHTS ELEM	***607 N WESTMORELAND AVE***	***16***	***107***
ALEXANDRIA NEW ELEMENTARY SCHO	BEVERLY BOULEVARD/N. HA	34	244
BELMONT PRIMARY CENTER #1	610 MICHELTORENA ST	35	270
BELMONT NEW ELEMENTARY SCHOOL	NORTH VERMONT AVENUE/CO	36	296
VALUE CHARTER SCHOOL	221 NORTH WESTMORELAND	36	316
BELMONT/HOLLYWOOD #1	OAKWOOD AVENUE/JUANITA	36	388
LOS ANGELES NEW PRIMARY CENTER	WILSHIRE BOULEVARD/WILT	60	523
COMMONWEALTH ELEMENTARY SCHOOL	213 SOUTH COMMONWEALTH	63	695
BELMONT/HOLLYWOOD NEW PRIMARY	310 S LA FAYETTE PARK P	79	905
BELMONT/HOLLYWOOD ELEMENTARY S	2401 WILSHIRE BLVD	92	962

Emissions Inventory Data: 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 12/31/2002 has revealed that there are 13 EMI sites within the searched area.

Site	Address	Map ID	Page
PARAMOUNT PICTURES CORP	5675 LEMON GROVE AV	5	9
LA CITY COLLEGE	***855 N VERMONT AV***	***6***	***11***
CIRCLE PRINTING	***4618 MELROSE AVE***	***18***	***129***
PARAMOUNT PICTURES CORP	***5555 MELROSE AVE***	***21***	***156***
KAISER FOUNDATION HOSPITAL	2700-4900 SUNSET BLVD	26	185
MIDWAY FORD	***200 VERMONT AVE N***	***36***	***301***
FOUNDATION HEALTH TRANS GROUP/	***340 N MADISON AVE***	***36***	***378***
RITZ FRENCH HAND LAUNDRY	***306 N LARCHMONT BLVD***	***40***	***416***
TEMPLE COMMUNITY HOSPITAL	***235 N HOOVER ST***	***49***	***450***
U S AUTO BODY & REPAIR SHOP	***2918 TEMPLE ST***	***50***	***495***
TEXACO SVC STA	***3201 WILSHIRE BLVD***	***60***	***600***
PEACOCK CLEANERS	***3980 W 6TH STREET***	***60***	***621***
UANITA	***3333 W 3RD ST***	***68***	***856***

REF: This category contains properties where contamination has not been confirmed and which were determined as not requiring direct DTSC Site Mitigation Program action or oversight. Accordingly, these sites have been referred to another tate or local regulatory agency.

A review of the REF list, as provided by EDR, and dated 11/09/2004 has revealed that there are 3 REF

sites within the searched area.

Site	Address	Map ID	Page
TRUST SERVICES OF AMERICA	218,220,224 NORTH JUANI	36	323
CULLIGAN D I WATER SERVICES	315 NORTH HOOVER STREET	36	384
WEST FOURTH STREET SITE	2424 WEST 4TH STREET	89	945

CA SLIC: SLIC Region comes from the California Regional Water Quality Control Board.

A review of the CA SLIC list, as provided by EDR, has revealed that there are 10 CA SLIC sites within the searched area.

Site	Address	Map ID	Page
SIAM COMMERCIAL BANK	720-730 NORTH VINE STRE	15	99
SIAM COMMERCIAL BANK	720-730 VINE	15	99
LA DWP STREETLIGHT MAINTENANCE	611 NORTH HOOVER ST	16	110
CITY OF LOS ANGELES - DWP	611 HOOVER	16	116
KOREAN DRYCLEANERS & LAUNDRY	3807 WILSHIRE BLVD. #72	60	538
DFK CORPORATION	***3278 WILSHIRE BLVD.***	***60***	***561***
DFK CORP.	3278 WILSHIRE	60	561
FURBERTS PROPERTY	2016 TEMPLE ST	62	673
FURBERT PROPERTY	2016 TEMPLE	62	676
LESLIE FAMILY TRUST	3566-3580 003RD	64	823

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 12/31/2002 has revealed that there are 640 HAZNET sites within the searched area.

Site	Address	Map ID	Page
ICS AUTO BODY	4256 BURNS AVE	1	3
VERONICA . DE GUIA DMD	907 N VIRGIL AVE	1	4
GRACE HOPKINS	939 N MARIPOSA	2	4
PICO INVESTMENT CO	***901 N WESTERN AVE***	***3***	***5***
HOME SAVINGS OF AMERICA L A	955 N OXFORD AVE	3	6
LEMON G OVE REC EATION CT	4959 LEMON GROVE AVE	4	8
1X CITY OF LA/DEPT OF PARKS &	932 N HOBART BLVD	4	8
CITY LOS ANGELES/REC DEPT/LEMO	948 NORTH HOBART AVE	4	8
LA COMMUNITY COLLEGE DISTRICT	855 NORTH VERMONT AVENU	6	9
CITY OF LA - DPW/SANITATION	855 N VERMONT AVE	6	10
LOS ANGELES CITY COLLEGE	***855 N VERMONT AVE***	***6***	***11***
ALPHA PROPERTY MANAGEMENT	811 N HELIOTROPE	9	19
MANHATTAN DR'S OFFICE	654 N MANHATTAN PL	10	19
MOBIL OIL CORPORATION 18-LFR	655 WESTERN	10	22
SK SOUTHERN CALIFORNIA II	4996 MELROSE AVE	10	25
ANDRESON TYPOGRAPHICS	5059 MELROSE AVE	10	29
THRIFTY OIL CO #037	***5175 MELROSE AVE***	***10***	***29***

EXECUTIVE SUMMARY

EXECUTIVE SUMMARY

Site	Address	Map ID	Page
KARL B ZEILER DMD	581 N LARCHMONT BLVD	21	144
T & A	606 N LARCHMONT AVE #11	21	145
ELLIS C WONG DDS, INC	607 NORTH LARCHMONT BLV	21	146
EURO TYPE	606 N LARCHMONT	21	147
RB IMAGES INC	639 N LARCHMONT BLVD	21	148
WOOLFLOKS V W REPAIR	***639 N LARCHMONT BLVD***	***21***	***149***
CHEVRON 98304	5700 MELROSE	21	150
CHEVRON STATION NO 98304	***5700 MELROSE AVE***	***21***	***153***
PARAMOUNT PICTURES CORP	***5555 MELROSE AVE***	***21***	***156***
DISNEY PRODUCTIONS	5555 MELROSE AVE	21	164
UNITEL VIDEO INC	***5555 MELROSE AVE STUDIO***	***21***	***166***
PARAMOUNT PICTURES	5555 MELROSE AVE	21	168
WEST HOLLYWOOD AUTOMOTIVE	5570 MELROSE AVE	21	173
THEATRICAL AUTO INC	5576 MELROSE AVE	21	173
COCO'S MASTERCARE	5576 MELROSE AVE	21	174
MELROSE ONE HOUR PHOTO	5607 MELROSE AVE	21	174
LYMANS AUTOMOTIVE SERVICE INC	5600 MELROSE AVE	21	178
UNOCAL 76 SERVICE STATION	5600 MELROSE AVENUE	21	178
LEO'S AUTO REPAIR	***3100 W SUNSET BLVD***	***22***	***179***
CENTURY PAINT	663 N BERENDO ST	24	182
OLD WORLD CARFTMANSHIP	837 1/2 MICHELTORENA ST	25	183
CARROLL AND PETER AUTO	2450 SUNSET BLVD	26	183
SUNSET FAMILY DENTISTRY	2613 SUNSET BLVD.	26	184
THE FOOT CLINIC	2711 SUNSET BLVD	26	186
ALEGRIA PARTNERS LP	2737 / 2741 SUNSET BL	26	187
OSE ROQUE BODY & PAINT	2824 1/2 SUNSET BLVD	26	187
PARKMAN CLEANERS	***2925 SUNSET BLVD***	***26***	***190***
ALAN VIAU	2828 RESERVOIR	26	193
RAVENSWOOD APARTMENTS	570 N ROSSMORE AVE	28	193
MUIR & SINGH	550 N CAHUENGA	29	194
DAVID MUSSO	574 N WINDSOR ST	30	195
E M C MORTGAGE	5132 MAPLEWOOD AVE	31	195
LAUSD/ VAN NESS AVE ELEM	501 N VAN NESS AVE	31	197
NEWSFILM LABORATORIES	516 N LARCHMONT	33	199
IT MODELS	526 NO LARCHMONT BLVD	33	199
LA FIRE STATION 29	***158 S WESTERN AVE***	***34***	***202***
WESTERN AVE AUTO BODY	150 S WESTERN AVE	34	204
LA WILSHIRE BRANCH LIBRARY	***149 N ST ANDREWS PL***	***34***	***208***
1X HK PHOTO	124 N WESTERN AVE	34	209
HK PHOTO	124 NO WESTERN AVE	34	210
CHALAN LEETRAKUL, DDS INC	233 N WESTERN AVE	34	211
AY'S AUTO CENTER	4520 W BEVERLY BLVD	34	214
MOBIL OIL CORPORATION 18-LQG	4605 WEST BEVERLY BLVD	34	225
ELLER MEDIA	4620 BEVERLY BLVD	34	226
SCHAEFER AMBULANCE SVC INC	***4627 BEVERLY BLVD***	***34***	***227***
UNIVERSAL CLEANERS	***4650 WEST BEVERLY BLVD***	***34***	***232***
KI SOOK KIM	4474 W BEVERLY BLVD	34	236
GM AUTO RPR	4400 BEVERLY BLVD	34	239
BEVERLY TRANSMISSION	4401 W BEVERLY BLVD UNI	34	241
76 PRODUCTS STATION #0929	***4700 BEVERLY BLVD***	***34***	***247***
PETTYS UNOCAL SERCICE	4700 BEVERLY BLVD	34	251
SERVICE STATION 0929	***4700 BEVERLY BLVD***	***34***	***251***
PETTY'S SERVICE (#0929)	4700 BEVERLY BLVD	34	252
FIRESTONE TIRE	4305 W BEVERLY	34	253
FIRESTONE STORE #67K2	4305 BEVERLY BLVD	34	254
ALEGRIA DENTAL CENTER	4242 BEVERLY DR.	34	255

EXECUTIVE SUMMARY

EXECUTIVE SUMMARY

EXECUTIVE SUMMARY

EXECUTIVE SUMMARY

EXECUTIVE SUMMARY

Site	Address	Map ID	Page
LOS ANGELES MAYORS RESIDENCE	***605 SOUTH IRVING BLVD***	***60***	***615***
CINDERELLA CLEANERS	***4062-1/2 W 6TH ST ANDRE***	***60***	***616***
P AND L COLOR PRINTING	4052 WEST 6TH STREET	60	619
PEACOCK CLEANERS	***3980 W 6TH***	***60***	***620***
TOSCO CORPORATION STATION #305	4000 W 6TH STREET	60	622
K. S. 76 INC.	4000 WEST 6TH STREET	60	623
UNOCAL SERVICE STATION #3900	4000 W 6TH ST	60	624
SILOAN MEDICAL CENTER	547 SOUTH WESTERN AVE	60	626
SILOAM MEDICAL CENTER_INC	547 SOUTH WESTERN AVE	60	627
HOME SAVINGS OF AMERICA	539 S MANHATTAN	60	627
H & K IMPERIAL CLEANERS INC	***502 S WESTER AVE***	***60***	***627***
CALIFORNIA 21 MINUTE PHOTO	450 SO WESTERN AVENUE	60	630
CARDINAL LITHOGRAPH CO	414 S WESTERN AVE	60	632
WESTERN WILSHIRE CAR WASH INC	***401 S WESTERN AVE***	***60***	***632***
WESTERN CLEANERS	***347 S WESTERN AVE***	***60***	***633***
KIELING MANAGEMENT CO	345 S OXFORD	60	635
CHANG R EONG CHIROPRACTIC	338 S WESTERN AVE	60	636
HOLLYWOOD GRAND PRIX AUTO BODY	4274 W 3RD ST	60	640
SUSIE CHONGA LEE/UNITED REALTY	4205 W 3RD ST	60	645
OON Y KOH MEDICAL CORP	4220 W THIRD ST #105	60	646
SHELL SERVICE STATION	***270 S WESTERN***	***60***	***648***
DOCTOR PHOTO	269 SO. WESTERN AVE.	60	653
MOORE WHITE MEDICAL GRP	***266 S HARVARD***	***60***	***654***
CHAPMAN PARK AUTOMI	249 S OXFORD AVE	60	657
OSEFINA DEL CARMEN NIETO, DMD	244 SO OXFORD AVE SUI	60	658
HARVARD CAL-TIEMPO APARTMENTS	235 S HARVARD	60	658
CAHUENGA NEW E S NO 1	***225 S OXFORD AVE***	***60***	***658***
LAUSD/CAHUENGA ELEM	220 S HOBART BLVD	60	660
MID WESTERN AUTO CLINIC	215 SOUTH WESTERN AVENU	60	661
BEVERLY HILLS AUTO BODY GROUP	215 S WESTERN AVE	60	661
GP COLOR IMAGING GRP LLC	201 S OXFORD ST	60	664
GP COLOR	201 S OXFORD AVE	60	665
HOME SAVINGS OF AMERICA	200 N RAMPART BLVD	61	666
SHELL	400 N ALVARADO	62	680
ARCO PRODUCTS COMPANY	2106 TEMPLE ST	62	681
ARCO STATION	***2106 W TEMPLE ST***	***62***	***684***
CHEVRON 90514	403 N ALVARADO	62	690
M A B SERVICES INC	2121 W TEMPLE ST	62	692
SOUTH L A ENGINE REBUILDING	2122 W TEMPLE	62	692
K & W AUTO BODY & REPAIR SHOP	440 N ALVARADO ST	62	693
LAUSD/ COMMONWEALTH ELEM SCHOO	215 S COMMONWEALTH AVE	63	695
BRESEE FOUNDATION	3221 W 2ND ST	63	697
WILSHIRE TRADE CTR	664 SO CATALINA AVE	64	698
SINA CUSTOM LAB	3136 WILSHIRE BLVD	64	699
WILSHIRE ARDMORE PARTNERSHIP	3540 WILSHIRE BVLD STE	64	699
BULLOCK'S DEPARTMENT STORE	3050 WILSHIRE BLVD	64	699
FREESTYLE ENTERTAINMENT	3050 WILSHIRE BLVD	64	700
SOUTHWESTERN UNIVERSITY OF LAW	3050 WILSHIRE BLVD	64	700
IM H. LIM DDS	3350 WILSHIRE BLVD STE	64	702
WEDDING PLAZA	3000 WILSHIRE BLVD	64	702
NORTH LIGHT LIMITED	3055 WILSHIRE BLVD 4TH	64	704
O E F INC	***3055 WILSHIRE BLVD***	***64***	***706***
WILSHIRE DENTAL GROUP	2975 WILSHIRE BLVD STE	64	709
1X KOSS PROPERTIES CO	2975 WILSHIRE BLVD	64	710
1X 2975 WILSHIRE CO	2975 WILSHIRE BLVD	64	710
TOSCO CORPORATION STATION #303	3033 WILSHIRE BLVD	64	711

EXECUTIVE SUMMARY

Site	Address	Map ID	Page
1X MID-WILSHIRE ASSOC	3550/3580 WILSHIRE BLVD	64	715
CONCORD CLEANERS	***3959 WILSHIRE BLVD UNIT***	***64***	***717***
LOS ANGELES BUSINESS OURNAL	3345 WILSHIRE BLVD STE	64	721
BIO SPRING CHIROPRACTIC CARE	630 S SHATTO PLACE	64	727
YMCA OF METROPOLITAN LOS ANGEL	625 SOUTH NEW HAMPSHIRE	64	728
KOREAN ADVENTIST PRESS	619 SOUTH NEW HAMPSHIRE	64	728
H. HILL PROPERTIES,LLC	610 S HARVARD BLVD	64	729
1X KFI INC	610 ARDMORE AVE	64	730
L.A. SHATTO HEALTH CARE	612 SHATTO PLACE, #101	64	732
SPANIER & MASSIEN MDS	609 S WESTMORELAND AVE	64	732
HARVARD DENTAL CENTER	610 S. HARVARD BLVD. 10	64	733
TOGUCHI & BARRON DDS INC	3851 W 6TH ST	64	735
FISHER AUTOMOTIVE	3824 W 6TH ST	64	736
COSMO AUTO BODY SHOP	3826 WEST 6TH ST	64	736
EXCEL AUTO BODY CENTER	3826 WEST 6TH ST	64	736
HARVARD MEDICAL GROUP INC	3720 WEST 6TH ST	64	737
CONIA CHIROPRACTIC	3720 WEST 6TH STREET	64	738
INT'L EDUCATION CORP UNITED ED	3727 W 6TH ST, STE 317	64	738
F SQUARE PRINTING	3501 WEST 6TH STREET	64	739
STEWART KETCHUM	600 S HOBART	64	740
CLEANING STORE	3470 W 6TH ST	64	740
CLEANING STORE THE	3470 W 6TH ST	64	741
KINGSLEY CHIROPRACTIC CLINIC	3669 W 6TH ST	64	742
PHOTOPIA	3450 W 6TH ST	64	742
CHAPMAN PARK CLEANERS	***3450 W 6TH ST***	***64***	***743***
FOUNDERS CHURCH OF RELIGIOUS S	3251 W 6TH ST	64	746
COMME CIAL P OPE TY MGT	3251 W 6TH ST	64	747
HEI PAIK KIM MD INC	3663 W 6TH ST #203	64	747
OON HO CHOUNG MD	3663 W 6TH ST STE 103	64	748
WORK IN URY CENTER	3407 W 6TH ST #608	64	751
ROYAL GROUP	3407 WEST 6TH ST	64	751
MASTER SYSTEM CLEANERS	***3311 W 6TH***	***64***	***752***
ARCO PRODUCTS COMPANY	3325 W 6TH STREET	64	755
LA MERCED MEDICAL CLINIC	3130 W 6TH ST	64	757
SAMUEL & LEONICA ROXAS DMD	3130 W 6TH ST	64	757
BEN AMIN SONG, M.D.	3030 W 6TH ST	64	759
ESLAO DENTAL GROUP INC	3120 WEST SIXTH STREET	64	759
L A CNTY/INTERNAL SVCS DEPT/CO	3175 W 6TH	64	759
CO OF LA DEPT OF COMM & SR CIT	3175 WEST 6TH ST	64	760
PHONE BOOTH	3033 W 6TH ST	64	761
MERLE LEVINE	3151 WEST 6TH	64	762
DYNO AUTO CARE	3151 W 6TH ST	64	763
EMBO CLEANERS	***3809 W SIXTH ST***	***64***	***764***
IMPERIAL DRUG	560 SOUTH VERMONT AVENU	64	776
CHEVRON PRODUCTS COMPANY #9529	549 S NORMANDIE AVE	64	781
COUNTY OF LOS ANGELES- PUBLIC	550 S VERMONT AVE	64	782
LSD	550 SOUTH VERMONT AVE	64	782
LOS ANGELES COUNTY, INTERNAL S	550 S VERMONT	64	782
COUNTY OF LOS ANGELES/INTERNAL	550 S VERMONT AVE	64	784
L.A. COUNTY FACILITIES MANGEME	***550 S VERMONT AVE***	***64***	***784***
LE SAGE PARKING STRUCTURE	***550 SOUTH VERMONT AVENU***	***64***	***785***
STATE STREET BANK OF TRUST	520 S MIRAPOSA AVE	64	786
PILGRIM SCHOOL	540 SOUTH COMMONWEALTH	64	786
FAIRFIELD DEVELOPMENT LLT	535 S ALEXANDRIA STREET	64	788
ALEXAND IA APTS	535 S ALEXANDRIA AVE	64	788
INTERGRATED APARTMENTS	530 SOUTH KENMORE AVE	64	788

EXECUTIVE SUMMARY

EXECUTIVE SUMMARY

Site	Address	Map ID	Page
REINHERZ CHIROPRACTIC DNC	120 NO ALVARADO ST	69	881
WEST COAST MICROGRAPHICS	2202 BEVERLY BLVD	69	882
WEST COAST MICROGRAPHICS	2208 BEVERLY BLVD	69	883
HECTOR LANDIG, D.D.S.	2252 BEVERLY BLVD.	69	884
BRYAN COLLEGE	2333 BEVERLY BLVD	69	885
PHILLIPINO AMERICAN SVC GROUP	135 N PARKVIEW ST	69	885
REBECCA LAWLOR	220 S LAFAYETTE PARK PL	70	886
UNE SUGASAWARA	324 S ST ANDREWS ST	72	887
SHRINERS HOSPITAL	3160 GENEVA ST	74	890
CASA DE CLEANERS	***2604 WEST THIRD ST***	***76***	***895***
TORRANCE BANK	256 SOUTH RAMPART	76	900
IMMACULATE HEART COMMUNITY	435 S KENMORE	78	903
HANDCOCK SQUARE APARTMENTS	421 S VAN NESS	80	906
PROTREND LIMITED	414 S VIRTIL	82	910
BARNSDELL GARDENS	451 SOUTH NARVARD BLVD	83	910
ELLA MAE EVANS	1900 W BEVERLY BLVD	84	910
LON YATEMAN	1926 BEVERLY BLVD	84	911
CLEANING STORE THE	***528 S OCCIDENTAL BLVD***	***85***	***911***
TOWN 30MIN PHOTO	520 S OCCIDENTAL BLVD	85	913
BILL LEE	344 S WESTLAKE AVE STE	86	913
COUNTRY VILLA REHAB CENTER	340 SO ALVARADO ST	86	914
FARM FRESH RANCH MARKET	2000 W THIRD ST	86	915
H & S FOOD & GAS	2000 W 3RD ST	86	915
HOLY MARY MEDICAL CLINIC	328 SOUTH ALVARADO STRE	86	916
HOUSE EAR INSTITUTE	2100 W 3RD ST	86	919
METIC IT	2100 WEST 3RD STREET	86	920
HOME SAVINGS OF AMERICA	416 GRANDVIEW ST	86	920
ST VINCENT MEDICAL CENTER	***2131 WEST THIRD STREET***	***86***	***924***
ST VINCENT CT COMPANY LLC	201 S ALVARADO ST STE 3	86	931
ST VINCENT EYE SURGERY INSTITU	201 S ALVARADO ST STE 7	86	932
HCMG MID-WILSHIRE MEDICAL GP	201 S ALVARADO ST	86	933
DR CELEDINA P ALARCON DDS	194 SOUTH ALVERADO STRE	86	938
METIC TRANSPLANT LABS INC	262 S LAKE ST RM 315	86	939
HOUSE EAR INSTITUTE	***256 S LAKE ST***	***86***	***940***
FRANCES & OSEPH SHALANT	519 S SERRANO AVE	87	941
SWEL II INC	511 S SERRANO AVE	87	942
CASA RAMPART, LP	401 S RAMPART BLVD	88	942
CITY OF L A GENERAL SERVICES	412 S PARKVIEW ST	89	942
LOS ANGELES PHOTOGRAPHY CENTER	412 S PARK VIEW ST	89	943
ROSEMARIE QUINSON-CRUZ DMD	2428 W 3RD ST	89	946
OSEPH N STAN DDS	2440 W 3RD STREET	89	946
CASA RAMPART, LP	512 S RAMPART BLVD	90	948
HOME SAVINGS OF AMERICA	511 S RAMPART BLVD	90	948
HOUSE OF INDONESIAN CONSULATE	627 S WINDSOR AVE	91	949
MARGARET MILLER M&M MILLER TRU	601 S WINDSOR BLVD	91	949
MIDLAND COMPANY	733 S CORONADO	92	949
HOME SAVINGS OF AMERICA	2858 LEEWARD AVE	92	950
ERZY POPRAWSKI	2861 LEEWARD AVE	92	950
LA PRO THREE PARTNERSHIP	2818 LEEWARD STREET	92	951
FBM BODY SHOP INC	2811 LEEWARD AVE	92	951
TRI TECH AUTO CENTER__INC	2811 LEEWARD AVE	92	952
PACIFIC BELL	***720/740 RAMPART***	***92***	***954***
MICA COMPANY	2404 WILSHIRE BLVD	92	959
L A USD/OTIS NEW ELEM	2401 WILSHIRE BLVD	92	960
PARK WILSHIRE LTD	2424 WILSHIRE BLVD (ELE	92	964
CORONADO PLACE	671 SOUTH CORONADO	92	965

EXECUTIVE SUMMARY

Site	Address	Map ID	Page
BEYOND SHELTER	671 SOUTH CORONADO	92	965
DR FARID AFRA MD	2500 WILSHIRE BLVD.	92	966
THE VOIT CO	2500 WILSHIRE BLVD	92	966
SALVADORIAN RESTAURANT	685 S HOOVER ST	92	970
2601 ASSOCIATES,LLC	2601 WILSHIRE BLVD	92	971
ICO INVESTMENTS GROUP	672 S LAFAYETTE PARK PL	92	972
WESTCO PROPERTY INC	2600 WILSHIRE BLVD	92	972
VADEHRA 3C/O REPUBLIC MNGMNT	668 S RAMPART BLVD	92	972
HA YANG/MOON HONG	2857/2859 SUNSET PL	92	973
YOUNG'S GIFT CORNER #2	2619 WILSHIRE BLVD	92	976
UNIVERSAL REPROGRAPHICS INC	2706 WILSHIRE BLVD	92	977
LA BEST CLEANERS	***610 S RAMPART***	***92***	***984***
MONTECRISTO MEDICAL CLINIC	610 S RAMPAR BLVD	92	985
STATE COMPENSATION INSURANCE F	600 SOUTH LAFAYETTE PAR	92	985
LA FELIPE DE NEVE LIBRARY	***2820 W 6TH ST***	***92***	***986***
CITY OF LOS ANGELES/DEPT PARKS	2830 W 6TH ST	92	987
WARDLEY DEVELOPMENT INC	4465 WILSHIRE BLVD	93	987
WILSHIRE UNITED METHODIST CHUR	711 S PLYMOUTH BLVD	94	987
WILSHIRE PACIFIC REALTY & MGMT	4311 WILSHIRE BLVD	94	988
WASHINGTON MUTUAL 1006	4333 WILSHIRE BLVD	94	988
DR. SARKIS MESOROBIAN DC	2901 WILSHIRE BLVD	95	988
DAVID H CHUNG DC	670 CRENSHAW BLVD	96	989
ALRIGHT PARKING LOT	***4180 WILSHIRE***	***96***	***990***
ARGENT MANAGEMENT CORPORATION	4262 WILSHIRE BLVD	96	993
AMIESON PROPERTIES INC	4201 WILSHIRE BLVD	96	994
AMISON PROPERTIES INC	4201 WILSHIRE BLVD	96	994
HARBOR BUILDING	4201 WILSHIRE BLVD	96	995
THE E-BELL OF L A	743 SO LUCERNE BLVD	97	997
ICO INVESTMENTS	2415 6TH ST	98	998
PRESSMAN PRINTING	2416 WEST 6TH STREET	98	999
MACARTHUR PARK MAINTENANCE YAR	2230 W. SIXTH ST.	99	1000
BANK OF AME ICA	2101 W 6TH ST	99	1000
DON'S ONE HOUR PHOTO	600 S ALVARADO ST #B-2	99	1001
SAN OSE DENTAL CLINIC	2161 W 6TH ST	99	1002
FAMILY DENTAL PLAZA	2161 WEST 6TH STREET	99	1003
DEPT. PARK & REC/MAC ARTHUR PA	2239 6TH STREET	99	1009
MACARTHUR PARK SHOPPING CENTER	507 S ALVARADO	99	1009
SOUTHWESTERN UNIV SCH OF LAW	682 SHATTO PL	100	1012
UNOCAL SVC STA #5283	703 S VERMONT AVE	101	1012
SERVICE STATION 5283	***703 S VERMONT AVE***	***101***	***1013***
TOSCO CORPORATION, STATION #30	703 S VERMONT AVE	101	1014
EQUILON ENTERPRISES LLC	700 S VERMONT	101	1017
COMMERCIAL GRAPHICS CORP	3014 W 7TH STREET	101	1023
SCENE OF THE CRIME	3191 W 7TH ST	101	1024
KEUN OO YOO DDS	687 S VERMONT STREET	101	1024
HOUSING AUTHORITY OF LOS ANGEL	3056 LEEWARD AVE	102	1025
L A HOUSING AUTHORITY	3051 LEEWARD AVE	102	1025
BAPTIST SERVICE CORP	3000 LEEWARD AVE	102	1026
ARMONY TRUST	***3003 LEEWARD AVE***	***102***	***1027***
BEATRICE CAPPUCCI RECEIVER	2975 LEEWARD AVE	102	1029
LOUIS G. DEEB ENTERPRISES, INC	2959 LEEWARD	102	1030
SOUTH WESTERN PACIFIC LAND GRO	2959 LEEWARD	102	1030
PATRICK LABEL PRINTING CO	2873 W 7TH ST	102	1031
CENTRAL AMERICAN RESOURCE CTR	2845 W 7TH ST	102	1032
KOREA CENTRAL DAILY THE	690 WILSHIRE PL	102	1032
20/20 CLEANERS	***698 IROLO ST***	***103***	***1035***

Site	Address	Map ID	Page
PH PROPERTIES LLC	701 S KINGSLEY DR	105	1039
WILSHIRE TOWER APT	3460 7TH ST	106	1039
RESTORATION ENCHANCEMENTS	750 MARIPOSA	107	1042
DOLAN & KNIGHT MANAGEMENT COMP	709 SOUTH MARIPOSA	107	1042
HOME SAVINGS OF AMERICA	729 S ST ANDREWS PL	108	1043
LAUSD/WILTON PL ES	745 S WILTON PL	109	1043
HOME SAVINGS OF AMERICA	749 SOUTH BERENDO	110	1045

HMS: Los Angeles County Industrial Waste and Underground Storage Tank Sites.

A review of the LOS ANGELES CO. HMS list, as provided by EDR, has revealed that there are 3 LOS ANGELES CO. HMS sites within the searched area.

Site	Address	Map ID	Page
FUSION RESTAURANT	8687 W MELROSE AVE G180	29	195
L.A. COUNTY FACILITIES MANGEME	***550 S VERMONT AVE***	***64***	***784***
LA CO ISD LE SAGE COMPLEX	523 SHATTO PL	64	789

Site Mitigation Complaint Control Log: The Los Angeles County Site Mitigation Log comes from Community Health Services.

A review of the LA Co. Site Mitigation list, as provided by EDR, has revealed that there are 5 LA Co. Site Mitigation sites within the searched area.

Site	Address	Map ID	Page
KENTUCKY FRIED CHICKEN	***340 WESTERN AVE N***	***34***	***262***
PARKER/JUDGE GLOBAL PRESS	00220 N JUANITA	36	323
SHELL OIL STATION	00270 S WESTERN AV	60	648
PLAZA VICTORIA	00260 S NORMANDIE AV	66	854
UNIQUE CONSTRUCTION, INC.	02911 LEEWARD AV	102	1031

BROWNFIELDS DATABASES

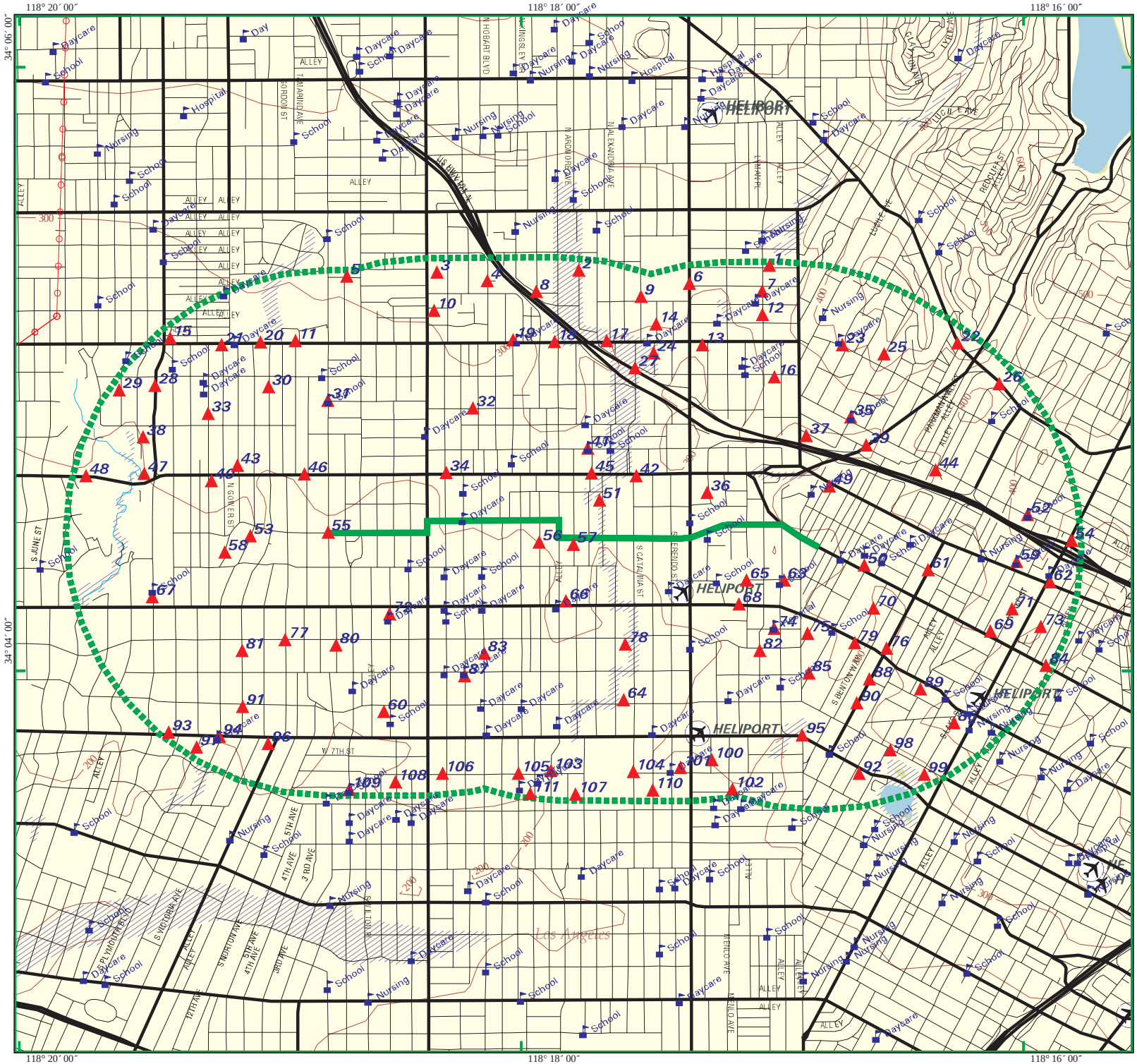
VCP: Contains low threat level properties with either confirmed or unconfirmed releases and the project proponents have request that DTSC oversee investigation and/or cleanup activities and have agreed to provide coverage for DTSC's costs.

A review of the VCP list, as provided by EDR, and dated 11/09/2004 has revealed that there is 1 VCP site within the searched area.

Site	Address	Map ID	Page
TERMINIX	2828 LONDON STREET	44	433

EXECUTIVE SUMMARY

Please refer to the end of the findings report for unmapped orphan sites due to poor or inadequate address information.



First Street Trunk Line

- Listed Sites
- Earthquake Epicenters (Richter 5 or greater)
- Search Boundary
- Roads
- Major Roads
- Waterways
- Railroads
- Contour Lines
- Pipelines
- Powerlines
- Fault Lines
- Water
- Superfund Sites
- Federal DOD Sites
- Indian Reservations BIA
- 100-Yr Flood Zones
- Wetlands

N

Los Angeles, CA

0 1/4 1/2

Scale in Miles

EDR Environmental Data Resources Inc

01352492.1r - 03 Feb 05