TECHNICAL APPENDICES - VOLUME II OF II

DRAFT

ENVIRONMENTAL IMPACT REPORT

BIG WAVE WELLNESS CENTER AND OFFICE PARK PROJECT

Lead Agency:

County of San Mateo
Planning and Building Department
455 County Center, 2nd Floor
Redwood City, CA 94063

Prepared by:

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Environmental Planning and Research

SCH No. 2008102109
October 2009

BIG WAVE WELLNESS CENTER AND OFFICE PARK

TECHNICAL APPENDICES VOLUME II OF II

DRAFT ENVIRONMENTAL IMPACT REPORT

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October 2009

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TECHNICAL APPENDICES
VOLUME II OF II

Big Wave Wellness Center and Office Park Project
Draft
Environmental Impact Report

APPENDIX F: GEOLOGY/SOILS DATA

- Geotechnical Investigation, Proposed 5-Acre Commercial Development, West Corner of Airport Street and Stanford Avenue, Princeton by the Sea, California
- Geotechnical Engineering Investigation, Proposed 10-Acre Commercial Development South of Airport Street, APN 047-311-060, Princeton by the Sea, California
- Third Party Geotechnical Review (April 3, 2007)
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- Memorandum: Review of Wetland Hydrology Indicators for Big Wave Jurisdictional Delineation Including Site Visit Commentary
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- Traffic Counts
- Level of Service Calculations
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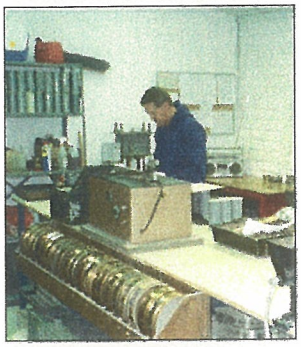
- Additional Intersection Analysis for the Proposed Big Wave Office Park and Wellness Center

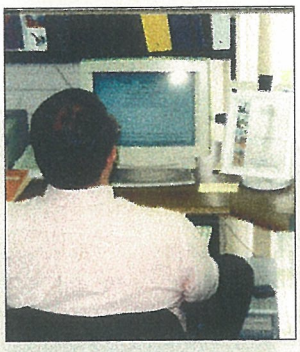
APPENDIX K: UTILITIES DATA

(Appendices A through E are included in Technical Appendices, Volume I)

APPENDIX F

GEOLOGY/SOILS DATA





REPORT

GEOTECHNICAL INVESTIGATION
PROPOSED 5-ACRE COMMERCIAL DEVELOPMENT
WEST CORNER OF AIRPORT STREET
AND STANFORD AVENUE
PRINCETON BY THE SEA, CALIFORNIA

For Barber & Peck

June 13, 2000

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Consulting Geotechnical Engineers and Engineering Geologists

June 13, 2000
BAGG Job No. PECKJ-01-00

Valoff & Peck Coatings
190 Mendell Street
San Francisco, California 94124
Attention: Mr. Jeffery Peck

GEOTECHNICAL INVESTIGATION
Proposed 5 Acre Commercial Development
West Corner of Airport Street
and Stanford Avenue
Princeton By The Sea, California
For Barber & Peck

Dear Mr. Peck:

Transmitted herewith is the report of our geotechnical investigation for the captioned project in Princeton By The Sea, California. The report presents data regarding the current soil conditions at the proposed 5 acre commercial site, and our recommendations for site grading, design of the building foundations, pavements, and associated improvements.

Thank you for the opportunity to perform these services. Please do not hesitate to contact us, should you have any questions or comments.

Very truly yours,

BAY AREA GEOTECHNICAL GROUP

Bruce Gaviglio
Senior Geotechnical Engineer
Geotechnical Engineer #333

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REPORT

GEOTECHNICAL INVESTIGATION
PROPOSED 5 ACRE COMMERCIAL SITE
WEST CORNER OF AIRPORT STREET
AND STANFORD AVENUE
PRINCETON BY THE SEA, CALIFORNIA

For Barber & Peck

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BAY AREA GEOTECHNICAL GROUP

Consulting Geotechnical Engineers and Engineering Geologists

REPORT

GEOTECHNICAL INVESTIGATION
PROPOSED 5-ACRE COMMERCIAL DEVELOPMENT
WEST CORNER OF AIRPORT STREET
AND STANFORD AVENUE
PRINCETON BY THE SEA, CALIFORNIA

For Barber & Peck

1.0 INTRODUCTION

This report presents the results of our geotechnical investigation performed for the proposed 5-acre commercial development in Princeton By The Sea, California. The attached Plate 1, Vicinity Map, shows the general location of the site, and Plate 2, Site Plan, shows the present layout of the property, and the approximate locations of our exploratory borings drilled for this investigation.

2.0 PROJECT DESCRIPTION

It is our understanding that commercial buildings consisting of one- and two-story concrete tilt-up structures will be constructed on the subject property. We further understand that building set backs of 140 feet along Airport Street and 50 feet along the drainage channel are required. On April 18, 2000, we observed the surface of the drainage channel water approximately 2 feet below the surface elevation of the property. On a preliminary basis, it appears that 2 to 4 feet of fill may be required to raise the existing site elevations above the 100 year flood plane.

3.0 PURPOSE AND SCOPE OF SERVICES

The purpose of our services was to obtain pertinent information regarding soil and foundation conditions at the subject site in order to develop **preliminary** (the type of import fill will determine the final recommendations) geotechnical recommendations for the proposed commercial development. Based on our understanding of the project, our report presents conclusions, opinions, and recommendations regarding:

- specific soil conditions discovered by our boring (such as loose or expansive/creeping/collapsible/liquefiable surface soils) that may require special mitigation or impose restrictions on the project,
- appropriate grading recommendations for preparation of the building pads,
- design criteria for the support of the proposed concrete tilt-up buildings, including allowable vertical bearing pressures for shallow spread footings or skin friction and lateral capacity for drilled piers,
- design criteria for slab-on-grade construction,
- design criteria for building support for a range of import fill material qualities,
- recommendations for improving drainage within the lot.

The scope of our services consisted of the following specific tasks:

- Obtain a permit for drilling soil borings from the San Mateo County Department of Environmental Health
- Visit the site and stake the boring locations at least 72 hours in advance of the planned explorations and notify Underground Service Alert to mark the known utilities entering to and/or within the site.

- Review published geologic maps, and reports from the United States Geological Survey pertinent to the site area regarding the geologic and seismic history of the site.

- Drill, log, and sample 9 exploratory borings to depths of 20 to 50 feet with a truck-mounted drilling rig using hollow stem augers. Drill the borings under the direction of one of our engineers who directed the exploration and obtained disturbed bulk, Standard Penetration Test, and relatively undisturbed ring samples of native soils for visual classification and laboratory testing. Measure the depth to groundwater, if encountered within the depths explored. Backfill the borings with a cement slurry. Place drill cuttings at on-site location designated by the client.

- Perform a laboratory testing program on the collected soil samples to evaluate the engineering characteristics of the subsurface soils. Tests included direct shear strength, classification tests, and moisture-density determination, as judged appropriate.

- Perform engineering analyses based on the results obtained from the above tasks and oriented towards the above-described purpose of the investigation.

- Prepare six copies of a report summarizing our findings and recommendations including a vicinity map, a site plan, boring logs, laboratory test results, and our conclusions and recommendations.

4.0 SITE DESCRIPTION

The subject 5 acre development is located at the west corner of the intersection of Airport Street and Stanford Avenue in Princeton By the Sea, California. The grass-covered, flat site is bounded on the northeast by Airport Street, on the northwest by a shallow creek, on the southeast by commercial buildings, and on the southwest by vacant lands. Artificial fill exists along the eastern property line. At the time of our field investigation the western side of the property contained standing water.

5.0 FIELD EXPLORATION AND LABORATORY TESTING

Subsurface conditions at the site were explored by drilling nine borings to depths ranging from 17½ feet to 41½ feet. The approximate locations of the exploratory borings drilled for this investigation are shown on the attached Plate 2, Site Plan. The borings were advanced with a truck-mounted drilling rig utilizing hollow stem augers. One of our engineers technically directed the exploration, maintained a continuous log of the borings, and obtained undisturbed ring and bulk samples for laboratory testing and visual examination.

The graphical representation of the materials encountered in the borings, and the results of laboratory tests as well as explanatory/illustrative data are attached, as follows:

- Plate 4, Unified Soil Classification System, illustrates the general features of the soil classification system used on the boring logs.
- Plate 5, Soil Terminology, lists and describes other soil engineering terms used on the boring logs.
- Plate 6, Boring Log Notes, describes general and specific conditions that apply to the boring logs.
- Plate 7, Key to Symbols, describes various symbols used on the boring logs.
- Plates 8 through 16, Boring Logs, describe the soils encountered, show the depths and blow counts for the samples, and show results of the strength tests, classification tests, and moisture-density data.
- Plate 17, Plasticity Data, graphs and presents the Atterberg Limits of two selected soil samples.

Selected undisturbed samples were also tested in direct shear to evaluate the strength characteristics of the foundation soils. Tests were performed at natural (field) moisture contents and under various surcharge pressures. The moisture content and dry density of undisturbed samples were determined

to aid in correlating their engineering properties. The results of our laboratory strength tests, and moisture-density data are summarized on the boring logs. The remaining laboratory test results are shown on the plate described above.

6.0 GEOLOGY AND SEISMICITY

The site area is mapped as being underlain by coarse-grained, older alluvial fan and stream terrace deposits (**Qof**) of the Pleistocene Age, consisting of poorly consolidated gravel, sand, and silt, coarser grained at heads of old fans and in narrow canyons, and younger (outer) alluvial fan deposits (**Qyfo**) of the Holocene age, consisting of unconsolidated fine sand, silt, and clayey silt. The Regional Geology Map, Plate 3 shows the geology of the site, (Graymer, 1997). The site is outside the Alquist-Priolo Special Studies Zone (Brabb, 1986).

The project site is located within the western portion of the seismically-active San Francisco Bay region. The nearest major active fault is the San Gregorio fault, located approximately 0.3 kilometers to the southwest of the project site. The San Gregorio fault is considered to be potentially capable of generating a Moment Magnitude 7.3 earthquake. The San Andreas fault is located approximately 11.0 kilometers to the northeast. The San Andreas fault generated an earthquake of Moment Magnitude 7.0 on the San Francisco peninsula in 1838, and the great San Francisco Earthquake of 1906, with an estimated Moment Magnitude 7.9. Other faults in the area, which are generally considered inactive, include the Pilarcitos fault, located approximately 6.8 kilometers to the northeast of the site. The potential moment magnitude and shaking intensity for the nearest active faults are presented in Table 1 below.

The seismic history of the region and studies of recurrence intervals of major faults, such as the San Andreas fault, indicate that the subject site will experience ground accelerations and shaking from a significant earthquake during the design life of the project. Based on the distance to the fault zones

from the subject site, and the earthquake magnitudes shown (ABAG "scenario" earthquake), we have estimated the peak ground surface acceleration at this site as tabulated below. These accelerations were estimated assuming a stiff soil profile condition in accordance with Campbell (1997) and Boore et. al (1997).

TABLE-1

SUMMARY OF FAULT INFORMATION

FAULT NAME	POTENTIAL MOMENT MAGNITUDE	DISTANCE TO FAULT (kilometers)	SHAKING INTENSITY (ABAG, 1999)	PEAK ACCELERATION (PGA)
San Gregorio	7.3	0.3	X-Very Violent	0.7g
Entire San Andreas (1906)	7.9	11.0	IX-Violent	0.5g
Peninsula Segment of the San Andreas	7.2	11.0	VIII-Very Strong	0.4g

Maps prepared by ABAG, 1999, indicate the site area will experience a Modified Mercalli Intensity of X, with "Very Violent" shaking and "Extreme Damage" as a result of a Moment Magnitude 7.3 earthquake on the San Gregorio fault, and a Modified Mercalli Intensity of VIII, with "Very Strong" shaking and "Moderate Damage" as a result of a Moment Magnitude 7.2 earthquake on the Peninsula segment of the San Andreas fault. The Modified Mercalli Intensity Scale is presented in Table 2.

TABLE-2
MODIFIED MERCALLI INTENSITY SCALE
(From ABAG, On Shaky Ground, 1999)

MMI Value	Description of Shaking Severity (1999 maps)	Summary Damage Description (1995 maps)	Full Description
I			Not felt. Marginal and long period effects of large earthquakes.
II			Felt by persons at rest, on upper floors, or favorably placed.
III			Felt indoors. Hanging objects swing. Vibration like passing of light trucks. Duration estimated. May not be recognized as an earthquake.
IV			Hanging objects swing. Vibration like passing of heavy trucks; or sensation of a jolt like a heavy ball striking the walls. Standing motor cars rock. Windows, dishes, doors rattle. Glasses clink. Crockery clashes. In the upper range of IV wooden walls and frame creak.
V	Light	Pictures Move	Felt outdoors; direction estimated. Sleepers wakened. Liquids disturbed, some spilled. Small unstable objects displaced or upset. Doors swing, close, open. Shutters, pictures move. Pendulum clocks stop, start, change rate.
VI	Moderate	Objects Fall	Felt by all. Many frightened and run outdoors. Persons walk unsteadily. Windows, dishes, glassware broken. Knickknacks, books, etc., off shelves. Pictures off walls. Furniture moved or overturned. Weak plaster and masonry D cracked. Small bells ring (church, school). Trees, bushes shaken (visibly, or heard to rustle).
VII	Strong	Nonstructural Damage	Difficult to stand. Noticed by drivers of motor cars. Hanging objects quiver. Furniture broken. Damage to masonry D, including cracks. Weak chimneys broken at roof line. Fall of plaster, loose bricks, stones, tiles, cornices (also unbraced parapets and architectural ornaments). Some cracks in masonry C. Waves on ponds; water turbid with mud. Small slides and caving in along sand or gravel banks. Large bells ring. Concrete irrigation ditches damaged.
VIII	Very Strong	Moderate Damage	Steering of motor cars affected. Damage to masonry C; partial collapse. Some damage to masonry B; none to masonry A. Fall of stucco and some masonry walls. Twisting, fall of chimneys, factory stacks, monuments, towers, elevated tanks. Frame houses moved on foundations if not bolted down; loose panel walls thrown out. Decayed piling broken off. Branches broken from trees. Changes in flow or temperature of springs and wells. Cracks in wet ground and on steep slopes.
IX	Violent	Heavy Damage	General panic. Masonry D destroyed; masonry C heavily damaged, sometimes with complete collapse; masonry B seriously damaged. (General damage to foundations.) Frame structures, if not bolted, shifted off foundations. Frames racked. Serious damage to reservoirs. Underground pipes broken. Conspicuous cracks in ground. In alluvial areas sand and mud ejected, earthquake fountains, sand craters.
X	Very Violent	Extreme Damage	Most masonry and frame structures destroyed with their foundations. Some well-built wooden structures and bridges destroyed. Serious damage to dams, dikes, embankments. Large landslides. Water thrown on banks of canals, rivers, lakes, etc. Sand and mud shifted horizontally on beaches and flat land. Rails bent slightly.
XI			Rails bent greatly. Underground pipelines completely out of service.
XII			Damage nearly total. Large rock masses displaced. Lines of sight and level distorted. Objects thrown into the air.

Masonry A: Good workmanship, mortar, and design; reinforced, especially laterally, and bound together by using steel, concrete, etc.; designed to resist lateral forces.
Masonry B: Good workmanship and mortar; reinforced, but not designed in detail to resist lateral forces.
Masonry C: Ordinary workmanship and mortar; no extreme weaknesses like failing to tie in at corners, but neither reinforced nor designed against horizontal forces.
Masonry D: Weak materials, such as adobe; poor mortar; low standards of workmanship; weak horizontally.
Full descriptions are from: Richter, C.F. 1958, *Elementary Seismology*, W.H. Freeman and Co., San Francisco, pp135-149, 650-653.

7.0 SITE CONDITIONS

7.1 Subsurface Conditions

The borings were drilled at selected locations as shown on Plate 2, Site Plan. The soils encountered at the site generally consist of extremely heterogeneous lenses of soft to very stiff lean clays (CL), sandy lean clays (CL), fat clays (CH), and loose to very dense clayey sands (SC), silty sands (SM), and poorly graded sands (SP). For more information regarding the subsurface materials, we refer you to Plates 8 through 16, Boring Logs.

7.2 Groundwater

Groundwater was encountered during the drilling operation at a depth ranging from 3 to 10 feet below the existing ground surface. It should be noted that the groundwater level will fluctuate as a result of seasonal changes.

7.3 Liquefaction Potential

Soil liquefaction is a phenomenon in which saturated (submerged) cohesionless soils can be subject to a temporary loss of strength due to buildup of excess pore pressure, and reduction of soil effective stress during cyclic loading, such as those produced by the earthquakes. In the process, the soil acquires a mobility sufficient to permit both horizontal and vertical movements, if not confined. Soils most susceptible to liquefaction are loose, clean, saturated, uniformly-graded, fine-grained sands. Silty sands may also be susceptible to liquefaction during strong ground shaking, although to a lesser extent.

The analyses of liquefaction potential of the loose to medium dense sandy soils beneath the site was performed based on the procedure outlined in "Evaluation of Liquefaction Potential and Consequences, Historical Perspective and Updated Procedures" (Idriss, 1997), "Cyclic Liquefaction and Its Evaluation Based on SPT and CPT" (Robertson, 1997), and "Preliminary Report from NCEER Workshop on Evaluation of Liquefaction Resistance of Soils" (Youd, 1997). The exploratory borings drilled at the site encountered liquefiable layers within the depths explored . The borings encountered silty sands below the water table ranging in consistency from loose to medium dense, and with a fines content ranging from 4% to 42%. However, because of the varying amount of fines in this and other granular soil layers within the depths explored, the potential for liquefaction to occur beneath the site is, therefore, moderate. Because of the lenticular nature of the soil deposits beneath the site, and because of the depth to groundwater once fill has been placed on the site, it is our opinion that the surface effects of such liquefaction would be limited to differential settlements of the ground surface (For an estimate of the settlement magnitude see Section 8.6 of this report).

8.0 CONCLUSIONS AND RECOMMENDATIONS

8.1 General

Based on the subsurface exploration conducted at the subject site and the results obtained from our laboratory testing program, it is our opinion that it is geotechnically feasible to construct the proposed commercial building(s), provided the recommendations presented in this report are incorporated into the project design and construction. When the final development plans are available, they should be reviewed by this office prior to construction to confirm that the intent of our recommendations are reflected in the plans, and to confirm that our recommendations properly address the proposed project in its final form.

In general, the shallow groundwater levels at the site will create difficulties during construction. Dewatering of the near surface material may be necessary in order to recompact the material at a lower moisture content. After raising the site grades, it will then be appropriate to excavate the utility trenches.

8.1.1 Recompaction

Our explorations indicate the site is blanketed by approximately 12 inches of soft and wet soils. The site development calls for raising the grades by approximately 2 to 4 feet. Therefore, before fill placement, the upper 18 inches of soft/loose surface soils should be removed and the underlying soils properly moisture conditioned, and recompacted before fill placement, as this material would adversely affect the performance of shallow foundations.

8.1.2 Anticipated Settlement

Our subsurface exploration has encountered lenses of medium dense silty sands and poorly graded sands that have a moderate potential for liquefaction during a major earthquake. Our subsurface exploration also encountered soft clayey soils at depth. Compression of weak soils under the weight of the fill and structural loads and/or liquefaction of the saturated granular soils beneath the site can cause settlement of the shallow foundations. In order to reduce the total settlement due to the proposed buildings, we recommend a 3 foot surcharge be placed over the entire site, or on specifically identified building pads. The weight of the surcharge will partially consolidate the weak subsurface soil layers before the buildings are constructed. Therefore, for satisfactory performance of spread footing foundations, we recommend the site be graded to the proposed rough pad grades, a 3 foot surcharge be placed on the building pads, and left undeveloped until a portion of the projected settlements under the fill weight have taken place. A more specific settlement analysis cannot be made until the nature of site grading and the magnitude of the structural loads for the proposed commercial structure(s) have been determined.

8.1.3 Preliminary Foundations

Provided site grading is performed as recommended herein, we anticipate conventional shallow footings will provide satisfactory support for the proposed commercial building(s). With the recompaction of the upper 2 feet of surface soil and the 2 to 4 feet of imported material, the buildings will be essentially founded on a minimum 4 foot thick mat of compacted soil. Deep foundations, such as drilled piers, are not recommended because of the high ground water table, the vertical extent of soft soils and loose sands beneath the site. Drilled piers are also expected to be cost prohibitive because of their embedment depth and because of construction difficulties posed by the high groundwater.

8.1.4 Ground Shaking

The site could experience very strong ground shaking from future earthquakes during the anticipated lifetime of the project. The intensity of the ground shaking will depend on the magnitude of the earthquake, distance to the epicenter, and the response characteristics of the native soils and bedrock. While it is not possible to totally preclude damage to structures during major earthquakes, strict adherence to good engineering design and construction practices will help reduce the risk of damage to the proposed structures.

8.1.5 Preliminary Recommendations

The import materials selected to raise the grade of the site will determine the final recommendations for foundations and pavement sections. Once the import source has been determined, and an R-value test of the material has been performed, a final pavement section can be designed for the parking areas and driveways for the site. The foundations recommendations can then be finalized depending on the materials and the magnitude of the building loads anticipated.

8.2 Site Grading

It is our understanding that site grading will consist of importing fill material to raise building pad(s) and driveway/parking areas to the desired grades above the flood level. The conclusions and recommendations presented in this report are therefore based on the assumption that site grades will be raised 2 to 4 feet.

As used in this report, the term "compact" and its derivatives mean that all on-site an import soils should be compacted to at least 90 percent of maximum dry density, as determined by ASTM Test Method D1557-91, at a moisture content that is at least 2 to 3 percent over optimum.

The following grading procedures should be followed for areas to receive fill, pavements, concrete slabs, or flatwork:

- Strip and remove the organically-contaminated topsoil and debris from the site surface. Stockpile the strippings for later disposal at an off-site location, or for later use in landscaping areas only. The depth of stripping is estimated to be approximately 6 inches, and should be verified in the field by the Geotechnical Engineer at the time of construction.

- Further over-excavate any loose soils from all areas to be developed. The depth of loose soils is anticipated to be 18 inches in depth, and should be verified by the Geotechnical Engineer at the time of construction. Where removal of trees or large bushes are planned, all major root systems must be over-excavated and removed. Depending on the time of year the grading takes place, dewatering of the near surface soils may be required in order to recompact the upper two feet of native soil.

- Scarify the over-excavated surfaces to a depth of 8 inches. Thoroughly moisture condition the scarified surfaces to at least 2% to 3% over optimum moisture content and re-compact as specified above. Further over-excavate, as necessary, any area still containing weak and/or yielding (pumping) soils, as determined in the field by the Geotechnical Engineer.

- Place fill on the over-excavated surfaces and in the holes/depressions created by the above actions in uniformly moisture conditioned and compacted lifts not exceeding 8 inches in loose thickness. Rocks or cobbles larger than 4 inches in maximum

dimensions should not be allowed to remain within the foundation areas, unless they can be crushed in-place by the construction equipment.

The on-site soils generally are suitable for use as structural fill. However, it is our understanding that 2 to 4 feet of fill will be placed to raise the building pad(s) above the flood level. Any imported fill soils should be predominantly granular in nature, should be free of organics, debris, or rocks over 4 inches in size, and should be approved by the Geotechnical Engineer before importing to the site. Presently we do not know the type of soil that will be imported to the site. We have provided two alternate specifications for imported materials. Thus, we are providing recommendations for preliminary foundation and pavement design, based on these two material alternatives.

8.2.1 Import Material Alternate A

As a general guide to acceptance, Alternative A material should have a Plasticity Index less than 15, an R-value of at least 25, and a fines content between 15 and 40 percent.

8.2.2 Import Material Alternate B

As a general guide to acceptance, Alternative B material should have a Plasticity Index less than 25, an R-value of at least 15.

All aspects of site grading including clearing/stripping, over-excavation, and placement of fills or backfills should be performed under the observation of BAGG's field representatives. It must be the Contractor's responsibility to select equipment procedures that will accomplish the grading as described above. The Contractor must also organize the work in such a manner that one of our field representatives can observe and test the grading operations, including clearing, excavation, compaction of fills and backfills, and compaction of subgrades.

8.3 1997 Uniform Building Code Site Characterization

Great strides have been made recently in the revision of codes for better design against the destructive power of major earthquakes. These advances have been incorporated into the 1997 Edition of the UBC. The type and distance to the faults are interpreted from "Maps of Known Active Fault Near-Source Zones in California and Portions of Nevada to be used with the 1997 Uniform Building Code". The appropriate parameters for the subject site have been tabulated in Table 3.

TABLE 3

PARAMETERS FOR SEISMIC DESIGN

UBC, 1997	Site Parameter	
Figure 16-2, Seismic Zone Map of the U.S.	Zone 4	
Table 16-I, Seismic Zone Factor Z	0.4	
Table 16-J, Soil Profile Type	S_D, Stiff Soil Profile	
Closest Distance to Known Seismic Source	0.3 kilometers	11.0 kilometers
Table 16-U, Seismic Source Type	A(San Gregorio)	A(San Andreas)
Table 16-S, Near-Source Factor, N_a	1.5	1.0
Table 16-T, Near-Source Factor, N_v	2.0	1.2
Table 16-Q, Seismic Coefficient C_a	$0.44N_a$	$0.44N_a$
Table 16-R, Seismic Coefficient C_v	$0.64N_v$	$0.64N_v$

8.4 Foundations

Provided site grading is performed as recommended above, conventional shallow footings will provide satisfactory support for the proposed commercial building(s). Conventional shallow footing foundations will also require that the site be surcharged for a period to allow a significant portion of

the settlements caused by consolidation of compressible soils at the site to occur before foundations are constructed.

The footings should be established 18 inches below the rough pad grade, and should not be less than 12 inches in width. The preliminary design for such footings may be accomplished using an allowable bearing pressures described below in Table 4, Bearing Pressures For Various Import Materials.

TABLE 4
BEARING PRESSURES FOR VARIOUS IMPORT MATERIALS
(for preliminary design purposes only)

Alternative Import	A	B
R-Value Greater Than	25	15
Plasticity Index (PI) Less Than	15	25
Allowable Bearing Pressures		
Dead Load (psf) =	2,000	1,500
Total Design Loads (psf) =	3,000	2,400

Note that this table should be used only as a guide for preliminary design; the final bearing pressures should be verified when the import source has been determined. The value for dead plus live loads may be increased by one-third for short-term wind and seismic loads.

Continuous footings should be properly reinforced. Such reinforcing should consist of a minimum of 2 No.4 bars placed at the top and bottom of the footings to provide structural continuity and to span over localized irregularities in soil conditions.

The bottom of footing excavations should be firm, clean, and free of any loose or yielding soils. To the extent possible, footings should be poured in neat excavations without the use of side forms and

the soils exposed in the excavations should not be allowed to dry out or crack before concrete placement. Any dry and cracked soils should be excavated and replaced with properly-compacted fill soils or lean concrete.

8.5 Under Slab Measures

Concrete slabs should be supported on import non-expansive soils that have been prepared and compacted as recommended under "Site Grading". The subgrade soils should be maintained at a moisture content of at least 2% to 3% over optimum, and should be approved by the Geotechnical Engineer before the slab is poured.

As a precaution to minimize transmission of soil moisture up through the floor slab and to provide appropriate support to floor loads, it is recommended that the slab under the office areas be underlain with at least 4 inches of approved, clean, free draining, angular gravel. Where heavy floor loads are such as forklift, storage, or equipment loads are anticipated, the crushed rock should be replaced with a 6-inch layer of Class II aggregate base (minimum R-value = 78) compacted to at least 95 percent of maximum dry density.

The base course is intended to serve as a capillary break; however, moisture may accumulate in the base course zone. Therefore, a plastic vapor barrier of at least six mil thickness should be placed on the rock if moisture protection is desired and a damp slab is not desirable. To aid in curing the concrete and to protect the membrane during construction, the vapor barrier should be covered with a 2-inch-thick layer of curing sand that should be wetted prior to pouring the slab.

8.6 Lateral Design

Lateral resistance may be obtained from passive earth pressures acting on the sides of foundation members which have been poured in neat excavations. The preliminary value for allowable passive resistance to wind or seismic loads can be taken as an equivalent fluid pressure of 300 pounds per

cubic foot, and should be verified once the import source has been identified. For resisting long-term loads, the passive resistance within the upper 12 inches of soils should be ignored.

A frictional coefficient of 0.35 can be used between the bottom of footings and imported non-expansive fill soils.

8.7 Settlements

There will be three main sources of settlement for this development: potential seismic densification and/or liquefaction of the loose granular soils under portions of the site; static settlements due to the placement of the fill required to raise the site above the flood plan; and static settlements due to the weight of the buildings. One possible solution to decrease the total amount of settlement of the building is to accelerate consolidation of the soft and loose material by placing a 3-foot thick soil surcharge over the building pads. The surcharge will pre-consolidate the compressible soil layer so that when the soil is removed and the building constructed, only minor additional settlements will occur. We estimate the soil surcharge can be removed in one to two months. Monitoring the movement of settlements through markers placed in the fill will indicate when the surcharge may be removed.

8.7.1 Seismic Settlement

The potential magnitude of settlement caused by liquefaction evaluated with the procedures described in the "Liquefaction" section of this report, varies from ½ to 2 inches across the site. These settlement magnitudes have been estimated based on the groundwater levels as encountered in our exploratory borings. The liquefaction settlement would be additive to the settlements caused by fill soils and structural loads.

8.7.2 Static Fill Settlement

The settlement for fill placement loads cannot be estimated until the nature of site grading and the magnitude of the structural loads and related improvements have been determined. At this time the fill thickness required to raise the pad grades above the flood plane is approximately 1 to 2 feet near Airport Street and 3 to 4 feet along the western property line. The amount of settlement is directly related to the weight and therefore the thickness of the of the fill. The settlements will be generally smaller along Airport Street and the largest near the western property line. The location and thickness of soft and loose soil layers also vary across the site. Because of these variables, it is not practical to predict settlements over the entire site.

8.7.3 Static Building Settlement

The settlement for structural loads cannot be made until the nature of site grading and the magnitude of the structural loads for the proposed commercial structure(s) and related improvements have been determined. We recommend to further limit the post-construction settlements of spread footing foundations, and that the site should be surcharged with 3 feet of fill for a period of one to two months. Because we anticipate settlements will occur quite rapidly, it will be feasible to determine the duration of surcharge by monitoring settlement markers. When the settlement markers show no movement, the buildings may then be constructed.

8.8 Pavement Section

An R-value of 15 and 25 were assumed in this preliminary pavement design. On this basis the following flexible pavement sections were calculated for various Traffic Indices in accordance with the Caltrans Highway Design Manual, 5th Edition, dated July 1, 1995. The actual pavement design should be based on laboratory R-value tests of the pavement subgrade material after grading operations are completed.

As shown in Tables 5 and 6, several Traffic Indices were assumed in our analyses for the two assumed R-values. Pavement sections for other Traffic Indices and different combinations of asphaltic concrete (AC) and aggregate base rock can be provided, if required by the Project Civil Engineers, however, the AC thickness given in the tables are generally the minimum recommended.

All pavement construction and materials should conform to applicable sections of the latest edition of the Caltrans Standard Specifications, State of California, Department of Transportation. The top 12 inches of subgrade beneath pavements section should be stabilized and compacted to a minimum degree of compaction of 95 percent, based upon ASTM Test Method D 1557-91.

TABLE 5

PAVEMENT DESIGN SECTIONS

(Subgrade R-Value = 15)

TRAFFIC INDEX	ASPHALTIC CONCRETE (Inches)	CLASS 2 AGGREGATE BASE R-value > 78 (Inches)	CLASS 3 AGGREGATE SUBBASE R-value > 50 (Inches)
4.5	2.5	7.5	--
5.0	3.0	8.0	--
5.5	3.0	10.0	--
6.0	3.5	10.5	--
6.5	4.0	11.5	–
		6.0	6.0
7.0	4.0	13.0	--
		6.0	8.0
7.5	4.5	14.0	–
		6.0	9.0

TABLE 6

PAVEMENT DESIGN SECTIONS

(Subgrade R-Value = 25)

TRAFFIC INDEX	ASPHALTIC CONCRETE (Inches)	CLASS 2 AGGREGATE BASE R-value > 78 (Inches)	CLASS 3 AGGREGATE SUBBASE R-value > 50 (Inches)
4.5	2.5	6.5	--
5.0	3.0	6.5	--
5.5	3.0	8.0	--
6.0	3.5	8.5	--
6.5	4.0	9.5	--
		5.0	5.0
7.0	4.0	10.5	--
		6.0	5.0
7.5	4.5	11.5	--
		6.0	6.0

8.9 Utility Trench Backfill

It is our opinion that the sides of temporary unshored trenches will stand nearly vertical, provided the trench depth does not exceed 5 feet, and heavy equipment is not allowed within 5 feet of the edge of the trench. All trench spoils should be placed no closer than 3 feet (or one-half the trench depth) to the trench sidewalls. All work associated with trenching must conform to the State of California, Division of Industrial Safety requirements.

Trench backfill materials and compaction should conform to the following:

- In general, soils used for trench backfill should be free of debris, roots and other organic matter, debris, and rocks or lumps exceeding 3 inches in greatest dimension.

- Compaction should be performed to a minimum of 90% relative compaction in accordance with ASTM D1557, at a moisture content recommended previously. In pavement areas, the upper 24 inches of the backfill (below the pavement subgrade) shall be compacted to 95% of the maximum dry density.

- Jetting will not be allowed.

8.10 Drainage

Drainage measures to control and collect surface run-off should be considered an integral part of the proposed development. The ground surface adjacent to all sides of the proposed buildings should be sloped to drain away from the foundations. Unpaved and landscaped areas should slope at least 5 percent to at least 5 feet away from the face of the building. Runoff should not be allowed to flow over graded slopes, and any area where surface run-off becomes concentrated should be provided with a catch basin. The run-off from building roofs should be collected in closed, non-perforated pipes and discharged to the local storm drain system or to suitable outfall locations in a manner that will not allow ponding adjacent to foundations.

Surface and subsurface drainage facilities and catchment areas should be checked frequently and cleaned or maintained throughout the project life, as necessary.

8.11 Plan Review

It is recommended that the Geotechnical Engineer (Bay Area Geotechnical Group) be retained to review the final grading, improvement and foundation plans. This review is to assess general suitability of the earthwork and foundation recommendations contained in this report, and to verify the appropriate implementation of our recommendations into the project plans and specifications.

8.12 Observation and Testing

It is recommended that the Geotechnical Engineer (BAGG) be retained to provide services during the grading, excavation, and foundation construction phases of work. This is to observe compliance with the design concepts, specifications and recommendations, and to allow for design changes in the event that subsurface conditions differ from those anticipated during construction.

9.0 CLOSURE

This report has been prepared in accordance with generally-accepted engineering practices for the strict use of Barber & Peck and other professionals associated with the specific project described in this report. The recommendations presented in this report are based on our understanding of the proposed construction as described herein, and upon the soil conditions encountered in our exploratory borings drilled for this investigation.

The conclusions and recommendations contained in this report are based on subsurface conditions revealed by widely-spaced borings. It is not uncommon for unanticipated conditions to be encountered during site grading and/or foundation installation, and it is not possible for all such variations to be found by a field exploration program appropriate for this type of project. The recommendations contained in this report are therefore contingent upon the review of the final grading, drainage, and foundation plans by this office, and upon geotechnical observation and testing by BAGG of all pertinent aspects of site grading including demolition, placement of fills and backfills, and footing excavations.

Soil conditions and standards of practice change with time. Therefore, we should be consulted to update this report, if the construction does not commence within 18 months from the date this report is submitted. Additionally, the recommendations of this report are only valid for the proposed

development as described herein. If the proposed project is modified, our recommendations should be reviewed and approved or modified by this office in writing.

The following references and plates are attached and complete this report:

Plate 1	Vicinity Map
Plate 2	Site Plan
Plate 3	Regional Geology Map
Plate 4	Unified Soil Classification System
Plate 5	Soil Terminology
Plate 6	Boring Log Notes
Plate 7	Key to Symbols
Plates 8 through 16	Boring Logs
Plate 17	Plasticity Data

10.0 REFERENCES

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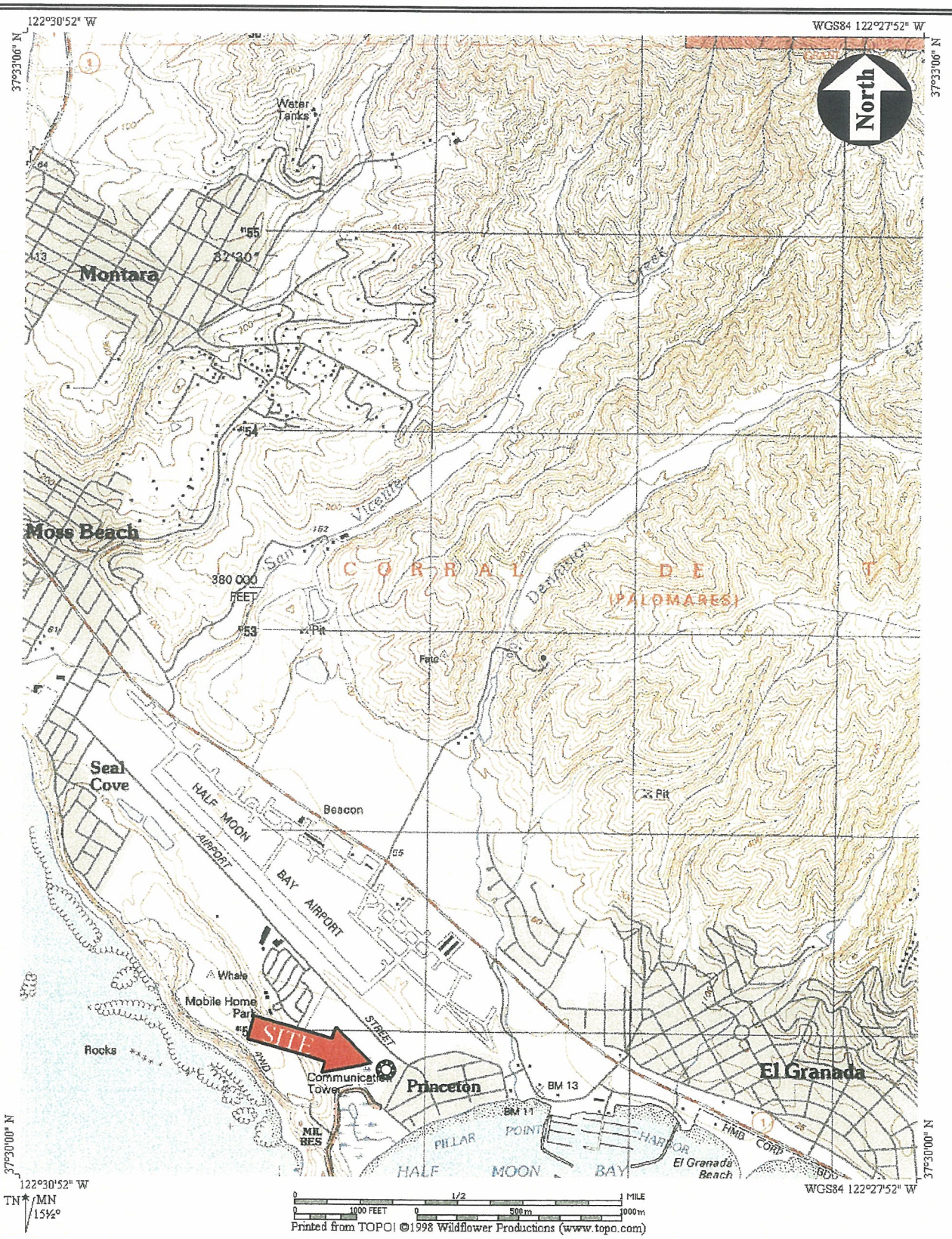
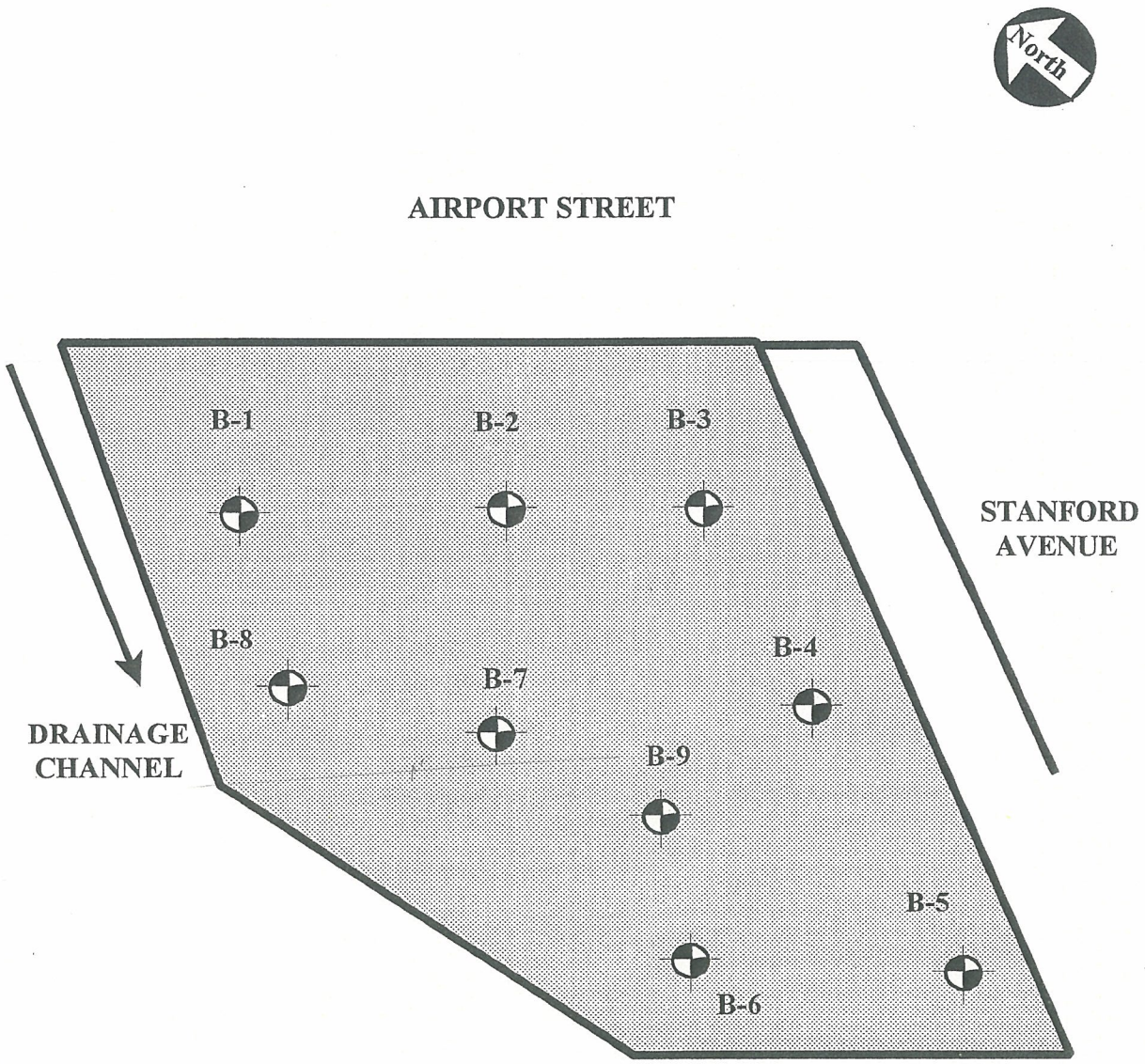


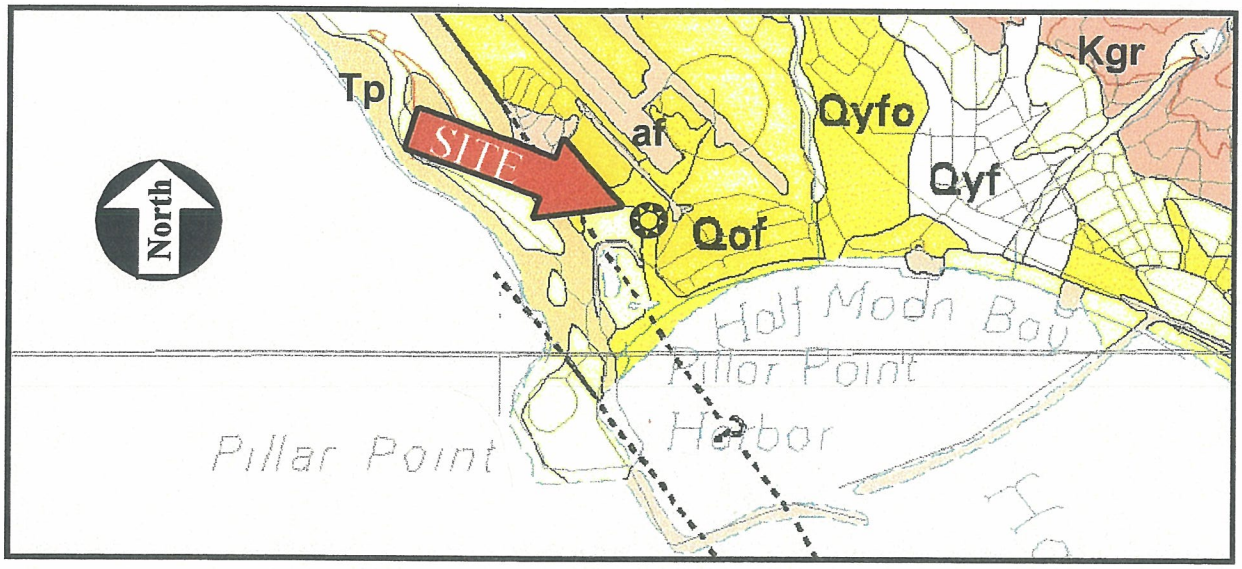
PROPOSED 5-ACRE COMMERCIAL DEVELOPMENT WEST CORNER OF AIRPORT STREET AND STANFORD AVENUE PRINCETON BY THE SEA, CALIFORNIA	VICINITY MAP		
	JOB NO.	DATE	PLATE
	PECKJ-01-00	June 2000	1



Sketch Not To Scale

Approximate Boring Locations

PROPOSED 5-ACRE COMMERCIAL DEVELOPMENT WEST CORNER OF AIRPORT STREET AND STANFORD AVENUE PRINCETON BY THE SEA, CALIFORNIA	SITE PLAN		
	JOB NO. PECKJ-01-00	DATE June 2000	PLATE 2



LEGEND

Qyfo **Younger (outer) alluvial fan deposits (Holocene)**
Unconsolidated fine sand, silt, and clayey silt

Qyf **Younger (inner) Alluvial fan deposits (Holocene)**
Unconsolidated fine- to coarse-grained sand, silt, and gravel, coarser grained at heads of fans and in narrow canyons

Qof **Coarse-grained older alluvial fan and stream terrace deposits (Pleistocene)**
Poorly consolidated gravel, sand, and silt, coarser grained at heads of old fans and in narrow canyons.

Tp **Purisima Formation (Pliocene and upper Miocene)**
Predominantly gray and greenish-gray to buff fine-grained sandstone, siltstone, and mudstone, but also includes some porcelaneous shale and mudstone, chert, silty mudstone, and volcanic ash. West of Portola Valley, this unit consists of fine- to medium-grained silty sandstone.

Kgr **Granitic rocks of Montara Mountain**
Very light gray to light brown, medium- to coarsely-crystalline foliated granitic rock, largely quartz diorite with some granite. These rocks are highly fractured and deeply weathered. Foliation is marked by an alignment of dark minerals and dark dioritic inclusions.

af **Artificial fill (Historic)**
Loose to very well consolidated gravel, sand, silt, clay, rock fragments, organic matter, and man-made debris in various combinations. Thickness is variable and may exceed 30 m in places. Some is compacted and quite firm, but fill made before 1965 is nearly everywhere not compacted and consists simply of dumped materials.

Reference: *Geology of the Onshore Part of San Mateo County, California: a Digital Database* Pamphlet Derived from Digital OF98-137, By E.E. Brabb, R.W. Graymer, and D.L. Jones.

PROPOSED 5-ACRE COMMERCIAL DEVELOPMENT WEST CORNER OF AIRPORT STREET AND STANFORD AVENUE PRINCETON BY THE SEA, CALIFORNIA	REGIONAL GEOLOGY MAP		
	JOB NO.	DATE	PLATE
	PECKJ-01-00	June 2000	3

COARSE-GRAINED SOILS
LESS THAN 50% FINES*

GROUP SYMBOLS	ILLUSTRATIVE GROUP NAMES	MAJOR DIVISIONS
GW	Well graded gravel Well graded gravel with sand	GRAVELS More than half of coarse fraction is larger than No. 4 sieve size
GP	Poorly graded gravel Poorly graded gravel with sand	
GM	Silty gravel Silty gravel with sand	
GC	Clayey gravel Clayey gravel with sand	
SW	Well graded sand Well graded sand with gravel	SANDS More than half of coarse fraction is smaller than No. 4 sieve size
SP	Poorly graded sand Poorly graded sand with gravel	
SM	Silty sand Silty sand with gravel	
SC	Clayey sand Clayey sand with gravel	

NOTE: Coarse-grained soils receive dual symbols if:
(1) their fines are CL-ML (e.g. SC-SM or GC-GM) or
(2) they contain 5-12% fines (e.g. SW-SM, GP-GC, etc.)

FINE-GRAINED SOILS
MORE THAN 50% FINES*

GROUP SYMBOLS	ILLUSTRATIVE GROUP NAMES	MAJOR DIVISIONS
CL	Lean clay Sandy lean clay with gravel	SILTS AND CLAYS liquid limit less than 50
ML	Silt Sandy silt with gravel	
OL	Organic clay Sandy organic clay with gravel	
CH	Fat clay Sandy fat clay with gravel	SILTS AND CLAYS liquid limit more than 50
MH	Elastic silt Sandy elastic silt with gravel	
OH	Organic clay Sandy organic clay with gravel	
PT	Peat Highly organic silt	HIGHLY ORGANIC SOIL

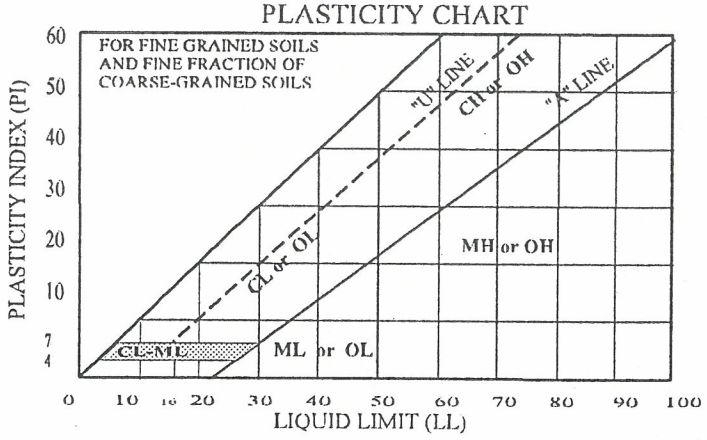
NOTE: Fine-grained soils receive dual symbols if their limits plot in the hatched zone on the Plasticity Chart (CL-ML).

SOIL SIZES

COMPONENT	SIZE RANGE
BOULDERS	ABOVE 12 in.
COBBLES	3 in. to 12 in.
GRAVEL	No. 4 to 3 in.
Coarse	¾ in to 3 in.
Fine	No. 4 to ¾ in.
SAND	No. 200 to No.4
Coarse	No. 10 to No. 4
Medium	No. 40 to No. 10
Fine	No. 200 to No. 40
*FINES:	BELOW No. 200

NOTE: Classification is based on the portion of a sample that passes the 3-inch sieve.

PLASTICITY CHART



Reference: ASTM D 2487-98, Standard Classification of Soils for Engineering Purposes (Unified Soil Classification System).

GENERAL NOTES: The tables list 30 out of a possible 110 Group Names, all of which are assigned to unique proportions of constituent soils. Flow charts in ASTM D 2487 aid assignment of the Group Names. Some general rules for fine grained soils are: less than 15% sand or gravel is not mentioned; 15% to 25% sand or gravel is termed "with sand" or "with gravel;" and 30% to 49% sand or gravel is termed "sandy" or "gravelly." Some general rules for coarse-grained soils are: uniformly-graded or gap-graded soils are "Poorly" graded (SP or GP); 15% or more sand or gravel is termed "with sand" or "with gravel;" 15% to 25% clay and silt is termed clayey and silty and any cobbles or boulders are termed "with cobbles" or "with boulders."

UNIFIED SOIL CLASSIFICATION SYSTEM

SOIL TYPES (Ref 1)

Boulders: particles of rock that will not pass a 12-inch screen.
Cobbles: particles of rock that will pass a 12-inch screen, but not a 3-inch sieve.
Gravel: particles of rock that will pass a 3-inch sieve, but not a #4 sieve.
Sand: particles of rock that will pass a #4 sieve, but not a #200 sieve.
Silt: soil that will pass a #200 sieve, that is non-plastic or very slightly plastic, and that exhibits little or no strength when dry.
Clay: soil that will pass a #200 sieve, that can be made to exhibit plasticity (putty-like properties) within a range of water contents, and that exhibits considerable strength when dry.

MOISTURE AND DENSITY

Moisture Condition: an observational term; dry, moist, wet, or saturated.
Moisture Content: the weight of water in a sample divided by the weight of dry soil in the soil sample, expressed as a percentage.
Dry Density: the pounds of dry soil in a cubic foot of soil.

DESCRIPTORS OF CONSISTENCY (Ref 3)

Liquid Limit: the water content at which a - soil that will pass a #40 sieve is on the boundary between exhibiting liquid and plastic characteristics. The consistency feels like soft butter.
Plastic Limit: the water content at which a - soil that will pass a #40 sieve is on the boundary between exhibiting plastic and semi-solid characteristics. The consistency feels like stiff putty.
Plasticity Index: the difference between the liquid limit and the plastic limit, i.e. the range in water contents over which the soil is in a plastic state.

MEASURES OF CONSISTENCY OF COHESIVE SOILS (CLAYS) (Ref's 2 & 3)

Very Soft	N=0-1*	C=0-250 psf	Squeezes between fingers
Soft	N=2-4	C=250-500 psf	Easily molded by finger pressure
Medium Stiff	N=5-8	C=500-1000 psf	Molded by strong finger pressure
Stiff	N=9-15	C=1000-2000 psf	Dented by strong finger pressure
Very stiff	N=16-30	C=2000-4000 psf	Dented slightly by finger pressure
Hard	N>30	C>4000 psf	Dented slightly by a pencil point

*N=blows per foot in the Standard Penetration Test. In cohesive soils, with the 3-inch-diameter ring sampler, 140-pound weight, divide the blow count by 1.2 to get N (Ref 4).

MEASURES OF RELATIVE DENSITY OF GRANULAR SOILS (GRAVELS, SANDS, AND SILTS) (Ref's 2 & 3)

Very Loose	N=0-4**	RD=0-30	Easily push a ½-inch reinforcing rod by hand
Loose	N=5-10	RD=30-50	Push a ½-inch reinforcing rod by hand
Medium Dense	N=11-30	RD=50-70	Easily drive a ½-inch reinforcing rod
Dense	N=31-50	RD=70-90	Drive a ½-inch reinforcing rod 1 foot
Very Dense	N>50	RD=90-100	Drive a ½-inch reinforcing rod a few inches

**N=Blows per foot in the Standard Penetration Test. In granular soils, with the 3-inch-diameter ring sampler, 140-pound weight, divide the blow count by 2 to get N (Ref 4).

xxxx

GENERAL NOTES FOR BORING LOGS:

The boring logs are intended for use only in conjunction with the text, and for only the purposes the text outlines for our services. The Plate "Soil Terminology" defines common terms used on the boring logs.

The plate "Unified Soil Classification System," illustrates the method used to classify the soils. The soils were visually classified in the field; the classifications were modified by visual examination of samples in the laboratory, supported, where indicated on the logs, by tests of liquid limit, plasticity index, and/or gradation. In addition to the interpretations for sample classification, there are interpretations of where stratum changes occur between samples, where gradational changes substantively occur, and where minor changes within a stratum are significant enough to log.

There may be variations in subsurface conditions between borings. Soil characteristics change with variations in moisture content, with exchange of ions, with loosening and densifying, and for other reasons. Groundwater levels change with seasons, with pumping, from leaks, and for other reasons. Thus boring logs depict interpretations of subsurface conditions only at the locations indicated, and only on the date(s) noted.

SPECIAL NOTES FOR THIS REPORT:

FIELD NOTES

1. The nine borings were drilled on May 8 and May 9, 2000, with a truck mounted drilling rig utilizing 8-inch-diameter (outside) hollow stem augers.

2. The boring locations were approximately located by pacing from known points on the site.

3. The soils' Group Names [e.g. SANDY LEAN CLAY] and Group Symbols [e.g. (CL)] were determined or estimated per ASTM D 2487, Standard Classification of Soils for Engineering Purposes (Unified Soil Classification System, see Plate 3). Other soil engineering terms used on the boring logs are defined on Plate 4, Soil Terminology.

4. The undisturbed samples were obtained in a 2½-inch-ID, 3-inch-OD, Modified California sampler lined with 1-inch-long brass rings, and disturbed samples with a $1^{3}/_{8}$-inch-ID, 2-inch-OD, Standard Penetration Test sampler. The samples were driven with a 140-pound hammer free-falling 30 inches (ASTM D3350 and ASTM D1586).

5. The "Blow Count" Column on the boring logs indicates the number of blows required to drive the sampler below the bottom of the boring, and the blow counts given are for each 6 inches of sampler penetration.

6. Groundwater was encountered during drilling at various depths, as noted in the Boring Logs.

LABORATORY NOTES

7. The tabulated strength values on the boring logs are yield point values, or the strength measured when the material begins to deform plastically.

BORING LOG NOTES

BAY AREA GEOTECHNICAL GROUP

KEY TO SYMBOLS

Symbol	Description
Strata symbols	
	Silty, clayey sand
	Sandy lean clay
	Clayey sand
	Silty sand
	Lean clay
	High plasticity (fat) clay
	Sandy silt
	Silt
	Poorly graded sand with silt
	Moderate plasticity clay
Misc. Symbols	
	Water level at completion of boring
	Water first encountered during drilling

Symbol	Description
Soil Samplers	
	Modified California Sampler: 2.375" ID by 3" OD, split-barrel sampler driven w/ 140-pound hammer falling 30" (ASTM D 3550)
	Standard Penetration Test: 1 3/8" ID by 2" OD, split-spoon sampler driven with 140-pound hammer falling 30" (ASTM D 1586)
Line Types	
———	Denotes a sudden, or well identified strata change
---------	Denotes a gradual, or poorly identified strata change
Laboratory Tests	
DS	Denotes direct shear test performed at field moisture content.
DSm	Denotes the second half of a multi-phase direct shear test performed on a DS sample.
LL	Denotes Liquid Limit per ASTM D 4318-98
PL	Denotes Plastic Limit per ASTM D 4318-98
PI	Denotes Plasticity Index per ASTM D 4318-98

BAY AREA GEOTECHNICAL GROUP

BORING LOG

Boring No. B-1

JOB NAME: Commercial Development
CLIENT: Barber & Peck
LOCATION: Princeton-by-the-Sea
DRILLER: Exploration Geoservices
DRILL METHOD: 8" hollow stem augers

JOB NO.: PECKJ-01-00
DATE DRILLED: 5/9/2000
ELEVATION:
LOGGED BY: MRM
CHECKED BY:

Type of Strength Test	Test Surcharge Pressure, psf	Test Water Content, %	Shear Strength, psf	In-Situ Water Content, %	In-Situ Dry Unit Weight, pcf	Depth, ft.	Soil Symbols, Samplers and Blow Counts	USCS	Description	Remarks
						0	10 12 12	SC-SM	Black Silty, Clayey Sand, moist, medium dense	topsoil
				18.2	107			CL	Brown mottled with Red-Brown Sandy Lean Clay, moist, stiff, medium plasticity	LL = 35 PI = 15
						4	9 13 14	SC	Dark Gray Clayey Medium Grained Sand, moist, medium dense	25% passing No.200 sieve
						8		SM	Gray and White Silty Medium Grained Sand, wet, medium dense	
							9 11 21	CL	Green-Gray with Red-Brown Lean Clay, moist, stiff, medium plasticity	
						12		SM	Light Gray-Brown Silty Medium Grained Sand, wet, dense	18% passing No.200 sieve
								CH	Dark Gray Fat Clay, wet, stiff, high plasticity	
							6 10 18	SM	Dark Gray Silty Fine Sand, wet, medium dense	
						16				
						20	9 11 18			
									Boring terminated at 21.0 feet. Backfilled with neat cement.	
						24				

BAY AREA GEOTECHNICAL GROUP

BORING LOG

Boring No. B-2

JOB NAME: Commercial Development
CLIENT: Barber & Peck
LOCATION: Princeton-by-the-Sea
DRILLER: Exploration Geoservices
DRILL METHOD: 8" hollow stem augers

JOB NO.: PECKJ-01-00
DATE DRILLED: 5/9/2000
ELEVATION:
LOGGED BY: MRM
CHECKED BY:

Type of Strength Test	Test Surcharge Pressure, psf	Test Water Content, %	Shear Strength, psf	In-Situ Water Content, %	In-Situ Dry Unit Weight, pcf	Depth, ft.	Soil Symbols, Samplers and Blow Counts	USCS	Description	Remarks
						0	6	SC-SM	Black Silty, Clayey Sand, moist, medium dense	topsoil
							11	CH	Black Fat Clay, moist, medium stiff, high plasticity	
DS	320	Nat.	500	27.6	93		19	CL		
DSm	1500	Nat.	950			4			Dark Gray Fine Sandy Lean Clay, moist, medium stiff, medium plasticity	
							8			
DS	720	Nat.	600	41.6	79		11	CL	Brown mottled with Rusty Red-Brown Lean Clay, wet, medium stiff, medium plasticity	
DSm	2000	Nat.	900				15			
						8				
							6	SM	Dark Gray and White Silty Medium Grained Sand, wet, medium dense, with layers of medium stiff Dark Gray Clays and Sandy Clays	
DS	1200	Nat.	900	33.1	86		8			
DSm	2500	Nat.	1840				13			
						12			increasing Fines	
							5			
						16	6		Dark Gray, Fine Sands	42% passing No.200 sieve
							8			
									slightly plastic Fines	
						20	11			
							16			15% passing No.200 sieve
							20			
									Boring terminated at 21.5 feet. Backfilled with neat cement.	
						24				

BAY AREA GEOTECHNICAL GROUP

BORING LOG

Boring No. B-3

JOB NAME: Commercial Development
CLIENT: Barber & Peck
LOCATION: Princeton-by-the-Sea
DRILLER: Exploration Geoservices
DRILL METHOD: 8" hollow stem augers

JOB NO.: PECKJ-01-00
DATE DRILLED: 5/8/2000
ELEVATION:
LOGGED BY: MRM
CHECKED BY:

Type of Strength Test	Test Surcharge Pressure, psf	Test Water Content, %	Shear Strength, psf	In-Situ Water Content, %	In-Situ Dry Unit Weight, pcf	Depth, ft.	Soil Symbols, Samplers and Blow Counts	USCS	Description	Remarks
						0		SC-SM	Black Silty, Clayey Sand, moist, medium dense	topsoil
				12.9	102		13 16 12	CL	Black Sandy Lean Clay, moist, stiff, medium plasticity Dark Gray	
						4			Brown mottled with Red-Brown, White Medium Grained Sands	
				20.7	108		15 8 10			
						8			increasing Sand content	
								SC	Light Brown Widely Graded Sand, moist, dense, with few Gravels	
				16.9	114	12	20 29 50			
								SM	Light Gray-Brown with pockets of Red-Brown Silty Widely Graded Sand, wet, very dense	
				16.9	116	16	31 50-5"			
						20	15	CL	Greenish-Gray mottled with Red-Brown Sandy Lean Clay, moist, very stiff, medium plasticity	
				17.8	111		27 49	ML	Blue-Gray Sandy Silt, moist, very stiff, low plasticity, with lenses of Sandy Clay and Silty Sand	
						24	20 22			

BAY AREA GEOTECHNICAL GROUP

BORING LOG

Boring No. B-3

JOB NAME: Commercial Development
CLIENT: Barber & Peck
LOCATION: Princeton-by-the-Sea
DRILLER: Exploration Geoservices
DRILL METHOD: 8" hollow stem augers

JOB NO.: PECKJ-01-00
DATE DRILLED: 5/8/2000
ELEVATION:
LOGGED BY: MRM
CHECKED BY:

Type of Strength Test	Test Surcharge Pressure, psf	Test Water Content, %	Shear Strength, psf	In-Situ Water Content, %	In-Situ Dry Unit Weight, pcf	Depth, ft.	Soil Symbols, Samplers and Blow Counts	USCS	Description	Remarks
				18.9	112	28	28		increasing Sand content	
				19.5	111	32	29 50-4"	SM	Blue-Gray Fine Sand, wet, very dense	
						36			Dark Gray, micaceous	
				30.4	93	40	34 50-5"			
						44			Boring terminated at 41.5 feet. Backfilled with neat cement.	
						48				
						52				

BAY AREA GEOTECHNICAL GROUP

BORING LOG

Boring No. B-4

JOB NAME: Commercial Development
CLIENT: Barber & Peck
LOCATION: Princeton-by-the-Sea
DRILLER: Exploration Geoservices
DRILL METHOD: 8" hollow stem augers

JOB NO.: PECKJ-01-00
DATE DRILLED: 5/8/2000
ELEVATION:
LOGGED BY: MRM
CHECKED BY:

Type of Strength Test	Test Surcharge Pressure, psf	Test Water Content, %	Shear Strength, psf	In-Situ Water Content, %	In-Situ Dry Unit Weight, pcf	Depth, ft.	Soil Symbols, Samplers and Blow Counts	USCS	Description	Remarks
						0		SC-SM	Black Silty, Clayey Sand, moist, medium dense	topsoil
							8 13 16	CL	Black Sandy Lean Clay, moist, medium stiff, medium plasticity Dark Gray Gray-Brown	
DS DSm	320 1500	Nat. Nat.	620 1580	19.9	101	4		SC	Brown Clayey Sand, moist, dense, medium plasticity Fines	
DS DSm	720 2000	Nat. Nat.	800 2230	12.5	117		36 50-5"	SM	Brown Silty Widely Graded Sand, moist, very dense	
						8		SC	Light Gray-Brown Clayey Sand, moist, dense, with lenses of Sandy Lean Clay	
						12	20 21 28			
						16	22 25 33		mottled with Red-Brown	
								CL	Gray-Brown Sandy Lean Clay, moist, very stiff, medium plasticity, with lenses of Silt	
						20	18 29 36		Blue-Gray	
									Boring terminated at 22.5 feet. Backfilled with neat cement.	
						24				

BAY AREA GEOTECHNICAL GROUP

BORING LOG

Boring No. B-5

JOB NAME: Commercial Development
CLIENT: Barber & Peck
LOCATION: Princeton-by-the-Sea
DRILLER: Exploration Geoservices
DRILL METHOD: 8" hollow stem augers

JOB NO.: PECKJ-01-00
DATE DRILLED: 5/9/2000
ELEVATION:
LOGGED BY: MRM
CHECKED BY:

Type of Strength Test	Test Surcharge Pressure, psf	Test Water Content, %	Shear Strength, psf	In-Situ Water Content, %	In-Situ Dry Unit Weight, pcf	Depth, ft.	Soil Symbols, Samplers and Blow Counts	USCS	Description	Remarks
						0		SC-SM	Black Silty, Clayey Sand, moist, medium dense	topsoil
								CL	Black to Dark Gray Sandy Lean Clay, moist, very stiff, medium plasticity	
				14.0	120	4	8 14 16		Gray-Brown Dark Brown	LL = 22 PI = 7
								SM	Brown Silty Medium Grained Sand, wet, dense	
				14.9	114	8	38 41 48		Green-Gray, increasing Fines	
								CL	Brown mottled with Red-Brown Fine Sandy Lean Clay, moist, very stiff, medium plasticity	
				20.2	107	12	18 28 40		lenses of Red-Brown Silty Sand	
						16	18 25 36			
									Boring terminated at 18.0 feet. Backfilled with neat cement.	
						20				
						24				

BAY AREA GEOTECHNICAL GROUP

BORING LOG

Boring No. B-6

JOB NAME: Commercial Development
CLIENT: Barber & Peck
LOCATION: Princeton-by-the-Sea
DRILLER: Exploration Geoservices
DRILL METHOD: 8" hollow stem augers

JOB NO.: PECKJ-01-00
DATE DRILLED: 5/9/2000
ELEVATION:
LOGGED BY: MRM
CHECKED BY:

Type of Strength Test	Test Surcharge Pressure, psf	Test Water Content, %	Shear Strength, psf	In-Situ Water Content, %	In-Situ Dry Unit Weight, pcf	Depth, ft.	Soil Symbols, Samplers and Blow Counts	USCS	Description	Remarks
						0		SC-SM	Black Silty, Clayey Sand, moist, medium dense	topsoil
								CL	Black Fine Sandy Lean Clay, moist, stiff, medium plasticity	
								SC	Dark Gray Clayey Medium Grained Sand, wet, medium dense	
DS	480	Nat.	300	20.3	106	4	5 8 9			
DSm	1500	Nat.	950							
								CL	Brown mottled with Red-Brown Fine Sandy Lean Clay, moist, stiff, medium plasticity	
							7 14 25		Light Gray-Brown with Red-Brown	
DS	960	Nat.	1740	17.1	115	8			Gray-Brown	
DSm	2000	Nat.	2400							
								SM	Rusty Red-Brown Silty Medium Grained Sand, wet, very dense, with lenses of micaceous Yellow-Brown Fine Sandy Lean Clay	
						12	30 43 45			
DS	1500	Nat.	1430	19.2	112					
DSm	2500	Nat.	2200						Gray-Brown	
						16				
							25 44 51			
						20		CL	Brown mottled with Green-Gray Fine Sandy Lean Clay, moist, hard, medium plasticity	
							21 25 38		Blue-Gray, increasing Fine Sand content	
						24				

BAY AREA GEOTECHNICAL GROUP

BORING LOG

Boring No. B-6

JOB NAME: Commercial Development
CLIENT: Barber & Peck
LOCATION: Princeton-by-the-Sea
DRILLER: Exploration Geoservices
DRILL METHOD: 8" hollow stem augers

JOB NO.: PECKJ-01-00
DATE DRILLED: 5/9/2000
ELEVATION:
LOGGED BY: MRM
CHECKED BY:

Type of Strength Test	Test Surcharge Pressure, psf	Test Water Content, %	Shear Strength, psf	In-Situ Water Content, %	In-Situ Dry Unit Weight, pcf	Depth, ft.	Soil Symbols, Samplers and Blow Counts	USCS	Description	Remarks
						28	32 44 50	SM	Brown mottled with Red-Brown Silty Fine Sand, wet, very dense	
						32			Dark Gray, micaceous	
						36	15 21 36			
						40	9 29 50- 5"			
						44			Boring terminated at 41.5 feet. Backfilled with neat cement.	
						48				
						52				

BAY AREA GEOTECHNICAL GROUP

BORING LOG

Boring No. B-7

JOB NAME: Commercial Development
CLIENT: Barber & Peck
LOCATION: Princeton-by-the-Sea
DRILLER: Exploration Geoservices
DRILL METHOD: 8" hollow stem augers

JOB NO.: PECKJ-01-00
DATE DRILLED: 5/9/2000
ELEVATION:
LOGGED BY: MRM
CHECKED BY:

Type of Strength Test	Test Surcharge Pressure, psf	Test Water Content, %	Shear Strength, psf	In-Situ Water Content, %	In-Situ Dry Unit Weight, pcf	Depth, ft.	Soil Symbols, Samplers and Blow Counts	USCS	Description	Remarks
						0		SC-SM	Black Silty, Clayey Sand, moist, medium dense	topsoil
								CL	Dark Gray Sandy Lean Clay, moist, medium stiff, medium plasticity	
						4	2 4 6	SC	Dark Gray Clayey Medium Grained Sand, wet, loose Brown	
				23.3	101			CL	Rusty Red-Brown Fine Sandy Lean Clay, moist, very stiff, medium plasticity	
						8	9 21 29		Gray-Brown mottled with Red-Brown, Medium Grained Sands	
				18.5	112				increasing Sand content	
						12	21 35 40		few Coarse Gravel	
				17.0	114				with lenses of Clayey, Silty Sands	
						16				
						20			Boring terminated at 19.0 feet. Backfilled with neat cement.	
						24				

BAY AREA GEOTECHNICAL GROUP

BORING LOG

Boring No. B-8

JOB NAME: Commercial Development
CLIENT: Barber & Peck
LOCATION: Princeton-by-the-Sea
DRILLER: Exploration Geoservices
DRILL METHOD: 8" hollow stem augers

JOB NO.: PECKJ-01-00
DATE DRILLED: 5/9/2000
ELEVATION:
LOGGED BY: MRM
CHECKED BY:

Type of Strength Test	Test Surcharge Pressure, psf	Test Water Content, %	Shear Strength, psf	In-Situ Water Content, %	In-Situ Dry Unit Weight, pcf	Depth, ft.	Soil Symbols, Samplers and Blow Counts	USCS	Description	Remarks
						0		SC-SM	Black Silty, Clayey Sand, moist, medium dense	topsoil
							3 5 8	CL	Dark Gray Sandy Lean Clay, moist, soft, medium plasticity	
DS	320	Nat.	250	32.2	89				Brown	
DSm	1500	Nat.	670			4		SC	Dark Gray Clayey Medium Grained Sand, moist, medium dense	
							8 13 16	SC-SM	Light Gray-Brown Silty, Clayey Medium Grained Sand, wet, medium dense	
DS	850	Nat.	700	17.9	107					
DSm	2000	Nat.	1900			8		CH	Dark Gray Fat Clay, wet, stiff, high plasticity	
							8 10 12	SC-SM	Dark Gray Silty, Clayey Medium Grained Sand, wet, medium dense	
DS	1500	Nat.	300	41.3	80	12				
DSm	2500	Nat.	480					SP-SM	Black and White Poorly Graded Medium Grained Sand with Silt, wet, dense	
						16	15 18 30			4% passing No.200 sieve
									Boring terminated at 17.5 feet. Backfilled with neat cement.	
						20				
						24				

BAY AREA GEOTECHNICAL GROUP

BORING LOG

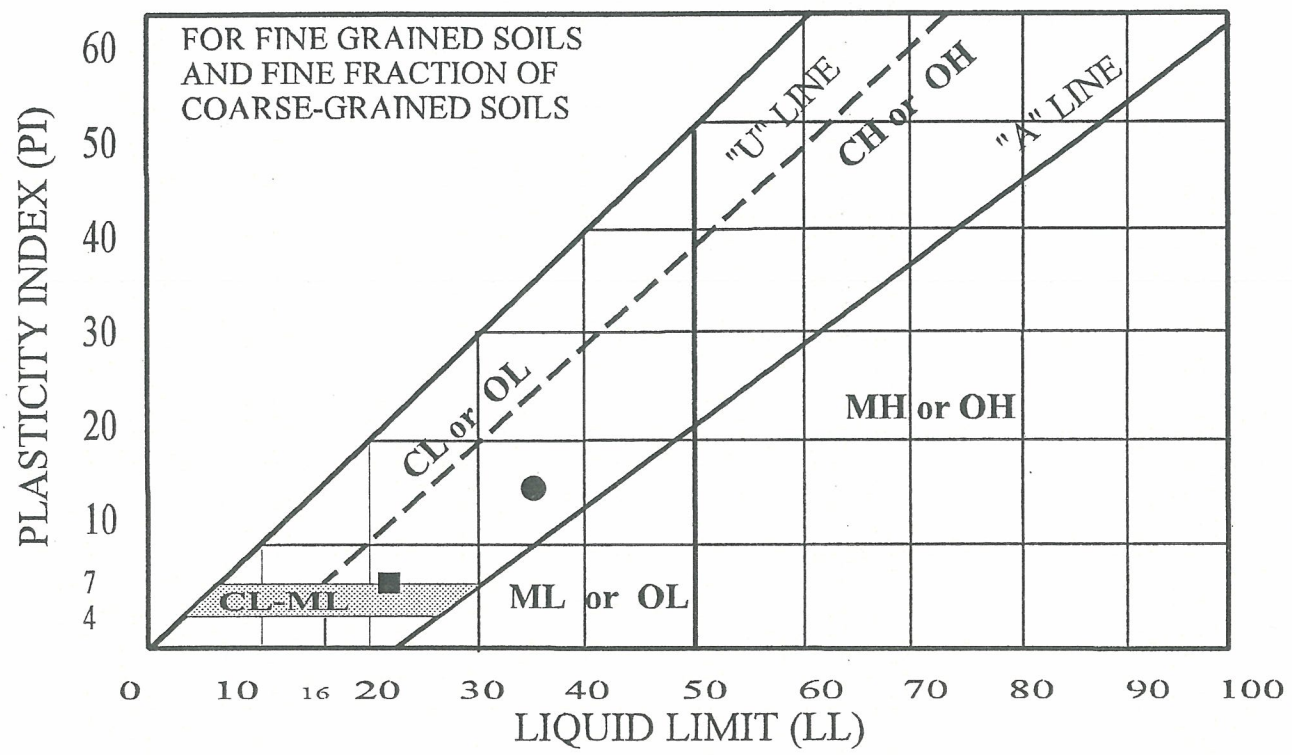
Boring No. B-9

JOB NAME: Commercial Development
CLIENT: Barber & Peck
LOCATION: Princeton-by-the-Sea
DRILLER: Exploration Geoservices
DRILL METHOD: 8" hollow stem augers

JOB NO.: PECKJ-01-00
DATE DRILLED: 5/9/2000
ELEVATION:
LOGGED BY: MRM
CHECKED BY:

Type of Strength Test	Test Surcharge Pressure, psf	Test Water Content, %	Shear Strength, psf	In-Situ Water Content, %	In-Situ Dry Unit Weight, pcf	Depth, ft.	Soil Symbols, Samplers and Blow Counts	USCS	Description	Remarks
						0		SC-SM	Black Silty, Clayey Sand, moist, medium dense	topsoil
								CL	Dark Gray Sandy Lean Clay, moist, stiff, medium plasticity	
				18.6	112	4	6 8 11	SC	Gray-Brown Clayey Medium Grained Sand, moist, medium dense	
								CL/CH	Brown Moderate Plasticity Clay, moist, stiff	
				47.6	76		6 5 11			
								SM	Light Gray Silty Fine to Medium Grained Sand, moist, very dense	
						12	9 18 25			
				19.3	110					10% passing No.200 sieve
						16	9 15 36			
				20.1	99				Boring terminated at 18.5 feet. Backfilled with neat cement.	
						20				
						24				

PLASTICITY CHART

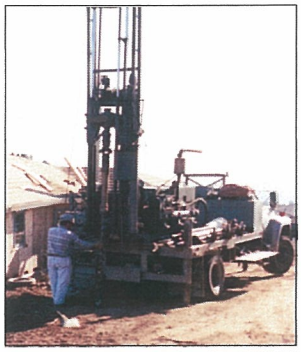


SYMBOL	SAMPLE SOURCE	DEPTH (FEET)	NATURAL WATER CONTENT W[%]	LIQUID LIMIT	PLASTIC LIMIT	PLASTICITY INDEX	SOIL DESCRIPTION
●	Boring 1	1.5	18.2	35	20	15	Brown mottled with Red-Brown Sandy Lean Clay (CL)
■	Boring 5	3.5	14.0	22	15	7	Black to Dark Gray Sandy Lean Clay (CL)

PROPOSED 5- ACRE COMMERCIAL DEVELOPMENT
WEST CORNER OF AIRPORT STREET
AND STANFORD AVENUE
PRINCETON BY THE SEA, CALIFORNIA

PLASTICITY DATA

Job No.	Date	Plate
PECKJ-01-00	June 2000	17



REPORT

GEOTECHNICAL ENGINEERING INVESTIGATION
PROPOSED 10-ACRE COMMERCIAL DEVELOPMENT
SOUTH OF AIRPORT STREET
APN 047-311-060
PRINCETON BY THE SEA, CALIFORNIA

For Big Wave Development
May 7, 2002

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Consulting Geotechnical Engineers and Engineering Geologists

May 7, 2002
BAGG Job No. BIGWA-01-00

Big Wave Development
190 Mendell Street
San Francisco, CA 94124
Attention: Mr. Steve Barber

Preliminary Geotechnical Engineering Investigation
Proposed 10 Acre Commercial Development
South Side of Airport Street
APN 047-311-060
Princeton By the Sea, California

Dear Mr. Steve Barber:

Transmitted herewith is the report of our preliminary geotechnical engineering investigation for the captioned project in Princeton By The Sea, California. The report presents data regarding the current soil conditions within the proposed 10 acre commercial site, and our recommendations for site grading, design of building foundations, pavements, and associated improvements.

Thank you for the opportunity to perform these services. Please do not hesitate to contact us, should you have any questions or comments.

Very truly yours,

BAY AREA GEOTECHNICAL GROUP

REGISTERED PROFESSIONAL ENGINEER
BRUCE GAVIGLIO
No. 333
Exp 12/31/05
GEOTECHNICAL
STATE OF CALIFORNIA

Bruce Gaviglio
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Engineer in Training

DL/BEG/EH/dl
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REPORT

PRELIMINARY GEOTECHNICAL ENGINEERING INVESTIGATION PROPOSED 10-ACRE COMMERCIAL DEVELOPMENT SOUTH SIDE OF AIRPORT STREET APN 047-311-060 PRINCETON BY THE SEA, CALIFORNIA

For Big Wave Development

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ASFE Document titled "Important Information About Your Geotechnical Engineering Report"

BAY AREA GEOTECHNICAL GROUP

Consulting Geotechnical Engineers and Engineering Geologists

REPORT

PRELIMINARY
GEOTECHNICAL ENGINEERING INVESTIGATION
PROPOSED 10-ACRE COMMERCIAL DEVELOPMENT
SOUTH SIDE OF AIRPORT STREET
APN 047-311-060
PRINCETON BY THE SEA, CALIFORNIA
For Big Wave Development

1.0 INTRODUCTION

This report presents the results of our preliminary geotechnical investigation performed for the proposed 10-acre commercial development in Princeton By The Sea, California. The attached Plate 1, Vicinity Map, shows the general location of the site, and Plate 2, Site Plan, shows the present layout of the property, and the approximate locations of our exploratory borings drilled for this investigation. This report was prepared in accordance with our Proposal Number 01-160, dated January 3, 2002.

2.0 PROJECT DESCRIPTION

It is our understanding that the immediate plans contemplate site use as a mini-storage and boat yard; however, the site may later be developed by construction of one-story concrete tilt-up commercial buildings. We also understand that 100-foot-wide set backs from the existing wetlands have been specified, thus reducing the available building space from 14 acres to 10 acres. On a preliminary

basis, it appears that 2 to 4 feet of fill may be necessary to raise the existing site elevation above the flood plane, thus requiring some 50,000 cubic yards of imported fill material.

3.0 PURPOSE AND SCOPE OF SERVICES

The purpose of our services was to obtain pertinent information regarding soil and foundation conditions at the subject site in order to develop ***preliminary*** (the type of import fill will determine the final recommendations) geotechnical recommendations for the proposed commercial development. This report is preliminary because the following items are not defined:

- building size and foundation loadings,
- building locations,
- fill depth, location, and quality.

Until these items have been defined, we cannot calculate the anticipated settlement of the proposed fill and buildings. We have provided a range of estimated settlements for 2 to 4 feet of fill and one and two story commercial buildings. In addition, our field exploration and laboratory testing program has gathered sufficient data so that no additional borings and only additional confirmational laboratory testing will be necessary to finalize the report, provided the rough site grading is performed as recommended herein.

We have conducted a subsurface exploration at the site consisting of 14 randomly located borings. A laboratory testing program was then designed and conducted to evaluate the quality and consistency of the subsurface soils, and to aid in developing recommendations and geotechnical design criteria for the project.

The southwest corner of the property is located within the Alquist-Priolo Earthquake Fault Zone. Most of the area that will be developed is outside of the special studies zone extending

approximately 500 feet southwest of Airport Street and therefore, will not require a fault study. However, the southwest edge of the property adjacent to the wetlands will require fault trenches to delineate the fault location and determine appropriate building setbacks from the fault, if habitable structures are to be constructed within this portion of the parcel.

Based on our understanding of the project, our report presents ***preliminary*** conclusions, opinions, and recommendations regarding:

- specific soil conditions discovered by our boring, such as loose or expansive, creeping, collapsible, or liquefiable surface soils that may require special mitigation or impose restrictions on the project,
- appropriate grading recommendations for filling the site and preparation of the building pads,
- design criteria for the support of proposed commercial buildings, including allowable vertical bearing pressures for shallow spread footings or skin friction and lateral capacity for drilled piers,
- design criteria for slab-on-grade construction,
- design criteria for building support constructed upon a range of import fill materials,
- recommendations for site drainage,
- preliminary estimates of settlements based on assumed fill depths and building loadings.

The scope of our services consisted of the following specific tasks:

- Obtain a permit for drilling soil borings from the San Mateo County Department of Environmental Health.
- Visit the site and stake the boring locations at least 72 hours in advance of the planned explorations and notify Underground Service Alert to mark the known utilities entering to and/or within the site.

- Review published geologic maps, and reports from the United States Geological Survey pertinent to the site area regarding the geologic and seismic history of the site.

- Drill, log, and sample 14 exploratory borings to depths of 20 to 50 feet with a truck-mounted drilling rig using hollow stem augers. Drill the borings under the direction of one of our geologists. Direct the exploration and obtain Standard Penetration Test and relatively undisturbed ring samples of native soils for visual classification and laboratory testing. Measure the depth to groundwater, as encountered within the depths explored. Backfill the borings with a cement slurry. Place drill cuttings at on-site location designated by the client.

- Perform a laboratory testing program on the collected soil samples to evaluate the engineering characteristics of the subsurface soils. Tests included direct shear strength, classification tests, and moisture-density measurements, as judged appropriate.

- Perform engineering analyses based on the results obtained from the above tasks and oriented toward the above-described purpose of the investigation.

- Prepare six copies of a report summarizing our findings and recommendations including a vicinity map, a site plan, boring logs, laboratory test results, and our conclusions and recommendations.

4.0 SITE DESCRIPTION

The subject 14-acre parcel, of which only 10 acres can be developed, is located about 1,200 feet northwest of the intersection of Airport Street and Stanford Avenue in Princeton By the Sea, California. The site is relatively flat and/or very gently sloping towards the southwest. The surface of the site is covered with wild grass and scrub brush. The site is bounded on the northeast by Airport Street, on the northwest by a trailer park, on the west and south by wetlands, on the southeast by vacant lands, and on the east by a shallow creek.

5.0 FIELD EXPLORATION AND LABORATORY TESTING

Subsurface conditions at the site were explored by drilling twelve borings to depths ranging from 17 feet to 25 feet, and two deep borings to depths of 50 feet. The approximate locations of the exploratory borings drilled for this investigation are shown on the attached Plate 2, Site Plan. The borings were advanced with a truck-mounted drilling rig utilizing hollow stem augers. One of our geologists technically directed the exploration, maintained a continuous log of the borings, and obtained undisturbed ring and bulk samples for laboratory testing and visual examination.

The graphical representation of the materials encountered in the borings, and the results of laboratory tests as well as explanatory/illustrative data are attached, as follows:

- Plate 6, Unified Soil Classification System, illustrates the general features of the soil classification system used on the boring logs.
- Plate 7, Soil Terminology, lists and describes other soil engineering terms used on the boring logs.
- Plate 8, Boring Log Notes, describes general and specific conditions that apply to the boring logs.
- Plates 9-A and 9-B, Key to Symbols, describes various symbols used on the boring logs.
- Plates 10 through 23, Boring Logs, describe the soils encountered, show the depths and blow counts for the samples, and summarized results of the strength tests, classification tests, and moisture-density data.
- Plate 24, Plasticity Data, graphs and presents the Atterberg Limits of two selected soil samples.

Selected undisturbed samples were also tested in direct shear to evaluate the strength characteristics of the foundation soils. Tests were performed at natural (field) moisture contents and under various surcharge pressures. The moisture content and dry density of undisturbed samples were measured

to aid in correlating their engineering properties. The results of our laboratory strength tests, wash analyses (over U.S. Standard #200 sieve), and moisture-density data are summarized on the boring logs. The remaining laboratory test results are shown on the plate described above.

6.0 GEOLOGY AND SEISMICITY

The site area is mapped as being underlain by coarse-grained, older alluvial fan and stream terrace deposits (**Qof**) of the Pleistocene Age, consisting of poorly consolidated gravel, sand, and silt, coarser grained at heads of old fans and in narrow canyons, and younger (outer) alluvial fan deposits (**Qyfo**) of the Holocene age, consisting of unconsolidated fine sand, silt, and clayey silt. The Regional Geology Map, Plate 3 shows the geology of the site, (Graymer, 1998).

Active earthquake faults have been recognized within the immediate site area, and the San Francisco Bay Area is known to be within a seismically active region. This region has the highest rate of seismic moment release per square mile of any urban area in the United States. It is emerging from the stress shadow of the 1906 San Francisco Earthquake and future large earthquakes are considered a certainty. The nearest major active fault is the San Gregorio fault, located approximately 500 feet (0.15 kilometers) to the southwest of the buildable portion of the project site. The San Gregorio fault is considered to be potentially capable of generating a Moment Magnitude 7.3 earthquake. Many large historical earthquakes have occurred on active faults associated with the regional stress field of the San Andreas fault zone, located approximately 10.8 kilometers to the northeast. The San Andreas fault generated an earthquake of Moment Magnitude 7.0 on the San Francisco peninsula in 1838, and the great San Francisco Earthquake of 1906, with an estimated Moment Magnitude 7.9.

The southwest corner of the site is within the Alquist-Priolo Special Studies Zone (Brabb, 1986); however, at the current time no development is planned for this portion of the site. The map of the Alquist-Priolo Earthquake Fault Zone, Plate 4 shows the location of the special studies zone. A portion of the southwest corner of the site is located within the special studies zone, and also cannot

be developed due to wetland construction restrictions. Therefore, no subsurface trenching was performed to locate the San Gregorio fault for this investigation because the owner is not proposing to build in the special studies zone portion of his property.

Other faults in the area, which are generally considered inactive, include the San Mateo Creek fault, located approximately 8.9 kilometers to the northeast, and the Pilarcitos fault, located approximately 6.7 kilometers to the northeast of the site. These faults are not listed in "Maps of Known Active Fault Near-Source Zones in California and Portions of Nevada" to be used with 1997 Uniform Building Code, implying they can be considered inactive for the purpose of building design. The potential moment magnitude and shaking intensity for the nearest active faults are presented in Table 1 below.

Table 1
SIGNIFICANT EARTHQUAKE SCENARIOS

Fault	Approx. Distance to the Site (km)	Potential Moment Magnitude (M_W)	Shaking Intensity[2]
San Gregorio	0.15	7.3[1]	X-Very Violent
San Andreas (entire)	10.8	7.9[1]	IX-Violent
San Andreas (Peninsula)	10.8	7.2[1]	VIII Very Strong

[1] Working Group on California Earthquake Probabilities, 1999.
[2] Association of Bay Area Governments, 2001.

Maps prepared by ABAG, 2001, indicate the site area will experience a Modified Mercalli Intensity of X, with "Very Violent" shaking and "Extreme Damage" as a result of a Moment Magnitude 7.3 earthquake on the San Gregorio fault, a Modified Mercalli Intensity of XI, with "Violent" shaking and "Heavy Damage" as a result of a Moment Magnitude 7.9 earthquake on the entire San Andreas fault, and a Modified Mercalli Intensity of VIII, with "Very Strong" shaking and "Moderate Damage" as a result of a Moment Magnitude 7.2 earthquake on the Peninsula segment of the San Andreas fault. The Modified Mercalli Intensity Scale is presented in Table 2.

TABLE 2
MODIFIED MERCALLI INTENSITY SCALE
(From ABAG, On Shaky Ground, 2001)

MMI Value	Description of Shaking Severity (2001 maps)	Summary Damage Description (1995 maps)	Full Description
I			Not felt. Marginal and long period effects of large earthquakes.
II			Felt by persons at rest, on upper floors, or favorably placed.
III			Felt indoors. Hanging objects swing. Vibration like passing of light trucks. Duration estimated. May not be recognized as an earthquake.
IV			Hanging objects swing. Vibration like passing of heavy trucks; or sensation of a jolt like a heavy ball striking the walls. Standing motor cars rock. Windows, dishes, doors rattle. Glasses clink. Crockery clashes. In the upper range of IV, wooden walls and frame creak.
V	Light	Pictures Move	Felt outdoors; direction estimated. Sleepers wakened. Liquids disturbed, some spilled. Small unstable objects displaced or upset. Doors swing, close, open. Shutters, pictures move. Pendulum clocks stop, start, change rate.
VI	Moderate	Objects Fall	Felt by all. Many frightened and run outdoors. Persons walk unsteadily. Windows, dishes, glassware broken. Knickknacks, books, etc., off shelves. Pictures off walls. Furniture moved or overturned. Weak plaster and masonry D cracked. Small bells ring (church, school). Trees, bushes shaken (visibly, or heard to rustle).
VII	Strong	Nonstructural Damage	Difficult to stand. Noticed by drivers of motor cars. Hanging objects quiver. Furniture broken. Damage to masonry D, including cracks. Weak chimneys broken at roof line. Fall of plaster, loose bricks, stones, tiles, cornices (also unbraced parapets and architectural ornaments). Some cracks in masonry C. Waves on ponds; water turbid with mud. Small slides and caving in along sand or gravel banks. Large bells ring. Concrete irrigation ditches damaged.
VIII	Very Strong	Moderate Damage	Steering of motor cars affected. Damage to masonry C; partial collapse. Some damage to masonry B; none to masonry A. Fall of stucco and some masonry walls. Twisting, fall of chimneys, factory stacks, monuments, towers, elevated tanks. Frame houses moved on foundations if not bolted down; loose panel walls thrown out. Decayed piling broken off. Branches broken from trees. Changes in flow or temperature of springs and wells. Cracks in wet ground and on steep slopes.
IX	Violent	Heavy Damage	General panic. Masonry D destroyed; masonry C heavily damaged, sometimes with complete collapse; masonry B seriously damaged. (General damage to foundations.) Frame structures, if not bolted, shifted off foundations. Frames racked. Serious damage to reservoirs. Underground pipes broken. Conspicuous cracks in ground. In alluvial areas sand and mud ejected, earthquake fountains, sand craters.
X	Very Violent	Extreme Damage	Most masonry and frame structures destroyed with their foundations. Some well-built wooden structures and bridges destroyed. Serious damage to dams, dikes, embankments. Large landslides. Water thrown on banks of canals, rivers, lakes, etc. Sand and mud shifted horizontally on beaches and flat land. Rails bent slightly.
XI			Rails bent greatly. Underground pipelines completely out of service.
XII			Damage nearly total. Large rock masses displaced. Lines of sight and level distorted. Objects thrown into the air.

Masonry A: Good workmanship, mortar, and design; reinforced, especially laterally, and bound together by using steel, concrete, etc.; designed to resist lateral forces.

Masonry B: Good workmanship and mortar; reinforced, but not designed in detail to resist lateral forces.

Masonry C: Ordinary workmanship and mortar; no extreme weaknesses like failing to tie in at corners, but neither reinforced nor designed against horizontal forces.

Masonry D: Weak materials, such as adobe; poor mortar; low standards of workmanship; weak horizontally.

Full descriptions are from: Richter, C.F. 1958, *Elementary Seismology*, W.H. Freeman and Co., San Francisco, pp135-149, 650-653.

7.0 SITE CONDITIONS

7.1 Subsurface Conditions

The borings were drilled at randomly selected locations as shown on Plate 2, Site Plan. The soils encountered at the site generally consist of extremely heterogeneous lenses of soft to very stiff lean clays (CL), sandy lean clays (CL), lean to fat clays (CL\CH), and loose to very dense clayey sands (SC), silty sands (SM), clayey gravels (GC), and poorly- to well-graded sands with varying fines content (SP, SW, SW-SC, SW-SM, SP-SC, SP-SM). For more information regarding the subsurface materials, we refer you to Plates 10 through 23, Boring Logs.

7.2 Groundwater

Groundwater was encountered during the drilling operation at a depth ranging from 5½ to 7½ feet below the existing ground surface. It should be noted that the groundwater level will fluctuate as a result of seasonal changes.

7.3 Liquefaction Potential

Soil liquefaction is a phenomenon in which saturated (submerged) cohesionless soils can be subject to a temporary loss of strength due to buildup of excess pore pressure, and reduction of soil effective stress during cyclic loading, such as those produced by earthquakes. In the process, the soil acquires a mobility sufficient to permit both horizontal and vertical movements, if not confined. Soils most susceptible to liquefaction are loose, clean, uniformly-graded, fine-grained sands. Silty sands may also be susceptible to liquefaction during strong ground shaking, although to a lesser extent.

Our analyses of liquefaction potential of the loose to medium dense sandy soils encountered beneath the site were performed based on the procedure outlined in "Liquefaction Resistance of Soils: Summary Report from the 1996 NCEER and 1998 NCEER\NSF Workshops on Evaluation of Liquefaction Resistance of Soils," (*T.L. Youd et al*, 2001). The borings encountered poorly- to well-graded sands and silty sands below the water table ranging in consistency from loose to medium dense, and with a fines content ranging from 4% to 15%. Because of the lenticular nature of the soil deposits beneath the site, and because of the depth to groundwater once fill has been placed on the site, it is our opinion that the surface effects of such liquefaction would be limited to differential settlements of the ground surface (For an estimate of the settlement magnitude see Section 8.7 of this report).

7.4 Seismic Compaction Potential

Densification of loose sandy soils above the groundwater table may also occur during major earthquakes. Several borings contained nonuniform layers of loose to medium dense granular soils marginally susceptible to densification during major earthquakes. While these sand layers were found to be at or beneath the water table during our site investigation, these loose to medium dense sand layers are susceptible to seismic compaction if the water table were to be lowered, with the magnitude of settlement similar to that arising from liquefaction. The analysis of the potential of these soils for densification and compaction during major earthquakes was performed based on the procedure outlined in "Evaluation of Settlements in Sands Due to Earthquake Shaking" (*Takimatsu and Seed*, 1987). Our analysis has concluded that densification of the medium dense sandy subsurface materials will cause differential settlements at the ground surface, most likely limited to between ½ and 3½ inches with the existing site conditions.

8.0 CONCLUSIONS AND RECOMMENDATIONS

8.1 General

Based on the subsurface exploration conducted at the subject site and the results obtained from our laboratory testing program, it is our opinion that it is geotechnically feasible to construct the proposed commercial building(s), provided the recommendations presented in this report are incorporated into the project design and construction. When the preliminary development plans are available, they should be reviewed by this office prior to construction to confirm that the intent of our recommendations are reflected in the plans, and to confirm that our recommendations properly address the proposed project in its final form.

In general, the shallow groundwater levels at the site may create difficulties during construction. Dewatering of the near surface material may be necessary in order to recompact the material at a lower moisture content. After raising the site grades, it will then be appropriate to excavate the utility trenches.

8.1.1 Recompaction

Our explorations indicate the site is blanketed by approximately 12 inches of loose soils that become soft and wet during the rainy season, and would adversely affect the performance of shallow foundations. The site development calls for raising the grades by approximately 2 to 4 feet. Therefore, before fill placement, the upper 18 inches of the surface soils should be removed and the underlying soils properly moisture conditioned and recompacted before fill placement.

8.1.2 Anticipated Settlement

Our subsurface exploration has encountered layers of medium dense silty sands, poorly- to well-graded sands of significant thickness that have a moderate to high potential for liquefaction and/or seismic compaction during a major earthquake. Our subsurface exploration also encountered medium stiff clayey soils at depth. Compression of weak soils under the weight of the fill and structural loads and/or liquefaction of the saturated granular soils beneath the site can cause settlement of the shallow foundations. In order to reduce the total settlement due to the proposed buildings, we recommend a 4-foot surcharge be placed over the entire site, or on specifically identified building pads. The weight of the surcharge will partially consolidate the weak subsurface soil layers before the buildings are constructed. Therefore, for satisfactory performance of spread footing foundations, we recommend the site be graded to the proposed rough pad grades, a 4-foot surcharge be placed on the building pads, and the site left undeveloped until a portion of the projected settlements under the fill weight have taken place. A more specific settlement analysis cannot be made until the nature of site grading and the magnitude of the structural loads for the proposed commercial structure(s) have been determined.

8.1.3 Preliminary Foundations

Provided site grading is performed as recommended herein, we anticipate conventional shallow footings will provide satisfactory support for the proposed commercial building(s). With the recompaction of the upper 2 feet of surface soil and the 2 to 4 feet of imported material, the buildings will be essentially founded on a minimum 4-foot thick mat of compacted soil. Deep foundations, such as drilled piers, are not recommended because of the high ground water table, the vertical extent of soft soils, and loose sands beneath the site. Drilled piers are also expected to be prohibitive in cost because of the needed embedment depth and because of construction difficulties posed by the high groundwater.

8.1.4 Ground Shaking

The site could experience very strong ground shaking from future earthquakes during the anticipated lifetime of the project. The intensity of the ground shaking will depend on the magnitude of the earthquake, distance to the epicenter, and the response characteristics of the native soils and bedrock. While it is not possible to totally preclude damage to structures during major earthquakes, strict adherence to good engineering design and construction practices will help reduce the risk of damage to the proposed structures.

8.1.5 Preliminary Recommendations

The import materials selected to raise the grade of the site will determine the final recommendations for foundations and pavement sections. Once the import source has been determined, and an R-value test of the material has been performed, a final pavement section can be designed for the parking areas and driveways for the site. The foundation recommendations can then be finalized depending on the materials and the magnitude of the building loads anticipated.

8.2 Site Grading

It is our understanding that site grading will consist of importing fill material to raise the building pad(s) and driveway/parking areas to the desired grades above the flood level. The conclusions and recommendations presented in this report are therefore based on the assumption that site grades will be raised 2 to 4 feet.

As used in this report, the term "compact" and its derivatives mean that all on-site an import soils should be compacted to at least 90 percent of maximum dry density, as determined by ASTM Test Method D1557-01, at a moisture content that is at least 2 to 3 percent over optimum.

The following grading procedures should be followed for areas to receive fill, pavements, concrete slabs, or flatwork:

- Strip and remove the organically-contaminated topsoil and debris from the site surface. Stockpile the strippings for later disposal at an off-site location, or for later use in landscaping areas only. The depth of stripping is estimated to be approximately 6 inches, and should be verified in the field by the Geotechnical Engineer at the time of construction.

- Further over-excavate any loose soils from all areas to be developed. The depth of loose soils is anticipated to be 18 inches in depth, and should be verified by the Geotechnical Engineer at the time of construction. Where removal of trees or large bushes are planned, all major root systems must be over-excavated and removed. Depending on the time of year the grading takes place, dewatering of the near surface soils may be required in order to recompact the upper two feet of native soil.

- Scarify the over-excavated surfaces to a depth of 8 inches. Thoroughly moisture condition the scarified surfaces to at least 2% to 3% over optimum moisture content and re-compact as specified above. Further over-excavate, as necessary, any area still containing weak and/or yielding (pumping) soils, as determined in the field by the Geotechnical Engineer.

- Place fill on the over-excavated surfaces and in the holes/depressions created by the above actions in uniformly moisture conditioned and compacted lifts not exceeding 8 inches in loose thickness. Rocks or cobbles larger than 4 inches in maximum dimensions should not be allowed to remain within the foundation areas, unless they can be crushed in-place by the construction equipment.

The on-site soils generally are suitable for use as structural fill. However, it is our understanding that 2 to 4 feet of fill will be placed to raise the building pad(s) above the flood level. Any imported fill soils should be predominantly granular in nature, should be free of organics, debris, or rocks over 4 inches in size, and should be approved by the Geotechnical Engineer before importing to the site. Presently we do not know the type of soil that will be available for import to the site. We have therefore provided two alternate specifications for imported materials, and we are providing

recommendations for preliminary foundation and pavement design, based on these two material alternatives.

As a general guide to acceptance, Alternative A material should have a Plasticity Index less than 15, an R-value of at least 25, and a fines content between 15 and 40 percent, and Alternative B material should have a Plasticity Index less than 25, an R-value of at least 15.

All aspects of site grading including clearing/stripping, over-excavation, and placement of fills or backfills should be performed under the observation of BAGG's field representatives. It must be the Contractor's responsibility to select equipment and procedures that will accomplish the grading as described above. The Contractor must also organize his work in such a manner that one of our field representatives can observe and test the grading operations, including clearing, excavation, compaction of fills and backfills, and compaction of subgrades.

8.3 1997 Uniform Building Code Site Characterization

Great strides have been made recently in the revision of codes for better design against the destructive power of major earthquakes. These advances have been incorporated into the 1997 Edition of the UBC. The type and distance to the faults are interpreted from "Maps of Known Active Fault Near-Source Zones in California and Portions of Nevada to be used with the 1997 Uniform Building Code." The Regional Fault Map, Plate 5, shows the location of the mapped active faults in the Bay Area based on the 1997 UBC maps. The appropriate parameters for the subject site have been tabulated in Table 3.

TABLE 3
PARAMETERS FOR SEISMIC DESIGN

UBC, 1997	Site Parameters	
Figure 16-2, Seismic Zone Map of the U.S.	Zone 4	
Table 16-I, Seismic Zone Factor Z	0.4	
Table 16-Q, Seismic Coefficient C_a	$0.44N_a$	
Table 16-R, Seismic Coefficient C_v	$0.64N_v$	
Table 16-J, Soil Profile Type	S_D, Stiff Soil Profile	
Closest Distance to Known Seismic Source	<2.0 kilometers	10.8 kilometers
Table 16-U, Seismic Source Type	A(San Gregorio)	A(San Andreas)
Table 16-S, Near-Source Factor, N_a	1.5	1.0
Table 16-T, Near-Source Factor, N_v	2.0	1.2

8.4 Foundations

Provided site grading is performed as recommended above, conventional shallow footings will provide satisfactory support for the proposed commercial building(s). Conventional shallow footing foundations will also require that the site be surcharged for a period to allow a significant portion of the settlements caused by consolidation of compressible soils at the site to occur before foundations are constructed.

The footings should be established 18 inches below the rough pad grade, and should not be less than 12 inches in width. The preliminary design for such footings may be accomplished using an allowable bearing pressures described below in Table 4, Bearing Pressures For Various Import Materials.

TABLE 4
BEARING PRESSURES FOR VARIOUS IMPORT MATERIALS
(for preliminary design purposes only)

Alternative Import	A	B
R-Value Greater Than	25	15
Plasticity Index (PI) Less Than	15	25
Allowable Bearing Pressures		
Dead Load (psf) =	2,000	1,500
Total Design Loads (psf) =	3,000	2,400

Note that this table should be used only as a guide for preliminary design; the final bearing pressures should be verified when the import source has been determined. The recommended bearing value for dead plus live loads may be increased by one-third for short-term wind and seismic loads.

Continuous footings should be properly reinforced. Such reinforcing should consist of a minimum of 2 No. 4 bars placed at the top and bottom of the footings to provide structural continuity and to span over localized irregularities in soil conditions.

The bottom of footing excavations should be firm, clean, and free of any loose or yielding soils. To the extent possible, footings should be poured in neat excavations without the use of side forms and the soils exposed in the excavations should not be allowed to dry out or crack before concrete placement. Any dry and cracked soils should be excavated and replaced with properly-compacted fill soils or lean concrete.

8.5 Under Slab Measures

Concrete slabs should be supported on import non-expansive soils that have been prepared and compacted as recommended under "Site Grading," and the top of 12" of import materials should conform to Alternative A in Table 4. The subgrade soils should be maintained at a moisture content

of at least 2% to 3% over optimum, and should be approved by the Geotechnical Engineer immediately before the slab is poured.

As a precaution to minimize transmission of soil moisture up through the floor slab and to provide appropriate support to floor loads, it is recommended that the slab under the office areas be underlain with at least 4 inches of approved, clean, free draining, angular gravel. Where heavy floor loads such as forklift, storage, or equipment loads are anticipated, the crushed rock should be replaced with a 6-inch layer of Class II aggregate base (minimum R-value = 78) compacted to at least 95 percent of maximum dry density.

The base course is intended to serve as a capillary break; however, moisture may accumulate in the base course zone. Therefore, a plastic vapor barrier of at least six mil thickness should be placed on the rock if moisture protection is desired and a damp slab is not desirable. To aid in curing the concrete and to protect the membrane during construction, the vapor barrier should be covered with a 2-inch-thick layer of curing sand that should be wetted prior to pouring the slab.

8.6 Lateral Design

Lateral resistance may be obtained from passive earth pressures acting on the sides of foundation members which have been poured in neat excavations. The preliminary value for allowable passive resistance to wind or seismic loads can be taken as an equivalent fluid pressure of 300 pounds per cubic foot, and should be verified once the import source has been identified. For resisting long-term loads, the passive resistance within the upper 12 inches of soils should be ignored.

A frictional coefficient of 0.35 can be used between the bottom of footings and imported (both Alternate "A" and "B" material) non-expansive fill soils.

8.7 Settlements

There will be three main sources of settlement for this development: potential seismic densification and/or liquefaction of the loose granular soils under portions of the site; static settlements due to the placement of the fill required to raise the site above the flood plain; and static settlements due to the weight of the buildings. One possible solution to decrease the total amount of settlement of the building is to accelerate consolidation of the soft clayey material by placing a 4-foot thick soil surcharge over the building pads - consolidation of the granular materials should occur rather rapidly, and may not even be noticed during placement of the fills. The surcharge will pre-consolidate the compressible soil layer so that when the soil is removed and the building constructed, only minor additional settlements will occur. We estimate the soil surcharge can be removed in one to two months. Monitoring the movement of settlements through markers placed in the fill will indicate when the surcharge may be removed.

8.7.1 Seismic Settlement

The potential magnitude of settlement caused by liquefaction evaluated with the procedures described in the "Liquefaction" and "Seismic Compaction" sections of this report, varies from ½ to 3½ inches across the site, for the existing conditions. These settlement magnitudes have been estimated based on the groundwater levels as encountered in our exploratory borings, the blow counts measured during sampling, and the fines content measured in the laboratory. The liquefaction settlement would be additive to the settlements caused by fill soils and structural loads. Once the fill has been placed, however, the consolidation of the on-site materials caused by the surcharge may decrease the magnitude of seismic settlement.

8.7.2 Static Fill Settlement

The settlement for fill placement loads cannot be properly estimated until the nature of site grading and the magnitude of the fill have been determined. At this time the fill thickness required to raise

the pad grades above the flood plane is approximately 2 feet near Airport Street and up to 4 feet along the southwestern building line. The amount of settlement is directly related to the weight and therefore the thickness of the fill. The settlements will be generally smaller along Airport Street and the largest near the western property line. While the loose granular soils will consolidate rather rapidly during the grading process, and may not even be noticeable during grading, the soft compressible clayey soils will consolidate over a longer period of time, and may be noticeable with settlement markers. The location and thickness of soft and loose soil layers also vary across the site. Because of these variables, it is not practical to accurately predict settlements over the entire site. However, our preliminary estimates for the settlements due to placement of fill to be on the range of ½ to 3 inches across the site, with differential settlement on the order of 1¼ inch over a distance of 100 feet.

8.7.3 Static Building Settlement

The settlement for structural loads cannot be made until the nature of site grading and magnitude of the building loads and related improvements have been determined. We recommend to further limit the post-construction settlements of spread footing foundations, and that the site should be surcharged with 4 feet of fill for a period of one to two months. Because we anticipate the majority of the settlements (from the granular soils) will occur quite rapidly during grading, much of the anticipated settlement will not be noticeable. However, it may be feasible to determine the duration of surcharge to consolidate the soft clayey soils underlying the site by monitoring settlement markers. When the settlement markers show no movement, the surcharge can be removed and the buildings may then be constructed.

We anticipate that 4 feet of surcharge is expected to reduce settlements from a range of ½ to 3½ inches to ½ to 1¼ inches.

8.8 Drainage

Drainage measures to control and collect surface run-off should be considered an integral part of the proposed development. The ground surface adjacent to all sides of the proposed buildings should be sloped to drain away from the foundations. Unpaved and landscaped areas should slope at least 5 percent to at least 5 feet away from the face of the building. Runoff should not be allowed to flow over graded slopes, and any area where surface run-off becomes concentrated should be provided with a catch basin. The run-off from building roofs should be collected in closed, non-perforated pipes and discharged to the local storm drain system or to suitable outfall locations in a manner that will not allow ponding adjacent to foundations.

Surface and subsurface drainage facilities and catchment areas should be checked frequently and cleaned or maintained throughout the project life, as necessary.

8.9 Review of Preliminary Building Plans

It is recommended that the Geotechnical Engineer (Bay Area Geotechnical Group) be retained to review the preliminary grading, improvement and foundation plans. This review is to assess general suitability of the earthwork and foundation recommendations contained in this report, and to verify the appropriate implementation of our recommendations into the project plans and specifications. This review will also allow us to finalize our recommendations.

8.10 Construction Observation and Testing

It is recommended that the Geotechnical Engineer (BAGG) be retained to provide services during the grading, excavation, and foundation construction phases of work. This is to observe compliance with the design concepts, specifications and recommendations, and to allow for design changes in the event that subsurface conditions differ from those anticipated during construction.

9.0 CLOSURE

This preliminary report has been prepared in accordance with generally-accepted engineering practices for the strict use of Big Wave Development and other professionals associated with the specific project described in this report. The preliminary recommendations presented in this report are based on our understanding of the proposed construction as described herein, and upon the soil conditions encountered in our exploratory borings drilled for this investigation.

The conclusions and recommendations contained in this preliminary report are based on subsurface conditions revealed by fourteen widely-spaced borings. It is not uncommon for unanticipated conditions to be encountered during site grading and/or foundation installation, and it is not possible for all such variations to be found by a field exploration program appropriate for this type of project. The recommendations contained in this report are therefore contingent upon the review of the preliminarly grading, drainage, and foundation plans by this office, and upon geotechnical observation and testing by BAGG of all pertinent aspects of site grading including demolition, placement of fills and backfills, and footing excavations.

Soil conditions and standards of practice change with time. Therefore, we should be consulted to update this report, if the construction does not commence within 24 months from the date this report is submitted. Additionally, the recommendations of this report are only valid for the proposed development as described herein. If the proposed project is modified, our recommendations should be reviewed and approved or modified by this office in writing.

The following references and plates are attached and complete this report:

Plate 1	Vicinity Map
Plate 2	Site Plan
Plate 3	Regional Geology Map
Plate 4	Alquist-Priolo Earthquake Fault Zone
Plate 5	Regional Fault Map
Plate 6	Unified Soil Classification System
Plate 7	Soil Terminology
Plate 8	Boring Log Notes
Plates 9-A and 9-B	Key to Symbols
Plates 10 through 23	Boring Logs
Plate 24	Plasticity Data

ASFE Document titled "Important Information About Your Geotechnical Engineering Report"

10.0 REFERENCES

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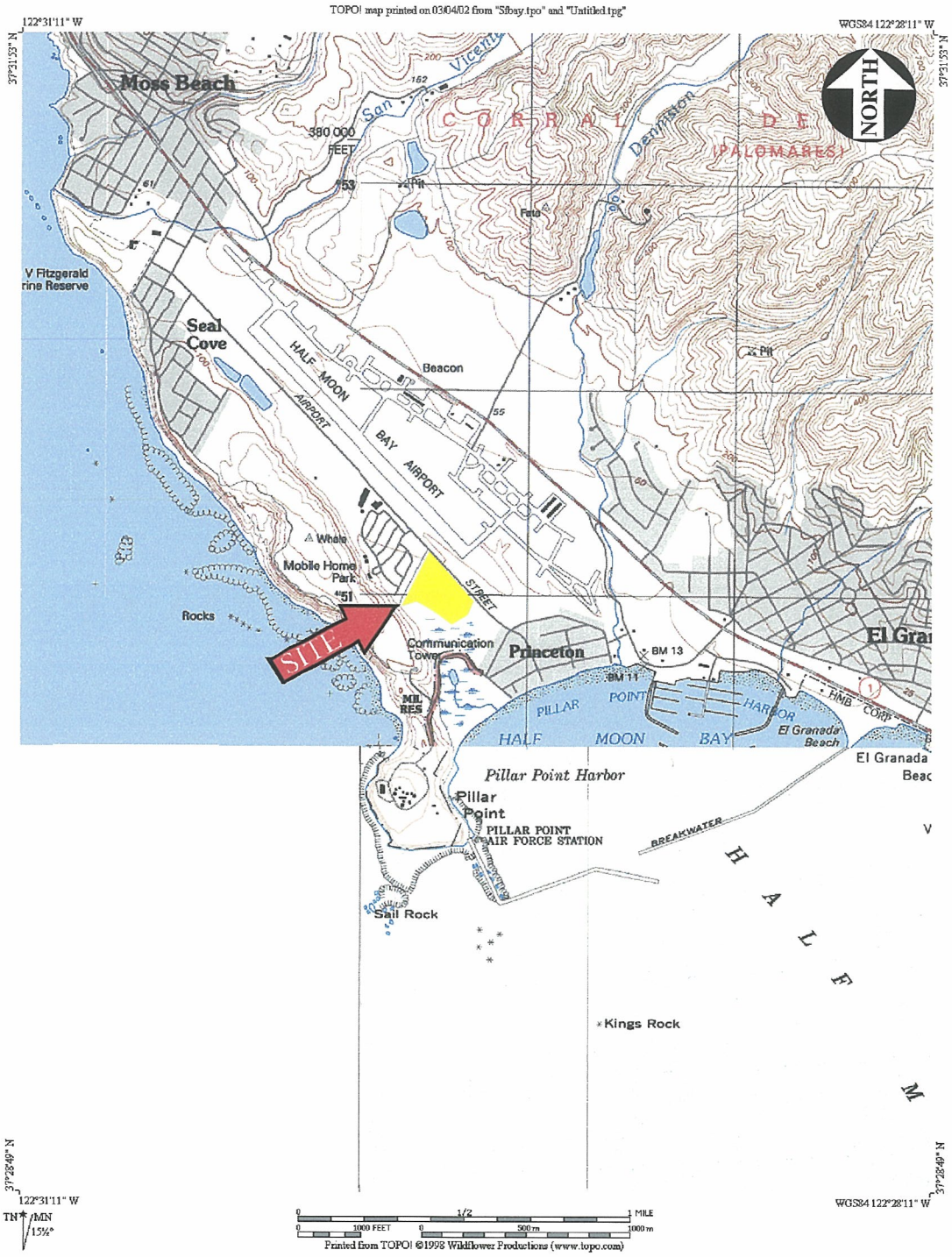
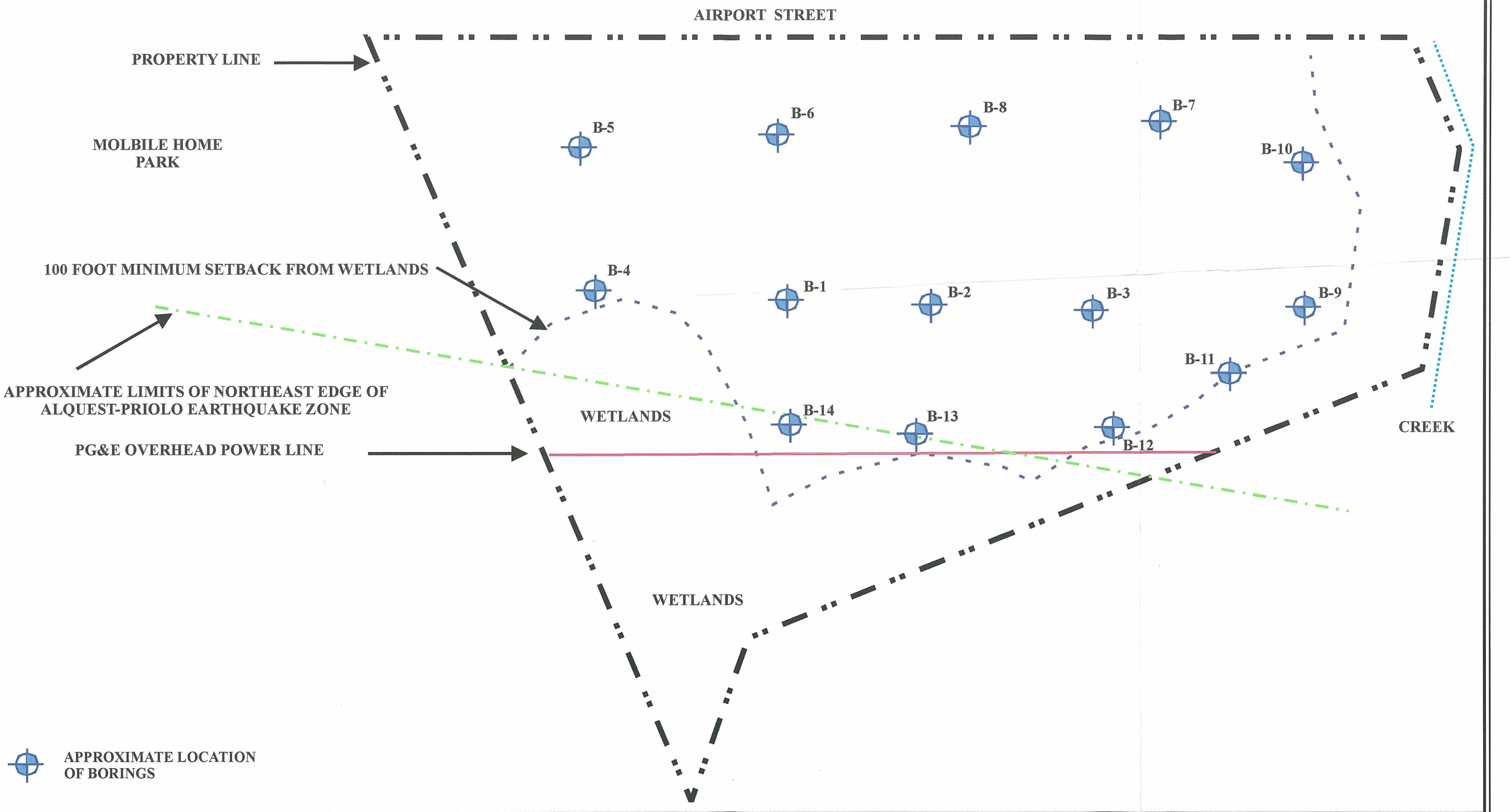
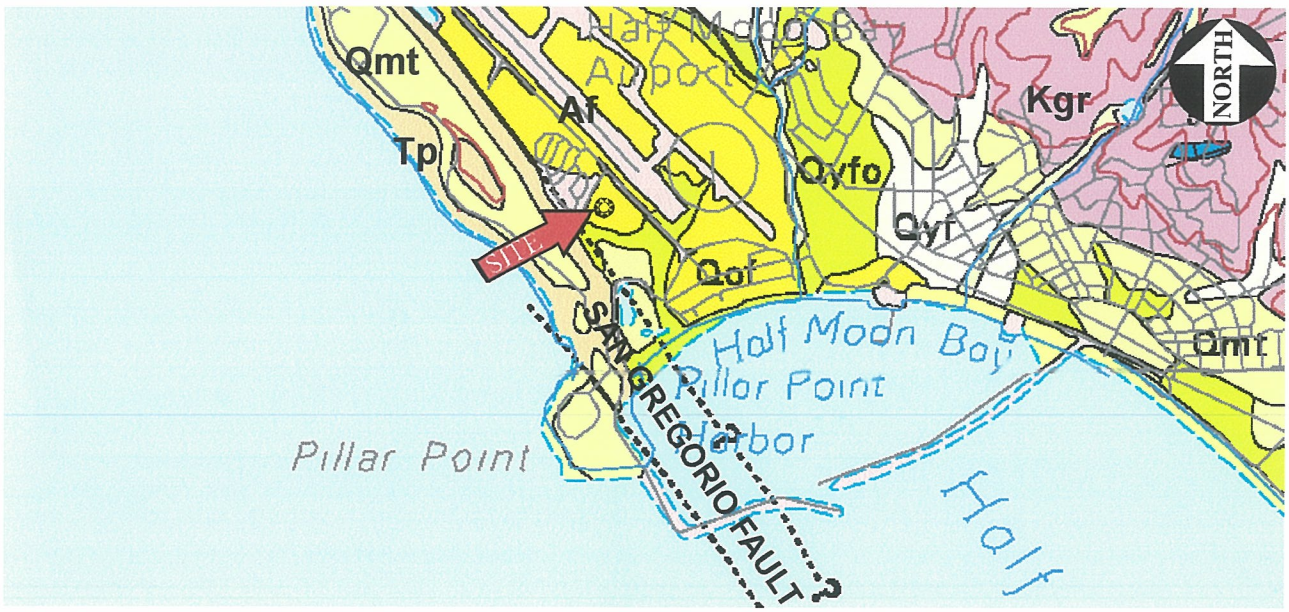


PROPOSED COMMERCIAL DEVELOPMENT SOUTH SIDE OF AIRPORT STREET APN 047-311-060 PRINCETON-BY-THE-SEA, CALIFORNIA For Big Wave Development	**VICINITY MAP**		
	JOB NO. BIGWA-01-00	DATE May 2001	PLATE 1



Base Map:	NORTH	**PROPOSED COMMERCIAL DEVELOPMENT SOUTH SIDE OF AIRPORT STREET APN 047-311-060 PRINCETON-BY-THE-SEA, CALIFORNIA For Big Wave Development**	BAGG	**SITE PLAN**		
				JOB NO. BIGWA-01-00	SCALE 1" = 100'	DATE May 2002	PLATE 2



LEGEND

Qyfo Younger (outer) alluvial fan deposits (Holocene)
Unconsolidated fine sand, silt, and clayey silt.

Qmt Marine terrace deposits (Pleistocene)
Poorly consolidated and poorly indurated well- to poorly-sorted sand and gravel. Thickness variable but probably less than 30 m.

af Artificial fill (Historic)
Loose to very well consolidated gravel, sand, silt, clay, rock fragments, organic matter, and man-made debris in various combinations. Thickness is variable and may exceed 30 m in places. Some is compacted and quite firm, but fill made before 1965 is nearly everywhere not compacted and consists simply of dumped materials.

Qof Coarse-grained older alluvial fan and stream terrace deposits (Pleistocene)
Poorlyconsolidated gravel, sand, and silt, coarser grained at heads of old fans and in narrow canyons.

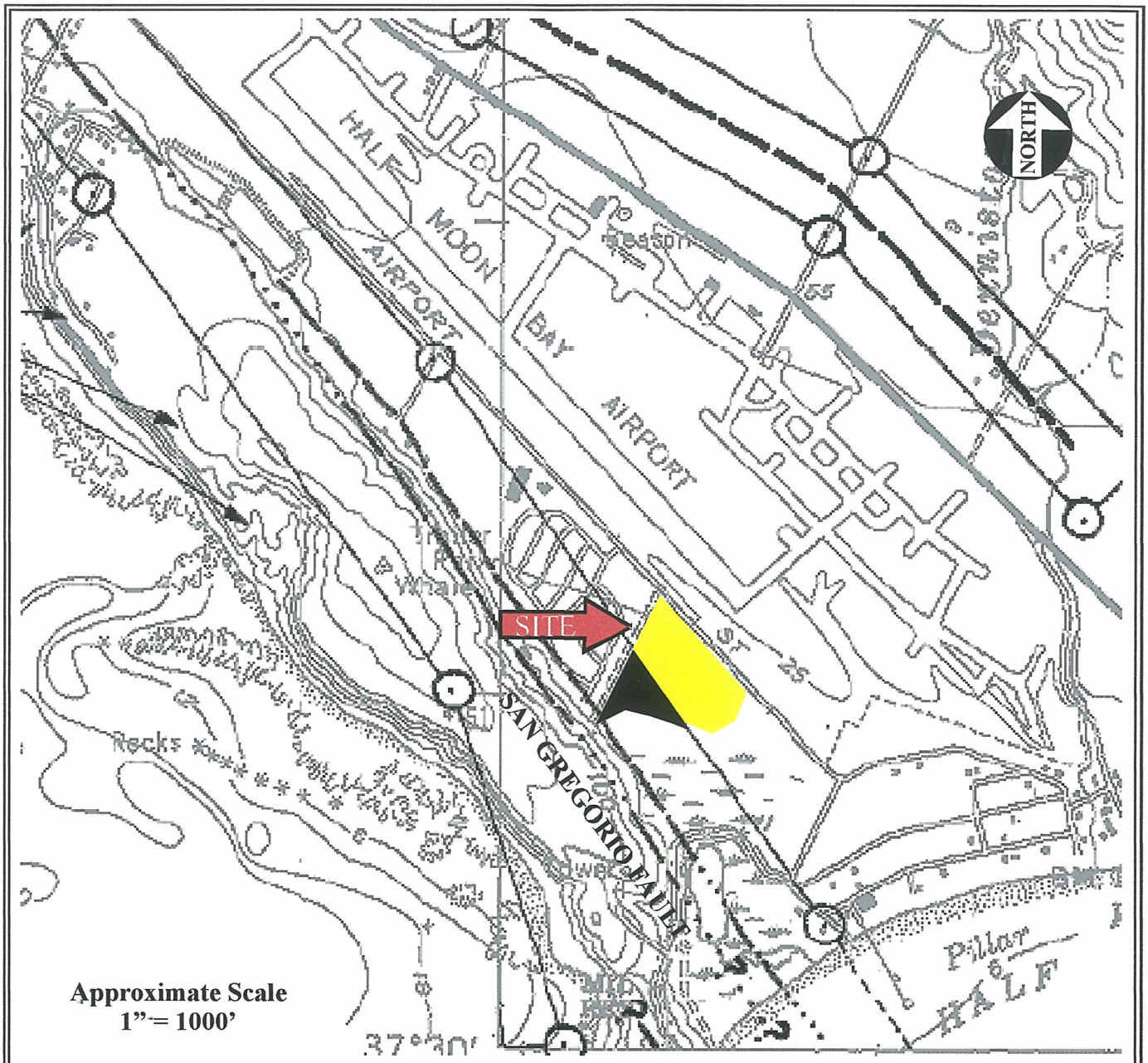
Qyf Younger (inner) alluvial fan deposits (Holocene)
Unconsolidated fine- to coarse grained sand, silt, and gravel, coarser grained at heads of fans and in narrow canyons.

Tp Purisima Formation (Pliocene and upper Miocene)
Predominantly gray and greenish-gray to buff finegrained sandstone, siltstone, and mudstone, but also includes some porcelaneous shale and mudstone, chert, silty mudstone, and volcanic ash. West of Portola Valley, this unit consists of fine- to medium-grained silty sandstone.

Kgr Granitic rocks of Montara Mountain
Very light gray to light brown, medium- to coarsely crystalline foliated granitic rock, largely quartz diorite with some granite. These rocks are highly fractured and deeply weathered. Foliation is marked by an alignment of dark minerals and dark dioritic inclusions. Tabular bodies of aplite and pegmatite generally parallel foliation.

REFERENCE: *GEOLOGY OF THE ONSHORE PART OF SAN MATEO COUNTY, CALIFORNIA: A DIGITAL DATABASE, PAMPHLET DERIVED FROM DIGITAL OF98-137*, by Brabb, E.E., Graymer, R.W., And Jones, D.L. U.S. Geological Survey, 1998.

PROPOSED COMMERCIAL DEVELOPMENT SOUTH SIDE OF AIRPORT STREET APN 047-311-060 PRINCETON-BY-THE-SEA, CALIFORNIA For Big Wave Development	**REGIONAL GEOLOGY MAP**		
	JOB NO. BIGWA-01-00	DATE May 2001	PLATE 3

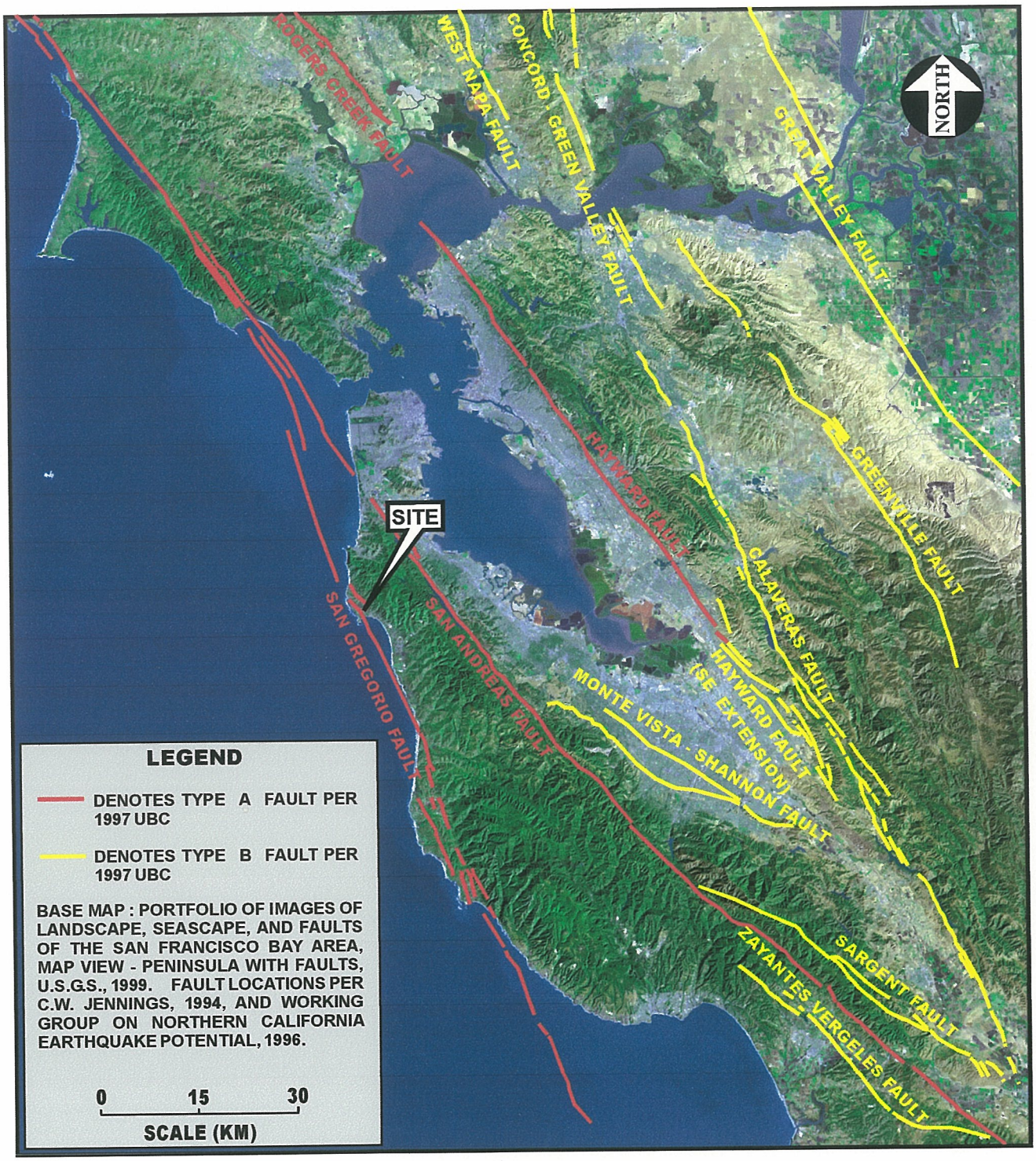


Approximate Scale
1"= 1000'

Site shaded black is a wetland zone not to be constructed. In the field wetlands setback line runs very close to the diving line between the black and yellow areas of the site.

REFERENCE: Reproduced with permission, California Division of Mines and Geology CD-ROM 2000-004 (2000), Official Map of Alquist-Priolo Earthquake Fault Zones, Montara Mountain Quad, 1982.

PROPOSED COMMERCIAL DEVELOPMENT SOUTH SIDE OF AIRPORT STREET APN 047-311-060 PRINCETON-BY-THE-SEA, CALIFORNIA For Big Wave Development	ALQUIST-PRIOLO EARTHQUAKE FAULT ZONES		
	JOB NO BIGWA-01-00	DATE May 2002	PLATE 4



PROPOSED COMMERCIAL DEVELOPMENT
SOUTH SIDE OF AIRPORT STREET
APN 047-311-060
PRINCETON-BY-THE-SEA, CALIFORNIA
For Big Wave Development

REGIONAL FAULT MAP

JOB NO.	DATE	PLATE
BIGWA-01-00	May 2002	5

COARSE-GRAINED SOILS
LESS THAN 50% FINES*

GROUP SYMBOLS	ILLUSTRATIVE GROUP NAMES	MAJOR DIVISIONS
GW	Well graded gravel Well graded gravel with sand	GRAVELS More than half of coarse fraction is larger than No. 4 sieve size
GP	Poorly graded gravel Poorly graded gravel with sand	
GM	Silty gravel Silty gravel with sand	
GC	Clayey gravel Clayey gravel with sand	
SW	Well graded sand Well graded sand with gravel	SANDS More than half of coarse fraction is smaller than No. 4 sieve size
SP	Poorly graded sand Poorly graded sand with gravel	
SM	Silty sand Silty sand with gravel	
SC	Clayey sand Clayey sand with gravel	

NOTE: Coarse-grained soils receive dual symbols if:
(1) their fines are CL-ML (e.g. SC-SM or GC-GM) or
(2) they contain 5-12% fines (e.g. SW-SM, GP-GC, etc.)

FINE-GRAINED SOILS
MORE THAN 50% FINES*

GROUP SYMBOLS	ILLUSTRATIVE GROUP NAMES	MAJOR DIVISIONS
CL	Lean clay Sandy lean clay with gravel	SILTS AND CLAYS liquid limit less than 50
ML	Silt Sandy silt with gravel	
OL	Organic clay Sandy organic clay with gravel	
CH	Fat clay Sandy fat clay with gravel	SILTS AND CLAYS liquid limit more than 50
MH	Elastic silt Sandy elastic silt with gravel	
OH	Organic clay Sandy organic clay with gravel	
PT	Peat Highly organic silt	HIGHLY ORGANIC SOIL

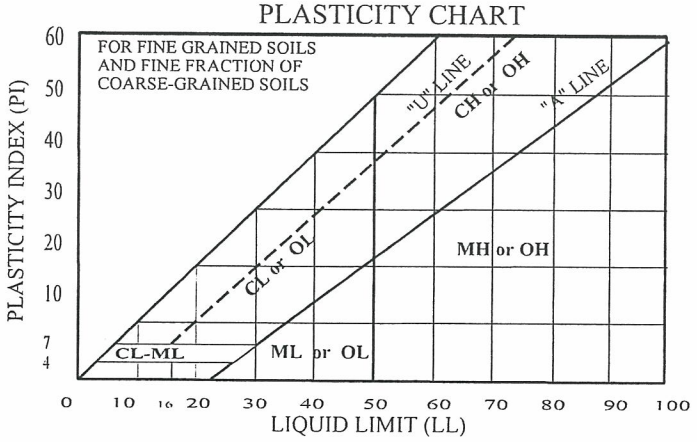
NOTE: Fine-grained soils receive dual symbols if their limits plot in the hatched zone on the Plasticity Chart (CL-ML).

SOIL SIZES

COMPONENT	SIZE RANGE
BOULDERS	ABOVE 12 in.
COBBLES	3 in. to 12 in.
GRAVEL	No. 4 to 3 in.
Coarse	¾ in to 3 in.
Fine	No. 4 to ¾ in.
SAND	No. 200 to No.4
Coarse	No. 10 to No. 4
Medium	No. 40 to No. 10
Fine	No. 200 to No. 40
*FINES:	BELOW No. 200

NOTE: Classification is based on the portion of a sample that passes the 3-inch sieve.

PLASTICITY CHART



Reference: ASTM D 2487-00, Standard Classification of Soils for Engineering Purposes (Unified Soil Classification System).

GENERAL NOTES: The tables list 30 out of a possible 110 Group Names, all of which are assigned to unique proportions of constituent soils. Flow charts in ASTM D 2487-00 aid assignment of the Group Names. Some general rules for fine grained soils are: less than 15% sand or gravel is not mentioned; 15% to 25% sand or gravel is termed "with sand" or "with gravel;" and 30% to 49% sand or gravel is termed "sandy" or "gravelly." Some general rules for coarse-grained soils are: uniformly-graded or gap-graded soils are "Poorly" graded (SP or GP); 15% or more sand or gravel is termed "with sand" or "with gravel;" 15% to 25% clay and silt is termed clayey and silty and any cobbles or boulders are termed "with cobbles" or "with boulders."

UNIFIED SOIL CLASSIFICATION SYSTEM

SOIL TYPES (Ref 1)

Boulders: particles of rock that will not pass a 12-inch screen.
Cobbles: particles of rock that will pass a 12-inch screen, but not a 3-inch sieve.
Gravel: particles of rock that will pass a 3-inch sieve, but not a #4 sieve.
Sand: particles of rock that will pass a #4 sieve, but not a #200 sieve.
Silt: soil that will pass a #200 sieve, that is non-plastic or very slightly plastic, and that exhibits little or no strength when dry.
Clay: soil that will pass a #200 sieve, that can be made to exhibit plasticity (putty-like properties) within a range of water contents, and that exhibits considerable strength when dry.

MOISTURE AND DENSITY

Moisture Condition: an observational term; dry, moist, wet, or saturated.
Moisture Content: the weight of water in a sample divided by the weight of dry soil in the soil sample, expressed as a percentage.
Dry Density: the pounds of dry soil in a cubic foot of soil.

DESCRIPTORS OF CONSISTENCY (Ref 3)

Liquid Limit: the water content at which a - soil that will pass a #40 sieve is on the boundary between exhibiting liquid and plastic characteristics. The consistency feels like soft butter.
Plastic Limit: the water content at which a - soil that will pass a #40 sieve is on the boundary between exhibiting plastic and semi-solid characteristics. The consistency feels like stiff putty.
Plasticity Index: the difference between the liquid limit and the plastic limit, i.e. the range in water contents over which the soil is in a plastic state.

MEASURES OF CONSISTENCY OF COHESIVE SOILS (CLAYS) (Ref's 2 & 3)

Very Soft	N=0-1*	C=0-250 psf	Squeezes between fingers
Soft	N=2-4	C=250-500 psf	Easily molded by finger pressure
Medium Stiff	N=5-8	C=500-1000 psf	Molded by strong finger pressure
Stiff	N=9-15	C=1000-2000 psf	Dented by strong finger pressure
Very stiff	N=16-30	C=2000-4000 psf	Dented slightly by finger pressure
Hard	N>30	C>4000 psf	Dented slightly by a pencil point

*N=blows per foot in the Standard Penetration Test. In cohesive soils, with the 3-inch-diameter ring sampler, 140-pound weight, divide the blow count by 1.2 to get N (Ref 4).

MEASURES OF RELATIVE DENSITY OF GRANULAR SOILS (GRAVELS, SANDS, AND SILTS) (Ref's 2 & 3)

Very Loose	N=0-4**	RD=0-30	Easily push a ½-inch reinforcing rod by hand
Loose	N=5-10	RD=30-50	Push a ½-inch reinforcing rod by hand
Medium Dense	N=11-30	RD=50-70	Easily drive a ½-inch reinforcing rod
Dense	N=31-50	RD=70-90	Drive a ½-inch reinforcing rod 1 foot
Very Dense	N>50	RD=90-100	Drive a ½-inch reinforcing rod a few inches

**N=Blows per foot in the Standard Penetration Test. In granular soils, with the 3-inch-diameter ring sampler, 140-pound weight, divide the blow count by 2 to get N (Ref 4).

xxxx

GENERAL NOTES FOR BORING LOGS:

The boring logs are intended for use only in conjunction with the text, and for only the purposes the text outlines for our services. The Plate "Soil Terminology" defines common terms used on the boring logs.

The plate "Unified Soil Classification System," illustrates the method used to classify the soils. The soils were visually classified in the field; the classifications were modified by visual examination of samples in the laboratory, supported, where indicated on the logs, by tests of liquid limit, plasticity index, and/or gradation. In addition to the interpretations for sample classification, there are interpretations of where stratum changes occur between samples, where gradational changes substantively occur, and where minor changes within a stratum are significant enough to log.

There may be variations in subsurface conditions between borings. Soil characteristics change with variations in moisture content, with exchange of ions, with loosening and densifying, and for other reasons. Groundwater levels change with seasons, with pumping, from leaks, and for other reasons. Thus boring logs depict interpretations of subsurface conditions only at the locations indicated, and only on the date(s) noted.

SPECIAL FIELD AND LABORATORY NOTES FOR THIS REPORT:

1. The fourteen borings were drilled on April 10, 2002, with a truck mounted SIMCO 2800 drilling rig utilizing 8-inch-diameter (outside) hollow stem augers, and on April 22 and 23, 2002, with a truck mounted Mobile B-53 drilling rig utilizing 8-inch-diameter (outside) hollow stem augers. The borings were sealed with cement grout immediately after the last soil sample was collected.

2. The boring locations were approximately located by using back azimuths from known points on and off the site.

3. The soils' Group Names [e.g. SANDY LEAN CLAY] and Group Symbols [e.g. (CL)] were determined or estimated per ASTM D 2487-00, Standard Classification of Soils for Engineering Purposes (Unified Soil Classification System, see Plate 6). Other soil engineering terms used on the boring logs are defined on Plate 7, Soil Terminology.

4. The undisturbed samples were obtained in a 2½-inch-ID, 3-inch-OD, Modified California sampler lined with 1-inch-long brass rings, and in a 1⅜-inch-ID, 2-inch-OD, Standard Penetration Test sampler. The samples were driven with a 140-pound hammer free-falling 30 inches (ASTM D3550-01 and ASTM D1586-99), as indicated on the boring logs.

5. The "Blow Count" Column on the boring logs indicates the number of blows required to drive the sampler below the bottom of the boring, and the blow counts given are for each 6 inches of sampler penetration.

6. Groundwater was encountered during drilling, at the locations and date as mentioned in the Boring Logs.

7. The symbol "DS" denotes a direct shear test on an undisturbed sample at its field moisture content, and the symbol "DSX" denotes a direct shear test on an undisturbed sample at artificially increased moisture content. Where two direct shear values are shown, the second value denotes the last half of a multi-phase direct shear (DSm) test. The tabulated strength values on the boring logs are yield point values, or the strength measured when the material begins to deform plastically (ASTM D 2166-00).

8. The symbol "LL" and "PI" denotes Liquid Limit and Plasticity Index (ASTM D 4318-00).

BORING LOG NOTES

BAY AREA
GEOTECHNICAL
GROUP

KEY TO SYMBOLS

Strata symbols

Sandy lean clay

Clayey sand

Silty sand

Clayey gravel

Moderate plasticity clay

Well graded sand with silt and gravel

Well graded sand

Sandy silt

Poorly graded sand with silt

Poorly graded sand

Lean clay

Well graded sand with silt

Well graded sand with clay

Symbol	Description
	Borderline sandy clay to clayey sand
	Silty, lean clay

Misc. Symbols

Water first encountered during drilling

Water level at completion of boring

Soil Samplers

Modified California Sampler: 2.375" ID by 3" OD, split-barrel sampler driven w/ 140-pound hammer falling 30" (ASTM D 3550-01)

Standard Penetration Test: 1 3/8" ID by 2" OD, split-spoon sampler driven with 140-pound hammer falling 30" (ASTM D 1586-99)

Line Types

———— Denotes a sudden, or well identified strata change

– – – Denotes a gradual, or poorly identified strata change

Laboratory Tests

DS	Denotes direct shear test performed at field moisture content (ASTM D2166-00).
DSm	Denotes the second half of a multi-phase direct shear test performed on a DS sample (ASTM D2166-00).
DSX	Denotes direct shear test performed on a sample that had been submerged in water (ASTM D2166-00).
LL	Denotes Liquid Limit per ASTM D4318-00

BAY AREA
GEOTECHNICAL
GROUP

KEY TO SYMBOLS

Laboratory Tests

PI	Denotes Plasticity Index per ASTM D4318-00
SA	Denotes Sieve Analysis per ASTM D1140-00

BAY AREA GEOTECHNICAL GROUP

BORING LOG

Boring No. B-1

JOB NAME: Proposed Commercial Development
CLIENT: Big Wave Development, LLC
LOCATION: Airport Street, Princeton By The Sea
DRILLER: Lead Drilling
DRILL METHOD: SIMCO 2800 with 8" ϕ hollow stem augers

JOB NO.: BIGWA-01-00
DATE DRILLED: 04/10/02
ELEVATION: N.A.
LOGGED BY: BJK
CHECKED BY:

Type of Strength Test	Test Surcharge Pressure, psf	Test Water Content, %	Shear Strength, psf	In-Situ Water Content, %	In-Situ Dry Unit Weight, pcf	Depth, ft.	Soil Symbols, Samplers and Blow Counts	USCS	Description	Remarks
						0		CL	FINE SANDY LEAN CLAY, dark gray, moist, medium stiff, medium plasticity	
DS DSm	320 1600	Nat. Nat.	850 1650	14.8	116	4	11 12 16	SC	CLAYEY SAND, trace of white gravels, brown with black, white specks, moist, medium dense	LL = 29 PI = 11
						8	20 22 24	SM	SILTY SAND WITH GRAVEL, brown, wet, dense (quartz, feldspar fragments, granitic source)	
DS DSm	950 2000	Nat. Nat.	1150 2200	16.1	112	12	16 18 23	GC	CLAYEY GRAVEL WITH SAND, gray, wet, dense (granitic source)	
DS DSm	1500 2500	Nat. Nat.	1550 2400	18.1	112	16	6 6 7	CL	SANDY LEAN CLAY, gray and orange brown, wet, stiff, medium plasticity	
							9 13 25	SM	SILTY SAND WITH GRAVEL, red brown, wet, medium dense (granitic detritus)	
						20				
						24			Boring terminated in boiling sands - heaved up to 17 feet. Backfilled with cement grout.	

BAY AREA GEOTECHNICAL GROUP

BORING LOG

Boring No. B-2

JOB NAME: Proposed Commercial Development
CLIENT: Big Wave Development, LLC
LOCATION: Airport Street, Princeton By The Sea
DRILLER: Lead Drilling
DRILL METHOD: SIMCO 2800 with 8" ϕ hollow stem augers

JOB NO.: BIGWA-01-00
DATE DRILLED: 04/10/02
ELEVATION: N.A.
LOGGED BY: BJK
CHECKED BY:

Type of Strength Test	Test Surcharge Pressure, psf	Test Water Content, %	Shear Strength, psf	In-Situ Water Content, %	In-Situ Dry Unit Weight, pcf	Depth, ft.	Soil Symbols, Samplers and Blow Counts	USCS	Description	Remarks
						0		CL/ CH	LEAN TO FAT CLAY, dark gray, moist, medium stiff, medium to high plasticity, silty	
DS	850	Nat.	1300	16.6	113		9	CL	COARSE SANDY LEAN CLAY, brown and red brown mottled, with black oxide specks and white granitic detritus, moist, stiff, medium plasticity	
DSm	2000	Nat.	1950			4	13 18			
								SW-SM	WELL GRADED SAND WITH SILT AND GRAVEL, light brown, wet, medium dense - poorly consolidated (granitic detritus)	SA=11% passing No.200 sieve
						8	13 14 15			
						12	21 24 26			SA=10% passing No.200 sieve
						16				
						20			difficult drilling - loose sands with gravels	
						24			Boring terminated in flowing sands at 25.0 feet. Backfilled with cement grout.	

BAY AREA GEOTECHNICAL GROUP

BORING LOG

Boring No. B-3

JOB NAME: Proposed Commercial Development
CLIENT: Big Wave Development, LLC
LOCATION: Airport Street, Princeton By The Sea
DRILLER: Lead Drilling
DRILL METHOD: SIMCO 2800 with 8" ϕ hollow stem augers

JOB NO.: BIGWA-01-00
DATE DRILLED: 04/10/02
ELEVATION: N.A.
LOGGED BY: BJK
CHECKED BY:

Type of Strength Test	Test Surcharge Pressure, psf	Test Water Content, %	Shear Strength, psf	In-Situ Water Content, %	In-Situ Dry Unit Weight, pcf	Depth, ft.	Soil Symbols, Samplers and Blow Counts	USCS	Description	Remarks
						0		CL/CH	LEAN TO FAT CLAY, dark gray, moist, medium stiff, medium to high plasticity	
								SC	CLAYEY COARSE SAND, brown to orange brown mottled, with black oxide specks, moist, medium dense (granitic detritus)	
DS	320	Nat.	750	14.8	117		11 13 17			
DSm	1600	Nat.	1650			4				
								SW	WELL GRADED SAND, brown, wet, medium dense (granitic detritus)	
DS	800	Nat.	850	33.2	89		10 7 17	ML	FINE SANDY SILT, light brown, wet, medium stiff, low plasticity, micaceous	
DSm	2000	Nat.	1350			8		SW-SM	WELL GRADED SAND WITH SILT AND GRAVEL, brown to red brown, wet, medium dense, unconsolidated (granitic detritus) flowing sands	
						12	8 9 11			SA=9% passing No.200 sieve.
						16		SM	SILTY SAND WITH GRAVEL, light gray, wet, medium dense (granitic detritus)	
							15 15 11			SA=15% passing No.200 sieve.
						20		SW-SM	WELL GRADED SAND WITH SILT AND GRAVEL, red brown, wet, medium dense, with ½" thick silt layers (granitic detritus)	
						24	19 15 10			Boring terminated at 24.5 feet. Backfilled with cement grout.

BAY AREA GEOTECHNICAL GROUP

BORING LOG

Boring No. B-4
Page 1 of 2

JOB NAME: Proposed Commercial Development
CLIENT: Big Wave Development, LLC
LOCATION: Airport Street, Princeton By The Sea
DRILLER: Exploration Geoservices
DRILL METHOD: Mobile B-53 with 8" ϕ hollow stem augers

JOB NO.: BIGWA-01-00
DATE DRILLED: 04/22/02
ELEVATION: N.A.
LOGGED BY: BJK
CHECKED BY:

Type of Strength Test	Test Surcharge Pressure, psf	Test Water Content, %	Shear Strength, psf	In-Situ Water Content, %	In-Situ Dry Unit Weight, pcf	Depth, ft.	Soil Symbols, Samplers and Blow Counts	USCS	Description	Remarks
						0		CL/ CH	LEAN TO FAT CLAY WITH SAND, dark gray, moist, hard, medium to high plasticity	LL = 51 PI = 33
DSX	320	20.9	750	18.9	109		7 18 24			
								CL	SANDY LEAN CLAY, orange-brown and brown mottled, moist, hard, medium plasticity	
DSX	1500	20.0	1600	19.3	109	4	8 16 25			
								SW	WELL GRADED SAND, brown, wet (granitic detritus)	
DS	650	Nat.	600	16.5	116		8 16 20			
DSm	1800	Nat.	1350			8				
								CL	SANDY LEAN CLAY, orange brown and brown mottled, wet, stiff, medium plasticity	
DS	1100	Nat.	1000	19.9	109		15 8 11			
DSm	2300	Nat.	1800			12				
				24.8	98	16	7 8 12		increasing sand content	
								CL	SANDY LEAN CLAY, with silt, light brown, wet, hard, medium plasticity (micaceous detritus)	
				18.6	108	20	18 28 34			
						24			with thin lenses of sand	

BAY AREA GEOTECHNICAL GROUP

BORING LOG

Boring No. B-4
Page 2 of 2

JOB NAME: Proposed Commercial Development *JOB NO.:* BIGWA-01-00

Type of Strength Test	Test Surcharge Pressure, psf	Test Water Content, %	Shear Strength, psf	In-Situ Water Content, %	In-Situ Dry Unit Weight, pcf	Depth, ft.	Soil Symbols, Samplers and Blow Counts	USCS	Description	Remarks
				20.1		28	12 10 13	SP-SM	POORLY GRADED MEDIUM-FINE SAND WITH SILT, gray, wet, very dense	
				20.7		32	22 25 41		medium dense	
				22.6		36	12 22 40			
				28.6		40	7 9 16		loose	SA=12% passing No.200 sieve
				32.7		44	1 2 3			SA=5% passing No.200 sieve
				35.6		48	2 8 8	SP	POORLY GRADED FINE SAND, gray, medium dense, wet	SA=4% passing No.200 sieve
						52			Boring terminated at 50.0 feet. Backfilled with cement grout.	

BAY AREA GEOTECHNICAL GROUP

BORING LOG

Boring No. B-5

JOB NAME: Proposed Commercial Development
CLIENT: Big Wave Development, LLC
LOCATION: Airport Street, Princeton By The Sea
DRILLER: Exploration Geoservices
DRILL METHOD: Mobile B-53 with 8" ϕ hollow stem augers

JOB NO.: BIGWA-01-00
DATE DRILLED: 04/22/02
ELEVATION: N.A.
LOGGED BY: BJK
CHECKED BY:

Type of Strength Test	Test Surcharge Pressure, psf	Test Water Content, %	Shear Strength, psf	In-Situ Water Content, %	In-Situ Dry Unit Weight, pcf	Depth, ft.	Soil Symbols, Samplers and Blow Counts	USCS	Description	Remarks
						0	9 12 15	CL/ CH	LEAN TO FAT CLAY, dark gray, moist, very stiff, medium to high plasticity	
DSX DS DSm	500 320 1600	20.3 Nat. Nat.	740 750 1400	19.0 16.9	108 110	4		CL	SANDY LEAN CLAY, with granitic detritus, orange-brown to brown mottled, moist, very stiff, medium plasticity	
				19.8	101		9 11 16			
						8		CL	SILTY LEAN CLAY, orange brown and light brown (micaceous), moist to wet, very stiff, low plasticity	
				28.2	92	12	7 9 11			
								SP	WELL GRADED SAND, mostly coarse sand, orange brown, wet, very dense (granitic detritus)	
				16.1	113	16	22 50			
						20	22 50			
					30.9				Boring terminated at 21.0 feet. Backfilled with cement grout.	
						24				

BAY AREA GEOTECHNICAL GROUP

BORING LOG

Boring No. B-6

JOB NAME: Proposed Commercial Development
CLIENT: Big Wave Development, LLC
LOCATION: Airport Street, Princeton By The Sea
DRILLER: Exploration Geoservices
DRILL METHOD: Mobile B-53 with 8" ϕ hollow stem augers

JOB NO.: BIGWA-01-00
DATE DRILLED: 04/22/02
ELEVATION: N.A.
LOGGED BY: BJK
CHECKED BY:

Type of Strength Test	Test Surcharge Pressure, psf	Test Water Content, %	Shear Strength, psf	In-Situ Water Content, %	In-Situ Dry Unit Weight, pcf	Depth, ft.	Soil Symbols, Samplers and Blow Counts	USCS	Description	Remarks
						0		CL/CH	LEAN TO FAT CLAY, dark gray, moist, very stiff, medium to high plasticity	
								CL	SANDY LEAN CLAY, orange brown to brown mottled, moist, hard, medium plasticity (granitic detritus)	
				14.0	115	4	12 17 21			
						8	5 7 8		medium stiff, decreasing sand content	
DS DSm	850 2000	Nat. Nat.	700 1350	16.1	115					
						12	12 18 24	SW	WELL GRADED SAND, mostly coarse sand, orange brown to light brown, wet, dense	
				15.9	111					
						16		SW-SM	WELL GRADED SAND WITH SILT, gray, wet, dense; silts micaceous, sands are granitic detritus	
				38.8	79		12 22 37			
						20			Boring terminated at 19.5 feet. Backfilled with cement grout.	
						24				

BAY AREA GEOTECHNICAL GROUP

BORING LOG

Boring No. B-7
Page 1 of 2

JOB NAME: Proposed Commercial Development
CLIENT: Big Wave Development, LLC
LOCATION: Airport Street, Princeton By The Sea
DRILLER: Exploration Geoservices
DRILL METHOD: Mobile B-53 with 8" ϕ hollow stem augers

JOB NO.: BIGWA-01-00
DATE DRILLED: 04/23/02
ELEVATION: N.A.
LOGGED BY: BJK
CHECKED BY:

Type of Strength Test	Test Surcharge Pressure, psf	Test Water Content, %	Shear Strength, psf	In-Situ Water Content, %	In-Situ Dry Unit Weight, pcf	Depth, ft.	Soil Symbols, Samplers and Blow Counts	USCS	Description	Remarks
						0		CL/ CH	LEAN TO FAT CLAY, dark gray, moist, medium stiff, medium to high plasticity	
								CL	SANDY LEAN CLAY, orange brown to mottled brown, moist, hard, medium plasticity	
DSX	1700	16.0	1500	15.6	117	4	10 21 27			
								CL	SILTY LEAN CLAY, with sand, light brown, moist to wet, very stiff, low plasticity	
DS DSm	800 1900	Nat. Nat.	1000 1650	18.5	113	8	6 9 11			
								SW-SM	WELL GRADED SAND WITH SILT, brown, wet, dense (granitic detritus)	
				20.8	106	12	12 17 31			
								CL	SANDY LEAN CLAY, orange brown to light brown, mottled, moist, very stiff, medium plasticity	
				27.1	95	16	9 12 15			
								SW-SC	WELL GRADED SAND WITH CLAY, red brown to brown, moist to wet, medium dense (granitic detritus)	
				18.5	109	20	9 12 22			
						24		SW-	WELL GRADED SAND	

BAY AREA GEOTECHNICAL GROUP

BORING LOG

Boring No. B-7
Page 2 of 2

JOB NAME: Proposed Commercial Development *JOB NO.:* BIGWA-01-00

Type of Strength Test	Test Surcharge Pressure, psf	Test Water Content, %	Shear Strength, psf	In-Situ Water Content, %	In-Situ Dry Unit Weight, pcf	Depth, ft.	Soil Symbols, Samplers and Blow Counts	USCS	Description	Remarks
						28	50	SM	WITH SILT, gray, wet, very dense	no recovery
				24.4		32	30 50-5"		silty sand to coarse sand	
				33.9		36	9 12 15	SP	POORLY GRADED FINE TO MEDIUM GRAINED SAND, gray, wet, medium dense	SA=4% passing No.200 sieve
				29.0		40	7 9 11			SA=5% passing No.200 sieve
				27.7		44 48	3 6 8	SP-SM	POORLY GRADED MEDIUM TO COARSE SAND WITH SILT, gray, wet, medium dense	SA=6% passing No.200 sieve
						52			Boring terminated at 50.0 feet. Backfilled with cement grout.	

BAY AREA GEOTECHNICAL GROUP

BORING LOG

Boring No. B-8

JOB NAME: Proposed Commercial Development
CLIENT: Big Wave Development, LLC
LOCATION: Airport Street, Princeton By The Sea
DRILLER: Exploration Geoservices
DRILL METHOD: Mobile B-53 with 8" ϕ hollow stem augers

JOB NO.: BIGWA-01-00
DATE DRILLED: 04/22/02
ELEVATION: N.A.
LOGGED BY: BJK
CHECKED BY:

Type of Strength Test	Test Surcharge Pressure, psf	Test Water Content, %	Shear Strength, psf	In-Situ Water Content, %	In-Situ Dry Unit Weight, pcf	Depth, ft.	Soil Symbols, Samplers and Blow Counts	USCS	Description	Remarks
						0		CL/ CH	LEAN TO FAT CLAY, dark gray, moist, very stiff, medium to high plasticity	
DSX	320	---	700	---	---		9 12 17	CL	SANDY LEAN CLAY WITH GRAVEL, brown to orange brown, mottled, moist, very stiff, medium plasticity	
				21.4	104	4	9 12 25			
						8		SW-SM	WELL GRADED SAND WITH SILT, mostly coarse, brown, wet, medium dense (granitic detritus)	SA=7% passing No.200 sieve
				14.0	114		9 12 18			
						12		SW-SC	WELL GRADED SAND WITH CLAY, brown to orange brown mottled, wet, medium dense	
				15.6		16	5 7 10			
				17.5		20	12 17 22		dense	
									Boring terminated at 20.5 feet. Backfilled with cement grout.	
						24				

BAY AREA GEOTECHNICAL GROUP

BORING LOG

Boring No. B-9

JOB NAME: Proposed Commercial Development
CLIENT: Big Wave Development, LLC
LOCATION: Airport Street, Princeton By The Sea
DRILLER: Exploration Geoservices
DRILL METHOD: Mobile B-53 with 8" ϕ hollow stem augers

JOB NO.: BIGWA-01-00
DATE DRILLED: 04/22/02
ELEVATION: N.A.
LOGGED BY: BJK
CHECKED BY:

Type of Strength Test	Test Surcharge Pressure, psf	Test Water Content, %	Shear Strength, psf	In-Situ Water Content, %	In-Situ Dry Unit Weight, pcf	Depth, ft.	Soil Symbols, Samplers and Blow Counts	USCS	Description	Remarks
						0		CL/ CH	LEAN TO FAT CLAY, dark gray, moist, stiff, medium to high plasticity	
DSX	500	16.9	600	14.8	109	4	6 7 11	CL	LEAN CLAY WITH SAND, dark brown with specks of orange brown, moist, very stiff, medium plasticity	
DS DSm	900 2000	Nat. Nat.	1100 2100	17.2	116	8	12 32 40	SW-SM	WELL GRADED SAND WITH SILT, brown to orange brown, wet, very dense (granitic detritus)	
				14.0	114	12	6 12 28	SW-SM	WELL GRADED SAND WITH SILT, mostly coarse, orange brown, wet, medium dense to dense (granitic detritus)	SA=12% passing No.200 sieve
				16.9		16	12 16 20	SW-SC	WELL GRADED SAND WITH CLAY, wet, medium dense to dense (granitic detritus)	
						20			Boring terminated at 20.0 feet. Backfilled with cement grout.	
						24				

BAY AREA GEOTECHNICAL GROUP

BORING LOG

Boring No. B-10

JOB NAME: Proposed Commercial Development
CLIENT: Big Wave Development, LLC
LOCATION: Airport Street, Princeton By The Sea
DRILLER: Exploration Geoservices
DRILL METHOD: Mobile B-53 with 8" ϕ hollow stem augers

JOB NO.: BIGWA-01-00
DATE DRILLED: 04/22/02
ELEVATION: N.A.
LOGGED BY: BJK
CHECKED BY:

Type of Strength Test	Test Surcharge Pressure, psf	Test Water Content, %	Shear Strength, psf	In-Situ Water Content, %	In-Situ Dry Unit Weight, pcf	Depth, ft.	Soil Symbols, Samplers and Blow Counts	USCS	Description	Remarks
				11.7	107	0	13 12 11	CL/ CH	LEAN TO FAT CLAY WITH SAND, dark gray, moist, very stiff, medium to high plasticity	
								CL	SANDY LEAN CLAY, dark brown with orange brown specks, moist, very stiff, medium plasticity	
				14.4	109	4	12 28 40	SW	WELL GRADED SAND, mostly coarse sand, orange brown, moist to wet	
						8		SM	SILTY SAND, light brown with orange brown (Fe staining), wet, medium dense	
				18.4	110	12	9 12 13			SA=22% passing No.200 sieve
						16		SW	WELL GRADED SAND, mostly coarse, gray to brown, wet, medium dense	
				15.9	114		12 17 20			
						20			Boring terminated at 20.0 feet. Backfilled with cement grout.	
						24				

BAY AREA GEOTECHNICAL GROUP

BORING LOG

Boring No. B-11

JOB NAME: Proposed Commercial Development
CLIENT: Big Wave Development, LLC
LOCATION: Airport Street, Princeton By The Sea
DRILLER: Exploration Geoservices
DRILL METHOD: Mobile B-53 with 8" ϕ hollow stem augers

JOB NO.: BIGWA-01-00
DATE DRILLED: 04/22/02
ELEVATION: N.A.
LOGGED BY: BJK
CHECKED BY:

Type of Strength Test	Test Surcharge Pressure, psf	Test Water Content, %	Shear Strength, psf	In-Situ Water Content, %	In-Situ Dry Unit Weight, pcf	Depth, ft.	Soil Symbols, Samplers and Blow Counts	USCS	Description	Remarks
				14.8	115	0	9 12 15	CL/ CH	LEAN TO FAT CLAY WITH SAND, dark gray, moist, very stiff, medium to high plasticity	
								CL	SANDY LEAN CLAY, orange brown and brown mottled with black Fe specks, moist, very stiff, medium plasticity	
DS DSm	650 1700	Nat. Nat.	500 1200	24.6	104	4	9 12 18	ML	SANDY SILT, orange brown, moist, medium stiff, low plasticity	
						8		SM	SILTY WELL GRADED SAND WITH GRAVEL, brown to orange brown, wet, medium dense	SA=20% passing No.200 sieve
				15.4	116		5 10 13			
						12		SW	WELL GRADED SAND, mostly coarse sands, gray, wet, dense	
				14.5	119	16	12 29 30			
								CL/ SC	SANDY CLAY TO CLAYEY SAND, gray, wet, stiff/medium dense, low plasticity	
				17.3			4 5 7			
						20			Boring terminated at 20.0 feet. Bacfilled with cement grout.	
						24				

BAY AREA GEOTECHNICAL GROUP

BORING LOG

Boring No. B-12

JOB NAME: Proposed Commercial Development
CLIENT: Big Wave Development, LLC
LOCATION: Airport Street, Princeton By The Sea
DRILLER: Exploration Geoservices
DRILL METHOD: Mobile B-53 with 8" ϕ hollow stem augers

JOB NO.: BIGWA-01-00
DATE DRILLED: 04/22/02
ELEVATION: N.A.
LOGGED BY: BJK
CHECKED BY:

Type of Strength Test	Test Surcharge Pressure, psf	Test Water Content, %	Shear Strength, psf	In-Situ Water Content, %	In-Situ Dry Unit Weight, pcf	Depth, ft.	Soil Symbols, Samplers and Blow Counts	USCS	Description	Remarks
						0		CL/ CH	LEAN TO FAT CLAY, dark gray, moist, stiff, medium to high plasticity	
				16.2	116	4	10 12 20	CL	SANDY LEAN CLAY, brown and orange brown, mottled with black Fe specks, moist, very stiff, medium plasticity	
				21.1	104	8	10 14 16	SW	WELL GRADED SAND, mostly coarse sand, wet, medium dense	
				64.4	65	12	2 3 3	SC	CLAYEY WELL GRADED SAND, brown and gray, wet, loose/medium stiff, low plasticity	SA=17% passing No.200 sieve
				12.8		16	12 21 35	SW	WELL GRADED SAND, gray to brown, wet, very dense	
						20			Boring terminated at 20.0 feet. Backfilled with cement grout.	
						24				

BAY AREA GEOTECHNICAL GROUP

BORING LOG

Boring No. B-13

JOB NAME: Proposed Commercial Development
CLIENT: Big Wave Development, LLC
LOCATION: Airport Street, Princeton By The Sea
DRILLER: Exploration Geoservices
DRILL METHOD: Mobile B-53 with 8" ϕ hollow stem augers

JOB NO.: BIGWA-01-00
DATE DRILLED: 04/22/02
ELEVATION: N.A.
LOGGED BY: BJK
CHECKED BY:

Type of Strength Test	Test Surcharge Pressure, psf	Test Water Content, %	Shear Strength, psf	In-Situ Water Content, %	In-Situ Dry Unit Weight, pcf	Depth, ft.	Soil Symbols, Samplers and Blow Counts	USCS	Description	Remarks
						0		CL/ CH	LEAN TO FAT CLAY, dark gray, moist, stiff, medium to high plasticity	
								CL	SANDY LEAN CLAY, brown and orange brown, moist, hard, medium plasticity	
				20.9	108	4	9 17 25	SW-SC	WELL GRADED SAND WITH CLAY, brown to orange brown, moist, dense	
						8		CL	SANDY LEAN CLAY, gray with orang-brown mottling, wet, medium stiff, medium plasticity	
DS DSm	1100 2300	Nat. Nat.	900 1850	17.7	114	12	9 10 15			
				22.8	103	16	8 16 16	CL-ML	SILTY LEAN CLAY WITH SAND, brown with orange-brown mottling, wet, very stiff, low plasticity	
								SW-SM	WELL GRADED SAND WITH SILT, orange brown and brown, wet, dense	
				16.3		20	12 20 29		Boring terminated at 20.0 feet. Backfilled with cement grout.	
						24				

BAY AREA GEOTECHNICAL GROUP

BORING LOG

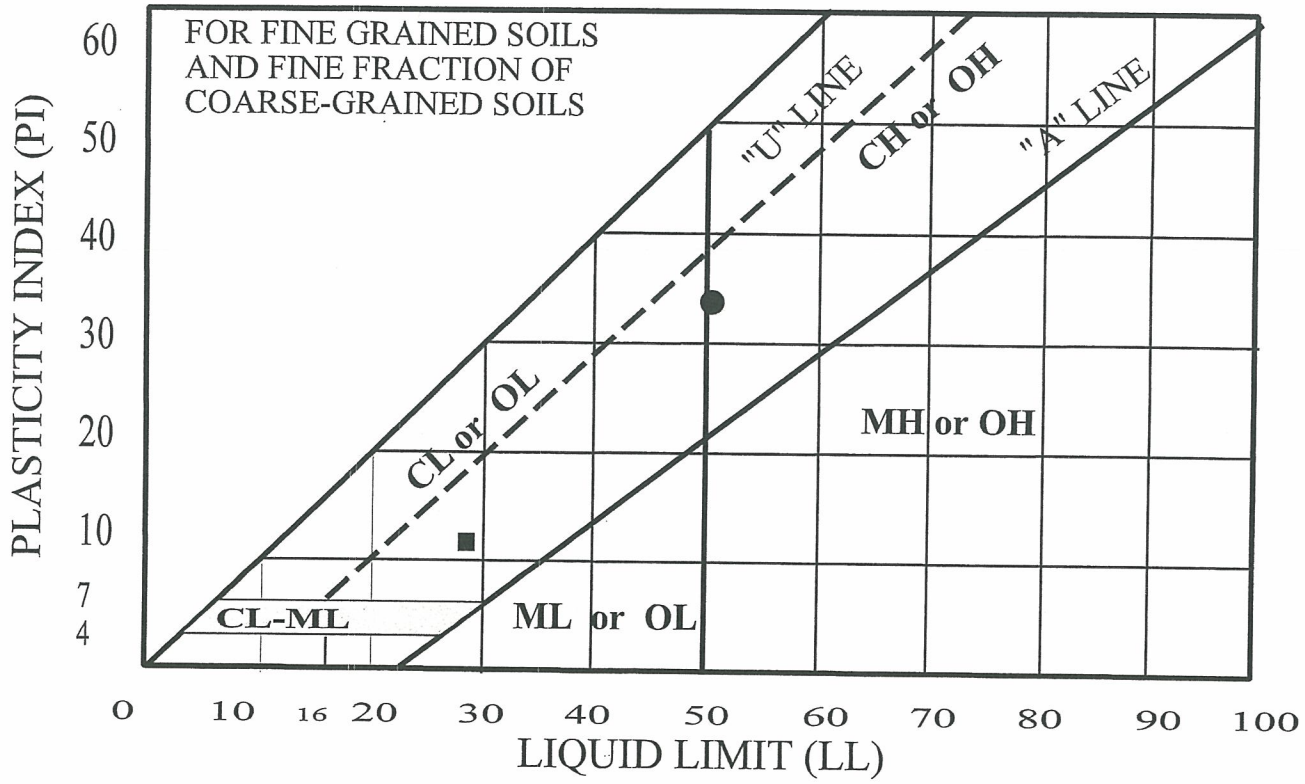
Boring No. B-14

JOB NAME: Proposed Commercial Development
CLIENT: Big Wave Development, LLC
LOCATION: Airport Street, Princeton By The Sea
DRILLER: Exploration Geoservices
DRILL METHOD: Mobile B-53 with 8" ϕ hollow stem augers

JOB NO.: BIGWA-01-00
DATE DRILLED: 04/22/02
ELEVATION: N.A.
LOGGED BY: BJK
CHECKED BY:

Type of Strength Test	Test Surcharge Pressure, psf	Test Water Content, %	Shear Strength, psf	In-Situ Water Content, %	In-Situ Dry Unit Weight, pcf	Depth, ft.	Soil Symbols, Samplers and Blow Counts	USCS	Description	Remarks
						0		CL/ CH	LEAN TO FAT CLAY, dark gray, moist, medium stiff, medium to high plasticity	
DS DSm	320 1600	Nat. Nat.	750 1400	18.4	109		10 15 18	CL	SANDY LEAN CLAY, brown and orange brown, medium stiff, medium plasticity	
						4				
							9 20 22	SW-SM	WELL GRADED SAND WITH SILT, brown, wet, dense	
						8				
								CL/ SC	SANDY CLAY TO CLAYEY SAND, gray, wet, very stiff/ medium dense, low plasticity	
						12	9 12 22			
						16		SW-SC	WELL GRADED SAND WITH CLAY, gray with orange brown mottles, wet, very dense	
							17 50			
						20			Boring terminated at 19.5 feet. Backfilled with cement grout.	
						24				

PLASTICITY CHART



SYMBOL	SAMPLE SOURCE	DEPTH (FEET)	NATURAL WATER CONTENT W[%]	LIQUID LIMIT	PLASTIC LIMIT	PLASTICITY INDEX	SOIL DESCRIPTION
●	B-1	1.5	14.8	29	18	11	Brown with Black CLAYEY SAND (SC)
■	B-4	1.5		51	18	33	Dark Gray LEAN TO FAT CLAY WITH SAND (CL\CH)

PROPOSED COMMERCIAL DEVELOPMENT
SOUTH SIDE OF AIRPORT STREET
APN 047-311-060
PRINCETON-BY-THE-SEA, CALIFORNIA
For Big Wave Development

PLASTICITY DATA

Job No.	Date	Plate
BIGWA-01-00	April 2002	24

Important Information About This

Geotechnical Engineering Proposal

Subsurface problems are a principal cause of construction delays, cost overruns, claims, and disputes.

While you cannot eliminate all such risks, you can manage them. The following information is provided to help.

Participate in Development of the Subsurface Exploration Plan

Geotechnical engineering begins with the creation of an effective subsurface exploration plan. This proposal starts the process by presenting an initial plan. While that plan may consider the unique physical attributes of the site and the improvements you have in mind, it probably does not consider your unique goals, objectives, and risk management preferences. Subsurface exploration plans that are finalized without considering such factors presuppose that clients' needs are unimportant, or that all clients have the same needs. *Avoid the problems that can stem from such assumptions* by finalizing the plan and other scope elements directly with the geotechnical engineer you feel is best-qualified for the project, along with the other project professionals whose plans are affected by the geotechnical engineer's findings and recommendations. If you have been told that this step is unnecessary; that client preferences do not influence the scope of geotechnical engineering service or that someone else can articulate your needs as well as you, you have been told *wrong.* No one else can discuss your geotechnical options better than an experienced geotechnical engineer, and no one else can provide the input you can. Thus, while you certainly are at liberty to accept a proposed scope "as is," recognize that it could be a unilateral scope developed without direct client/engineer discussion; that authorizing a unilateral scope will force the geotechnical engineer to accept all assumptions it contains; that assumptions create risk. *Manage your risk. Get involved.*

Expect the Unexpected

The nature of geotechnical engineering is such that planning needs to *anticipate the unexpected.* During the design phase of a project, more or deeper borings may be required, additional tests may become necessary, or someone associated with your organization may request a service that was not included in the final scope. During the construction phase, additional services may be needed to respond quickly to unanticipated conditions. In the past, geotechnical engineers commonly did whatever was required to oblige their clients' representatives and safeguard their clients' interests, taking it on faith that their clients wanted them to do so. But some did not, refusing to pay for legitimate extras on the ground that the engineer proceeded without proper authorization, or failed to submit notice in a timely manner, or failed to provide proper documentation. *What are your preferences? Who is permitted to authorize additional geotechnical services on your project? What type of documentation do you require? To whom should it be sent? When? How?* By addressing these and similar issues sooner rather than later, you and your geotechnical engineer will be prepared for the unexpected, to help prevent molehills from growing into mountains.

Have Realistic Expectations; Apply Appropriate Preventives

The recommendations included in a geotechnical engineering report are *not final,* because they are based on opinions that can be verified *only* during construction. For that reason, most geotechnical engineering proposals offer the construction observation services that permit the geotechnical engineer of record to confirm that subsurface conditions are what they were expected to be, or to modify recommendations when actual conditions were not anticipated. *An offer to provide construction observation is an offer to better manage your risk.* Clients who do not take advantage of such an offer; clients who retain a second firm to observe construction, can create a high-risk "Catch-22" situation for themselves. *The geotechnical engineer of record cannot assume responsibility or liability for a report's recommendations when another firm performs the services needed to evaluate the recommendations' adequacy.* The second firm is also likely to disavow liability for the recommendations, because of the substantial and possibly uninsurable risk of assuming responsibility for ser-

vices it did not perform. Recognize, too, that no firm other than the geotechnical engineer of record can possibly have as intimate an understanding of your project's geotechnical issues. As such, reliance on a second firm to perform construction observation can elevate risk still more, because it may not have the wherewithal to recognize subtle, but sometimes critically important unanticipated conditions, or to respond to them in a manner consistent with your goals, objectives, and risk management preferences.

Realize That Geoenvironmental Issues Have Not Been Covered

The equipment, techniques, and personnel used to perform a *geoenvironmental* study differ significantly from those used to perform a *geotechnical* study. *Geoenvironmental services are not being offered in this proposal. The report that results will not relate any geoenvironmental findings, conclusions, or recommendations.* Unanticipated environmental problems have led to numerous project failures. If you have not yet obtained your own geoenvironmental information, ask your geotechnical consultant for risk management guidance. *Do not rely on an environmental report prepared for someone else.*

Have the Geotechnical Engineer Work with Other Design Professionals and Constructors

Other design team members' misinterpretation of a geotechnical engineering report has resulted in costly problems. Manage that risk by having your geotechnical engineer confer with appropriate members of the design team before finalizing the scope of geotechnical service (as suggested above), and, again, after submitting the report. *Also retain your geotechnical engineer to review pertinent elements of the design team members' plans and specifications.*

Reduce the risk of unanticipated conditions claims that can occur when constructors misinterpret or misunderstand the purposes of a geotechnical engineering report. Use appropriate language in your contract documents. Retain your geotechnical engineer to participate in prebid and preconstruction conferences, and to perform construction observation.

Read Responsibility Provisions Closely

Clients, design professionals, and constructors who do not recognize that geotechnical engineering is far less exact than other engineering disciplines can develop unrealistic expectations. Unrealistic expectations can lead to disappointments, claims, and disputes. To help reduce such risks, geotechnical engineers commonly include a variety of explanatory provisions in their proposals. Sometimes labeled "limitations," many of these provisions indicate where geotechnical engineers' responsibilities begin and end, to help others recognize their own responsibilities and risks, thus to encourage more effective scopes of service. *Read this proposal's provisions closely.* Ask questions. Your geotechnical engineer should respond fully and frankly.

Rely on Your Geotechnical Engineer for Additional Assistance

Membership in ASFE exposes geotechnical engineers to a wide array of risk management techniques that can be of genuine benefit to everyone involved with a construction project. Confer with an ASFE-member geotechnical engineer for more information. Confirm a firm's membership in ASFE by contacting ASFE directly or at its website.

ASFE

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Treadwell&Rollo

3 April 2007
Project No. 4602.01

Ms. Tami Borton
Christopher A. Joseph & Associates
179 H Street
Petaluma, California 94952

Subject: Third Party Geotechnical Review
Big Wave Office Park and Wellness Center
Princeton by the Sea, California

Dear Ms. Borton:

This letter presents the results of Treadwell & Rollo, Inc.'s (T&R's) peer review of the existing geotechnical and geological information for the proposed Big Wave Office Park and Wellness Center project. The Big Wave project site is in Princeton by the Sea, California. Our work was performed in accordance with the subconsultant agreement signed on 5 March 2007.

SITE DESCRIPTION

The site is located along the coast of the Pacific Ocean approximately 25 miles south of San Francisco within an unincorporated portion of San Mateo County which is bordered by San Francisco County to the north and Santa Cruz County to the south.

The site is located on the southern side of Airport Street, northwest of the Princeton/Pillar Point Harbor area in Princeton by the Sea, California. Princeton by the Sea adjoins Half Moon Bay on the northwest side. The site encompasses 20 acres on two parcels (APN 047-311-060 [14.88 acres] and APN 047-312-040 [5.12 acres]) which are separated by a drainage swale owned by San Mateo County. The drainage swale separates the two parcels and leads to the Pillar Point Marsh, a salt marsh habitat influenced by both tidal action and freshwater runoff from its tributary drainage area. The drainage swale and Pillar Point Salt Marsh are wetlands which partially extend onto both parcels. On APN 047-311-060, the northernmost parcel, wetlands extend along the western and southern edges. On APN 047-311-040, the southernmost parcel, wetlands extend along the western and northern edges.

The site is currently used as agricultural farmland.

PROJECT DESCRIPTION

The project consists of the Big Wave Office Park and the Wellness Center. Our understanding of the proposed project is based on project descriptions provided by Christopher A. Josephs & Associates, dated May 2007, and civil drawings for the office park and wellness center prepared by MacLeod and Associates, dated 14 October 2005.

Treadwell & Rollo, Inc. *Environmental & Geotechnical Consultants*
501 14th Street, Third Floor, Oakland, CA 94612
Telephone (510) 874-4500 Facsimile (510) 874-4507

Office Park

The office park will be constructed on parcel 047-311-060, which consists of 14.88 acres. The office park development will include construction of four two-story office buildings and a one-story maintenance building. The location of the maintenance building is to be determined at a later date. Other site improvements for the office park will include surface parking, paved walkways and patios, and landscaped area.

All surfaces, with the exception of the building footprint, are proposed to be pervious to maintain the natural hydrology of the site to the extent feasible. The plans indicate the proposed parking lots will be paved with pervious concrete and sloped toward vegetated swales.

Civil drawings indicate up to about two feet of cut/fill will be required to reach design pad elevations. The total area to be graded on the office park parcel is 10.5 acres with grading to balance on-site with 6,000 cubic yard (cy) of cut and 6,000 cy of fill.

Wellness Center

The wellness center is intended to serve developmentally disabled adults. The wellness center would be developed on parcel 047-312-040, which consists of 5.12 acres. The center development will include the following elements:

- 18 residential duplexes to house developmentally disabled adults and support staff
- an apartment building to be used as long-term affordable housing for developmentally disabled adults
- a community center
- commercial/retail that the wellness center can lease to businesses that provide employment opportunities to the developmentally disabled community
- storage facility that will be owned and operated by the developmentally disabled
- a maintenance building.

Other site improvements will include parking, community recreation area, a six-foot high security fence, and on-site pathway. The pathway will allow pedestrian and wheelchair access between parcels. The path would cross the drainage swale between the two parcels either via the roadway or a clear-span bridge.

All surfaces, with the exception of the building footprint, are proposed to be pervious to maintain the natural hydrology of the site to the extent feasible. The plans indicate the proposed parking lots will be paved with pervious concrete and sloped toward vegetated swales.

The total area to be graded on the office park parcel is 3.5 acres. Civil drawings indicate up to about four feet of fill will be required to reach design pad elevations. While all excavated soil would be reused on-site, this parcel would require 9,800 cy of imported fill.

SCOPE OF SERVICES

Our scope of services consisted of:

- reviewing available geotechnical and geologic information submitted by the project applicant;
- compiling and reviewing readily available published and unpublished geologic and seismicity data for the site vicinity; and
- preparing a written letter describing the results of our study, including a discussion of potential geotechnical and geological concerns, such as local seismicity, strong shaking from earthquakes on nearby portions of active faults, soil liquefaction[1], ground subsidence, and expansive soil.

Our scope of services did not include performing on-site geologic mapping, drilling borings, performing laboratory testing, or performing any type of subsurface exploration for this study.

SUBSURFACE CONDITIONS

The office park site was previously investigated by the Bay Area Geotechnical Group (BAGG). The results of their study were presented in a report titled *Preliminary Geotechnical Engineering Investigation, Proposed 10-Acre Commercial Development South of Airport Street, APN 047-311-060, Princeton by the Sea, California*, dated 7 May 2002. No subsurface information was available for the wellness center site.

---

[1] Liquefaction is a phenomenon in which saturated, cohesionless soil experiences a temporary loss of strength due to the buildup of excess pore water pressure, especially during cyclic loading such as that induced by earthquakes. Soil most susceptible to liquefaction is loose, clean, saturated, uniformly graded, fine-grained sand and silt of low plasticity that is relatively free of clay.

BAGG performed field exploration at the office park parcel in 2002. The results of BAGG field exploration indicate the office park parcel is underlain by a wide variety of soil types including clay, sandy clay, sandy silt, clayey sand, silty sand with gravel, clayey gravel, and sand with varying amounts of clay, silt, and gravel to the maximum depths explored of 17 to 50 feet below the existing ground surface (bgs). Groundwater was encountered between depths of 5-1/2 and 7-1/2 feet bgs during drilling.

No subsurface information was available for the wellness center parcel.

DISCUSSION AND CONCLUSIONS

From our review of the available subsurface data, we preliminarily conclude the proposed office park project is feasible from a geotechnical standpoint provided the review comments presented in this letter are properly addressed by the applicant and/or applicant's consultant. In addition, geotechnical studies should be performed at the wellness center site. The primary geotechnical concerns for this site are:

- very strong to very violent shaking during an earthquake due to the close proximity of the site to the San Gregorio and the San Andreas faults
- seismic hazards, including the potential for fault rupture, liquefaction, lateral spreading[2], sand boils, and cyclic densification[3]
- presence of highly expansive near-surface soil
- foundation selection.

These and other geotechnical issues are discussed in the following sections.

Field Exploration

BAGG performed 14 borings at the office park parcel in 2002. The borings were advanced to depths between 17 and 50 feet bgs using a rig equipped with hollow-stem augers. Based on their field investigation, BAGG concluded the site is underlain by lenses of potentially liquefiable soil.

---

[2] Lateral spreading is a phenomenon in which surficial soil displaces along a shear zone that has formed within an underlying liquefied layer. Upon reaching mobilization, the surficial blocks are transported downslope or in the direction of a free face by earthquake and gravitational forces.

[3] Cyclic densification is a phenomenon in which non-saturated, cohesionless soil is compacted by earthquake vibrations, causing differential settlement.

In accordance with SP 117[4], the subsurface conditions for liquefaction evaluations should be explored by advancing rotary-wash borings and/or cone penetration tests (CPTs) to a depth of at least 50 feet. These types of investigative procedures provide a reliable means of assessing the relative density and liquefaction potential of the underlying granular soils at the proposed project sites. Based on our qualitative assessment of the boring logs prepared by BAGG for the office park parcel, it appears that several saturated, medium dense, granular soil layers are present at the site at depths greater than 40 feet bgs. Considering the drilling methods used for evaluating the subsurface conditions at the site, we believe the blow counts presented on the boring logs, especially the logs for the 50-foot-deep borings, appear to be low and may indicate soil disturbance during field testing. We suggest additional subsurface exploration be performed at the office park parcel using either rotary-wash drilling procedures and/or CPTs to better assess the liquefaction potential of the subsurface soils.

No subsurface information was available for the wellness center parcel. Therefore, we conclude a field exploration program consisting of rotary-wash borings and/or CPTs that extend to depths of at least 50 feet bgs should be performed at the wellness center parcel to evaluate subsurface conditions and the potential for soil liquefaction.

Seismic Hazards

Our discussion of seismic hazards, such as strong ground shaking, fault rupture, soil liquefaction, and cyclic densification are presented in the following sections.

Ground Shaking

According to the BAGG report, the nearest fault to the office park site is the San Gregorio fault, located about 500 feet (0.15 kilometers) from the site. The San Andreas fault lies about 10.8 kilometers for the site. Maps prepared by Association of Bay Area Governments (ABAG, 2001) indicate the office park area will experience a Modified Mercalli Intensity of X, which could result in "very violent" shaking and "extreme damage" as a result of a moment magnitude 7.3 earthquake on the San Gregorio fault. The ABAG maps also indicate that during a moment magnitude 7.9 earthquake on the San Andreas fault, the site could experience "violent" shaking and "heavy damage". The wellness center site will likely experience very strong to very violent ground shaking, similar to the nearby office park site.

---

[4] Document titled "Guidelines for Evaluating and Mitigating Seismic Hazards in California, Special Publication 117," prepared by California Department of Conservation, Division of Mines and Geology, dated 13 March 1997.

We believe the proposed office and wellness center buildings should be designed to prevent collapse and to maintain reasonable ingress and egress for the office building tenants, developmentally disabled inhabitants of the wellness centers buildings, and potential emergency response workers (if needed).

Fault Rupture

The southwestern portion of the office park parcel is located in an Earthquake Fault Zone, as defined by the Alquist-Priolo Earthquake Fault Zoning Act. If proposed habitable structures are planned within the Earthquake Fault Zone, special geologic studies consisting of trenching to locate the San Gregorio Fault will be required by the Alquist-Priolo Earthquake Fault Zoning Act. The BAGG report indicates that the office park developer is not proposing to build in the special studies zone portion of the property. No information was presented to indicate whether the proposed wellness center buildings will be located within an Alquist-Priolo Earthquake Fault Zone.

T&R concludes the proposed habitable office and residential structures will be relatively close to the Alquist-Priolo Earthquake Fault Zone. Therefore, we recommend that as part of the final plan review process, the applicant's geotechnical/geological consultant should review the plans and provide a written statement indicating whether to proposed habitable structures are located outside of the Alquist-Priolo Earthquake Fault Zone.

Soil Liquefaction, Lateral Spreading, and Cyclic Densification

During a major earthquake on a segment of one of the nearby faults, very strong to very violent shaking is expected to occur at the site. Strong shaking during an earthquake can result in ground failures, such as those associated with soil liquefaction, lateral spreading, and cyclic densification.

BAGG drilled 12 borings to depths between 17 and 25 feet and two borings to depth of 50 feet in the office park parcel to obtain subsurface information for seismic hazard evaluation. The borings were drilled with hollow-stem auger equipment and the two 50-foot borings terminated in medium dense sandy soil. BAGG concluded that the office park site is underlain by layers of saturated and unsaturated, loose to medium dense, sandy soil. The BAGG report indicates the soil deposits are lenticular and the surface effects of liquefaction would be limited to differential settlement of the ground surface.

The BAGG report indicates that loose layers of sandy soil will densify during a major earthquake. The settlement analyses by BAGG estimates that differential settlement of the ground surface would be between 1/2 and 3-1/2 inches.

T&R performed a preliminary review of the liquefaction potential and earthquake-induced settlement at the proposed office building site. Based on the data presented on the BAGG boring logs, we conclude that liquefaction and a minor amount of cyclic densification are likely to occur at the site. T&R's preliminary estimate for liquefaction-induced ground surface settlement is between zero and six inches with differential settlement of about three inches across a 50-foot horizontal distance. T&R's estimate of differential liquefaction-induced settlement is of the same order of magnitude as BAGG's estimate. T&R's preliminary estimate for cyclic densification is about 1/4 inch.

In T&R opinion, additional subsurface exploration using rotary-wash drilling methods and/or CPTs should be performed to better characterize the subsurface conditions at the site. Based on the results of subsurface investigation, BAGG should evaluate and discuss the potential for soil liquefaction and liquefaction-induced ground failures, such as lateral spreading, surface ruptures, and sand boils at the office park site. Also, a geotechnical investigation and seismic hazard evaluation should be performed at the proposed wellness center site.

Anticipated Settlement

The BAGG report indicates that foundation settlement may occur due to the consolidation and compression of weak soil under the weight of new fill and structural loads. Also, the BAGG report indicates foundation settlement will occur due to liquefaction-induced reconsolidation of saturated granular layers. Section 8.7.1 of the BAGG report describes seismic settlement that varies from 1/2 to 3-1/2 inches across the site. Section 8.7.2 of the BAGG report indicates that static settlement of soft and loose soil layers due to the placement of fill will range from 1/2 to 3 inches with differential settlement of about 1-1/4 inch over a 100-foot-distance.

BAGG recommends placing a 4-foot-thick layer of surcharge material over the entire site or on specifically identified building pads to reduce the potential for foundation settlement. Section 8.7.3 of the BAGG report indicates that a 4-foot-thick layer of surcharge fill should be placed and monitored until no further movement is detected which is preliminarily estimated to be 1 to 2 months by BAGG. Subsequently, the surcharge fill can be removed and the buildings can be constructed. BAGG indicates that four feet of surcharge fill will reduce settlement to about 1/2 to 1-1/4 inches.

T&R concludes that insufficient data is available to accurately predict and amount of settlement that will occur at the site due to the weight of new fill and building loads. T&R recommends that BAGG perform additional engineering analyses and provide an estimate for the immediate settlement and consolidation-related settlement of the underlying weak soil layers. To perform settlement computations, we suggest that high-quality soil samples be collected and laboratory tests be performed to establish the preconsolidation pressure, the compression index (Cc), and the coefficient of consolidation (Cv) of the underlying weak soil layers. This information can be

used to determine whether a surcharge program will be an effective means of accelerating the consolidation-related settlement of the ground surface. Based on T&R's preliminary evaluation of the geotechnical data presented in the BAGG report, it is difficult to determine whether preloading the site with four feet of surcharge fill will have a significant beneficial impact on the settlement behavior of the proposed structures.

Expansive Soil, Pavements, and Foundation Considerations

Expansive soil undergoes large volume changes during changes in moisture content, i.e., it shrinks when dried and expands when wetted. The most common cause of changing soil moisture content is seasonal fluctuation due to rainfall; however, improper surface drainage or underground water pipe leaks may cause shrink/swell of soil. Expansive soil can cause damage to building foundations, concrete slabs, hardscape, pavement, underground utilities, and other surface or near-surface improvements due to structural distress induced by subgrade swelling and shrinkage.

The near-surface soil encountered in the borings drilled by BAGG primarily consist of medium to high plasticity clay. The BAGG report recommends over-excavating approximately 18 inches of "loose soil from all areas to be developed", scarifying the exposed surface to a depth of eight inches, moisture-conditioning the exposed subgrade to at least 2 to 3 percent above the optimum moisture content, and compacting the soil to at least 90 percent of the maximum dry density of the soil, as determined by ASTM Test Method D1557-01. The BAGG report also provides specifications for imported materials, consisting of a fill with a plasticity index (PI) less that 15, resistance value (R-value) of at least 25, and fines content of between 15 and 40 percent (Alternative A) or a material with a PI less than 25 and an R-value of at least 15 (Alternative B). The BAGG report indicates that preliminary foundation and pavement designs are based on a site underlain by these two materials.

T&R reviewed the geotechnical information provided in the BAGG report and concluded that the site is blanketed by about 1-1/2 to 2-1/2 feet of potentially expansive clayey soil. In T&R's opinion, BAGG should provide an estimate of differential movement associated with the shrinking and swelling of the existing on-site expansive soil, and a statement of whether conventional shallow footings are appropriate for the support of the buildings if the site is blanketed by medium to highly expansive soil. Typically, buildings designed on sites that are underlain by expansive soil will either be supported on: 1) shallow foundations that rest on a layer of non-expansive engineered fill[5], 2) a deepened spread-type footings where the proposed footings gain support below the depth of significant seasonal moisture fluctuation and the slab-on-grade floors will be supported on layers non-expansive fill, as described above, 3) a stiffened

[5] T&R typically defines non-expansive fill as a material with a PI less than 12 and a liquid limit less than 40.

foundation system, such as a reinforced concrete or post-tensioned mat, that is capable of resisting the differential movement and soil pressures associated with the expansive soil, or 4) a deep foundation system that transfers the building and slab loads to competent soil beneath the near-surface moderately to highly expansive soil layer. In T&R's opinion, a foundation system consisting the deepened spread footings or stiffened shallow foundations are likely to be the most appropriate system(s) for mitigating the adverse impacts associated expansive soil at the office park site. In regards to the proposed pavement design, the R-value of highly expansive clayey soil is typically low (less than 10); therefore, T&R suggests that laboratory testing should be performed to determine the lateral limits of the expansive soil at the site and the appropriate strength values for use in the proposed pavement design.

Foundation Design

For the office park parcel, BAGG recommended the building pad area be surcharged to reduce settlement, and the buildings be supported on conventional shallow footings founded on an 18-inch-thick layer of compacted fill. As we discussed earlier, additional laboratory data is needed to determine if preloading the site with surcharge fill will be an effective method for reducing consolidation-related settlement under the weight of new fill and building loads. Also, we believe that the placement of surcharge fill will not significantly reduce earthquake-induced settlement associated with soil liquefaction and cyclic densification.

Based on our preliminary engineering analyses of the data presented in the BAGG report, T&R concludes the proposed office building foundations will need to accommodate up to approximately six inches of seismically-induced total settlement and up to about three inches of seismically-induced differential settlement across a 50-foot-distance. Also, the proposed building foundations will need to accommodate differential movement associated with the shrinking and swelling of the near-surface expansive clay.

Foundation recommendations for the wellness center parcel were not provided in the information reviewed for this project.

Pervious Pavement

The project description indicates pervious pavements will be used for both the office park and wellness center parcels. Considering the near-surface soil consists of moderately to highly expansive clay, we conclude that special subgrade preparation and pavement design recommendations may be required to prevent the near-surface clayey soil from ponding water, and becoming saturated and weak under the proposed traffic loads.

T&R recommends that BAGG provide design recommendations for a pervious pavement system that will allow surface water to percolate through the pavement without causing adverse impacts to new pavements and building foundations due to moisture fluctuations in the near-surface expansive clay.

Bridge Foundations

The project description indicates a bridge may be constructed across the drainage swale that separates the office park and wellness center parcels. Bridge foundation recommendation were not provided in the information reviewed for this study.

T&R recommends that BAGG provide design recommendations for a proposed pedestrian bridge that crosses the drainage swale.

Seismic Design Criteria

The BAGG report indicated that the office park parcel is underlain by potentially liquefiable soil and has characterized the office park site as a Soil Profile Type S_D (stiff soil profile). According to the 1997 Uniform Building Code, the site should be characterized as a Soil Profile Type S_F. BAGG should explain why the site should be characterized as a Soil Profile Type S_D instead of a S_F site.

CONCLUSIONS AND COMMENTS

Based on our review of available geotechnical information, T&R concludes that the proposed office park project is feasible, but potentially constrained by: 1) very strong to very violent ground shaking, 2) static and seismic settlement, and 3) near-surface moderately to highly expansive soil. T&R reviewed BAGG's preliminary geotechnical investigation report, and has the following comments:

Comment No. 1

T&R recommends that the applicant's geotechnical consultant perform a geotechnical investigation of the wellness center site and supplemental exploration of the office park site by using rotary-wash borings and/or CPTs that are at least 50 feet deep.

Comment No. 2

T&R recommends that the applicant's geotechnical consultant evaluate the liquefaction potential of the subsurface granular soil layers based on the results of field and laboratory data developed from rotary-wash borings and/or CPTs (see Comment No. 1). If the potential for soil

liquefaction exists, the applicant's geotechnical should comment on the magnitude of total and differential settlement associated with liquefaction-induced reconsolidation, the potential for liquefaction-induced lateral spreading, the potential for liquefaction-induced ground rupture and sand boils, and the soil profile type that should be used in the seismic design of the proposed buildings.

Comment No. 3

T&R recommends that the applicant's geotechnical consultant collect high-quality soil samples and perform consolidation tests on the samples. Consolidation-related settlements can be estimated based on the laboratory test results, as well as the rate in which consolidation settlement is expected to occur. Based on the consolidation test results, the applicant's geotechnical consultant can determine the magnitude of consolidation-related settlement, and whether preloading of the site using four feet of surcharge fill will be beneficial in reducing the amount of long-term consolidation-related settlement.

Comment No. 4

T&R recommends that the applicant's geotechnical consultant collect soil samples and perform Atterberg limits, shrink-swell, R-value, and corrosivity tests on the samples. The results of these laboratory tests can be used to evaluate whether the near-surface soil is expansive or corrosive. Also, the R-value test result can be used for the design the new pavement sections.

Comment No. 5

Based on the results of the supplemental geotechnical investigation, T&R recommends that the applicant's geotechnical consultant re-evaluate whether conventional shallow spread footings supported on an 18-inch-thick layer of compacted fill is still appropriate for the proposed project.

T&R believes that preloading the site using four feet of surcharge fill will not have a significant beneficial impact on reducing the amount of earthquake-induced settlement. Therefore, T&R believes that the proposed foundation system will need to accommodate total and differential settlement of up to six inches, and three inches across a 50-foot-distance respectively. In T&R's opinion, a stiffened shallow foundation system, such as a post-tensioned mat or a well-reinforced concrete mat resting on a 12- to 18-inch-thick layer of well-compacted, non-expansive fill, would be the most appropriate foundation system for this project, especially when considering that the project site may be subjected to very strong to very violent ground shaking.

Comment No. 6

T&R concludes the proposed habitable office and residential structures will be relatively close to the Alquist-Priolo Earthquake Fault Zone. Therefore, T&R recommends that the applicant's geotechnical consultant be given the opportunity to review the final project plans and should prepare a written statement to indicate whether the proposed habitable structures are located outside of the Alquist-Priolo Earthquake Fault Zone.

Comment No. 7

T&R recommends that the applicant's geotechnical consultant provide foundation recommendations for the proposed pedestrian bridge that will cross the existing drainage swale.

Comment No. 8

T&R recommends that BAGG provide design recommendations for a pervious pavement system that will allow surface water to percolate through the pavement without causing adverse impacts to new pavements and building foundations due to moisture fluctuations in the near-surface expansive clay.

In conclusion, T&R recommends the project applicant and/or applicant's consultant consider the comments presented above and provide a response or acknowledgement that the comments presented above will be addressed during the final design of the project. T&R appreciates the opportunity to assist you with the evaluation of the geotechnical and geological issues for this project. If you have any questions or require additional information, please call.

Sincerely yours,
TREADWELL & ROLLO, INC.

Dean H. Iwasa
Geotechnical Engineer

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BAGG ENGINEERS
▶Geotechnical ▶Geoenviromental ▶Special Inspection
(FORMERLY BAY AREA GEOTECHNICAL GROUP)

July 11, 2008
Job No. BIGWA-01-01

Big Wave LLC
1333 Jones Street, Suite 307
San Francisco, CA 94109

GEOTECHNICAL CONSULTATION
Proposed Big Wave Office Park and Wellness Center
Airport Street Northwest of Stanford Avenue
APN 047-311-060 (Office Park) and
APN 047-312-040 (Wellness Center)
Princeton-By-The-Sea, California

Dear Mr. Steve Barber

We have reviewed the third party geotechnical review prepared by Treadwell & Rollo, dated April 3, 2007, Project No. 4602.01, and your portion of a memo titled "6.0 Site Geology and Soil Investigation," which were received from your office, conducted a brief visit to the site, and reviewed personal communication regarding the proposed site improvements. This letter provides our comments and a separate letter defines a proposal to perform a final geotechnical engineering report for the proposed Big Wave Office Park and Wellness Center, located on Airport Street in Princeton-By-The-Sea, California.

After a review of the two documents referenced above we believe the base problem is to define the proposed development so that the final geotechnical report will address the geotechnical mitigations for each perceived problem. As an example, the highly expansive soil can be handled in two ways; remove the expansive soil from the building and parking areas during grading or adjust the foundation and pavement section to mitigate the expansive potential of the material. The final geotechnical report can address both cases, but the report will be more costly. R-value test would have to be performed on the expansive soil and the material below the expansive soil, if the grading elevations are not defined.

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The following items should be adjusted in the 6.0 Site Geology and Soil Investigation memo:

Item 6.6 Geotechnical Peer Review, 1

"50 deep holes" should be changed to "holes at least 50 feet deep."

At present we proposed to push 3 Cone Penetration Test (CPT) and two borings for each site. This may change, if the development changes.

Item 6.6 Geotechnical Peer Review, 7

Shallow footings will be sized due to seismic settlement and not expansive soil.

Item 6.6 Geotechnical Peer Review, 8

Shallow footings depth due to seismic settlement and not expansive soil will control.

Item 6.6 Geotechnical Peer Review, 11

Additional investigation will better define the range of seismic settlement.

Item 6.6 Geotechnical Peer Review, 12

Remove expansive soil from parking area.

Item 6.6 Geotechnical Peer Review, 13

The location of the bridge is important before the final geotechnical engineering investigation.

After Item 6.6 Geotechnical Peer Review, 13

Site surcharge will produce the settlement due to the weight of the proposed buildings. By reducing the stress of the buildings adjusting to the static building settlement, the structure is in a better position to adjust from the seismic settlement.

Thank you for the opportunity to be of service. Please do not hesitate to contact us, should you have any questions or comments.

Very truly yours,
BAGG Engineers

Bruce Gaviglio
Senior Geotechnical Engineer

BEG/sd
(2 copies)

PROPOSAL

TO: Big Wave LLC
1333 Jones Street, Suite 307
San Francisco, CA 94109

DATE: July 10, 2008

PROPOSAL NO: 08-201

BILLING ADDRESS: Same as above

ATTN: Mr. Steve Barber

Based on the third party geotechnical review prepared by Treadwell & Rollo, dated April 3, 2007, Project No. 4602.01, which was received from your office, a brief visit to the site, and personal communication regarding the proposed site improvements, this proposal summarizes the engineering services that we are prepared to perform and suggests contract arrangements, as follows:

TYPE OF SERVICES: Final Geotechnical Engineering Investigation

PROJECT: Proposed Big Wave Office Park and Wellness Center

SITE LOCATION: Airport Street Northwest of Stanford Avenue
APN 047-311-060 (Office Park) and
APN 047-312-040 (Wellness Center)
Princeton-By-The-Sea, California

SITE CONDITIONS:

The Office Park site consists of an approximately 14-acre site bounded by Airport Street to the northeast, on the northwest by a trailer park, on the west and south by wetlands, on the southeast by vacant lands, and on the east by a shallow creek. The surface of the site is relatively flat, and gently slopes downward toward the southwest. At the time of our site visit, the surface of the site was covered with a wild growth of grass and low shrubs along the northwest, southwest, and southeast perimeter, with the center area of the parcel disked.

The Wellness Center site consists of an approximately 5-acre site bounded by Airport Street to the northeast, existing commercial developments to the southeast, vacant lands to the southwest, and a shallow creek with the Office Park site beyond to the northwest. At the time of our site visit, this site had standing water in the western, lower lying portion of the site adjacent to the creek. The surface of the site was covered with low lying grass, with the western portion of the site along the creek covered with lush vegetation.

We have previously provided preliminary geotechnical investigations for the Wellness Center site in 2000, and the Office Park site in 2002, based on the preliminary designs of both sites at the time. Since then, the locations and types of buildings have been finalized, and our preliminary geotechnical investigation has been peer reviewed to identify additional geotechnical information required for the site.

The site area is mapped as being underlain by coarse-grained, older alluvial fan and stream terrace deposits (**Qof**) of the Pleistocene Age, consisting of poorly consolidated gravel, sand, and silt, coarser grained at heads of old fans and in narrow canyons, and younger (outer) alluvial fan deposits (**Qyfo**) of the Holocene age, consisting of unconsolidated fine sand, silt, and clayey silt. Our two preliminary investigations indicate sand layers at depths that are potentially susceptible to seismic compaction and seismically induced liquefaction, a high groundwater table, as well as expansive surface soils and seismic hazards associated with the close proximity of the San Gregorio fault.

PROJECT DESCRIPTION:

It is our understanding that the Office Park project will consist of four two-story office buildings and a single-story maintenance building. The surface parking surrounding the buildings is anticipated to be pervious concrete. Other site improvements will consist of paved walkways and landscape areas that will include several percolation ponds, and a paved fire road at the southeast, southwest, and northwest perimeter of the site.

The Wellness Center will consist of several buildings to include a commercial (lower floor) and residential apartment (upper floor) building, a community center, residential duplexes, storage facilities,

and a maintenance building. A pedestrian bridge is planned to span across the creek to provide access between the Wellness Center and the Office Park.

Grading at the sites is anticipated to be cuts and fills of up to two feet within the Office Park site, and fills of up to four feet within the Wellness Center site.

Before this investigation is started the proposed development should be finalized. The location of the proposed pedestrian bridge should be finalized so that we can drill additional borings in the foundation areas. The proposed bridge is in the wetlands area where we assumed no structures would be constructed and therefore did no drilling and borings. The grading plan should be finalized so that we can obtain a soil sample of the pavement areas. If the expansive surface soil will be removed from the parking and building areas, the pavement section and building foundation will be modified. If the height of the buildings changes during our investigation and engineering phase, then the depth and type of the foundation will also change. Therefore, if the development changes then the scope of services should be adjusted.

APPROACH:

The evaluation of the conditions at the two sites can be performed based on the available information from our two preliminary geotechnical investigation reports, as well guidelines provided by Treadwell & Rollo from their peer review letter for the Office Park site. We propose to perform a geotechnical engineering investigation at each of the sites to address the foundation and grading recommendations for the design of the site structures, and an assessment of the seismic hazards at the two sites. We will conduct a subsurface investigation at the sites consisting of advancing six Cone Penetration Testing (CPT) probes (three on each site) and drilling four auger borings. We plan to advance three CPT probes and drill two auger borings to depths of 30 feet at the Office Park site, and three CPT probes and two auger borings to depths of 30 feet at the Wellness site. The CPT probes will extend to a depth of 100 feet, to supplement subsurface information for possible pile foundations from our two preliminary geotechnical engineering investigations. We will obtain relatively undisturbed ring samples and bulk samples of the near-surface soils from the auger borings for pavement design analyses, settlement analyses, and to provide recommendations for the proposed foot bridge connecting the two sites where two of the borings will be located. A laboratory testing program will then be designed and conducted to

evaluate the quality and consistency of the bulk samples obtained from the site, and to aid in developing criteria for design and construction of the proposed pavements and surface structures.

It should be noted that Cone Penetration Testing is a much more rapid and cost effective approach than conventional drilling for subsurface exploration as it permits rapid exploration of subsurface conditions while minimizing retrieval of subsurface materials, an inconvenient and occasionally expensive by-product of conventional drilling. Continuous measurements are made of the resistance to penetration of the tip and the frictional sliding resistance of the sleeve of the cone. The exploration method employs sensors that are pushed into the ground to infer the properties of soils and pore fluids. Known as direct-push technology, this method can be used to map out the vertical and lateral extent of stratigraphic layers. By using standard engineering correlations, the geotechnical properties of various subsurface strata can be inferred. Soundings also have the great advantage of not producing any drill cuttings, soils, or fluids. Data are automatically logged onto a field computer and are ready for immediate viewing and analysis in the field.

As required by the San Mateo County Environmental Health Division, permits will be obtained from the County for the CPT boreholes.

PURPOSE:

The purpose of our investigation will be to review available geotechnical and geologic literature pertinent to the two sites and to conduct a subsurface exploration program at the site as necessary to evaluate the seismic hazards at the sites, and to develop geotechnical recommendations for the design of the proposed Wellness Center and Office Park. We plan to issue separate reports for the two sites once the additional subsurface investigation and engineering analyses has been completed.

On this basis, we anticipate it will be necessary for our report to address:

- appropriate soil class type and seismic parameters per CBC 2007,
- specific soil conditions discovered by our borings/CPTs (such as loose or expansive, creeping, collapsible surface soils) that may require special mitigation or impose restrictions on the project, including the type, quality, and consistency of any on-site fill soils,

- depth to groundwater and criteria for dealing with shallow groundwater during construction, as encountered,

- potential of the site soils for liquefaction and/or compaction during seismic activities, including the consequences of liquefaction and criteria for mitigating the impact of such hazards on the new buildings,

- criteria for site grading, preparation of the building pads, placement of fills and backfills, including the utility trenches, specifications for acceptable imported fill soils, and criteria for excavation of pits and below grade vaults,

- criteria for the support of the proposed buildings, including permissible bearing values for dead, dead plus live, and dead plus live plus seismic loads, and allowable passive resistance and friction coefficient for spread footing foundations, subgrade modulus for mat foundations, pile capacity, as necessary,

- impact of the site settlement under the weight of the fill soils forming the building pad as well as the structural loads, on the performance of shallow building foundations and slab-on-grade floors,

- criteria for the support of the concrete slab-on-grade floors,

- lateral earth (active and at-rest) pressures for the design of retaining walls, pit walls, and shallow depressions,

- flexible and rigid permeable pavement sections for various Traffic Indices, including sections with aggregate base and asphaltic concrete,

- provisions for the control of surface and subsurface drainage, including the permeability of the soils at the location of the proposed detention ponds based on the laboratory permeability test results.

SCOPE OF SERVICE:

We anticipate that the scope of our services will consist of the following specific tasks for the geotechnical engineering investigations:

- Conduct a thorough review of the available geotechnical and geologic reports prepared by others and by BAGG Engineers, and use the data where appropriate to supplement this investigation.

- Mark the CPTs and borings at the site and notify Underground Service Alert at least 48 hours prior to the planned exploration activity.

- Obtain a permit for advancing CPTs and drilling soil borings from the County of San Mateo Environmental Health Division, as required.

- Research and review pertinent geological maps and aerial photography relevant to the site area regarding the seismic and geologic history of the site and the immediate vicinity, and prepare a geologic and seismic write-up, as appropriate.

- Advance 6 CPT probes to a minimum depth of 100 feet at the site.

- Drill, log, and sample 4 exploratory borings to depths of 30 feet with a truck-mounted drilling rig using continuous flight augers. Advance the borings under the direction of one of our engineers or geologists who will direct the exploration and obtain disturbed bulk, undisturbed ring, and Standard Penetration Test samples of the subsurface materials for visual classification and laboratory testing. Measure the depth to groundwater in the borings. Backfill the borings with cement grout, as per the County guidelines. Leave the drilling cuttings at the site.

- Perform a laboratory testing program on the collected samples to evaluate the engineering characteristics of the subsurface materials. Tests may consist of direct and triaxial (UU) shear strength, R-value, consolidation, classification, and moisture-density, as judged appropriate.

- Perform engineering analyses based on the results obtained from the above tasks and oriented toward the above-described purpose of the investigation.

- Prepare six copies of a final report for each site summarizing our findings and recommendations, including a vicinity map, a site plan showing the boring locations, one or two subsurface profiles, a vicinity as well as a site geologic map, a fault map, CPT logs, boring logs, laboratory test results, and our conclusions, opinions, and recommendations. The report may first be issued as a draft for review and comment by the client, if required.

As required, permits will be obtained from the San Mateo County Environmental Health Division for advancing CPTs and auger boreholes. Note that a separate permit is required for each of the two sites, as each site is located on a separate parcel. Based on the same permit requirements, the CPTs and auger boreholes will be backfilled with cement grout as per standard protocol.

The following is a breakdown of our estimated fee for the above-described services:

1)	**Visit Site, Mark Borings, Obtain Permits (per APN), Review Old Reports, & Coordinate Project**					
	Project Engineer, estimate	6	hrs @	$125	$750	
	Mileage (trips to the site @ 100mi/visit)	200	mi @	$1.00	$200	
						$950
2)	**Subsurface Exploration/Geologic Reconnaissance**					
	CPT subcontractor	1	lump sum	$3,700	$3,700	
	Drilling subcontractor (cost + 10%)	8	hrs @	$165	$1,320	
	Supplies for boring backfill, cement, etc. (cost + 10%)	1	lump sum	$200	$200	
	Project Engineer/Geologist for logging, etc., estimate	12	hrs @	$115	$1,380	
	Mileage (one trip @ 100 mi/visit)	100	mi @	$1.00	$100	
						$6,500
3)	**Laboratory Testing (Geotechnical/Corrosion Evaluation)**					
	Saturated direct shear tests	4	tests @	$60	$240	
	Direct shear tests @ natural moisture content	10	tests @	$50	$500	
	Gradation tests	2	tests @	$110	$220	
	R-value tests	2	tests @	$230	$460	
	Plasticity Index tests	4	tests @	$110	$440	
	Consolidation tests	2	tests @	$320	$640	
	Moisture-density tests	10	tests @	$30	$300	
	Constant-Head Permeability tests	3	tests @	$250	$750	
						$3,550
4)	**Data Reduction, Boring Log Preparation, Analysis**					
	Project Engineer, estiamte	16	hrs @	$115	$1,840	
	Sr. Project Engineer, estimate	4	hrs @	$135	$540	
	Supervisory Engineer, estimate	4	hrs @	$160	$640	
	Drafting, estimate	12	hrs @	$75	$900	
						$3,920
5)	**Report Preparation & Supervisory Review**					
	Sr. Project Engineer, estimate	12	hrs @	$135	$1,620	
	Supervisory Engineer, estimate	4	hrs @	$160	$640	
	Clerical, estimate	8	hrs @	$50	$400	
						$2,660
	TOTAL ESTIMATED FEE					**$17,580**

FEE AND BREAKDOWN:

We propose to perform the above services on a time-and-expense basis in accordance with the attached "Schedule of Charges" and "Terms of Agreement". BAGG reserves the right to transfer fees between tasks, as some tasks may take longer than estimated and others may require less time. A total fee of **$17,580** for the two geotechnical engineering investigations, however, will not be exceeded without prior authorization from the client regarding unanticipated site conditions, or a change in the scope of work outlined in this proposal.

SCHEDULE:

A CPT rig and an auger drilling rig may be scheduled to be at the site within two weeks following your authorization to proceed, during which period the drilling permits will also be obtained from the County of San Mateo. The site exploratory drilling will be completed in two days (one for each site), and the laboratory testing will require approximately 10 to 14 additional working days to complete. Thus, we anticipate our final report could be completed in about four weeks after the field exploration has been completed.

OTHER:

We will notify Underground Service Alert to mark the known utilities at the site; however, BAGG cannot be responsible for any unanticipated conflicts of the borings with the existing underground utilities that have not been properly marked, or the resulting damage. Therefore, assistance from the client will be helpful in identification of the existing utilities in the exploration areas.

Verbal authorization to proceed with the scope of work described in this proposal shall constitute acceptance of this proposal and all attachments. We will proceed with work as if a signed contract has been forwarded to our office, as requested.

Thank you for the opportunity to submit this proposal. If the content of this proposal meets your approval, please initial the tasks you wish to authorize and sign and return one executed copy for our files to indicate acceptance of this proposal and its attachments. This proposal will be honored for a period of three months.

Very truly yours,
BAGG Engineers

Bruce Gaviglio
Senior Geotechnical Engineer

Damon C. Lai
Project Engineer

BEG/DCL/sd
(2 copies)
Attachments: ASFE Document Regarding Engineering Proposals
BAGG's Schedule of Charges (05/08)
Terms of Agreement (2/02)

THE ABOVE PROPOSAL AND ALL ENCLOSURES HAVE BEEN READ AND UNDERSTOOD, AND ARE HEREBY AGREED TO AND ACCEPTED. IT IS AGREED THAT "SCHEDULE OF CHARGES" AND "TERMS OF AGREEMENT" FORM AN EXPRESS PART OF THIS CONTRACT AS EVIDENCED BY MY SIGNATURE BELOW.

ACCEPTED BY: _____ **Date:** _____
Signature of Person Authorized to Accept

_____
Typed or Printed Name of Signatory

Important Information About This

Geotechnical Engineering Proposal

Subsurface problems are a principal cause of construction delays, cost overruns, claims, and disputes.

While you cannot eliminate all such risks, you can manage them. The following information is provided to help.

Participate in Development of the Subsurface Exploration Plan

Geotechnical engineering begins with the creation of an effective subsurface exploration plan. This proposal starts the process by presenting an initial plan. While that plan may consider the unique physical attributes of the site and the improvements you have in mind, it probably does not consider your unique goals, objectives, and risk management preferences. Subsurface exploration plans that are finalized without considering such factors presuppose that clients' needs are unimportant, or that all clients have the same needs. *Avoid the problems that can stem from such assumptions* by finalizing the plan and other scope elements directly with the geotechnical engineer you feel is best-qualified for the project, along with the other project professionals whose plans are affected by the geotechnical engineer's findings and recommendations. If you have been told that this step is unnecessary; that client preferences do not influence the scope of geotechnical engineering service or that someone else can articulate your needs as well as you, you have been told *wrong.* No one else can discuss your geotechnical options better than an experienced geotechnical engineer, and no one else can provide the input you can. Thus, while you certainly are at liberty to accept a proposed scope "as is," recognize that it could be a unilateral scope developed without direct client/engineer discussion; that authorizing a unilateral scope will force the geotechnical engineer to accept all assumptions it contains; that assumptions create risk. *Manage your risk. Get involved.*

Expect the Unexpected

The nature of geotechnical engineering is such that planning needs to *anticipate the unexpected.* During the design phase of a project, more or deeper borings may be required, additional tests may become necessary, or someone associated with your organization may request a service that was not included in the final scope. During the construction phase, additional services may be needed to respond quickly to unanticipated conditions. In the past, geotechnical engineers commonly did whatever was required to oblige their clients' representatives and safeguard their clients' interests, taking it on faith that their clients wanted them to do so. But some did not, refusing to pay for legitimate extras on the ground that the engineer proceeded without proper authorization, or failed to submit notice in a timely manner, or failed to provide proper documentation. *What are your preferences? Who is permitted to authorize additional geotechnical services on your project? What type of documentation do you require? To whom should it be sent? When? How?* By addressing these and similar issues sooner rather than later, you and your geotechnical engineer will be prepared for the unexpected, to help prevent molehills from growing into mountains.

Have Realistic Expectations; Apply Appropriate Preventives

The recommendations included in a geotechnical engineering report are *not final,* because they are based on opinions that can be verified *only* during construction. For that reason, most geotechnical engineering proposals offer the construction observation services that permit the geotechnical engineer of record to confirm that subsurface conditions are what they were expected to be, or to modify recommendations when actual conditions were not anticipated. *An offer to provide construction observation is an offer to better manage your risk.* Clients who do not take advantage of such an offer; clients who retain a second firm to observe construction, can create a high-risk "Catch-22" situation for themselves. *The geotechnical engineer of record cannot assume responsibility or liability for a report's recommendations when another firm performs the services needed to evaluate the recommendations' adequacy.* The second firm is also likely to disavow liability for the recommendations, because of the substantial and possibly uninsurable risk of assuming responsibility for ser-

vices it did not perform. Recognize, too, that no firm other than the geotechnical engineer of record can possibly have as intimate an understanding of your project's geotechnical issues. As such, reliance on a second firm to perform construction observation can elevate risk still more, because it may not have the wherewithal to recognize subtle, but sometimes critically important unanticipated conditions, or to respond to them in a manner consistent with your goals, objectives, and risk management preferences.

Realize That Geoenvironmental Issues Have Not Been Covered

The equipment, techniques, and personnel used to perform a *geoenvironmental* study differ significantly from those used to perform a *geotechnical* study. *Geoenvironmental services are not being offered in this proposal. The report that results will not relate any geoenvironmental findings, conclusions, or recommendations.* Unanticipated environmental problems have led to numerous project failures. If you have not yet obtained your own geoenvironmental information, ask your geotechnical consultant for risk management guidance. *Do not rely on an environmental report prepared for someone else.*

Have the Geotechnical Engineer Work with Other Design Professionals and Constructors

Other design team members' misinterpretation of a geotechnical engineering report has resulted in costly problems. Manage that risk by having your geotechnical engineer confer with appropriate members of the design team before finalizing the scope of geotechnical service (as suggested above), and, again, after submitting the report. *Also retain your geotechnical engineer to review pertinent elements of the design team members' plans and specifications.*

Reduce the risk of unanticipated conditions claims that can occur when constructors misinterpret or misunderstand the purposes of a geotechnical engineering report. Use appropriate language in your contract documents. Retain your geotechnical engineer to participate in prebid and preconstruction conferences, and to perform construction observation.

Read Responsibility Provisions Closely

Clients, design professionals, and constructors who do not recognize that geotechnical engineering is far less exact than other engineering disciplines can develop unrealistic expectations. Unrealistic expectations can lead to disappointments, claims, and disputes. To help reduce such risks, geotechnical engineers commonly include a variety of explanatory provisions in their proposals. Sometimes labeled "limitations," many of these provisions indicate where geotechnical engineers' responsibilities begin and end, to help others recognize their own responsibilities and risks, thus to encourage more effective scopes of service. *Read this proposal's provisions closely.* Ask questions. Your geotechnical engineer should respond fully and frankly.

Rely on Your Geotechnical Engineer for Additional Assistance

Membership in ASFE exposes geotechnical engineers to a wide array of risk management techniques that can be of genuine benefit to everyone involved with a construction project. Confer with an ASFE-member geotechnical engineer for more information. Confirm a firm's membership in ASFE by contacting ASFE directly or at its website.

ASFE
The Best People on Earth©
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BAGG SCHEDULE OF CHARGES

A new schedule of charges is issued early each year. Unless other arrangements have been made, job charges are made from the latest schedule regardless of when the job was started.

PERSONNEL CHARGES

Personnel charges are based on individual salaries times a multiplier determined in accordance with Manual No. 45 of the American Society of Civil Engineers. Following are the current ranges in billing rates for each category of personnel:

Personnel	Hourly Billing Rates
Principal/Supervisory Engineer	$ 150-165
Senior Engineer/Geologist, & Project Manager	135-150
Project Engineer/Geologist, Supervisory Technician	115-130
Staff Engineer/Geologist	105-125
Technician	88-100
Drafting including Computer Aided Drafting (CAD)	75-100
Support Services (Word-processing, Reproduction, etc.)	40-50

Personnel charges are for technical work. Charges are made for typing and for the time and costs of compiling and printing technical reports. Charges are not made for office management.

A premium multiplier of 1.5 is applied to technician rates on Saturdays, on night shifts, and over 8 hours on weekdays. The multiplier is 2.0 for work on Sundays, and 2.5 for work on holidays. Premium rates are not charged for the time of geologists, engineers, managers, or principals unless the client has approved them. All personnel charges are portal to portal. Travel time is charged up to a maximum of 8 hours per day.

For field observation and testing personnel, time up to 2 hours is charged as 2 hours, time between 2 and 4 hours is charged as 4 hours, and time between 4 and 8 hours is charged as 8 hours.

Outside consultants' fees and expenses are charged at cost plus 15%.

Expert testimony for depositions, court appearances, and other dispute resolution proceedings is charged at $300 per hour plus expenses. Research, analysis, consultation, meeting and other preparation services are charged at $150 per hour.

EQUIPMENT CHARGES

The following charges are for special equipment and are in addition to personnel charges:

Nuclear Density Gauge, per hour	$ 10.00
Car or Pick-up Truck, per mile	1.00
Printing and Reproduction, per sheet	0.15
Drill Rig Rental and Operation	Cost plus 15%
Outside Laboratory Testing	Cost plus 15%
Other Special Equipment	Prices on Request

Equipment in transit to or from the job site, or retained by the Client on a standby basis, is billed on the basis of four hours per calendar day, or at actual cost (plus 15 percent) in case of equipment which is leased or subleased or otherwise arranged for by Bay Area Geotechnical Group through its subcontractors or others.

If equipment is exposed to unusual and adverse conditions, an appropriate charge will be made for resultant abnormal deterioration.

MISCELLANEOUS CHARGES

Charges for special or unusual services or equipment are computed on the basis of cost plus 15 percent. Some samples of such outside services are:

Printing and Reproduction
Rented Cars or Pick-up Trucks
Transportation on Public Carriers
Special Fees, Permits, Insurance, etc.
Rented Heavy Equipment
Shipping Charges
Meals and Lodging
Craftsmen and Laborers
Health and Safety Equipment

LABORATORY CHARGES

Charges for laboratory tests include the usual laboratory work and the reporting of test results only. Charges for reduction and/or analysis of test data are based on hourly personnel charges. Charges for special tests are based on hourly personnel charges plus a charge of $10.00 per hour for laboratory equipment.

Moisture and Dry Density	$ 30.00
Plasticity Index	110.00
Wash Analysis, percent passing No. 200 screen	60.00
Sieve Analysis, dry	90.00
Sieve Analysis, including wash	100.00
Combined Analyses, including wash and hydrometer	160.00
Hydrometer	140.00
Specific Gravity, non-cohesive soil	60.00
Specific Gravity, cohesive soil	65.00
Unconfined Compressive Strength	55.00
Direct Shear, undisturbed sample	50.00
Direct Shear, undisturbed sample, saturated	60.00
Direct Shear, remolded sample	90.00
Direct Shear, remolded sample, saturated	100.00
Triaxial Shear, unconsolidated, undrained	80.00
Triaxial Shear, unconsolidated, undrained, remolded	150.00
Triaxial Shear, consolidated, undrained with pore-pressure measurements	400.00
Triaxial Shear, consolidated, undrained with pore-pressure, remolded	450.00
Consolidation, undisturbed sample	230.00
Consolidation, remolded sample	260.00
Permeability, undisturbed sample (constant head)	100.00
Permeability, remolded sample (constant head)	130.00
Permeability, undisturbed (falling head with back pressure)	230.00
Shrink-Swell, undisturbed sample	90.00
Shrink-Swell, remolded sample	120.00
Sand Equivalent	100.00
R-Value with Expansion Pressure, (soils)	215.00
R-Value, (base rock)	190.00
CBR, Corps of Engineers method, cohesionless soil	345.00
CBR, Corps of Engineers method, cohesive soil	515.00
Compaction, 4-inch-diameter mold	185.00
Compaction, 6-inch-diameter mold	200.00
Compaction, Cal-Impact	200.00
Compaction, check point only	80.00
Relative Density, cohesionless soil	155.00
Dynamic Tests	Prices on Request

TERMS OF AGREEMENT

FOR GEOTECHNICAL SERVICES

These Terms of Agreement have the following parts:

A. GENERAL CONTRACT PROVISIONS
1. The Contract
2. Contract Assignment
3. Waivers of Contract Provisions
4. Invalid or Unenforceable Provisions
5. Enforcement Jurisdiction

B. TERM AND TERMINATION
1. Time for Acceptance
2. Authorization by CLIENT's Instrument of Contract
3. Normal Termination
4. Termination by Failure to Perform
5. Termination Following Suspension
6. Survival

C. GENERAL PERFORMANCE CONDITIONS
1. General Conditions for CLIENT Performance
2. General Conditions for BAGG Performance
3. Fee Estimates
4, Standard of Care

D. TIME OF PERFORMANCE
1. Timeliness of the Services
2. Unavoidable Problems or Delays
3. Suspension of Services

E. INVESTIGATION AND CONSULTATION SERVICES
1. Inherent Uncertainties
2. Resulting Limitations
3. Damage or Alteration to Property
4. Discovery of Unanticipated Hazardous Materials
5. Permits and Approvals.

F. CONSTRUCTION OBSERVATION, TESTING, AND MONITORING SERVICES
1. Construction Monitoring
2. Construction Supervision
3. Jobsite Safety
4. Verification of Compliance
5. Verification of Grades

G. RISK ALLOCATION
1. Relation Between Risks and Potential Profit
2. Limitation and Indemnification
3. Limitation/Indemnification as a Business Understanding

H. DISPUTE RESOLUTION
1. Timing of Claims
2. Potential Stoppage of Services
3. Mediation
4. Others to be Bound by the Dispute Resolution Procedures

I. TERMS OF PAYMENT
1. Timing of Invoices and Payments
2. Disputes Over Payment
3. Enforced Payment

J. OWNERSHIP AND REUSE OF MATERIALS
1. Ownership of Materials
2. Unpaid-for Materials
3. Reuse of Materials

K. RETENTION OF MATERIALS
1. Retention of Reports
2. Retention of Files
3. Retention of Samples

A. GENERAL CONTRACT PROVISIONS

1. The Contract. These Terms of Agreement (TERMS) accompany a PROPOSAL by the Bay Area Geotechnical Group (BAGG) to a prospective client (CLIENT). The accepted PROPOSAL, these TERMS and the BAGG Schedule of Charges together constitute this CONTRACT. BAGG, CLIENT and their successors, assigns, and partners, are the parties to this CONTRACT. It is the entire CONTRACT between BAGG and CLIENT, and supersedes all prior or contemporaneous communications, representations, or agreements, written or oral. Where appropriate CLIENT shall be interpreted as OWNER.

2. **Contract Assignment.** Neither party may assign, sublet, or transfer its interests, rights, or obligations in this CONTRACT without the written consent of the other party. Nothing in this provision shall restrict BAGG from using subconsultants when in BAGG's sole opinion it is appropriate and customary to do so. Such persons and entities include but are not limited to drilling companies, testing laboratories, and specialized consultants, but not outside geotechnical engineers without CLIENT's prior consent.

3. **Waivers of Contract Provisions.** In the event that either party grants a waiver of any provision of this CONTRACT, that grant is not a waiver of a subsequent breach of the same provision or any other provision.

4. **Invalid or Unenforceable Provisions.** In the event that any provision of this CONTRACT is held to be invalid or unenforceable, the other provisions of this CONTRACT remain valid and binding on the parties hereto.

5. **Enforcement Jurisdiction.** This CONTRACT is to be construed in accordance with the laws of the State of California. Enforcement is to be in any court of competent jurisdiction in Santa Clara County.

B. TERM AND TERMINATION

1. **Time for Acceptance.** In the absence of specific arrangements to the contrary, the PROPOSAL is to remain open for acceptance for two months from its date of issuance.

2. **Authorization by CLIENT's Instrument of Contract.** In the event that CLIENT elects to authorize BAGG's services by means of a purchase order or other instrument of contract, the PROPOSAL and its attachments, including these TERMS are expressly included in the contractual agreement.

3. **Normal Termination.** BAGG's responsibilities under this CONTRACT will normally be fulfilled by successful completion of the scope of work described in the PROPOSAL. When additional services on the subject project, or services during subsequent phases of the project (such as review of plans and specifications, or observation and testing of construction) are requested and agreed upon, CLIENT and BAGG agree that all such services will also be provided in accordance with these TERMS, and as part of this CONTRACT.

4. **Termination by Failure to Perform.** If either party defaults in the performance of its material obligations hereunder, and if any such default is not corrected within 10 calendar days after written notice of such default, the non-defaulting party may, in addition to any other remedies it may have, immediately terminate this CONTRACT upon written notice to the defaulting party.

5. **Termination Following Suspension.** BAGG may, upon 10 calendar days' written notice to CLIENT terminate this CONTRACT upon suspension in accordance with Items D 3 and H 2 of these TERMS.

6. **Survival.** The parties' rights and obligations pursuant to Sections C through K of these TERMS shall survive expiration or termination of this CONTRACT.

C. GENERAL PERFORMANCE CONDITIONS

1. **General Conditions for CLIENT Performance.** CLIENT shall (a) cooperate fully with BAGG in providing its services, (b) provide free access to the jobsite for all necessary equipment and personnel, (c) provide results of all known studies regarding the jobsite and proposed project, to include but not be limited to existing land surveys, previous soil investigation reports, construction observation reports, plans, specifications, chemical tests, and governmental permits, (d) provide all known information about the jobsite to include but not be limited to surface conditions, subsurface conditions (including buried utilities and installations), existence of hazardous substances, and past construction or jobsite history, and (e) immediately transmit to BAGG all new data or information found or decided. BAGG shall not be liable for its actions, counsel, or advice based on any inaccurate or incomplete information provided by CLIENT.

2. **General Conditions for BAGG Performance.** BAGG shall provide professional services within the fields of geotechnical engineering and engineering geology for the purposes and within the scope of services described in the PROPOSAL, except as the services may be modified by later agreement of the parties, and except as they may be found impracticable to perform. In performing its services, BAGG may review and interpret information provided by CLIENT, and by third parties, including government authorities, testing laboratories, and other entities. BAGG will not conduct an independent evaluation of the accuracy or completeness of such information, and shall not be responsible for any errors or omissions contained in such information if it was professionally reasonable for BAGG to rely on such information.

3. **Fee Estimates.** BAGG shall perform the services in accordance with the hourly fees set forth in the PROPOSAL and Schedule of Charges. Any estimates of total fees that BAGG has provided to CLIENT in the PROPOSAL or otherwise are only preliminary approximations based on facts that are currently available and the currently anticipated level of work required to complete the PROPOSAL's scope of services. In no event is an estimate to be construed as a commitment of BAGG to render services at a minimum or maximum cost. From time to time, as the scope and details of the Services, and the assumptions underlying the Services, change, BAGG may provide CLIENT with revised estimates, but shall not proceed beyond the estimated cost without CLIENT's prior consent.

4. **Standard of Care.** BAGG's services provided under this CONTRACT will be conducted in a manner consistent with that level of care and skill ordinarily exercised by providers of Item C 2 services in the same area, under similar conditions, at the time the services are performed. This CONTRACT does not include or intend any other warranty, guarantee, or representation.

D. TIME OF PERFORMANCE

1. **Timeliness of the Services.** BAGG will start and proceed with the work in a timely manner. When the PROPOSAL contains a time estimate, BAGG will schedule the work to comply with the estimate. Some latitude in time of performance is implied unless the PROPOSAL specifies that time of performance is an essential element of a specific part or parts of the scope of services.

2. **Unavoidable Problems or Delays.** Neither party to this CONTRACT shall hold the other party responsible for damages or delays in performance occasioned by events beyond their control or due to factors that could not reasonably have been foreseen at the time this CONTRACT was entered into. Should such problems occur, both parties shall use their best efforts to overcome all difficulties and resume the normal pursuit and schedule of work. Such delays shall commensurately increase the CONTRACT completion time, and shall commensurately increase the CONTRACT amount by extra personnel, equipment, subcontract, and other charges directly attributable to the delays. At the option of either party to this CONTRACT, such delays may make this CONTRACT subject to termination or renegotiation.

3. **Suspension of Services.** At any time, CLIENT may suspend performance of services upon five calendar days written notice to BAGG. If payment of invoices is not maintained on a one-month-current basis, BAGG may suspend performance of services upon five calendar days written notice to CLIENT, and may withhold reports and other work products. BAGG shall have no liability whatsoever to CLIENT for any costs or damages as a result of such suspension. All suspensions shall commensurately increase the CONTRACT completion time, and shall commensurately increase the CONTRACT amount by extra personnel, equipment, subcontract, and other charges directly attributable to the delay from the suspension. At BAGG's option, a suspension for more than 30 calendar days in the aggregate may make this CONTRACT subject to termination or renegotiation.

E. INVESTIGATION AND CONSULTATION SERVICES

1. **Inherent Uncertainties.** Geotechnical Engineering and Engineering Geology include fields of practice that are evolving and are sometimes imprecise and inconsistent in terms of law, regulation, and state of the art. Further, geotechnical engineering and engineering geology require interpretation of data of limited precision, use data that must be interpolated between widely spaced information points, and interpret subsurface conditions that are usually variable. These inherent uncertainties generally preclude absolute answers, and sometimes result in changes to conclusions and recommendations as changed or different conditions are revealed by subsequent activities.

2. **Resulting Limitations.** BAGG shall be responsible for its counsel and advice (a) only to the extent that its counsel and advice are followed, (b) only to the extent that reasonable amounts of exploration, observation, testing, and analysis have revealed the pertinent conditions, (c) only when it observes or is informed of any subsequent activities that have revealed changed or different conditions, (d) only when it is retained to advise whether the changed or different conditions indicate a need to revise its recommendations or conclusions, and (e) only when it is retained to make revised recommendations and observe and test performance of any recommended work.

3. **Damage or Alteration to Property.** Some damage or alteration to property may result from normal performance of investigation services. BAGG will take reasonable precautions to minimize such damage or alteration, but shall not be responsible to provide corrective measures unless the PROPOSAL stipulates that BAGG shall be responsible to provide specific remedies for specific types of damage or alteration.

4. **Discovery of Unanticipated Hazardous Materials.** It is possible for hazardous materials to exist at a site where there is no reason to believe they could or should be present. BAGG and CLIENT agree that discovery of unanticipated hazardous materials constitutes a changed condition mandating a renegotiation of the scope of work or termination of services. CLIENT waives any claim against BAGG, and agrees to indemnify and hold BAGG harmless from any claim or liability for injury or loss arising from BAGG's encountering of hazardous materials, including cleanup of hazardous materials accidentally spread by BAGG's activities.

5. **Permits and Approvals.** If the Proposal so stipulates, or CLIENT later so requests, BAGG shall assist CLIENT in applying for permits and approvals from regulatory agencies. This assistance relates to completing and submitting forms, letters, and/or reports as to the results of services performed. BAGG is prepared to provide additional services as needed, such as conducting additional investigations and special tests, performing special research studies, preparing special documentation, and developing and delivering testimony. CLIENT and BAGG agree to discuss the scope of any additional services and the fees and expenses involved before BAGG performs them on CLIENT's behalf. BAGG's performance of its services does not in any way guarantee that permits will be issued or approvals granted, and nothing in BAGG's services shall be construed as an analysis or determination that CLIENT is in compliance with federal, state, or local laws, statutes, codes, ordinances, or regulations.

F. CONSTRUCTION OBSERVATION, TESTING, AND MONITORING SERVICES

1. **Construction Monitoring.** CLIENT recognizes that unanticipated or changed conditions may be encountered during construction, and that the Geotechnical Engineer who performed the investigation and design analyses is in the best position to recognize what constitutes a unanticipated or changed condition, and what is anticipated by his recommendations. CLIENT further recognizes that construction monitoring is a Quality Control/Quality Assurance technique employed to minimize risk. Provision of construction monitoring by BAGG is not insurance, nor does it constitute a guarantee of any type, and in no case does it relieve any contractor of its responsibility to perform the work in accordance with the plans and specifications. Should CLIENT for any reason not retain BAGG to perform construction monitoring during the full period of construction, CLIENT waives any claim against BAGG, and agrees to indemnify, defend, and hold BAGG harmless from any claim or liability for injury or loss that result from unanticipated or changed conditions not being discovered, or result from findings, conclusions, recommendations, plans, or specifications developed by BAGG, which in fact were not followed.

2. **Construction Supervision.** CLIENT agrees that provision of geotechnical construction monitoring services does not include or imply construction supervision. CLIENT also agrees that BAGG shall not be responsible for, nor have control or charge of any means, methods, techniques, sequences, or procedures of construction. BAGG will report observations, test results, and professional opinions to CLIENT. No action of BAGG or its representatives shall be construed as altering any agreement between CLIENT and others. Whenever in BAGG's opinion any observed work does not comply with plans, specifications, or our recommendations, BAGG will report this to CLIENT. BAGG has no right to reject or stop the work of any agent of CLIENT. Furthermore, BAGG's presence on a jobsite does not in any way guarantee the completion or quality of performance of the work of any party retained by CLIENT.

3. **Jobsite Safety.** BAGG will be responsible for the safety-related actions of its personnel acting within the scope of their employment, but shall not be responsible for jobsite safety or the safety-related actions of others including third parties, personnel of contractors, personnel of architects, personnel of other engineers, and CLIENT.

4. **Verification of Compliance.** Following construction monitoring, CLIENT may request a report verifying the work's compliance with the plans, specifications, and/or BAGG's recommendations. Such verifications are professional opinions based on observations of the work and on tests of samples of the work. Such verifications do not guarantee that all the work conforms with plans or specifications, and they do not relieve CLIENT's contractor of responsibility for conformance.

5. **Verification of Grades.** BAGG does not measure or verify site grades.

G. RISK ALLOCATION

1. **Relation Between Risks and Potential Profit.** A variety of risks potentially affect geotechnical engineers and engineering geologists entering an agreement to perform professional services on behalf of a client. One of these risks stems from the engineer's or geologist's potential for human error. Additional risks stem from current applications of legal doctrines wherein liability may be assigned without any showing of errors, omissions, or negligence. Strict liability is being applied, joint and several liability for damages is being assessed, third parties are claiming injury, and all conceivable parties to a project are being named as defendants in legal actions. Plaintiffs misunderstand or claim to misunderstand the uncertainties and limitations inherent in engineering and geologic services, and issues are often technical, complicated, and easy to obfuscate. In the current legal climate, potential defense costs and other potential losses constitute high-liability risks that bear no reasonable relationship to an engineer's or geologist's potential profit. Such risks on some types of projects are virtually uninsurable.

2. **Limitation and Indemnification**. In order to obtain the benefit of a fee that includes a lesser allowance for dealing with engineering/geologic risks, CLIENT agrees to limit BAGG's liability to CLIENT. As a sharing of risk commensurate with relative potentials for profit, CLIENT agrees that, to the fullest extent permitted by law, the total aggregate liability of BAGG and its employees, officers and subconsultants to CLIENT, for any and all injuries, damages, claims, losses, expenses, or claim expenses (including attorneys fees) arising out of this CONTRACT shall be limited to the greater of **$50,000, or BAGG's total fee**, for services rendered under this CONTRACT.

3. **Limitation/Indemnification as a Business Understanding**. The limitation/indemnification in Item G2 of these TERMS is a business understanding between CLIENT and BAGG, and shall apply to all theories of recovery including breach of contract or warranty, tort including negligence, strict or statutory liability, and any other cause of action except willful misconduct or gross negligence. **CLIENT understands that dollar limits higher than that indicated above can be negotiated. If CLIENT wishes to discuss higher limits and their impact on BAGG's fee, CLIENT should contact BAGG.**

H. DISPUTE RESOLUTION

1. **Timing of Claims** In the event that CLIENT makes a claim against BAGG, at law or otherwise, for any alleged error, omission, or other act arising out of performance of BAGG's services, the claim shall be presented to BAGG in writing. Upon such notice, the parties shall immediately meet and negotiate toward resolution of the claim.

2. **Potential Stoppage of Services.** In the event that the claim is not resolved within 15 days of the date of notice, BAGG may stop providing its services without liability regardless of whether the claim is ultimately resolved.

3. **Mediation.** All claims, disputes, and other matters in controversy between BAGG and CLIENT, arising out of or relating to this CONTRACT or the breach thereof, shall be submitted to non-binding mediation under the auspices of a mutually agreed upon Mediation Service experienced in handling construction related disputes prior to initiation of any lawsuit or other litigation unless BAGG and CLIENT mutually agree otherwise. The cost of said Mediation shall be split equally between the parties. This agreement to mediate shall be specifically enforceable under the prevailing law of the State of California in Santa Clara County.

I. TERMS OF PAYMENT

1. **Timing of Invoices and Payments.** In the absence of specific arrangements to the contrary, BAGG will send monthly invoices to CLIENT. The invoices shall be due and payable when billed. If not paid within one month, invoices are overdue and subject to a service charge of 0.8333 percent per month (10% per year) from the billing dates. Suspension of the work in accordance with Items D 2, D 3, and H 2 of these TERMS will not be cause for suspension of any payments.

2. **Disputes Over Payment.** To be recognized, any dispute over a statement shall be presented in writing to BAGG within one month after the billing date.

3. **Enforced Payment.** In the event that collection procedures or litigation become necessary to enforce payment, CLIENT shall reimburse BAGG for all reasonable costs incurred, including staff time, collection fees, attorneys' fees, court costs, and other claim-related expenses. Venue for litigation shall be in any court of competent jurisdiction in Santa Clara County, California.

J. OWNERSHIP AND REUSE OF MATERIALS

1. **Ownership of Materials.** All materials developed for the job, including reports, data sheets, and other documents, are instruments of service. Initially they are all the property of BAGG. After all fees for the job have been paid, reports (only) become the property of CLIENT, subject to retention and use of copies by BAGG. Client-provided documents shall remain the property of CLIENT.

2. **Unpaid-for Materials.** Upon demand by BAGG, CLIENT shall return to BAGG all unpaid-for materials, including reports, and shall not use them for licensing, permitting, design, construction, or other purposes. Without notice to CLIENT, BAGG may make unrestrained use of unpaid-for materials, including reports.

3. **Reuse of Materials.** Without written concurrence by BAGG, none of the materials, including reports, shall be considered suitable for reuse on extensions or modifications of the subject project, or for reuse on other projects.

K. RETENTION OF MATERIALS

1. **Retention of Reports.** BAGG will retain copies of reports for at least ten years after their issuance.

2. **Retention of Files.** BAGG will retain all pertinent records relating to services performed for a period of six years following submission of a report, during which period the records will be made available to CLIENT at all reasonable times.

3. **Retention of Samples.** Soil, rock, water, and/or other samples obtained from the jobsite are the property of CLIENT. BAGG shall preserve such samples for a least thirty calendar days after issuance of a report they support, or, if no report is planned, at least thirty calendar days after the samples were obtained, unless other arrangements are mutually agreed-upon in writing.

Treadwell&Rollo

22 April 2009
Project No. 4602.01

Ms. Jennie Anderson
Christopher A. Joseph & Associates
179 H Street
Petaluma, California 94952

Subject: Third Party Geotechnical Review
Big Wave Office Park and Wellness Center
Princeton by the Sea, California

Dear Ms. Anderson:

This letter presents the results of Treadwell & Rollo, Inc.'s (T&R's) third party review of the existing geotechnical information for the proposed Big Wave Office Park and Wellness Center project. The Big Wave project site is in Princeton by the Sea, California. Our work was performed in accordance with the subconsultant agreement signed on 5 March 2007.

SITE DESCRIPTION

The site is located along the coast of the Pacific Ocean approximately 25 miles south of San Francisco within an unincorporated portion of San Mateo County which is bordered by San Francisco County to the north and Santa Cruz County to the south.

The site is on the southern side of Airport Street, northwest of the Princeton/Pillar Point Harbor area. Princeton by the Sea adjoins Half Moon Bay on the northwest side. The site encompasses 19.5 acres on two parcels (APN 047-311-060 [14.25 acres] and APN 047-312-040 [5.28 acres]) which are separated by a drainage swale owned by San Mateo County. The drainage swale separates the two parcels and leads to the Pillar Point Marsh, a salt marsh habitat influenced by both tidal action and freshwater runoff from its tributary drainage area. The drainage swale and Pillar Point Salt Marsh are wetlands which partially extend onto both parcels. On APN 047-311-060, the northernmost parcel, wetlands extend along the western and southern edges. On APN 047-311-040, the southernmost parcel, wetlands extend along the western and northern edges.

The site is currently used as agricultural farmland.

PROJECT DESCRIPTION

The proposed project consists of the Big Wave Office Park and the Wellness Center. Our understanding of the proposed project is based on project descriptions provided by Christopher A. Josephs & Associates, dated May 2009, and civil drawings for the office park and wellness center prepared by MacLeod and Associates, dated July 2008.

Office Park

The office park would be developed on parcel 047-311-060, which consists of 14.25 acres. The office park development will include construction of four three-story office buildings and associated common areas. Common areas include parking lot, walkways, wetlands, and Communications Building. The

Communications Building will be two-stories high and will be located on the southeast corner of the proposed Office Park parking lot.

All surfaces, with the exception of the building footprints, are proposed to be covered by pervious materials to maintain the natural hydrology of the site to the extent feasible. The plans indicate the proposed parking lots will be paved with pervious concrete and sloped toward vegetated swales. Civil drawings indicate up to about two feet of cut/fill will be required to reach design pad elevations.

Wellness Center

The Wellness Center is intended to serve developmentally disabled (DD) adults. The Wellness Center would be developed on parcel 047-312-040, which consists of 5.28 acres. The Wellness Center facilities will include the following:

- a three-story apartment style building
- five single-story residential buildings, referred to as "breezeway units"
- a storage building.

Other site improvements will include parking, recreation center, indoor pool, basketball courts, multipurpose and wetlands trails, and a security fence.

Similar to the Office Park site, all surfaces, with the exception of the building footprints, are proposed to be covered by pervious materials to maintain the natural hydrology of the site to the extent feasible. The plans indicate the proposed parking lots will be paved with pervious concrete and sloped toward vegetated swales. Civil drawings indicate up to about four feet of fill will be required to reach design pad elevations.

DOCUMENTS REVIEWED

Previously, we reviewed the report prepared by Bay Area Geotechnical Group (BAGG) titled *Preliminary Geotechnical Engineering Investigation, Proposed 10-Acre Commercial Development South of Airport Street, APN 047-311-060, Princeton by the Sea, California*, dated 7 May 2002 and presented our conclusions and comments in a letter dated 3 April 2007. Subsequently, additional geotechnical information was provided for our review. In preparation of this letter, we have reviewed the following documents prepared by BAGG:

- Geotechnical investigation report titled "*Geotechnical Investigation, Proposed 5-Acre Commercial Development West Corner of Airport Street and Stanford Avenue, Princeton by the Sea, California*" and dated 13 June 2000.

- Geotechnical consultation letter dated 11 July 2008 in response to T&R's 3 April 2007 Third Party Geotechnical Review and Section 6.0 Site Geology and Soil Investigation memorandum.

- Proposal to perform final geotechnical investigation for proposed Big Wave Office Park and Wellness Center dated 10 July 2008.

CONCLUSIONS AND COMMENTS

Comments for Geotechnical Investigation Report for Wellness Center

Based on our review of available geotechnical information, T&R concludes that the proposed Wellness Center project is feasible, but potentially constrained by: 1) very strong to very violent ground shaking, 2) static and seismic settlement, and 3) near-surface moderately to highly expansive soil. T&R reviewed BAGG's geotechnical investigation report, and has the following comments:

Comment No. 1

T&R recommends that the applicant's geotechnical consultant perform a geotechnical investigation of the wellness center site by using rotary-wash borings and/or CPTs that are at least 50 feet deep.

Comment No. 2

T&R recommends that the applicant's geotechnical consultant evaluate the liquefaction potential of the subsurface granular soil layers based on the results of field and laboratory data developed from rotary-wash borings and/or CPTs (see Comment No. 1). If the potential for soil liquefaction exists, the applicant's geotechnical should comment on the magnitude of total and differential settlement associated with liquefaction-induced reconsolidation, the potential for liquefaction-induced lateral spreading, and the potential for liquefaction-induced ground rupture and sand boils.

Comment No. 3

T&R recommends that the applicant's geotechnical consultant collect high-quality soil samples and perform consolidation tests on the samples. Consolidation-related settlements can be estimated based on the laboratory test results, as well as the rate in which consolidation settlement is expected to occur. Based on the consolidation test results, the applicant's geotechnical consultant can determine the magnitude of consolidation-related settlement, and whether preloading of the site using 2 to 3 feet of surcharge fill for 1 to 2 months will be beneficial in reducing the amount of long-term consolidation-related settlement.

Comment No. 4

T&R recommends that the applicant's geotechnical consultant collect soil samples and perform Atterberg limits, shrink-swell, R-value, and corrosivity tests on the samples. The results of these laboratory tests can be used to evaluate whether expansion potential and corrosivity potential of the near-surface soil. Also the R-value test result can be used for the design the new pavement section.

Comment No. 5

Based on the results of the supplemental geotechnical investigation, T&R recommends that the applicant's geotechnical consultant re-evaluate whether conventional shallow spread footings supported on an 18-inch-thick layer of compacted fill is still appropriate for the proposed project.

T&R believes that preloading the site using 2 to 3 feet of surcharge fill for 1 to 2 months will not have a significant beneficial impact on reducing the amount of static and earthquake-induced settlement. Therefore, T&R believes that the proposed foundation system will need to accommodate total and

differential settlement due to post-liquefaction reconsolidation and consolidation of underlying clayey soils.

Comment No. 6

T&R recommends that BAGG provide design recommendations for a pervious pavement system that will allow surface water to percolate through the pavement without causing adverse impacts to new pavements and building foundations due to moisture fluctuations in the near-surface expansive clay.

Comments Regarding BAGG's 11 July 2008 Response to T&R's Third Party Geotechnical Review for Office Park and Section 6.0 Site Geology and Soil Investigation Memo

The Section 6.0 Site Geology and Soil Investigation memorandum referenced in BAGG's geotechnical consultation letter was not available for T&R review. Based on the context of BAGG's response, we judge the memorandum referenced was prepared based on T&R's third party geotechnical review comments dated 3 April 2007 for the Office Park.

BAGG Response to Item 6.6 Geotechnical Peer Review, 13

BAGG stated site surcharge will reduce the amount of settlement due to the weight of the proposed buildings. BAGG also stated that by reducing the stress of the buildings adjusting to the static building settlement, the structure is in a better position to adjust from the seismic settlement.

T&R concludes that insufficient data is available to accurately predict and amount of settlement that will occur at the site due to the weight of new fill and building loads. T&R recommends that BAGG perform additional engineering analyses and provide an estimate for the immediate settlement and consolidation-related settlement of the underlying compressible soil layers. To perform settlement computations, we suggest that high-quality soil samples be collected and laboratory tests be performed to establish the preconsolidation pressure, the compression index (Cc), and the coefficient of consolidation (Cv) of the underlying weak soil layers. This information can be used to determine whether a surcharge program will be an effective means of accelerating the consolidation-related settlement of the ground surface. Based on T&R's preliminary evaluation of the geotechnical data presented in the BAGG report, T&R believes that preloading the site using 4 feet of surcharge fill for a period of 1 to 2 months will not have significant beneficial impact on reducing the amount of consolidation settlement and earthquake-induced settlement at the site.

Comments for BAGG's Proposal dated 10 July 2008 for Final Geotechnical Investigation for Big Wave Office Park and Wellness Center

T&R generally agrees with the proposed scope BAGG presented in their proposal for final geotechnical investigation for the proposed development, except as noted below:

- T&R recommends that one auger boring to the depth of at least 50 feet be performed next to a planned CPT at either the Office Park or Wellness Center site for calibration of CPT results.
- T&R recommends BAGG make allowance for four consolidation tests to better evaluate the consolidation properties of underlying clayey soils across both sites.

- T&R recommends BAGG make allowance for at least two corrosion tests to evaluate the corrosion potential of near surface soils.

- T&R recommends the BAGG proposal for Office Park include an evaluation if proposed inhabitable structures are located within the Alquist-Priolo Earthquake Fault Zone.

In conclusion, T&R recommends the project applicant and/or applicant's consultant consider the comments presented above and provide a response or acknowledgement that the comments presented above will be addressed during the final design of the project. T&R appreciates the opportunity to assist you with the evaluation of the geotechnical and geological issues for this project. If you have any questions or require additional information, please call.

Sincerely yours,
TREADWELL & ROLLO, INC.

REGISTERED PROFESSIONAL ENGINEER
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19 May 2009
Project No. 4602.01

Ms. Jennie Anderson
Christopher A. Joseph & Associates
179 H Street
Petaluma, California 94952

Subject: Third Party Geotechnical Review
Big Wave Office Park and Wellness Center
Princeton by the Sea, California

Dear Ms. Anderson:

This letter presents the results of Treadwell & Rollo, Inc.'s (T&R's) peer review of the existing geotechnical and geological information for the proposed Big Wave Office Park and Wellness Center project. The Big Wave project site is in Princeton by the Sea, California. Our work was performed in accordance with the subconsultant agreement signed on 5 March 2007 and the additional scope of services presented in our budget increase request dated 11 May 2009.

SITE DESCRIPTION

The site is on the southern side of Airport Street, northwest of the Princeton/Pillar Point Harbor area. Princeton by the Sea adjoins Half Moon Bay on the northwest side. The site encompasses 19.5 acres on two parcels (APN 047-311-060 [14.25 acres] and APN 047-312-040 [5.28 acres]) which are separated by a drainage swale owned by San Mateo County. The drainage swale separates the two parcels and leads to the Pillar Point Marsh, a salt marsh habitat influenced by both tidal action and freshwater runoff from its tributary drainage area. The drainage swale and Pillar Point Salt Marsh are wetlands which partially extend onto both parcels. On the northernmost parcel (APN 047-311-060), wetlands extend along the western and southern edges, and on the southernmost parcel (APN 047-311-040), wetlands extend along the western and northern edges.

The site is currently used as agricultural farmland.

PROJECT DESCRIPTION

The proposed project consists of the Big Wave office park and the wellness center. Our understanding of the proposed project is based on project descriptions provided by Christopher A. Josephs & Associates, dated May 2009, and civil drawings for the office park and wellness center prepared by MacLeod and Associates, dated July 2008.

Office Park

The office park would be developed on parcel 047-311-060. The 14.25-acre office park development will include the construction of four, three-story office buildings and associated common areas. Common areas include parking lot, walkways, wetlands, and a communications building. The communications building will be two-stories high and will be located on the southeast corner of the proposed office park parking lot.

All surfaces, with the exception of the building footprints, are proposed to be covered by pervious materials to maintain the natural hydrology of the site to the extent feasible. The plans indicate the proposed parking lots will be paved with pervious concrete and sloped toward vegetated swales. Extensive groundwater recharge and wastewater infiltration are planned for the site. According to the project applicant, the anticipated water/wastewater loading rate will be about 20,000 gallons per day, distributed across the 14.25-acre office park and the 5.28-acre wellness center sites. Civil drawings indicate up to about two feet of cut/fill will be required to reach design pad elevations.

Wellness Center

The wellness center is intended to serve developmentally disabled adults. The wellness center would be developed on parcel 047-312-040, which consists of 5.28 acres. The wellness center facilities will include the following:

- a three-story apartment style building
- five single-story residential buildings, referred to as "breezeway units"
- a storage building.

Other site improvements will include parking, recreation center, indoor pool, basketball courts, multipurpose and wetlands trails, and a security fence.

Similar to the office park parcel, all surfaces with the exception of the building footprints are proposed to be covered by pervious materials to maintain the natural hydrology of the parcel to the extent feasible. The plans indicate the proposed parking lots will be paved with pervious concrete and sloped toward vegetated swales. Water and wastewater loading rates are described in the previous section. Civil drawings indicate up to about four feet of fill will be required to reach design pad elevations.

SCOPE OF SERVICES

Our scope of services consisted of:

- reviewing available geotechnical and geologic information submitted by the project applicant;
- compiling and reviewing readily available published and unpublished geologic and seismicity data for the site vicinity; and
- preparing a written letter describing the results of our study, including a discussion of potential geotechnical and geological concerns, such as local seismicity, strong shaking from earthquakes on nearby portions of active faults, soil liquefaction[1] and associated hazards, ground subsidence, and expansive soil.

[1] Liquefaction is a phenomenon in which saturated, cohesionless soil experiences a temporary loss of strength due to the buildup of excess pore water pressure, especially during cyclic loading such as that induced by earthquakes. Soil most susceptible to liquefaction is loose, clean, saturated, uniformly graded, fine-grained sand and silt of low plasticity that is relatively free of clay.

Our scope of services did not include performing on-site geologic mapping, drilling borings, performing laboratory testing, or performing any type of subsurface exploration for this study.

DOCUMENTS REVIEWED

We reviewed the following reports prepared by Bay Area Geotechnical Group (BAGG):

- Preliminary Geotechnical Engineering Investigation, Proposed 10-Acre Commercial Development South of Airport Street, APN 047-311-060, Princeton by the Sea, California, dated 7 May 2002.

- Geotechnical Investigation, Proposed 5-Acre Commercial Development West Corner of Airport Street and Stanford Avenue, Princeton by the Sea, California, dated 13 June 2000.

SUBSURFACE CONDITIONS

BAGG performed field exploration at the wellness center parcel in 2000 and the office park parcel in 2002. The results of BAGG field exploration indicate the wellness center parcel is underlain by a wide variety of soil types including clay and silt with varying amounts of sand and sand with varying amounts of clay and silt to the maximum depths explored of 17-1/2 to 41-1/2 feet below the existing ground surface (bgs). Groundwater was encountered between depths of 3 and 9 feet bgs during drilling.

The results of BAGG field exploration indicate the office park parcel is also underlain by a wide variety of soil types including clay, sandy clay, sandy silt, clayey sand, silty sand with gravel, clayey gravel, and sand with varying amounts of clay, silt, and gravel to the maximum depths explored of 17 to 50 feet bgs. Groundwater was encountered between depths of 5-1/2 and 7-1/2 feet bgs during drilling.

DISCUSSION AND CONCLUSIONS

From our review of the available subsurface data, we conclude the proposed project is feasible from a geotechnical standpoint. The primary geotechnical concerns for this site are:

- very strong to very violent shaking during an earthquake due to the close proximity of the site to the San Gregorio and the San Andreas faults

- seismic hazards, including the potential for fault rupture, liquefaction, lateral spreading[2], sand boils, and cyclic densification[3]

- presence of expansive near-surface soil

- foundation selection.

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[2] Lateral spreading is a phenomenon in which surficial soil displaces along a shear zone that has formed within an underlying liquefied layer. Upon reaching mobilization, the surficial blocks are transported downslope or in the direction of a free face by earthquake and gravitational forces.

[3] Cyclic densification is a phenomenon in which non-saturated, cohesionless soil is compacted by earthquake vibrations, causing differential settlement.

These and other geotechnical issues are discussed in the following sections.

Field Exploration

BAGG performed nine borings to depths between 17-1/2 and 41-1/2 feet bgs in the wellness center parcel in 2000 and 14 borings to depths between 17 and 50 feet bgs at the office park parcel in 2002. The borings were advanced using a rig equipped with hollow-stem augers. Based on their field investigation, BAGG concluded the wellness center and office park parcels are underlain by lenses of potentially liquefiable soil.

In accordance with SP 117[4], the subsurface conditions for liquefaction evaluations should be explored by advancing rotary-wash borings and/or cone penetration tests (CPTs) to a depth of at least 50 feet. These types of investigative procedures provide a reliable means of assessing the relative density and liquefaction potential of the underlying granular soils at the proposed site. Based on T&R's assessment of the boring logs prepared by BAGG for the site, it appears that several saturated, medium dense, granular soil layers are present at the site, including soil layers at depths greater than 40 feet bgs. Considering the drilling methods used for evaluating the subsurface conditions at the site, we believe the blow counts presented on the boring logs, especially the logs for the 50-foot-deep borings in the office park parcel, appear to be low and may indicate soil disturbance during field testing. We suggest additional subsurface exploration be performed at the site using either rotary-wash drilling procedures and/or CPTs to better assess the liquefaction potential of the subsurface soils.

Seismic Hazards

Our discussion of seismic hazards, such as strong ground shaking, fault rupture, soil liquefaction and associated hazards, and cyclic densification are presented in the following sections.

Fault Rupture

The southwestern portion of the office park parcel is located in an Earthquake Fault Zone, as defined by the Alquist-Priolo Earthquake Fault Zoning Act. If proposed habitable structures are planned within the Earthquake Fault Zone, special geologic studies consisting of trenching to locate the San Gregorio Fault will be required by the Alquist-Priolo Earthquake Fault Zoning Act. The BAGG report indicates that the office park developer is not proposing to build in the special studies zone portion of the property.

T&R concludes the proposed habitable structures at the office park parcel will be relatively close to the Alquist-Priolo Earthquake Fault Zone. Therefore, we recommend that as part of the final plan review process, the applicant's geotechnical/geological consultant should review the plans and provide a written statement indicating the proposed habitable structures are located outside of the Alquist-Priolo Earthquake Fault Zone.

The wellness center parcel is not within an Earthquake Fault Zone and no known active or potentially active faults exist on this parcel. In a seismically active area, the remote possibility exists for future faulting in areas where no faults previously existed; however, we conclude the risk of surface faulting and consequent secondary ground failure at the wellness center parcel is low.

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[4] Document titled "Guidelines for Evaluating and Mitigating Seismic Hazards in California, Special Publication 117," prepared by California Department of Conservation, Division of Mines and Geology, dated 13 March 1997.

Ground Shaking

According to the BAGG reports, the nearest fault to the site is the San Gregorio fault, located about 500 feet (0.15 kilometers) southwest of the office park parcel and 0.3 kilometers southwest of the wellness center parcel. The San Andreas fault lies about 10.8 kilometers from the office park parcel and 11 kilometers from the wellness center parcel. Maps prepared by Association of Bay Area Governments (ABAG, 2001) indicate the site will experience a Modified Mercalli Intensity of X, which could result in "very violent" shaking and "extreme damage" from a moment magnitude 7.3 earthquake on a nearby portion of the San Gregorio fault. The ABAG maps also indicate that during a moment magnitude 7.9 earthquake on a nearby portion of the San Andreas fault, the site could experience "violent" shaking and "heavy damage".

We believe the proposed office and wellness center buildings should be designed to prevent collapse and to maintain reasonable ingress and egress for the office building tenants, developmentally disabled inhabitants of the wellness centers buildings, and potential emergency response workers (if needed).

Cyclic Densification

The BAGG reports indicate that loose layers of sandy soil will densify during a major earthquake. The settlement analyses by BAGG estimates that differential settlement of the ground surface would be between 1/2 and 3-1/2 inches at the office park parcel. BAGG did not present an estimate of differential settlement due to cyclic densification at of the wellness center parcel. Based on the data presented on the BAGG boring logs, T&R performed a preliminary evaluation of cyclic densification at the wellness center parcel and we estimate that ground settlement due to cyclic densification will be on the order of 1/4 inch.

Soil Liquefaction and Associated Hazards

BAGG drilled 12 borings to depths between 17 and 25 feet bgs and two borings to depth of 50 feet bgs in the office park parcel, and nine borings between 17-1/2 and 41-1/2 feet bgs in the wellness center parcel to obtain subsurface information for a seismic hazard evaluation. The borings were drilled with hollow-stem auger equipment and the two 50-foot-deep borings were terminated in medium dense sandy soil. BAGG concluded that the office park and wellness center parcels are underlain by layers of saturated loose to medium dense, sandy soil that are susceptible to soil liquefaction. The BAGG report indicates the soil deposits are lenticular and the surface effects of liquefaction would be limited to differential settlement of the ground surface.

T&R performed a preliminary review of the liquefaction potential and associated hazards at the two sites, including the impacts associated with extensive surface water recharge and year-round wastewater disposal/infiltration. Based on T&R's analysis of the data presented on the BAGG boring logs, we conclude that liquefaction is likely to occur at the site. T&R preliminarily estimates that up to six inches of liquefaction-induced ground surface settlement may occur at the office park site with differential settlement of about three inches across a 50-foot horizontal distance. At the wellness center parcel, up to approximately 2.5 inches of liquefaction-induced ground settlement is estimated to occur with differential settlement of about 1.5 inches across a 50-foot horizontal distance.

T&R performed a preliminary evaluation for the potential for lateral spreading to occur at the site. We evaluated the location, thickness, and relative density of the potentially liquefiable soil layers, as well as, site topography and locations of free-face conditions, such as creek banks. Based on the results of our analysis, we conclude the potential for lateral spreading to occur at the office park and wellness center

sites is low. T&R also evaluated the potential for other types of liquefaction-induced ground failure to occur at the site, such as sand boils or lurch cracking. These types of ground failures are dependent on the thickness of the liquefiable soil layer relative to the thickness of the overlying non-liquefiable material. Because the potential liquefiable soil is relatively shallow, we preliminarily conclude the potential for surface manifestations of the liquefaction in the form of sand boils and lurch cracking will be high. Mitigation of the adverse impacts associated with liquefaction-induced sand boils and lurch cracking may include Deep Dynamic Compaction (DDC), Rapid Impact Compaction (RIC), and/or other types of soil densification techniques.

In T&R's opinion, additional subsurface exploration using rotary-wash drilling methods and/or CPTs should be performed to better characterize the subsurface conditions at the two sites for final project design purposes. Based on the results of additional subsurface investigation, BAGG should re-evaluate and reassess the potential for soil liquefaction and liquefaction-induced ground failures, including the potential for post-liquefaction reconsolidation, lateral spreading, lurch cracking, and sand boils at the two sites.

Anticipated Settlement

The BAGG report indicates that foundation settlement may occur due to the consolidation and compression of weak soil under the weight of new fill and structural loads. Also, the BAGG report indicates foundation settlement will occur due to liquefaction-induced reconsolidation of saturated granular layers. Section 8.7.1 of the BAGG reports describes seismic settlement that varies from 1/2 to 3-1/2 inches across the office park parcel and 1/2 to 2 inches across the wellness center parcel. Section 8.7.2 of the BAGG reports indicates that static settlement of soft and loose soil layers due to the placement of fill will range from 1/2 to 3 inches with differential settlement of about 1-1/4 inch over a 100-foot-distance for the office park parcel and no settlement estimates were provided for the wellness center parcel.

BAGG recommends placing a surcharge material over the entire site or on specifically identified building pads to reduce the potential for foundation settlement. Section 8.7.3 of the BAGG report indicates that a 4-foot-thick layer of surcharge fill should be placed on the office park parcel and monitored until no further movement is detected which is preliminarily estimated to be 1 to 2 months by BAGG. Subsequently, the surcharge fill can be removed and the buildings can be constructed. BAGG indicates that four feet of surcharge fill will reduce settlement to about 1/2 to 1-1/4 inches at the office park parcel. Similarly, BAGG recommends placing a 3-foot-thick layer of surcharge fill on the wellness center parcel and monitored until no further movement is detected which is preliminarily estimated to be 1 to 2 months by BAGG. Subsequently, the surcharge fill can be removed and the buildings can be constructed.

T&R concludes that insufficient data is available to accurately predict and amount of settlement that will occur at the site due to the weight of new fill and building loads. T&R recommends that BAGG perform additional engineering analyses and provide an estimate for the immediate settlement and consolidation-related settlement of the underlying weak soil layers. To perform settlement computations, we suggest that high-quality soil samples be collected and laboratory tests be performed to establish the preconsolidation pressure, the compression index (Cc), and the coefficient of consolidation (Cv) of the underlying weak soil layers. This information can be used to determine whether a surcharge program will be an effective means of accelerating the consolidation-related settlement of the ground surface. Based on T&R's preliminary evaluation of the geotechnical data presented in the BAGG report, it is difficult to

determine whether preloading the site with 3 to 4 feet of surcharge fill will have a significant beneficial impact on the settlement behavior of the proposed structures. However, if preloading the proposed building sites is found to be ineffective, alternative mitigations may include the use of deep foundations and/or a combination of a stiffened shallow foundation system and soil densification, such as DDC, RIC, and/or other types of equivalent soil densification processes.

Expansive Soil, Pavements, and Foundation Considerations

Expansive soil undergoes large volume changes during changes in moisture content, i.e., it shrinks when dried and expands when wetted. The most common cause of changing soil moisture content is seasonal fluctuation due to rainfall; however, improper surface drainage or underground water pipe leaks may cause expansive soils to shrink and swell. Expansive soil can cause damage to building foundations, concrete slabs, hardscape, pavement, underground utilities, and other surface or near-surface improvements due to differential ground movement induced by changes in soil moisture content.

The near-surface soil encountered in the borings drilled by BAGG at the office park parcel primarily consists of medium to high plasticity clay. The near-surface soil encountered in the borings drilled by BAGG at the wellness center parcel consists of low to high plasticity clay. The BAGG reports recommend over-excavating approximately 18 inches of "loose soil from all areas to be developed", scarifying the exposed surface to a depth of eight inches, moisture-conditioning the exposed subgrade to at least 2 to 3 percent above the optimum moisture content, and compacting the soil to at least 90 percent of the maximum dry density of the soil, as determined by ASTM Test Method D1557-01. Imported materials will consist of a fill with a plasticity index (PI) less that 15, resistance value (R-value) of at least 25, and fines content of between 15 and 40 percent (Alternative A) or a material with a PI less than 25 and an R-value of at least 15. The BAGG report indicates that preliminary foundation and pavement designs are based on a site underlain by these two materials.

T&R reviewed the geotechnical information provided in the BAGG report and concluded that the site is blanketed by about 1-1/2 to 2-1/2 feet of potentially expansive clayey soil. Typically, buildings designed on sites that are underlain by expansive soil will either be supported on: 1) stiffened shallow foundations that rest on a layer of non-expansive engineered fill[5], 2) a deepened spread footing system where the proposed footings gain support at or below the depth of significant seasonal moisture fluctuation and the slab-on-grade floor will be supported on a layer non-expansive fill, 3) a stiffened foundation system, such as a reinforced concrete or post-tensioned mat, that is capable of resisting the differential movement and soil pressures associated with the expansive soil, or 4) a deep foundation system that transfers the building and slab loads to competent soil beneath the near-surface moderately to highly expansive soil layer. In T&R's opinion, considering the potential for differential ground movement associated with expansive soil and liquefaction-induced ground failures, a foundation system consisting of: 1) stiffened shallow foundations bearing on a layer of well-compacted, non-expansive fill with or without deep soil compaction using DDC, RIC, or equivalent soil densification technique (depending upon the building specific magnitude of earthquake -induced settlement) or 2) a deep foundation system, such as drilled piers or driven piles, are likely to be the most appropriate system(s) for mitigating the adverse impacts of geologic hazards at the two sites.

[5] T&R typically defines non-expansive fill as a material with a PI less than 12 and a liquid limit less than 40.

Foundation Design

For the office park and wellness center parcels, BAGG recommended the building pad area be surcharged to reduce settlement, and the buildings be supported on conventional shallow footings founded on an 18-inch-thick layer of compacted fill. As we discussed earlier, additional laboratory data is needed to determine if preloading the site with surcharge fill will be an effective method for reducing consolidation-related settlement under the weight of new fill and building loads. Also, we believe that the placement of surcharge fill will not significantly reduce earthquake-induced settlement associated with soil liquefaction and cyclic densification.

Based on our preliminary engineering analyses, T&R concludes the proposed building foundations will need to accommodate up to approximately six inches of seismically-induced total settlement and up to about three inches of seismically-induced differential settlement across a 50-foot-distance. Also, the proposed building foundations will need to accommodate differential movement associated with the shrinking and swelling of the near-surface expansive clay.

Pervious Pavement

The project description indicates pervious pavements will be used for both the office park and wellness center parcels. Considering the near-surface soil consists of moderately to highly expansive clay and one of the proposed import fill materials appears to be fine-grained material with a plasticity index of less than 25; therefore, we conclude that special subgrade preparation and pavement design recommendations may be required to prevent the near-surface clayey soil from ponding water, and becoming saturated and weak under the proposed traffic loads.

T&R recommends that BAGG provide design recommendations for a pervious pavement system that will allow surface water to percolate through the pavement without causing adverse impacts to new pavements and building foundations due to moisture fluctuations in the near-surface expansive clay. Typical mitigations for improving the performance of pervious pavements at sites that underlain by moderately to highly expansive soil include using a permeable base material and installing subsurface drainage systems beneath the propose pavement sections.

Seismic Design Criteria

The BAGG reports indicated that the office park and wellness center parcels are underlain by potentially liquefiable soil and has characterized both parcels as a Soil Profile Type S_D (stiff soil profile) in accordance with the 1997 Uniform Building Code.

T&R reviewed the geotechnical information presented in the BAGG reports and concluded that there is potentially liquefiable soil beneath portions of the site. For seismic design in accordance with the provisions of 2007 California Building Code (CBC), we recommend using site class F and a site-response analysis is required to determine spectral accelerations for liquefiable soils.

If additional geotechnical exploration performed using rotary-wash drilling equipment or cone penetration tests should indicate the potentially-liquefiable soil layers are relatively thin and not continuous, a site class D may be appropriate for the site. Also, per ASCE 7-05, Section 20.301 (Exception 1), for buildings with natural period less than 0.5 seconds, a site-response analysis is not required to determine spectral accelerations for liquefiable soils, and the site may be evaluated as site class D. If the conditions for site class D are met, we recommend using site coefficient values F_a and F_v of 1.0 and 1.5, respectively. The

mapped site class B short (S_s) and one second (S_1) spectral values for Maximum Considered Earthquake (MCE) for the project site are 2.171 times gravitational acceleration (2.171g) and 1.064g, respectively. By applying the site class D modification factors F_a and F_v of 1.0 and 1.5, respectively, the corresponding S_{MS} and S_{M1} for the project sites are 2.171g and 1.597g, respectively.

EVALUATION OF POTENTIAL ENVIRONMENTAL IMPACTS

Impact Geo-1: Fault Rupture at Office Park Parcel

The southwestern portion of the office park parcel is within an Earthquake Fault Zone, as defined by the Alquist-Priolo Earthquake Fault Zoning Act. If proposed habitable structures are planned within the Earthquake Fault Zone, project impacts related to fault rupture would be ***potentially significant***.

The following mitigation measure would reduce Impact Geo-1 to a ***less-than-significant*** level:

Mitigation Measure Geo-1

As part of the final plan review process, the applicant's geotechnical/geological consultant shall review the plans and provide a written statement indicating whether the proposed habitable structures are located outside of the Alquist-Priolo Earthquake Fault Zone. If proposed habitable structures are planned within the Earthquake Fault Zone, special geologic studies consisting of trenching to locate the San Gregorio Fault shall be performed. Consistent with Alquist-Priolo Earthquake Fault Zone Act, habitable structures shall be set back a minimum of 50 feet from those portions of the fault identified within the Alquist-Priolo Earthquake Fault Zone Boundary as being active or potentially active, as well as from any other portions of the extended alignment of this fault identified through the subsequent geologic investigation as being active or potentially active.

Impact Geo-2: Fault Rupture at Wellness Center Parcel

The wellness center parcel is not within an Earthquake Fault Zone, as defined by the Alquist-Priolo Fault Zoning Act and no known active or potentially active faults exist on the parcel. In a seismically active area, the remote possibility exists for future faulting in areas where no faults previously existed. However, based on the proximity of the known fault traces, their orientation and trend, and their degree of activity, the probability of fault rupture at the wellness center parcel is considered low and therefore would be ***less than significant***. Therefore, no mitigation measures are required.

Impact Geo-3: Seismic Ground Shaking

Maps prepared by Association of Bay Area Governments (ABAG, 2001) indicate the site will experience a Modified Mercalli Intensity of X, which could result in "very violent" shaking and "extreme damage" as a result of a moment magnitude 7.3 earthquake on a nearby portion of the San Gregorio fault. The ABAG maps also indicate that during a moment magnitude 7.9 earthquake on the San Andreas fault, the site could experience "violent" shaking and "heavy damage".

The project applicant would be required to design and construct the project in conformance with the most recently adopted building code (2007 CBC) design parameters. In addition, proposed office and wellness center buildings shall be designed to prevent collapse and to maintain reasonable ingress and

egress for the office building tenants, developmentally disabled inhabitants of the wellness centers buildings, and potential emergency response workers (if needed).

Conformance with current CBC requirements would reduce the potential for structures on the project site to sustain damage during an earthquake event, and project impacts related to ground shaking would be ***less than significant***; therefore, no mitigation measures are required.

Impact Geo-4: Cyclic Densification

Loose layers of sandy soil above the ground water table that may densify during a major earthquake are present at the site. Impact to the project due to differential ground settlement resulting from cyclic densification of the loose sandy soils is ***potentially significant***.

The following mitigation measures would reduce Impact Geo-4 to a ***less-than-significant*** level:

Mitigation Measure Geo-4:

The final geotechnical investigation for the project shall evaluate the potential for cyclic densification and develop final mitigation measures, as needed. Potential mitigation measures may include: 1) overexcavating and replacing loose sandy soil with compacted engineered fill, 2) applying deep soil compaction techniques, such as DDC, RIC, or equivalent soil densification method, and 3) designing building foundations to accommodate total and differential ground settlement resulting from cyclic densification as well as post-liquefaction settlement and consolidation ground settlement (if applicable).

Impact Geo-5: Liquefaction and Associated Hazards

Existing subsurface information indicate liquefaction is likely to occur at the site. Potential liquefaction-induced hazards include lateral spreading, ground settlement due to post-liquefaction reconsolidation, and surface manifestations such as sand boils and lurch cracking.

Based on the thickness and the relative density of the potentially liquefiable soil, the potential for lateral spreading to occur at the site is low and therefore would be ***less than significant***. Therefore, no mitigation measures are required for lateral spreading.

The estimate for liquefaction-induced ground surface settlement for the office parcel is between 0 and 6 inches with differential settlement of about three inches across a 50-foot horizontal distance; and for the wellness center parcel is between 0 and 2.5 inches with differential settlement of about 1.5 inches across a 50-foot horizontal distance. Therefore impact to project due to liquefaction-induced ground surface settlement is ***potentially significant***.

Because of the potential for soil liquefaction within relatively shallow soil layers, the impact of surface manifestations of the liquefaction, such as sand boils or lurch cracking, is high at the sites and therefore would be ***potentially significant***.

The following mitigation measures would reduce Impact Geo-5 to a ***less-than-significant*** level:

Mitigation Measure Geo-5

Additional subsurface exploration using rotary-wash drilling methods and/or CPTs shall be performed to better characterize the subsurface conditions at the sites. Based on the results of subsurface investigation, BAGG shall re-evaluate the potential for soil liquefaction and liquefaction-induced ground failures, such as lateral spreading, post-liquefaction reconsolidation, lurch cracking, and sand boils at the sites. Final geotechnical investigation report shall provide mitigation measures for liquefaction-induced hazards. Potential mitigation measures may include: 1) improving the soil with deep soil compaction techniques, such as DDC, RIC, or equivalent method, to reduce the liquefaction potential, 2) buildings supported on stiffened shallow foundations (i.e. footings with interlocking grade beams) bearing on a layer of well-compacted fill, 3) buildings supported on deep foundations such as drilled piers, driven piles or propriety piles (i.e., torque-down piles and auger cast piles), and 4) constructing a structural slab that spans supported between columns.

Impact Geo-6: Expansive Soil

The office park parcel is blanketed by about 1-1/2 to 2-1/2 feet of potentially expansive clayey soil near the surface and therefore would be a ***potentially significant*** impact to the office park and wellness center projects.

The following mitigation measures would reduce Impact Geo-6 to a ***less-than-significant*** level:

Mitigation Measure Geo-6

The final geotechnical investigation shall provide an estimate of differential movement associated with the shrinking and swelling of the existing on-site expansive soil at the site. Mitigation measures for expansive soils may include designing the buildings to be supported on: 1) shallow foundations that rest on a layer of non-expansive engineered fill[6], 2) a deepened spread footing system where the proposed footings gain support at or below the depth of significant seasonal moisture fluctuation and the slab-on-grade floor will be supported on a layer non-expansive fill, as described above, 3) a stiffened foundation system, such as a reinforced concrete or post-tensioned mat, that is capable of resisting the differential movement and soil pressures associated with the expansive soil, or 4) a deep foundation system that transfers the building and slab loads to competent soil beneath the near-surface moderately to highly expansive soil layer.

Impact Geo-7: Total and Differential Settlement

Ground settlement at the project site will include cyclic densification settlement, post-liquefaction reconsolidation settlement, and consolidation settlement due to new loads from buildings and new fill. Therefore, impact to the project would be ***potentially significant***.

The following mitigation measures would reduce Impact Geo-7 to a ***less-than-significant*** level:

Mitigation Measure Geo-7

Additional subsurface exploration using rotary-wash drilling methods and/or CPTs and consolidation laboratory testing shall be performed to better characterize the subsurface conditions and soil properties at the site. Based on the results of subsurface investigation, BAGG shall re-evaluate total and differential

[6] T&R typically defines non-expansive fill as a material with a PI less than 12 and a liquid limit less than 40.

ground settlement due to cyclic densification, post-liquefaction reconsolidation, and consolidation settlement due to building loads and fill placement. Final geotechnical investigation report shall provide mitigation measures for ground settlement. Potential mitigation measures may include: 1) improving the soil with deep soil compaction techniques, such as DDC, RIC, or equivalent method, to reduce the potential for total and differential ground settlement, 2) supporting the buildings on stiffened shallow foundations (i.e. footings with interlocking grade beams) bearing on a layer of well-compacted fill, 3) supporting the buildings on deep foundations such as drilled piers, driven piles or propriety piles (i.e., torque-down piles and auger cast piles), and 4) constructing a structural slab that spans supported between columns. If deep foundations are selected, they shall be designed to accommodate load conditions resulting from post-liquefaction reconsolidation and consolidation due to the placement of new fill (if applicable).

Impact Geo-8: Pervious Pavements and Other Water/Wastewater Infiltration Systems

Pervious pavements and other water/wastewater infiltration systems to be used on the site may cause the subgrade soil to pond water and become saturated and weak under the loading conditions. Therefore, the impact to the project would be ***potentially significant***.

The following mitigation measures would reduce Impact Geo-8 to a ***less-than-significant*** level:

Mitigation Measure Geo-8

Considering the near-surface soil may consists of moderately to highly expansive clay, special subgrade preparation, and foundation and pavement design recommendations shall be required to prevent the near-surface clayey soil from ponding water, and becoming saturated and weak under the proposed site loading conditions, such foundation and traffic loads. Final design recommendations for a pervious pavement system shall allow surface water to percolate through the pavement without causing adverse impacts to new pavements and building foundations due to moisture fluctuations in the near-surface expansive clay. Potential mitigation measures may include: 1) collecting and redirecting surface and subsurface water away from the proposed building foundations, 2) using permeable base material within pavement areas, and 3) installing subdrains to collect and redirect water from areas that could adversely impact building foundations and vehicular pavement to a suitable outlet.

Impact Geo-9: Soil Erosion

Soil erosion on newly graded sites is a ***potentially significant*** impact. The following mitigation measures would reduce Impact Geo-8 to a ***less-than-significant*** level:

Mitigation Measure Geo-9

Exposed soil subgrade shall be protected from soil erosion through the use of deep-rooted plants, hydro-seeding, and development of a comprehensive civil grading and erosion control plan.

Other potential soil-related impacts were evaluated, including landslides; however, these impacts were not considered significant.

T&R appreciates the opportunity to assist you with the evaluation of the geotechnical and geological issues for this project. If you have any questions or require additional information, please call.

Sincerely yours,
TREADWELL & ROLLO, INC.

Dean H. Iwasa
Geotechnical Engineer

46020104.OAK

APPENDIX G

HAZARDS/HAZARDOUS MATERIALS DATA

PHASE I ENVIRONMENTAL SITE ASSESSMENT
BIG WAVE PROJECT
SOUTH OF AIRPORT STREET
Princeton by the Sea, California

Prepared For:
Christopher A. Joseph & Associates
Petaluma, California

26 March 2007
Project No. 4602.01

Treadwell&Rollo
Environmental and Geotechnical Consultants

Treadwell&Rollo

26 March 2007
Project No. 4602.01

Mr. Geoff Reilly
Christopher A. Joseph & Associates
179 H Street
Petaluma, CA 94954

Subject: Phase I Environmental Site Assessment
Big Wave Project
South of Airport Street
Princeton by the Sea, California

Dear Mr. Reilly:

Treadwell & Rollo is pleased to present this *Phase I Environmental Site Assessment, Big Wave Project, South of Airport Street, Princeton by the Sea, California.* If you have any questions or need any information, please contact me at (510) 874-4500 at extension 525.

Sincerely yours,
TREADWELL & ROLLO, INC.

Eric Morita
Project Geologist

Glenn M. Leong, R.E.A.
Associate Scientist

46020101.OAK

PHASE I ENVIRONMENTAL SITE ASSESSMENT
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PHASE I ENVIRONMENTAL SITE ASSESSMENT
BIG WAVE PROJECT
SOUTH OF AIRPORT STREET
Princeton by the Sea, California

1.0 SUMMARY

Treadwell & Rollo, Inc. has performed a Phase I Environmental Site Assessment (ESA) for the Big Wave Project located on the south side of Airport Street in Princeton by the Sea, California (APN 047-311-060 and APN 047-312-040) (Site) (Figure 1). This ESA was performed in substantial conformance with guidelines of the American Society for Testing and Materials (ASTM) E 1527-05, *Standard Practice for Environmental Site Assessments: Phase I Environmental Site Assessment Process*, November 2005. The ESA was performed on behalf of Christopher A. Joseph & Associates (Client) in support of an Environmental Impact Report (EIR) to fulfill building requirements for the City of Half Moon Bay. Plans are to develop the Site, currently occupied by farmland, into office and residential buildings with surface parking (Big Wave Office Park and Wellness Center).

The purpose of the Phase I ESA is to evaluate the possible presence of recognized environmental conditions at the Site. A recognized environmental condition is the presence or likely presence of any hazardous substances or petroleum products on a property under conditions that indicate an existing release, a past release, or a material threat of a release of any hazardous substances or petroleum products into structures on the Site or into the ground, groundwater, or surface water of the Site.

This assessment has revealed one recognized environmental condition at the Site. The recognized environmental condition is the possible application of pesticides to soil during the previous use of the Site as farmland dating back to the 1930s.

We recommend that a Phase II Environmental Site Assessment (Phase II) be performed at the Site to evaluate whether the recognized environmental condition represents an actual release of

hazardous substances to soil or groundwater at the Site. At minimum, the Phase II should be designed to evaluate whether pesticides are present in soil.

The Phase II could include additional analyses in anticipation of the proposed development. To determine if hazardous substances have migrated onto the Site from the north or northeast, we recommend sampling groundwater from the agricultural supply well. We understand that the redevelopment plans include the reuse of excavated soil to meet the foundation and landscaping design. No soil would be imported or exported in the northern part of the Site (APN 047-311-060) as the grading will be balanced with 6,000 cubic yards of soil of cut and 6,000 cubic yards of fill. Approximately 9,800 cubic yards of soil would need to be imported to the southern part of the Site (APN 047-312-040). The appropriateness of soil reuse will be partly dependent on the environmental quality of the soil to be excavated. In anticipation of the needs of this project, we recommend that the Phase II include parameters that can be applied to a health risk assessment and possible Site Management Plan (SMP) if soil is required to be transported off-Site. Treadwell and Rollo can assist you with these recommended services.

2.0 INTRODUCTION

This report presents the results of the Phase I Environmental Site Assessment (ESA) performed by Treadwell & Rollo, Inc. (Treadwell & Rollo) for the Big Wave Project located on the south side of Airport Street in Princeton by the Sea, California (APN 047-311-060 and APN 047-312-040) (Site) (Figures 1 and 2). This ESA was performed in substantial conformance with guidelines of the American Society for Testing and Materials (ASTM) E 1527-05, *Standard Practice for Environmental Site Assessments: Phase I Environmental Site Assessment Process*, November 2005. The ESA was performed on behalf of Christopher A. Joseph & Associates (Client) in support of an Environmental Impact Report (EIR) to fulfill building requirements for the development of the Site. Plans are to develop the Site (currently used as farmland), into office and residential buildings with surface parking (Big Wave Office Park and Wellness Center). The Big Wave Office Park would be constructed on the northern part of the Site (APN 047-311-060) and the Wellness Center would be constructed on the southern part of the

Site (APN 047-312-040). This ESA was performed in accordance with the Subcontractor Agreement, San Mateo County Big Wave Project EIR dated 5 December 2006.

2.1 Purpose

The purpose of this ESA is to identify recognized environmental conditions at the Site. A recognized environmental condition is the presence or likely presence of hazardous substances or petroleum products that may indicate an existing, past, or material threat of a release of such material to the structures, soil, surface water and/or groundwater at the Site.

2.2 Detailed Scope of Services

The scope of work for this ESA included:

- Review historical aerial photographs, historical Sanborn Fire Insurance maps and/or United States Geological Survey (USGS) historical topographic maps for the Site, as appropriate;
- Perform a reconnaissance survey of the Site and interview the current site owner/tenant or representative, and observe the adjacent properties, as accessible, to make visual observations of existing Site conditions, activities, types of land-use, and businesses within the search area;
- Review relevant documents and maps regarding local geologic and hydrogeologic conditions;
- Review local, state, and federal government database information provided by Environmental Data Resources, Inc. (EDR) pertinent to Phase I ESAs.
- Conduct inquires by telephone, visit, and /or written correspondence to the following regulatory agencies regarding building or environmental permits, environmental violations, incidents and/or status of enforcement actions at the Site:

  - City of Half Moon Bay Public Works Department
  - Half Moon Bay Fire Protection District
  - San Mateo County Environmental Health Services Agency (San Mateo County);
  - California Regional Water Quality Control Board (RWQCB);
- Preparation of this report documenting the research performed and identifying recognized environmental conditions.

No other tasks were performed as part of this Phase I ESA. Our scope of services did not include an audit for regulatory compliance nor did include a detailed survey for the presence or condition of asbestos, lead-based paint, radon or other naturally occurring materials.

2.3 Significant Assumptions

There were no significant assumptions for this Phase I ESA report.

2.4 Limitations and Exceptions

This ESA was performed in accordance with the Subcontractor Agreement, San Mateo County Big Wave Project EIR dated 5 December 2006. This ESA did not include a survey for the presence or condition of asbestos, lead-based paint, radon or other naturally occurring materials at the Site.

Reasonable effort has been made to check that the information obtained is factual and from reliable sources, but no responsibility is assumed for its accuracy. If no hazardous substances or conditions are reported to be on the Site, it should not be interpreted as a guarantee that they do not exist. Treadwell & Rollo assumes no responsibility or liability for errors in the information used or statements from sources other than those of Treadwell & Rollo. All conclusions and recommendations in this report concerning the Site are those professional opinions of the Treadwell & Rollo personnel involved with the project, and this report should not be considered a legal interpretation of existing environmental regulations. Opinions presented herein apply to Site conditions existing at the time of our assessment, and cannot necessarily be taken to apply to

Site changes or conditions of which we are not aware and have not had the opportunity to evaluate.

2.5 Special Terms and Conditions

There are no special terms or conditions regarding this Phase I ESA in the contract between Treadwell & Rollo and the Client.

2.6 User Reliance

This Phase I ESA was prepared for the Client and may be relied on solely by the Client, subject to the terms and limitations of the agreement between Treadwell & Rollo and the Client dated 5 December 2006. The findings contained within the report shall not, in whole or in part, be disseminated or conveyed to any other party, nor be used by any other party, in whole or in part without written prior consent of the Client and Treadwell & Rollo.

3.0 SITE DESCRIPTION

3.1 Location and Legal Description

The Site is located on the southern side of Airport Street, northwest of the Princeton/Pillar Point Harbor area in Princeton by the Sea, California. Princeton by the Sea adjoins Half Moon Bay on the northwest side and is located in unincorporated San Mateo County. The Site encompasses 20 acres on two parcels (APN 047-311-060 [14 acres] and APN 047-312-040 [6 acres]) which are separated by a drainage swale owned by San Mateo County (Figure 2). The drainage swale separates the two parcels and leads to the Pillar Point Marsh, a salt marsh habitat influenced by both tidal action and freshwater runoff from its tributary drainage area. The drainage swale and Pillar Point Salt Marsh are wetlands which partially extend onto both parcels. On APN 047-311-060, the northernmost parcel, wetlands extend along the western and southern edges. On APN 047-312-040, the southernmost parcel, wetlands extend along the western and northern edges.

A legal description of the Site is provided in Appendix A.

3.2 Site and Vicinity General Characteristics

The Site is located along the coast of the Pacific Ocean approximately 25 miles south of San Francisco along the San Francisco Peninsula within unincorporated San Mateo County which is bordered by San Francisco County to the north and Santa Cruz County to the south (Figure 1).

3.3 Current Use of the Property

The Site is currently used as agricultural farmland.

3.4 Descriptions of Structures, Roads, Other Improvements on the Site

An agricultural supply well is located in a fenced off area in the northeast corner of APN 047-311-060. Three 500-gallon, plastic, above ground storage tanks (ASTs) are partially filled with water next to the agricultural supply well in an enclosed fence area. A PG&E overhead power line traverses the southwestern part of the Site parallel to Airport Street. No buildings exist at the Site (Figure 3).

3.5 Current Uses of the Adjoining Properties

The Site is adjoined to the northeast by Airport Street with Half Moon Bay Airport on the eastern side of Airport Street; to the southeast by live-work spaces, Coastside Self Storage (110 Stanford Avenue), and various light industrial-use buildings; to the southwest by West Point Avenue with the Pacific Ocean further beyond; and to the northwest by El Granada Mobile Home Park (164 Culebra Street).

4.0 CLIENT PROVIDED INFORMATION

The following information was provided by the Client and is included in Appendix A.

4.1 Title Records

No title records were provided by the Client or Owner of the Site

4.2 Environmental Liens or Activity and Use Limitation

The Client is unaware of any environmental liens or activity and use limitations regarding the Site.

4.3 Specialized Knowledge

A Preliminary Geotechnical Engineering Investigation was prepared for the northern parcel (APN 047-311-060) on 7 May 2002 by the Bay Area Geotechnical Group (BAGG). The purpose of this investigation was to evaluate current soil conditions and provide preliminary recommendations for site grading, design of building foundations, pavements, and associated improvements for the proposed development. Borings were advanced in 14 randomly selected locations to depths ranging from 17 to 25 feet below ground surface (bgs) and two deep borings to depths of 50 feet bgs. Results of this investigation revealed that the subsurface generally consists of heterogeneous lenses of clays and sands interbedded with gravel. During the geotechnical field activities, groundwater was encountered at a depth ranging from 5.5 to 7.5 feet bgs. A copy of this report is included in Appendix A.

4.4 Valuation Reduction for Environmental Issues

The Client did not have any knowledge of any valuation reductions for environmental issues at the Site.

4.5 Owner Information

The owners of the Site are Mr. Jeff Peck and Mr. Steve Barber.

4.6 Reason for Performing a Phase I ESA

The reason for performing the Phase I ESA is to support of an Environmental Impact Report (EIR) to fulfill the city building requirements for development of the Site.

5.0 RECORDS REVIEW

5.1 Standard Environmental Record Sources

A review of environmental regulatory agency lists and records was performed for the Site and vicinity to identify potential sources of or activities involving hazardous substances or petroleum products that might affect the soil and groundwater quality at the Site. The lists identify properties where underground storage tank leaks, chemical spills, or contamination of soil and/or groundwater have been reported and confirmed. The regulatory lists also include properties where above-ground or underground storage tanks are present, hazardous materials are generated and/or stored, and whether or not there has been an unauthorized release.

A search of environmental regulatory agency databases for the Site and vicinity was prepared for Treadwell & Rollo by Environmental Data Resources Inc. (EDR). The EDR *Radius Map Report* of the results of this search and database acronyms are provided in Appendix B. Where appropriate, additional information was obtained from telephone interviews, online databases, or file reviews at the regulatory agencies. A summary of the findings is discussed below.

5.1.1 The Site

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

5.1.2 Off-Site Database Listings

Treadwell & Rollo focused on off-Site facilities with known contamination in soil and groundwater that were most likely to represent potential environmental concerns at the Site. These areas include adjoining properties or locations that were hydraulically up-gradient of the Site. The estimated direction of groundwater flow is to the southwest (discussed further in Section 5.2). Based on this estimated direction of groundwater flow, we focused on properties adjoining the Site or with active database listings east of the Site.

Three properties with the potential to impact the environmental conditions at the Site were identified and are summarized below (business names shown in parenthesis).

1. 164 Culebra Avenue (El Granada Mobile Home Park) – This mobile home park adjoins the Site to the north. This address is listed in the Leaking Underground Storage Tank (LUST) and the Spills, Leaks, Investigations, and Cleanups (SLIC) databases as the location of a drinking water well which has been chemically-affected by chlorinated solvents. The exact location of the water well could not be identified. Water samples collected from this well on 20 April 2006, the most recent sampling event within the EDR database, indicated that the following chlorinated solvents were detected in groundwater:

   - trichloroethylene (TCE) at 6.3 micrograms per liter (µg/L), exceeding the California drinking water standard (a.k.a., maximum contaminant level [MCL]) of 5 µg/L;
   - cis-1,2-Dichloroethylene (cis-1,2-DCE) at 4.1 µg/L, below the MCL of 6 µg/L; and
   - trans-1,2-Dichloroethylene (trans-1,2-DCE) at 1.2 µg/L, below the MCL of 10 µg/L.

   Similar chemical results have been detected in groundwater from this well in the EDR databases dating back to June 1999.

   Mr. Greg Smith of the San Mateo County Health Department (lead agency) was interviewed on 9 March 2007 and 21 March 2007. Mr. Smith confirmed that the drinking water well has historically been chemically affected by chlorinated solvents and that the source is from the adjoining property north of the mobile home park at 860 Airport Street (described below). Currently, this environmental case remains open.

2. 860 Airport Street (Yu Property) – This property is located approximately an eighth of a mile northwest and approximately equal in elevation relative to the Site. This address was identified by Mr. Greg Smith, as the potential source of chlorinated solvents that has chemically affected the drinking water well at the El Granada Mobile Home park. Mr.

Smith indicated that the unauthorized release of chlorinated solvents was likely from historic parts cleaning activities of marine/boat engines or from a former candle factory. Chlorinated solvents may have been used by the candle factory to extract wax from molds used to for shaping the candles. Currently, this environmental case remains open.

3. Half Moon Bay Airport (Half Moon Bay Flight Strip) – No address was reported for this database listing which was mapped an eighth of a mile to the northwest and higher in elevation relative to the Site. Although this listing is mapped an eighth of a mile to the northwest, the limits of this property extend to within a hundred feet of the Site on the east side of Airport Street.

   The Half Moon Bay Airport was formerly operated by the U.S. Air Force. This address was listed in the Formerly Used Defense Sites Properties (FUDS), a database of properties where the US Army Corps of Engineers is actively working or will take necessary cleanup actions. According to information from the database and from Mr. Lance McMahan of the Department of Toxic Substances Control (DTSC), this property has contained two 10,000-gallon, abandoned underground storage tanks (USTs) that formerly contained jet fuel, seven underground concrete pump pits, two exposed concrete sumps (measuring approximately 3.5 feet bgs 10.5 feet), concrete supports for one AST with underground support piping, and at least one UST near the edge of the Site (Figure 4). The two 10,000-gallon, abandoned USTs were identified north of the airport administration buildings approximately 3,400 feet northeast of the Site. Figure 4 was excerpted from an Inventory Project Report by Dynamic Corporation in 1992 (Dynamic, 1992). Figure 4 revealed the location of the USTs, ASTs, and sumps at the Half Moon Airport, but did not reveal details such as the number of USTs, ASTs, and sumps, the capacity, or the contents held within each. Figure 4 indicates that at least one UST with unknown contents existed within 500 feet north of the Site. All other hazardous materials storage in the USTs, ASTs, and fuel pits were documented to be over 2,000 feet northeast of the Site. Although USTs, ASTs, and fuel pits have been identified north of the Site at

the Half Moon Bay Airport, there was no indication of a release of hazardous materials or petroleum products to soil or groundwater from this property.

All other facilities identified in the EDR databases were either down- or cross-gradient, a significant distance from the Site, or were case-closed and are therefore unlikely to have chemically-affected soil or groundwater at the Site.

5.2 Physical Setting Sources

The physical setting at the Site is based on information from past investigations (BAGG, 2002; Clearwater, 2006), topographic maps (EDR, 2007b), and the *Physical Setting Source Addendum* to the *EDR Radius Map with GeoCheck* report (EDR, 2007a) (Appendix B).

The Site is located in a valley resting between Montara Mountain to the east and the Miramontes (hill) to the west. Seal Cove Fault (a part of the San Gregorio Fault Zone) extends through the center of the valley which trends to the northwest-southeast. The San Vicente and Denniston Creeks both flow from Montara Mountain to the west into the valley and then bend to the southeast past the Site and drain to the south toward Half Moon Bay (a.k.a. Pillar Point Harbor). The Site is located at the terminal part of this drainage basin within a quarter mile of Half Moon Bay in an area dominated by wetlands.

The general topography of the Site is flat with a slight slope to the south toward Half Moon Bay. The highest point of the Site is in the northernmost parcel (APN 047-311-060) at an approximate elevation of 25 feet above mean sea level (EDR, 2007b). The southwestern corner of the southernmost parcel (APN 047-312-040) is the lower part of the Site at an approximate elevation of 11 feet above mean sea level (EDR, 2007b). A drainage swale separates the two parcels. The drainage swale and the western part of both parcels are wetlands (BAGG, 2002).

The subsurface generally consists of alluvial material (30 to 150 feet in thickness) overlying the Purisima bedrock (Clearwater, 2006). The alluvial material consists of sandy clay, clayey and silty sand, and relatively clean to course to fine sands (Clearwater, 2006). A geotechnical

investigation performed on the northern part of the Site identified heterogeneous lenses of clays and sands interbedded with gravel to a maximum observed depth of 50 feet bgs with groundwater typically encountered at depths ranging from 5.5 to 7.5 feet bgs (BAGG, 2002). According to Mr. Greg Smith of the San Mateo County Health Department the direction of groundwater flow is to the south toward Half Moon Bay (parallel to the direction of surface drainage).

6.0 SITE HISTORY

This summary of land-use history at the Site was prepared from online sources and based on aerial photos, historical topographic maps, city directories, and Sanborn Fire Insurance Maps provided by EDR. Historical aerial photographs of the Site were reviewed for the years 1943, 1956, 1965, 1974, 1982, 1993, 1998, and 2001. Historical topographic maps were reviewed for the years 1899, 1947, 1949, 1956, 1968, 1980, 1993, and 1997. No coverage was available for the city directories and Sanborn Fire Insurance Maps. Aerial photos and historical topographic maps are provided in Appendix B.

The earliest history of the Site was determined from the 1899 topographic map. No building structures were identified at the Site. Four unknown building structures are present east of the Site along the base of the Miramontes.

The 1943 aerial photograph shows the Site as undeveloped with no building structures at the Site. An unknown road exists along the northern edge of the Site leading to four building structures adjoining the northwestern corner of the Site. Based on the presence of plow-lines, the property north of the Site is used as farmland. East of the Site is the present day Airport Street with an airfield further to the east. The drainage swale extends from the airfield northeast of the Site, under Airport Street, and diagonally through the Site to the southwest (the present day drainage swale). Small farms are present to the southeast. The present day West Point Road is constructed south of the Site with Pillar Point Marsh further to the south. West of the Site are wetlands with no building structures.

The 1965 aerial photograph and 1968 topographic map indicate that the present day mobile home park was constructed northwest of the Site on the adjoining property. The Site and other adjoining properties remained unchanged through at least 1965. A military reserve, the present day Pillar Point Military Reservation, was observed approximately a half of a mile south of the Site on Pillar Point.

The 1982 aerial photograph indicated that three building structures were constructed on the adjoining properties southeast of the Site. The Site and other adjoining properties remained unchanged in the 1982 aerial photograph.

The Site was relatively unchanged in the 1993 aerial photograph with the exception of cleared vegetation and a dirt path along the eastern edge of the northernmost parcel (APN 047-311-060). Six additional building structures were constructed along the adjoining property southeast of the Site.

The Site was unchanged in the 1998 aerial photograph.

The Site was relatively unchanged in the 2001 aerial photograph with exception of clusters of white objects (high reflective surfaces) observed along the northern-central edge of APN 047-311-060 and along the southern edge of APN 047-312-040. Because dirt paths lead to these white objects, it is likely that they represent illegal dumping from the adjoining properties.

7.0 SITE RECONNAISSANCE

On 10 March 2007, Treadwell & Rollo performed a reconnaissance of the Site (Photograph 1) and surrounding area. Support documentation is provided in Appendix C.

The northern part of the Site (APN 047-311-060) is occupied by farmland, a locked fence enclosure, a dirt road, and an overhead electrical line (Photograph 2) (Figure 3). The locked fence enclosure is located in the northern corner of the parcel and contains an agricultural supply well and three 500-gallon above ground storage tanks (ASTs) containing water (Photographs 2 and 3). Conveyance piping for irrigation was observed on the east side of the parcel, extending

from the locked fence enclosure to the southeast along Airport Street (Figure 2). An overhead electrical line extends north-south along the western side of the parcel (Figure 3). No transformers were observed on the overhead electrical lines. A dirt road borders the northern edge of the Site (Figure 3).

A drainage swale separates the northern (APN 047-311-060) and southern (APN 047-312-040) parts of the Site (Photograph 4).

The southernmost parcel (APN 047-312-040) is also occupied by farmland (Photograph 5). A garden area (50' x 200') on the southern part of the Site is being maintained by the adjoining property owners (Iacopi, 2007) (Figure 3).

Adjoining properties fronting Stanford Avenue were observed from public right of ways.

- Northwest of the Site - A mobile home park and an AST containing propane with the approximate capacity of 20,000 gallons (Photograph 6). The ground beneath the AST could not be viewed for possible staining.

- Northeast of the Site – Airport Street with Half Moon Bay Airport on the eastern side of Airport Street.

- Southeast of the Site -

    - Coastside Self Storage at 171 Stanford Avenue. This business had a series of one story buildings for rented storage spaces;

    - A two story building and asphalt-surface parking at 169 Stanford Avenue. This building appears to be a live-work space with office spaces on the ground floor. Business signs for this address included Northern Energy Propane, Marathon Solutions, and Ultraflex Incorporated. It is unknown if hazardous substances are used at this address. Exterior of the property was in good condition;

- Storage yard at 151 Stanford Avenue with scrap metal, loose engine parts, boats in-repair, and old vehicles. Poor housekeeping practices were observed on this lot. These objects were stored on a dirt-surface (Photograph 6). Floor staining could not be observed from the public street;
- A one-story metal building occupied by PJ Inc. (Building Contractors) at 119 Stanford Avenue;
- A vacant lot; and
- An unlabeled one-story metal building.

- Southwest of the Site – Pillar Point Marsh.

8.0 INTERVIEWS

Telephone interviews were performed with Mr. Jeff Peck (part-owner of the Site), Mr. Mike Iacopi (Site Operator), and Mr. Greg Smith (Program Specialist, San Mateo County Health Department), and Mr. Lance McMahan of the DTSC.

8.1 Mr. Jeff Peck

The interview with Mr. Jeff Peck was performed on 8 March 2007. Mr. Peck purchased the Site in 1999 and has operated the Site as agricultural farmland. No addresses are associated with the Site. The Site has been used as farmland since at least the 1930s (prior use of the Site is unknown). One agricultural well with an approximate depth of 120 feet below ground surface, and three ASTs (500-gallons each) exist in the northern part of the Site. Conveyance piping extends from the ASTs to the remaining parts of the Site for irrigation. No other improvements have been constructed at the Site. Although the Site has been used as agricultural farmland, according to Mr. Peck, no pesticides have been applied to soil at the Site. Dumping of tires, trees, and a boat has occurred at the Site (no hazardous wastes), although Mr. Peck could not recall the location of dumping. Mr. Peck was unaware of any soil or groundwater contamination

at the Site. There are no environmental clean-up liens or activity and land use limitations (AULs) for the Site.

8.2 Mr. Mike Iacopi

The interview with Mr. Mike Iacopi was performed on 13 March 2007. Mr. Iacopi is the operator of the Site and has been associated with the Site since 2003. Currently, Swiss chard, cauliflower, and broccoli are being grown at the Site. According to Mr. Iacopi, pesticides have not been applied to soil at the Site. There has been no storage or usage of hazardous materials at the Site. Mr. Iacopi was unaware of any illegal dumping or contamination at the Site.

8.3 Mr. Greg Smith

The interview with Mr. Greg Smith, the Program Specialist of the San Mateo County Health Department, was performed on 9 March 2007 and on 21 March 2007. Mr. Smith indicated that the Site was not listed as an open environmental case but there are open environmental cases up-gradient of the Site. The direction of groundwater flow is to the south toward Half Moon Bay.

Two open environmental cases exist for two properties north and hydraulically up-gradient of the Site. These two cases are the "El Granada Mobile Home Park" at 164 Culebra Street which adjoins the Site to the north, and the other case is the "Yu Property" located at 860 Airport Street, approximately 600 feet north of the Site. Both environmental cases are related to the release of chlorinated solvents, specifically tetrachloroethylene (PCE) and trichloroethylene (TCE), to soil and groundwater from historic activities performed at the Yu Property. Mr. Smith indicated that the contamination is the result of either past parts cleaning solvents used on boat engines or from solvents used by a past candle factory to extract wax from the candle molds. Chlorinated solvents have migrated from the Yu Property onto the El Granada Mobile Home Park.

Mr. Smith referred to a report detailing the groundwater contamination at the Yu Property and El Granada Mobile Home Park (Clearwater, 2006) (summarized below). In this report, three drinking water wells located north of the Site were identified in the El Granada Mobile Home

Park. Two of the drinking water wells are located on the Yu Property approximately 900 feet north of the Site and are referred to as the Corona and Culebra Wells. The Corona Well is completed at approximately 100 feet bgs and is screened from 55 to 70 feet bgs and 80 to 90 feet bgs. The Culebra Well is completed at approximately 110 feet bgs and is screened from 50-90 feet bgs and 100 to 110 feet bgs. The third well is located at the El Granada Mobile Home Park approximately 400 feet north of the Site and is referred to as the Retiro Well. The Retiro Well is completed at approximately 155 feet bgs and is screened from approximately 55 to 75 feet bgs and 85 to 95 feet bgs.

Groundwater which was sampled on a quarterly basis from the Corona, Culebra, and Retiro Wells between 1994 and 2003 indicated a steady decline of TCE and PCE concentrations in groundwater with a high of 62 micrograms per liter (µg/L) of TCE and 4.5 µg/L of PCE in the Corona Well from 1994-1998, to a low of 6.9 µg/L of TCE and concentrations that did not exceed laboratory reporting limits for PCE in 2003. According to Mr. Smith, PCE and TCE from the Corona Well are currently near drinking water standards (a.k.a. Maximum Contaminant Limits [MCLs]). The Culebra Well has shown a steady decline of PCE and TCE detected in groundwater which was sampled on a quarterly basis from 1994 through 2003. Mr. Smith indicated that concentrations of PCE and TCE in groundwater have not been detected above laboratory detection limits since May 2002. The Retiro Well, the furthest down-gradient well from the suspected source and closest to the Site, had a single detection of TCE in groundwater at 1 µg/L on 27 June 1997 (below MCLs). All other groundwater samples which have been collected on a quarterly basis from the Retiro Well dating back to 1997 have had no other detections of PCE or TCE in groundwater above laboratory detection limits. Because the Retiro Well has had no concentrations of PCE or TCE in groundwater since 1997, Mr. Smith did not think chlorinated solvents have migrated further south onto the Site.

8.4 Mr. Lance McMahan

The interview with Mr. Lance McMahan of the DTSC was performed on 16 March 2007 to obtain information about any potential environmental issues with the Half Moon Bay Airport which exists east of the Site across Airport Street. The Half Moon Bay Airport was listed in the

FUDS database. Mr. McMahan indicated that an "Inventory Project Report" was prepared for this address in 1991 which documented the inventory of hazardous materials storage at this location. He provided me an electronic copy of this report (Appendix C) with a map showing the locations of USTs, fuel pits, and sumps used at this location (Figure 4). Mr. McMahan was unaware of any releases of hazardous substances or petroleum products to soil or groundwater at the Half Moon Bay Airport site.

Support documentation for the interviews is provided in Appendix C.

9.0 FINDINGS

The environmental concerns and recognized environmental conditions at the Site and surrounding properties are described below.

9.1 At the Site

The Site has been occupied by farmland since at least 1930. No building structures have been constructed at the Site. Based on past use of the Site, the following environmental concerns were identified:

- The illegal dumping of tires, trees, and a boat has occurred at the Site (Peck, 2007). Clusters of white objects were observed along the northern-central edge of APN 047-311-060 and along the southern edge of APN 047-312-040 in aerial photographs from 2001. Based on the presence of dirt paths that lead to these white objects, it is likely that the white objects represent illegal dumping. Although illegal dumping has occurred at the Site, there has been no data to indicate that the dumped material was a hazardous substance or a petroleum product. These conditions generally do not represent a threat to human health or the environment and generally would not be the subject of an enforcement action if brought to the attention of appropriate governmental agencies. Therefore, this does not qualify as a recognized environmental condition.

- Pesticides may have been applied to soil at the Site. The Site has been operated as a farm dating back to the 1930s. Although the current owner and Site operator both indicate that to their knowledge pesticides have not been applied to soil at the Site, pesticides may have been applied to soil by previous Site users. Based on our experience with similar projects, the presence of pesticides of pesticides at the Site is likely to be present and therefore qualifies as a **recognized environmental condition**.

9.2 Surrounding Properties

The following environmental concerns were identified at the surrounding properties.

- A drainage swale separates two parcels at the Site. Possible non-point source contaminants may have been transported onto the Site as surface runoff originating from properties northeast of the Site (e.g., Half Moon Bay Airport). But because there was no evidence to suggest a material threat of a hazardous substances release onto the Site, the presence of the drainage swale does not qualify as a recognized environmental condition.

- Chlorinated solvents in groundwater have been identified at the Yu Property and El Granada Mobile Home Park (hydraulically up-gradient and north of the Site). Quarterly groundwater samples from the Corona, Culebra, and Retiro Wells located on these properties revealed historic detections of PCE and TCE (chlorinated solvents) in groundwater. These detected concentrations have steadily decreased since 1994, when quarterly groundwater monitoring began. Currently, the only concentrations of PCE and TCE in groundwater have been detected in the Corona Well at or near drinking water standards (located approximately 900 feet north of the Site). Chlorinated solvents have not been detected in groundwater from Retiro Well since 1997 (located approximately 400 feet north and hydraulically up-gradient of the Site). Based on the lack of detections in the Retiro Well and significant decreases in PCE and TCE concentrations in groundwater from the Corona and Culebra Wells, Mr. Smith of the San Mateo County indicated that the migration of chlorinated solvents onto the Site is unlikely. Therefore this does not qualify as a recognized environmental condition.

- An agricultural supply well was installed in the northern part of the Site and has been pumping water intermittently for agricultural use since 1987. Agricultural well is screened within the same aquifer as the Corona, Culebra, and Retiro Wells (up-gradient of the Site) where chlorinated solvents have historically been detected (Clearwater, 2006). The pumping of water from this agricultural well may have drawn chlorinated solvents onto the Site. But based on laboratory analytical results from the Retiro Well and on the opinion of Mr. Smith of the San Mateo County, this condition generally does not represent a threat to human health or the environment and generally would not be the subject of an enforcement action if brought to the attention of appropriate governmental agencies. Therefore, this does not qualify as a recognized environmental condition.

- Jet fuel and possibly other hazardous materials or petroleum products have been stored in various locations at the Half Moon Bay Airport (a.k.a., Half Moon Bay Air Strip). A map of the airport (Figure 4) indicated that at least one UST with unknown contents is located within 500 feet northeast of the Site. In addition, seven underground pump pits were identified along the taxiways near the hangar buildings, approximately 1,500 feet east of the Site. Although the jet fuel has been documented at the airport, there has been no evidence indicating a release of hazardous substances or petroleum products to soil or groundwater. However, due to the presence of a UST located within 500 feet northeast and up-gradient of the Site, if a release to soil or groundwater has occurred in the past, it may have migrated onto the Site. This condition generally does not represent a threat to human health or the environment and generally would not be the subject of an enforcement action if brought to the attention of appropriate governmental agencies. Therefore, this does not qualify as a recognized environmental condition.

All other properties were either hydraulically down-gradient or cross-gradient, were a significant distance from the Site, or were case-closed and therefore unlikely to have impacted soil or groundwater at the Site.

10.0 CONCLUSIONS

Treadwell & Rollo has performed a Phase I Environmental Site Assessment in general accordance with ASTM Practice E-1527-05 for the Big Wave Project property located on the south side of Airport Street in Princeton by the Sea, California (APN 047-311-060 and APN 047-312-040). This assessment has revealed one recognized environmental condition at the Site. This recognized environmental condition is the possible application of pesticides to soil during the previous use of the Site as farmland dating back to the 1930's.

Other environmental concerns that did not qualify as a recognized environmental condition include:

- Possible non-source pollutants from the northeast that may have been transported onto the Site as surface runoff from the drainage swale;
- Chlorinated solvents in groundwater that may have migrated onto the Site from properties north of the Site (up-gradient).
- Possible illegal dumping of hazardous substances at the Site;
- Possible release of hazardous substances or petroleum products in groundwater from the Half Moon Bay Airport located northeast of the Site. Although a number of storage tanks containing hazardous substances have been identified at this property, there has been no indication of a release of hazardous substances to soil or groundwater.

11.0 RECOMMENDATIONS

We recommend that a Phase II Environmental Site Assessment (Phase II) be performed at the Site to evaluate whether the recognized environmental conditions identified in this report represent an actual release of hazardous substances to soil or groundwater at the Site. At minimum, the Phase II should be designed to evaluate whether pesticides are present in soil.

The Phase II could include additional analyses in anticipation of the proposed development. To determine if hazardous substances have migrated onto the Site from the north or northeast, we recommend sampling groundwater from the agricultural supply well. We understand that the redevelopment plans include the reuse excavated soil to meet the foundation and landscaping design. No soil would be imported or exported in the northern part of the Site (APN 047-311-060) as the grading will be balanced with 6,000 cubic yards of soil of cut and 6,000 cubic yards of fill. Approximately 9,800 cubic yards of soil would need to be imported to the southern part of the Site (APN 047-312-040). The appropriateness of soil reuse will be partly dependent on the environmental quality of the soil to be excavated. Therefore, the Phase II should include parameters that may be applied to a health risk assessment and possible Site Management Plan (SMP) if soil is inappropriate for reuse and required to be transported off-Site. Treadwell and Rollo can assist you with these recommended services.

12.0 DEVIATIONS

There were no significant exceptions to, or deviations from, ASTM E 1527-05 in the performance of this Phase I ESA.

13.0 ADDITIONAL SERVICES

No additional services were contracted for between the Client and Treadwell & Rollo, beyond the scope of E 1527-05.

14.0 SIGNATURE OF ENVIRONMENTAL PROFESSIONAL

The signatures of the environmental professionals responsible for this Phase I ESA are provided on the submittal letter.

15.0 QUALIFICATIONS OF ENVIRONMENTAL PROFESSIONAL

The qualifications of the environmental professionals that conducted this ESA are provided in the resumes in Appendix D.

REFERENCES

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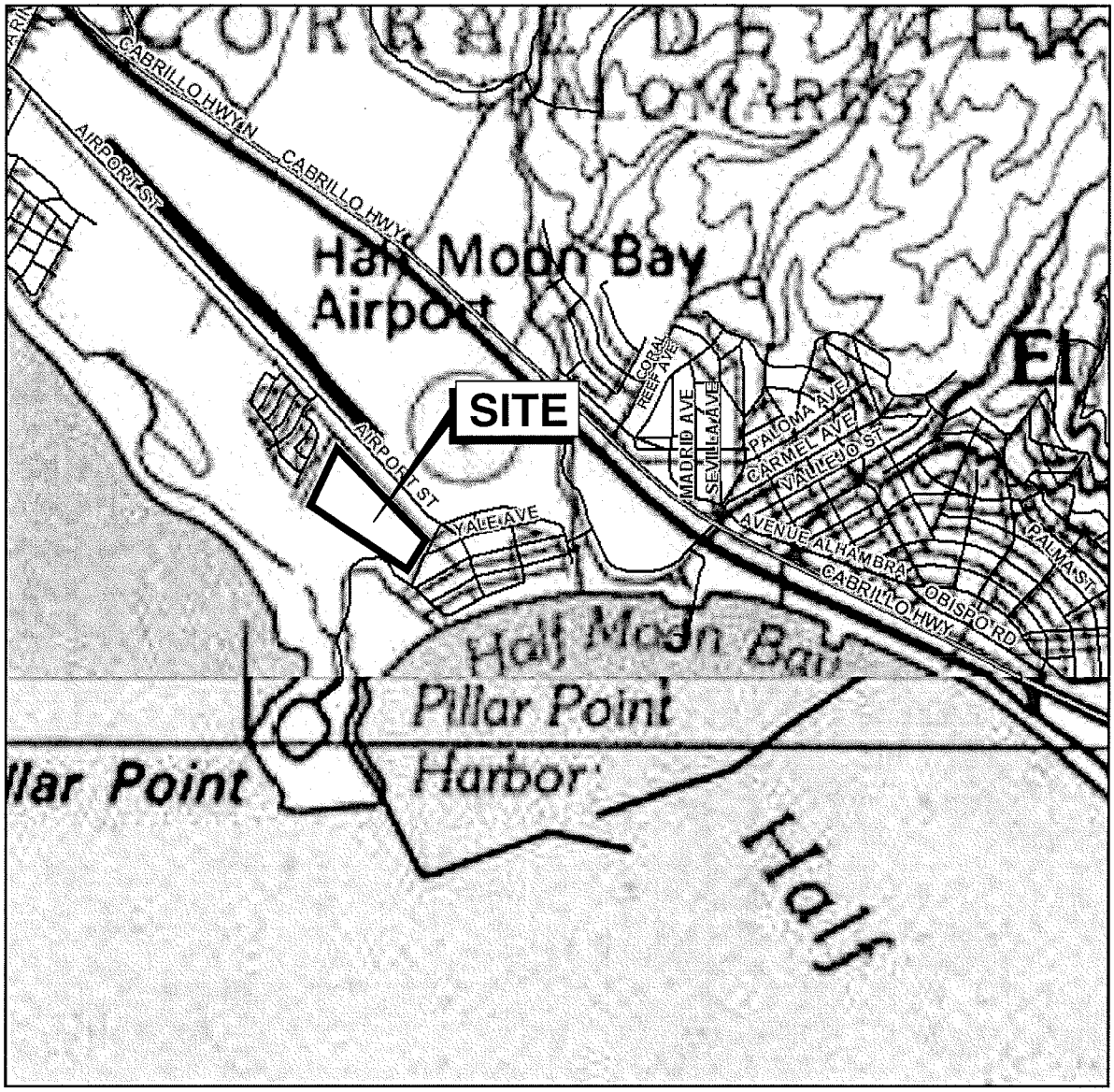
McMahan, Lance (McMahan, 2007). Telephone interview. 16 March 2007.

Peck, Jeff (Peck, 2007). Telephone interview. 8 March 2007.

Smith, Greg (Smith, 2007). Telephone interview. 9 March 2007.

FIGURES



Base map: The Thomas Guide
San Mateo County
1999

0 1/4 1/2 Mile

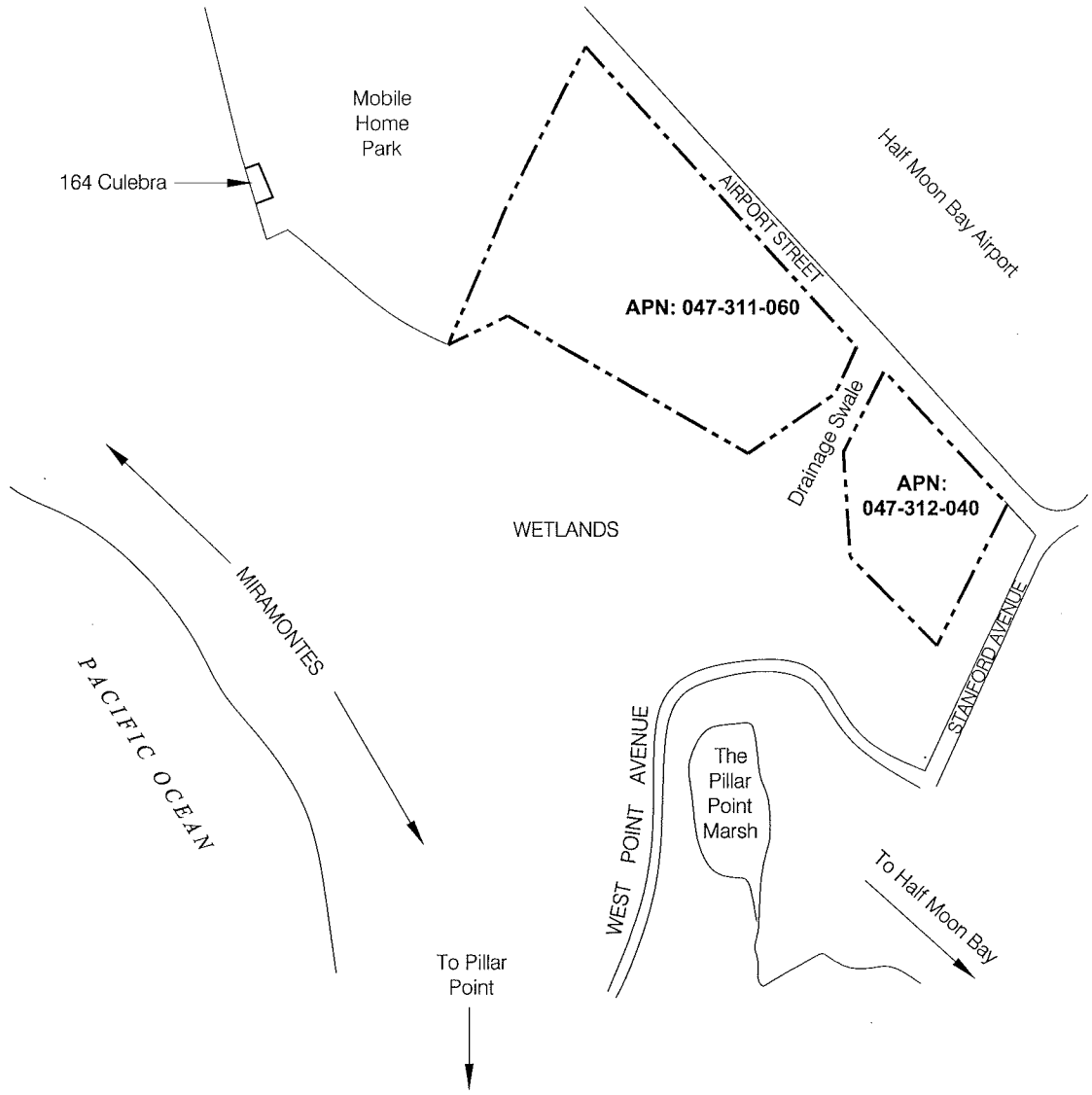
Approximate scale

BIG WAVE PROJECT
Princeton By The Sea, California

SITE LOCATION MAP

Treadwell&Rollo

Date 03/16/07	Project No. 4602.01	Figure 1



BIG WAVE PROJECT
Princeton By The Sea, California

SITE PLAN

Treadwell&Rollo

Date 03/21/07	Project No. 4602.01	Figure 2

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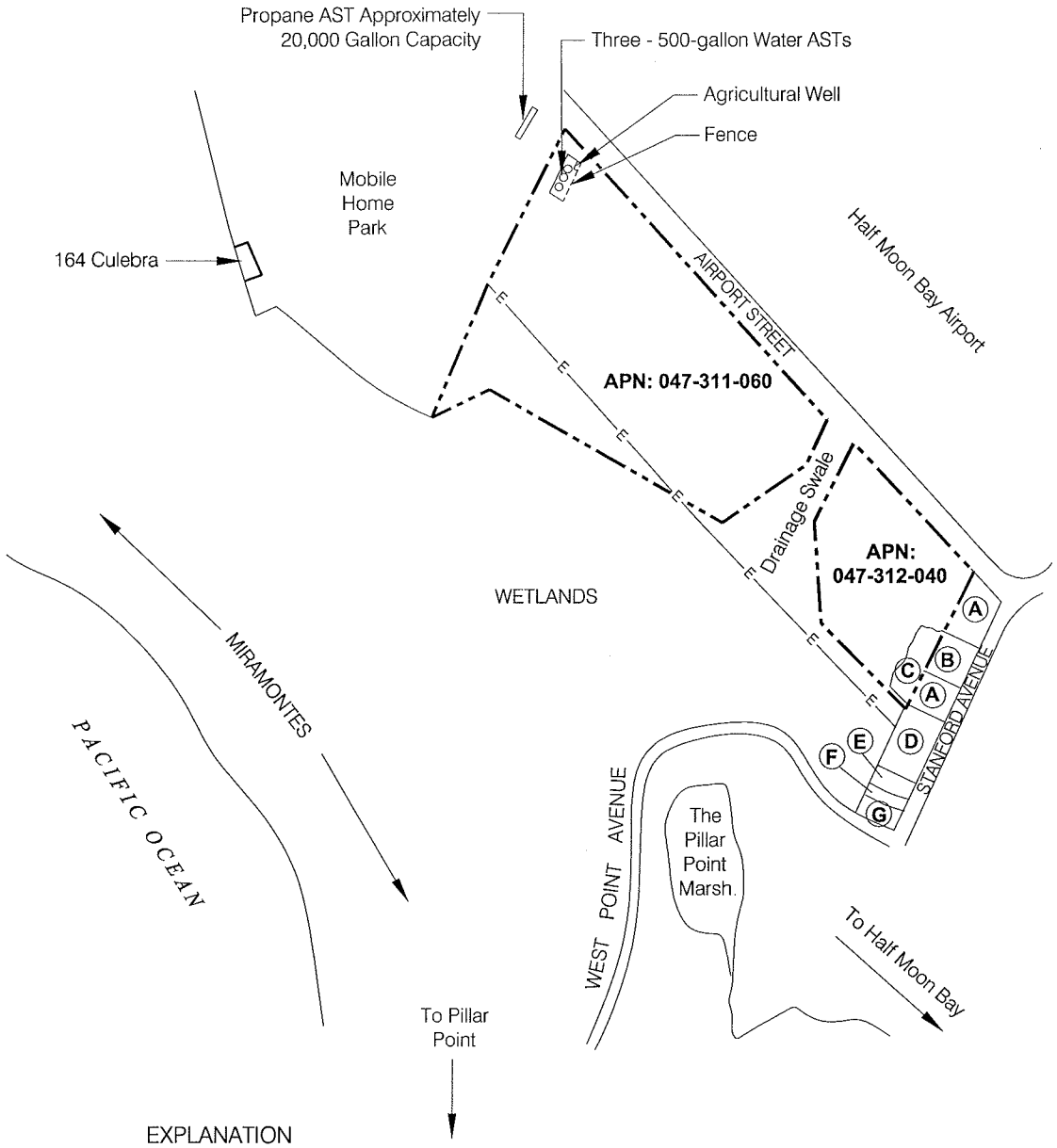

EXPLANATION

- (A) Coastside self storage (171 Stanford Ave)
- (B) Live Work Lofts (169 Stanford Ave)
- (C) Gardening area
- (D) Storage yard with scrap metal, engine parts, boats, and cars (151 Stanford Ave)
- (E) PJ Inc-Building Contractors (119 Stanford Ave)
- (F) Vacant lot
- (G) One-story metal shed
- Limits of the site

0 500 Feet
Approximate scale

BIG WAVE PROJECT
Princeton By The Sea, California

CURRENT USE OF THE SITE AND ADJOINING PROPERTIES

Treadwell&Rollo

Date 03/21/07 | Project No. 4602.01 | Figure 3

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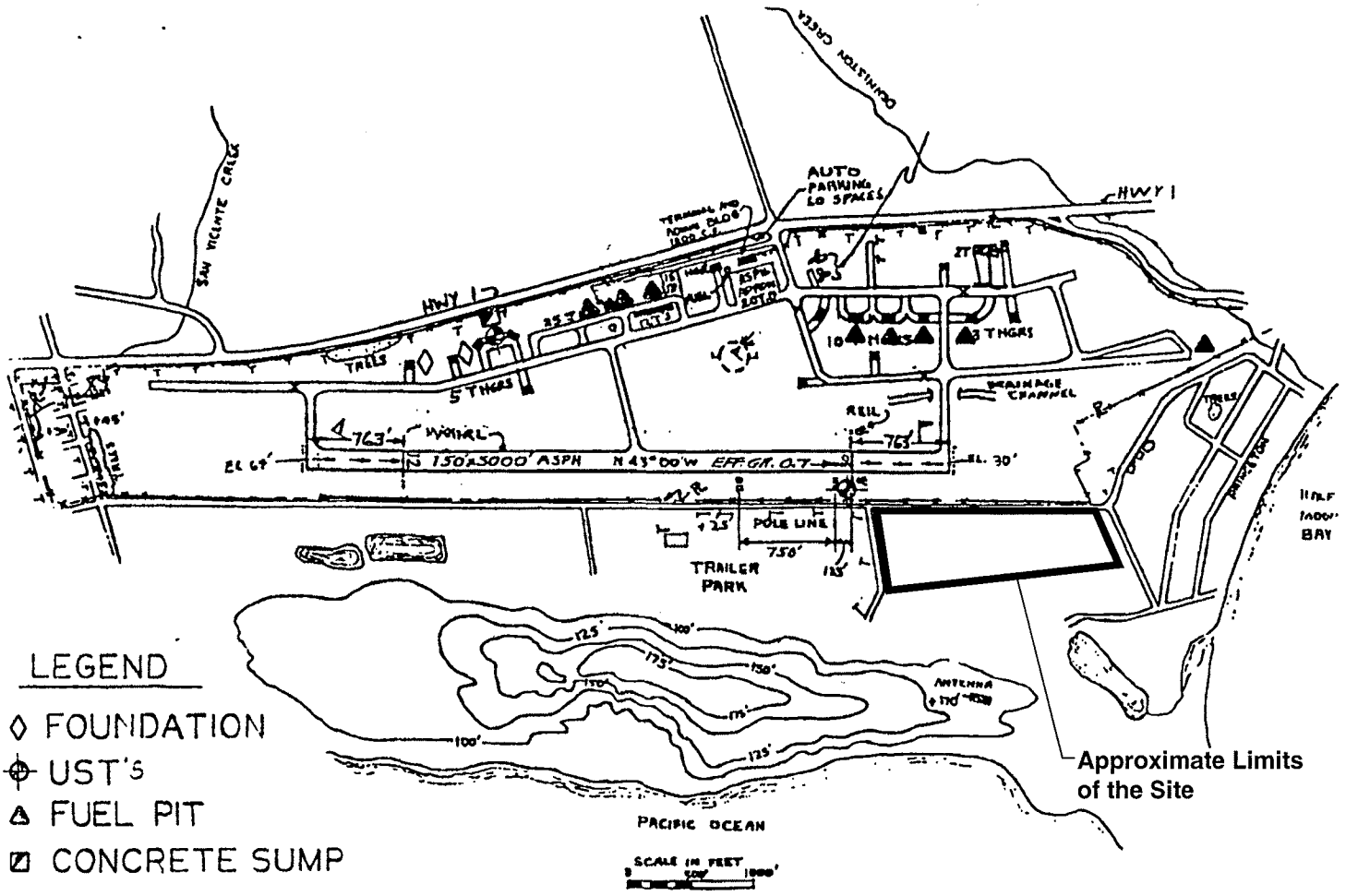
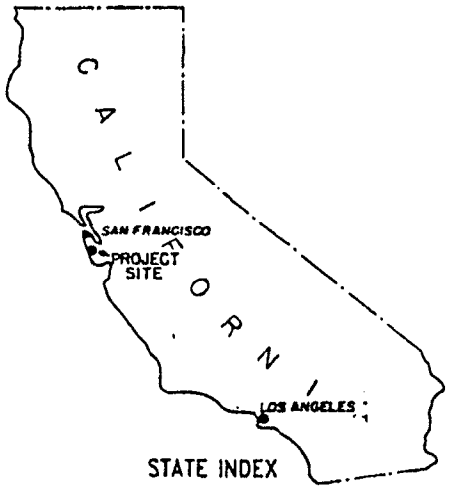
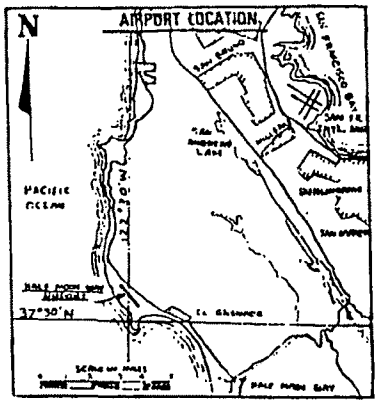


AIRPORT LAYOUT



STATE INDEX



VICINITY MAP

NOTES:

1. THE SITE IS CURRENTLY BEING USED BY THE HALF MOON BAY MUNICIPAL AIRPORT.
2. IMPROVEMENTS LEFT BY THE AIR FORCE AT THE SITE INCLUDED TWO USTS, SEVEN UNDERGROUND CONCRETE FUEL BUNKERS, AND TWO EXPOSED CONCRETE SUMPS.
3. NOT TO SCALE

HALF MOON BAY FLIGHT STRIP

DERP–FUDS
INVENTORY PROJECT REPORT

SITE VISIT 2 APRIL 1991

Figure 4

PHOTOGRAPHS

Photograph 1: The northern part of the Site (APN 047-311-060). View is looking to the west.

Photograph 2: The fence enclosure located in the northeast corner of the Site on APN 047-311-060. An agricultural supply well and three 500-gallon above ground storage tanks are within the fence enclosure. View is looking to the west.

Photograph 3: Agricultural supply well. View is looking to the North.

Photograph 4: A drainage swale separates the northern (APN 047-311-060) and southern (APN 047-312-040) parts of the Site. The photograph was taken on the eastern edge of the Site along Airport Street looking to the north.

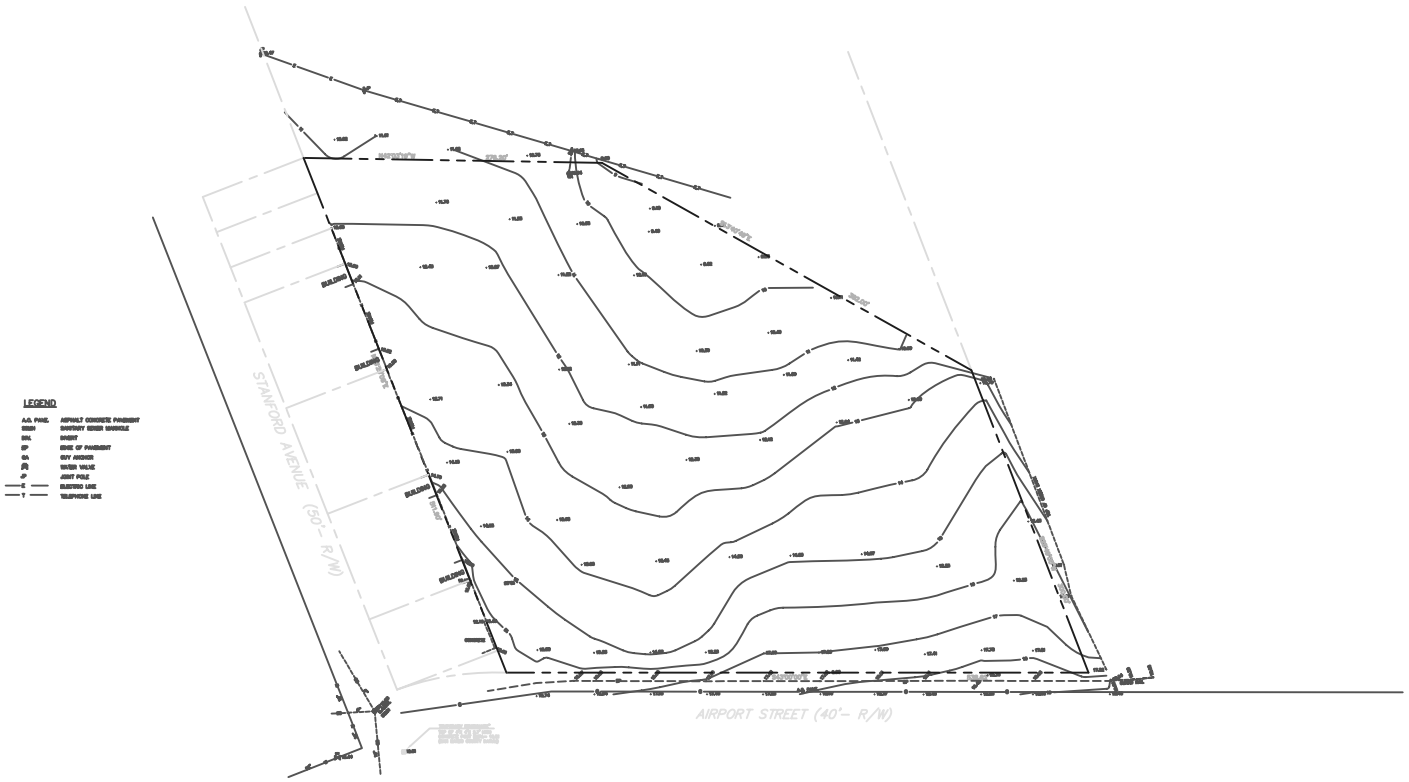
Photograph 5: The southern part of the Site looking to the south (APN 047-312-040).

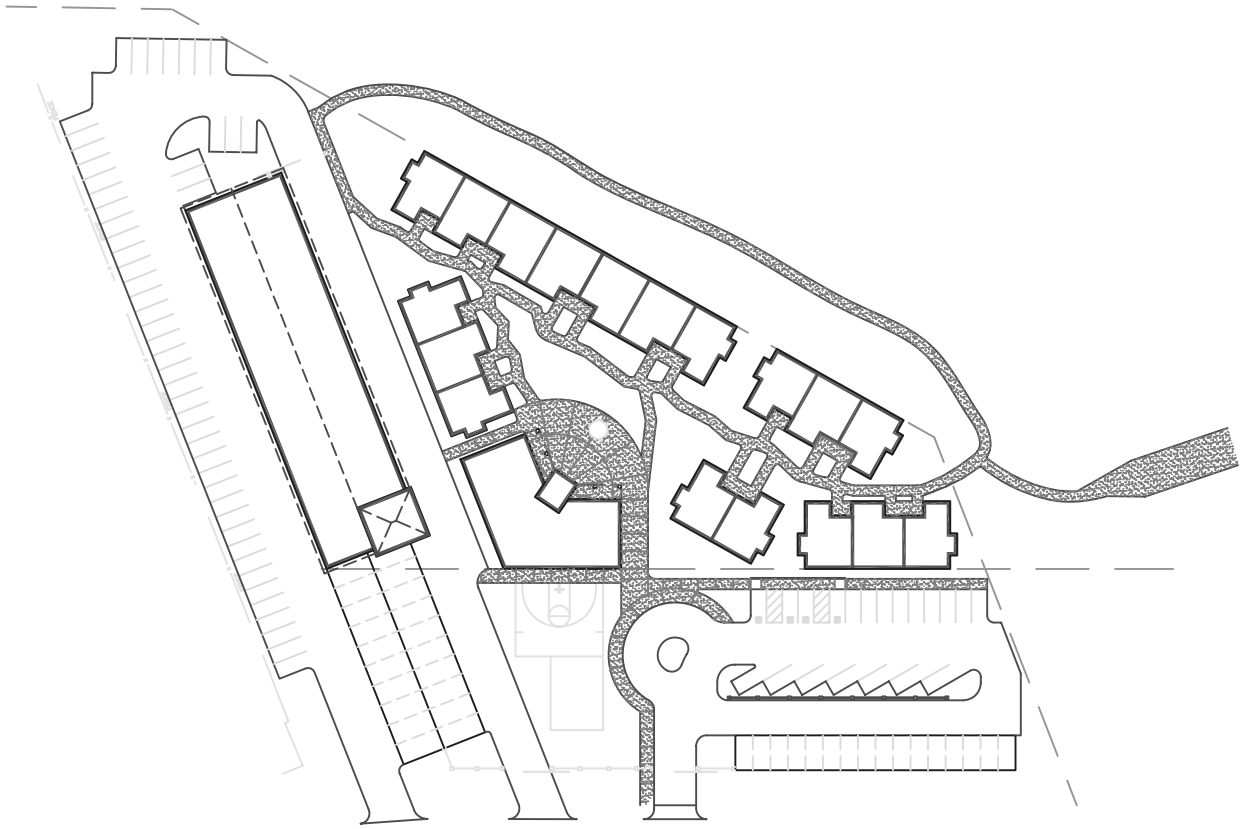
Photograph 6: A propane above ground storage tank with the approximate capacity of 20,000 gallons. View is from the Site looking to the north.

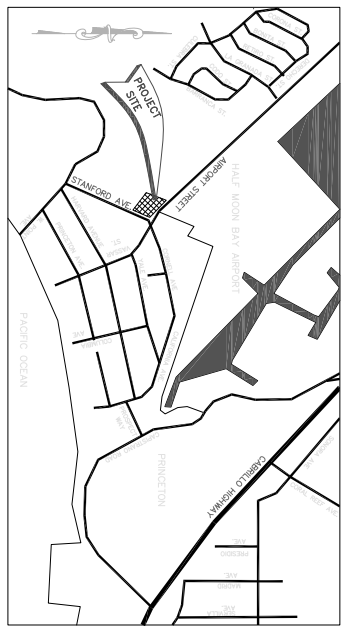
Photograph 7: Storage yard at 151 Stanford Avenue with scrap metal, loose engine parts, and boats and vehicles in-repair. This property adjoins the Site to the south.

APPENDIX A

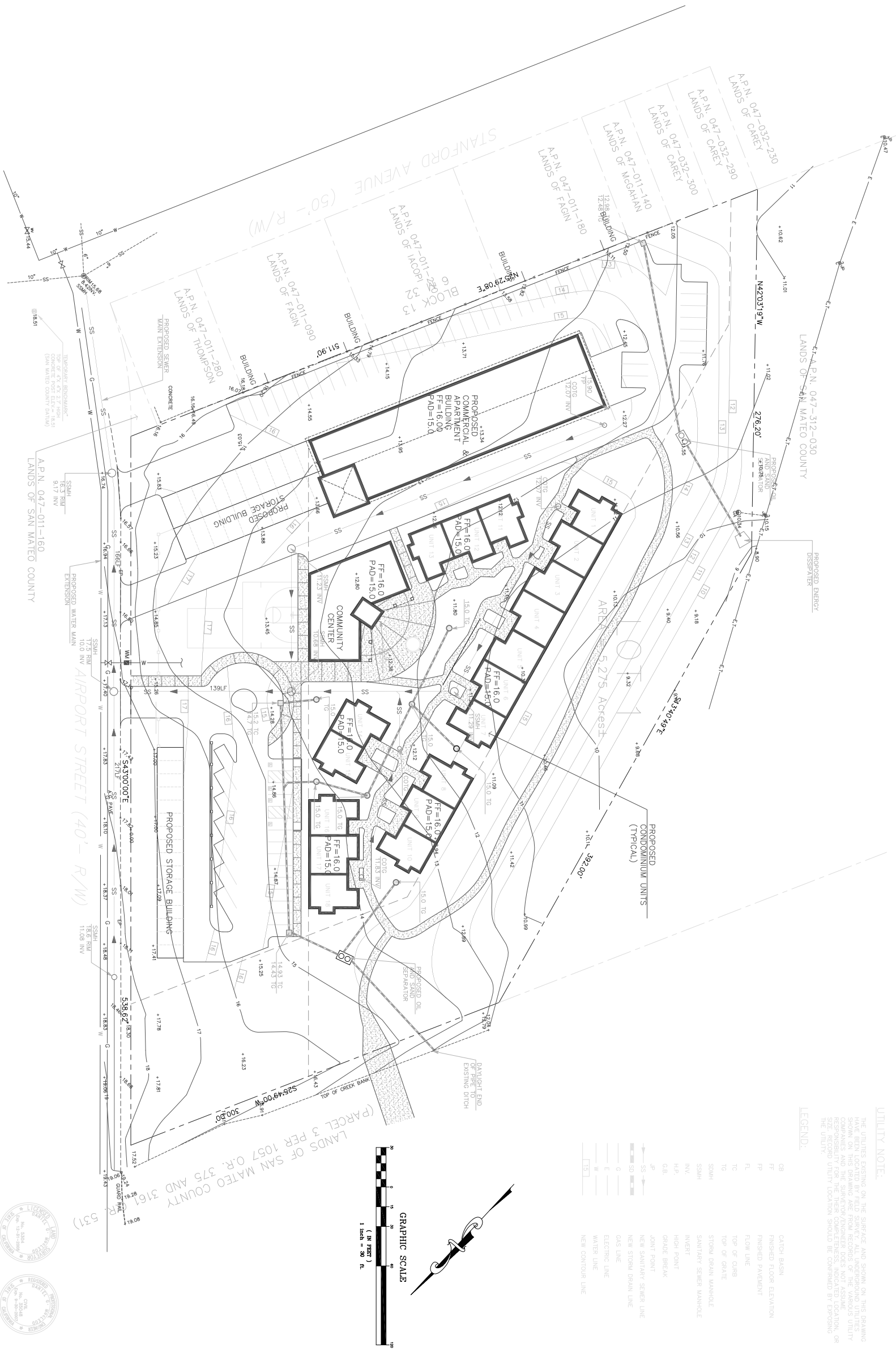
User Provided Information


LEGEND
A.C. PAVE. ASPHALT CONCRETE PAVEMENT
SDMH STORM DRAIN MANHOLE
INV. INVERT
EP EDGE OF PAVEMENT
GA GUY ANCHOR
WV WATER VALVE
UP JOINT POLE
E ELECTRIC LINE
T TELEPHONE LINE
STANFORD AVENUE (50'± R/W)
AIRPORT STREET (40'± R/W)





LOCATION MAP
SCALE: NOT TO SCALE



RECORD OWNER AND SUBDIVIDER:
BIG WAVE LLC
P.O. BOX 700
BELMONT CA 94002

LAND SURVEYOR AND CIVIL ENGINEER
MacLEOD & ASSOCIATES
965 CENTER STREET
SAN CARLOS, CA 94070
(650) 593-8580

ASSESSOR'S PARCEL NUMBER
047-312-040

EXISTING ZONING
M-1

UTILITIES:
GAS AND ELECTRICITY: PACIFIC GAS AND ELECTRIC COMPANY
SANITARY SEWER: GRANADA SANITARY DISTRICT
WATER: COASTSIDE WATER DISTRICT
TELEPHONE: S.B.C.
FIRE PROTECTION: HALF MOON BAY

UTILITY NOTE:
THE UTILITIES EXISTING ON THE SURFACE AND SHOWN ON THIS DRAWING HAVE BEEN LOCATED BY FIELD SURVEY. ALL UNDERGROUND UTILITIES SHOWN HEREON HAVE BEEN PLOTTED FROM VARIOUS UTILITY COMPANIES AND THE SURVEYOR/ENGINEER DOES NOT ASSUME RESPONSIBILITY FOR THE THEIR COMPLETENESS, INDICATED LOCATION, OR SIZE. RECORD UTILITY LOCATION SHOULD BE CONFIRMED BY EXPOSING THE UTILITY.

LEGEND:

CB	CATCH BASIN	SS	NEW SANITARY SEWER LINE
FF	FINISHED FLOOR ELEVATION	SD	NEW STORM DRAIN LINE
FP	FINISHED PAVEMENT	G	GAS LINE
FL	FLOW LINE	E	ELECTRIC LINE
TC	TOP OF CURB	W	WATER LINE
TG	TOP OF GRATE	[15]	NEW CONTOUR LINE
SDMH	STORM DRAIN MANHOLE		
SSMH	SANITARY SEWER MANHOLE		
INV.	INVERT		
H.P.	HIGH POINT		
G.B.	GRADE BREAK		
JP	JOINT POINT		

VESTING TENTATIVE SUBDIVISION MAP FOR CONDOMINIUM PURPOSES
(18 UNITS)
BEING A SUBDIVISION OF A.P.N. 047-312-040
AIRPORT STREET
PRINCETON BY THE SEA · SAN MATEO COUNTY · CALIFORNIA

PREPARED FOR:
BIG WAVE LLC

MacLEOD AND ASSOCIATES
CIVIL ENGINEERING · LAND SURVEYING
965 CENTER STREET · SAN CARLOS · CA 94070 · (650) 593-8580

REV.	DESCRIPTION	BY:	DATE

SHEET: C-1
DRAWING NO: 1584-00
DATE: 10/14/05
SCALE: 1"= 30'
CHECKED BY: DGM
DESIGNED BY: VFG
DRAWN BY: AAP

VESTING TENTATIVE SUBDIVISION MAP FOR COMMERCIAL CONDOMINIUM PURPOSES "BIG WAVE OFFICE PARK"

BEING A SUBDIVISION OF A.P.N. 047-311-060

AIRPORT STREET

SAN MATEO COUNTY

CALIFORNIA

PREPARED BY:

MacLEOD AND ASSOCIATES

CIVIL ENGINEERING · LAND SURVEYING

965 CENTER STREET · SAN CARLOS · CA 94070 · (650) 593-8580

PREPARED FOR:

BIG WAVE LLC

DRAWN BY: AAP

DESIGNED BY: VAG

CHECKED BY: DGM

DATE: 10/14/05

SCALE: 1"= 40

DRAWING NO.

1608-00

SHEET C-1

GRAPHIC SCALE

(IN FEET)

1 inch = 40 ft.

(40' R/W)

AIRPORT STREET

S43°00'00"E 1151.64'

N25°49'00"W 160.00'

S49°27'42"W 232.18'

N63°57'49"W 846.23'

N25°56'26"E 940.00'

N65°29'08"E 209.91'

(PARCEL 3, 1057 OR 351)

LANDS OF SAN MATEO COUNTY

A.P.N. 047-311-050

PARCEL 2

(56 PM 21-22)

LANDS OF BUCKS BUTANE PROPANE SVCS INC.

A.P.N. 047-300-050

PARCEL 1

(56 PM 21-22)

LANDS OF COACH SAN DIEGO INC.

A.P.N. 047-300-040 & 060

COMMON AREA=12.044± ACRES

LOT 5 (REMAINDER) 18.6

PROPOSED BUILDING FF=23.0 PAD=22.0± AREA = 25,424 S.F.± = 0.58 A.C.±

LOT 4 FOR COMMERCIAL CONDOMINIUM PURPOSES AREA = 27,020 S.F.± = 0.62 A.C.±

LOT 3

PROPOSED BUILDING FF=21 20.3 PAD=20.0± AREA = 22,600 S.F.± = 0.52 A.C.±

LOT 2 FOR COMMERCIAL CONDOMINIUM PURPOSES AREA = 21,168 S.F.± = 0.49 A.C.±

PROPOSED BUILDING FF=20.3 PAD=19.3± 193.

LOT 1

PROPOSED BUILDING FF=18.4 PAD=18.4 18.60 TC

PROPOSED BUILDING FF=19.4 PAD=18.7

PROPOSED WATER MAIN EXTENSION (TO EXISTING WATER MAIN ON STANFORD AVENUE)

PROPOSED SEWER MAIN EXTENSION (TO EXISTING SEWER MANHOLE ON STANFORD AVENUE)

TEMPORARY BENCHMARK: NAIL & SHINER ELEV.= 27.46 SAN MATEO COUNTY DATUM

dense trees g n v

dense grass

LOCATION MAP

NOT TO SCALE

PACIFIC OCEAN

PROJECT SITE

STANFORD AVE

AIRPORT STREET

HALF MOON BAY AIRPORT

CABRILLO HIGHWAY

PRINCETON

LEGEND:

CB	CATCH BASIN
FF	FINISHED FLOOR ELEVATION
FP	FINISHED PAVEMENT
FL	FLOWLINE
TC	TOP OF CURB
TG	TOP OF GRATE
SDMH	STORM DRAIN MANHOLE
SSMH	SANITARY SEWER MANHOLE
INV.	INVERT
H.P.	HIGH POINT
G.B.	GRADE BREAK
JP	JOINT POINT
SD	NEW STORM DRAIN LINE
SS	NEW SANITARY SEWER LINE
W	WATER LINE
E	ELECTRIC LINE
G	GAS LINE
25	NEW CONTOUR LINE

UTILITY NOTE:

THE UTILITIES EXISTING ON THE SURFACE AND SHOWN ON THIS DRAWING HAVE BEEN LOCATED BY FIELD SURVEY. ALL UNDERGROUND UTILITIES SHOWN ON THIS DRAWING ARE FROM RECORDS OF THE VARIOUS UTILITY COMPANIES AND THE SURVEYOR/ENGINEER DOES NOT ASSUME RESPONSIBILITY FOR THE THEIR COMPLETENESS, INDICATED LOCATION, OR SIZE. RECORD UTILITY LOCATION SHOULD BE CONFIRMED BY EXPOSING THE UTILITY.

UTILITIES:

GAS AND ELECTRICITY:	PACIFIC GAS AND ELECTRIC COMPANY
SANITARY SEWER:	ORO LOMA SANITARY DISTRICT
WATER:	COASTSIDE WATER DISTRICT
TELEPHONE:	S.B.C.
FIRE PROTECTION:	HALF MOON BAY

EXISTING & PROPOSED ZONING

M-1

ASSESSOR'S PARCEL NUMBER

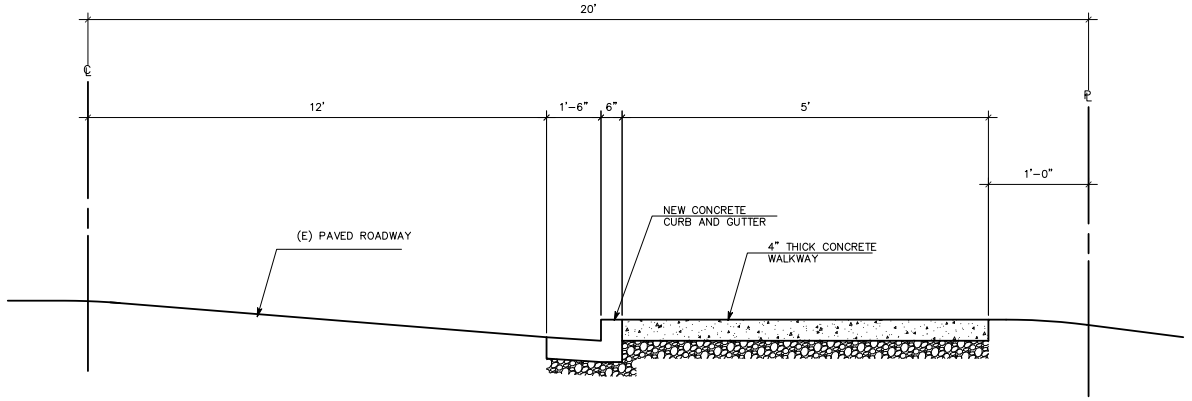
047-311-060

LAND SURVEYOR AND CIVIL ENGINEER

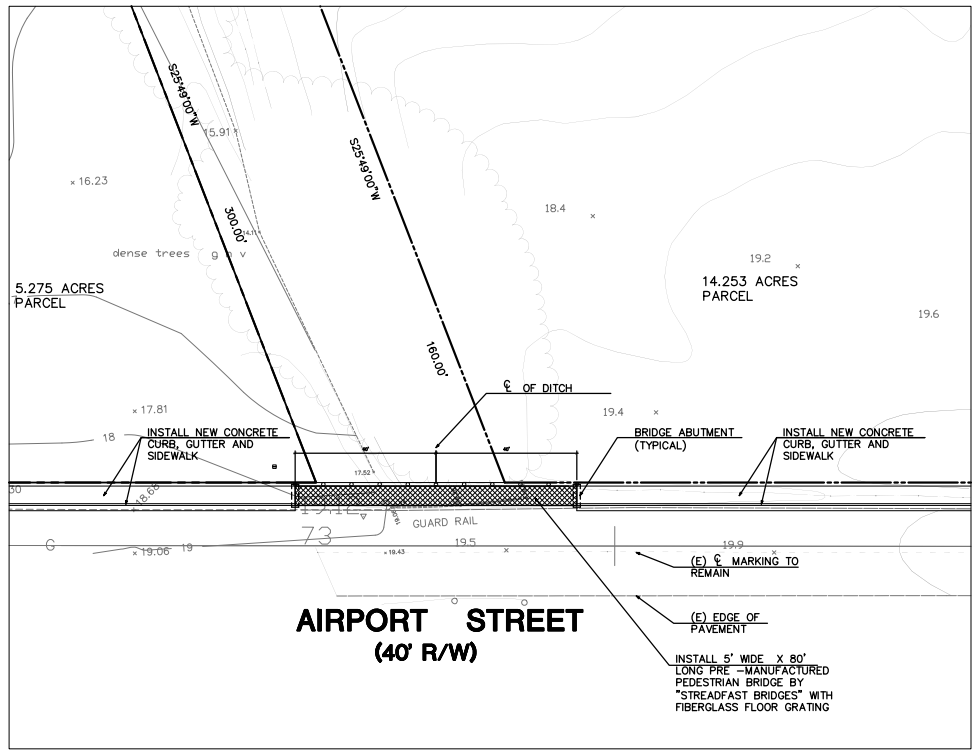
MacLEOD & ASSOCIATES
965 CENTER STREET
SAN CARLOS, CA 94070
(650) 593-8580

RECORD OWNER AND SUBDIVIDER:

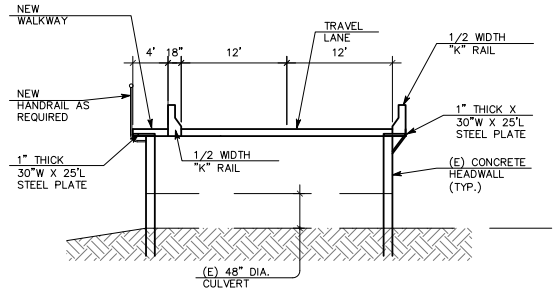
BIG WAVE LLC
P.O. BOX 700
BELMONT CA. 94002



A **TYPICAL SECTION**
NO SCALE



C **OPTION 3**
NO SCALE



SECTION A-A
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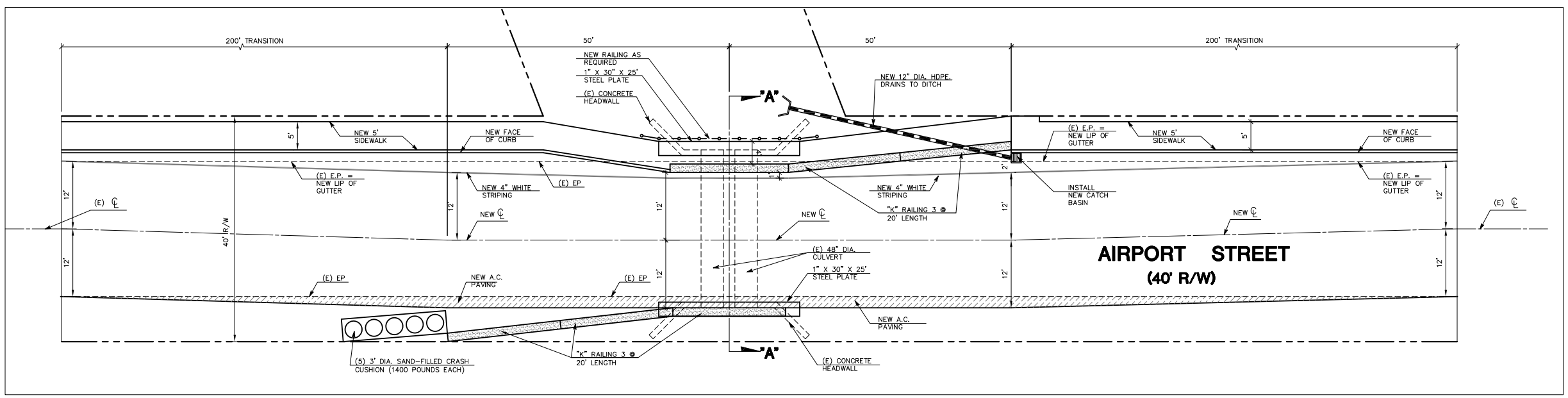


B **OPTION 2**
NO SCALE

REV.	DESCRIPTION	BY:	DATE
—	GENERAL REVISION	VPG	02/27/07

RECORDED PROFESSIONAL ENGINEER DANIEL B. WESTCOMBE CIVIL No. 55048 Exp. 9-30-2007 STATE OF CALIFORNIA

MacLEOD AND ASSOCIATES
CIVIL ENGINEERING · LAND SURVEYING
965 CENTER STREET · SAN CARLOS · CA 94070 · (650) 593-8580

PREPARED FOR:
BIG WAVE, LLC

DETAIL SHEET
BIG WAVE OFFICE PARK
AIRPORT STREET
SAN MATEO COUNTY CALIFORNIA
PRINCETON BY THE CITY

DRAWN BY:	AAP
DESIGNED BY:	VPG
CHECKED BY:	DGM
SCALE:	NONE
DATE:	10/14/05
DRAWING NO.	1608-00
SHEET	C-4

To ERIC M.

LEGAL DESCRIPTION

The land referred to herein is situated in the State of California, County of San Mateo, Unincorporated Area, described as follows:

BEGINNING AT THE INTERSECTION OF THE SOUTHWESTERLY LINE OF AIRPORT STREET, SAID STREET BEING PARCEL NO. 2 AS DESCRIBED IN THE GRANT DEED FROM JOSEPHINE C. VALENCIA TO THE UNITED STATE OF AMERICA RECORDED APRIL 30, 1943 IN BOOK 1057 OF OFFICIAL RECORDS AT PAGE 375, RECORDS OF SAID COUNTY, WITH THE NORTHEASTERLY PROLONGATION OF THE SOUTHEASTERLY BOUNDARY OF PARCEL 2 AS SAID PARCEL IS SHOWN ON THAT CERTAIN PARCEL MAP FILED AUGUST 13, 1985 IN VOLUME 56 OF PARCEL MAPS AT PAGES 21 AND 22, RECORDS OF SAID COUNTY; THENCE ALONG SAID LINE OF AIRPORT STREET SOUTH 43° 00' 00" EAST 1151.64 FEET TO THE MOST NORTHERLY CORNER OF PARCEL NO. 3 AS DESCRIBED IN SAID DEED FROM VALENCIA TO THE UNITED STATES OF AMERICA; THENCE ALONG THE NORTHWESTERLY LINE OF SAID PARCEL NO. 3 SOUTH 25° 49' 00" WEST 160.00 FEET TO AN 3/4" IRON PIPE MONUMENT WITH SURVEYOR'S TAG "LS 5304"; THENCE SOUTH 49° 23' 42" WEST 232.18 FEET TO A 3/4" IRON PIPE MONUMENT WITH SURVEYOR'S TAG "LS 5304"; THENCE NORTH 63° 37' 49" WEST 846.23 FEET TO A 3/4" IRON PIPE MONUMENT WITH SURVEYOR'S TAG "LS 5304"; THENCE SOUTH 66° 29' 08" WEST 209.91 FEET TO A 3/4" IRON PIPE MONUMENT WITH SURVEYOR'S TAG "LS 5304" ON THE SOUTHEASTERLY BOUNDARY OF PARCEL 1 AS SAID PARCEL IS SHOWN ON SAID PARCEL MAP; THENCE ALONG THE BOUNDARY OF SAID PARCEL 1 AND 2 OF SAID PARCEL MAP AND THE NORTHEASTERLY PROLONGATION THEREOF NORTH 25° 56' EAST 940.00 FEET TO THE POINT OF BEGINNING.

APN: 047-311-060 JPN: 047-031-311-01.02.00 A

End of Legal Description

Office Park Parcel

LEGAL DESCRIPTION OF PARCEL THREE
PILLAR POINT MARSH, SAN MATEO COUNTY

ALL THAT CERTAIN REAL PROPERTY SITUATE IN THE UNINCORPORATED COUNTY OF SAN MATEO, STATE OF CALIFORNIA, BEING A PORTION OF THE RANCHO CORRAL DE TIERRA PALOMARES, MORE PARTICULARLY DESCRIBED AS FOLLOWS:

BEGINNING AT THE MOST NORTHERLY CORNER OF LOT 27, BLOCK 13, AS SAID LOT AND BLOCK ARE SHOWN ON THAT CERTAIN MAP ENTITLED "PRINCETON BY THE SEA", FILED IN BOOK 6 OF MAPS AT PAGE 32, RECORDS OF SAID COUNTY; THENCE NORTH 42° 03' 19" WEST 276.20 FEET TO A 3/4" IRON PIPE MONUMENT WITH SURVEYOR'S TAG "LS 5304"; THENCE NORTH 13° 40' 49" WEST 392.00 FEET TO A 3/4" IRON PIPE MONUMENT WITH SURVEYOR'S TAG "LS 5304" ON THE SOUTHEASTERLY LINE OF PARCEL NO. 3 AS DESCRIBED IN THE GRANT DEED FROM JOSEPHINE C. VALENCIA TO THE UNITED STATES OF AMERICA RECORDED APRIL 30, 1943 IN BOOK 1057 OF OFFICIAL RECORDS AT PAGE 375, RECORDS OF SAID COUNTY; THENCE ALONG SAID LINE NORTH 25° 49' 00" EAST 300.00 FEET TO THE SOUTHWESTERLY LINE OF AIRPORT STREET, SAID STREET BEING PARCEL NO. 2 AS DESCRIBED IN SAID DEED VALENCIA TO THE UNITED STATES OF AMERICA; THENCE ALONG SAID LINE SOUTH 43° 00' 00" EAST 538.62 FEET TO THE NORTHWESTERLY LINE OF SAID BLOCK 13; THENCE ALONG SAID LINE SOUTH 25° 29' 08" WEST 511.90 FEET TO THE POINT OF BEGINNING.

Wellness Center Parcel

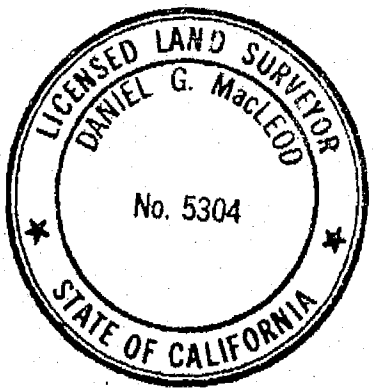
APN 047-312-040

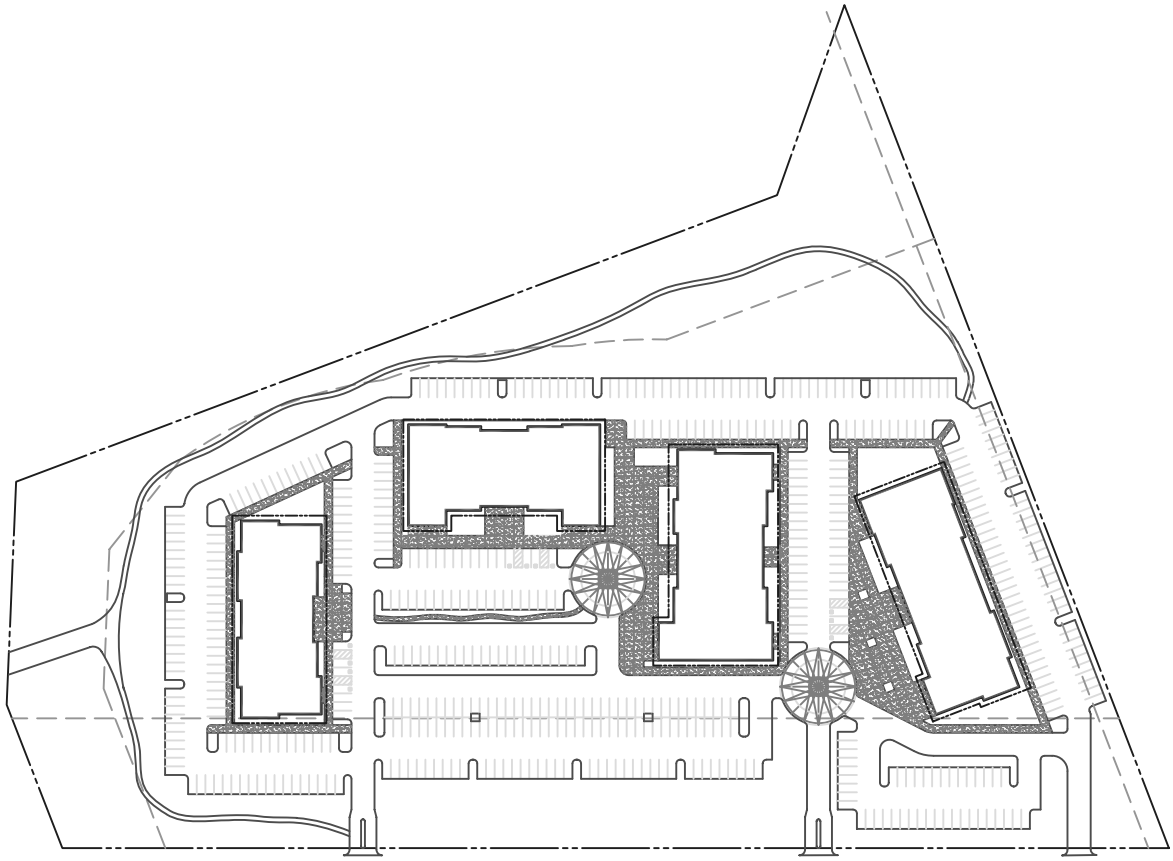
DESCRIPTION PREPARED BY:

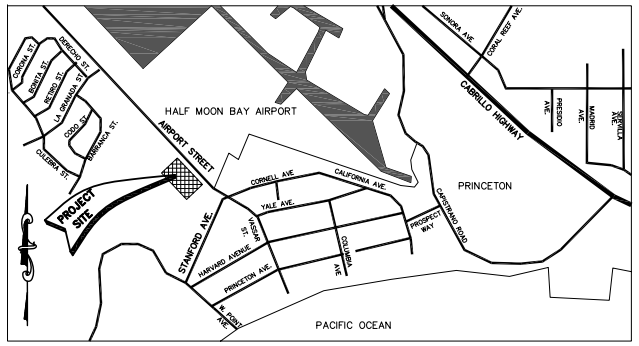
DANIEL G. MAC LEOD, L.S. # 5304
LICENSE EXPIRES 12/31/99

SIGNED: _____

DATED: 6/3/96







LOCATION MAP

NOT TO SCALE

GENERAL EROSION CONTROL NOTES:

1. THE INTENT OF THE EROSION CONTROL PLAN IS TO MINIMIZE ANY WATER QUALITY IMPACTS IN THE FORM OF SEDIMENT POLLUTION TO MAIN CREEK & TRIBUTARIES.
2. A CONSTRUCTION ENTRANCE WILL BE INSTALLED PRIOR TO STARTOF GRADING. LOCATION OF THE ENTRANCE MAY BE ADJUSTED BY THE CONTRACTOR TO FACILITATE GRADING OPERATIONS. ALL CONSTRUCTION TRAFFIC ENTERING THE PAVED ROAD MUST CROSS THE CONSTRUCTION ENTRANCE. THE ENTRANCE SHALL BE MAINTAINED IN A CONDITION THAT WILL PREVENT TRACKING OR FLOWING OF SEDIMENT ONTO PUBLIC RIGHTS-OF-WAY. THIS MAY REQUIRE PERIODIC TOP DRESSING WITH ADDITIONAL STONE AS CONDITION DEMAND, AND REPAIR OF ANY MEASURES USED TO TRAP SEDIMENTS.
3. WHEN NECESSARY, WHEELS SHALL BE CLEANED TO REMOVE SEDIMENT PRIOR TO ENTRANCE ONTO PUBLIC RIGHT-OF WAY. WHEN WASHING IS REQUIRED, IT SHALL BE DONE ON AN AREA STABILIZED WITH CRUSHED STONE WHICH DRAINS INTO AN APPROVED SEDIMENT BASIN. ALL SEDIMENT SHALL BE PREVENTED FROM ENTERING ANY STORM DRAIN, DITCH, OR WATERCOURSE THROUGH THE USE OF SAND BAGS, GRAVEL, BOARDS OR OTHER APPROVED METHODS.
4. THE EROSION AND SEDIMENT CONTROL MEASURES WILL BE OPERABLE DURING THE RAINY SEASON, OCTOBER 1 TO APRIL 15. BY OCTOBER 1, GRADING AND INSTALLATION OF STORM DRAINAGE AND EROSION AND SEDIMENT CONTROL FACILITIES WILL BE COMPLETED. NO GRADING WILL OCCUR BETWEEN OCTOBER 1 AND APRIL 15 UNLESS AUTHORIZED BY THE COUNTY REPRESENTATIVE.
5. DURING THE RAINY SEASON, ALL PAVED AREAS WILL BE KEPT CLEAR OF EARTH MATERIAL AND DEBRIS. THE SITE WILL BE MAINTAINED SO THAT A MINIMUM OF SEDIMENT-LADEN RUNOFF ENTERS THE STORM DRAINAGE SYSTEM.
6. ALL EROSION AND SEDIMENTATION CONTROL MEASURES SHALL BE IN ACCORDANCE WITH THE EROSION AND SEDIMENT CONTROL FIELD MANUAL OF THE CALIFORNIA REGIONAL WATER QUALITY CONTROL BOARD, 4TH EDITION, DATED AUGUST 2002.

LEGEND:

CB	CATCH BASIN
FF	FINISHED FLOOR ELEVATION
FP	FINISHED PAVEMENT
FL	FLOWLINE
TC	TOP OF CURB
TG	TOP OF GRADE
SDMH	STORM DRAIN MANHOLE
SSMH	SANITARY SEWER MANHOLE
INV.	INVERT
H.P.	HIGH POINT
G.B.	GRADE BREAK
JP	JOINT POINT
SS	NEW SANITARY SEWER LINE
SD	NEW STORM DRAIN LINE
G	GAS LINE
E	ELECTRIC LINE
W	WATER LINE
25	NEW CONTOUR LINE

INSTALL TEMPORARY FIBER ROLLS AROUND AREA DRAINS (TYPICAL)

INSTALL TEMPORARY FIBER ROLLS

INSTALL INLET BOX WITH GRATE COVER TG=18.0

INSTALL JUTE MESH OVER FILL SLOPES

LIMIT OF FILL

INSTALL INLET BOX WITH GRATE COVER TG=16.90

PROPOSED BUILDING FF=19.4 PAD=18.4 ±

CONNECT ALL BLDG. DOWNSPOUTS TO STORM DRAIN SYSTEM.

CURB DRAIN OPENING

JUNCTION BOX

PROPOSED BUILDING FF=20.3 PAD=19.3±

PROPOSED BUILDING FF=21.0 PAD=20.0±

PROPOSED BUILDING FF=23.0 PAD=22.0±

SDMH RIM=22.5

INSTALL TEMPORARY STABILIZED CONSTRUCTION ENTRANCE

TEMPORARY BENCHMARK:
NAIL & SHINER
ELEV.= 27.46
SAN MATEO COUNTY DATUM

AIRPORT STREET
(40' R/W)

GRAPHIC SCALE
40 0 20 40 80 160
(IN FEET)
1 inch = 40 ft.

REV.	DESCRIPTION	BY:	DATE
—	GENERAL REVISION	VPG	02/27/07

RECORDED PROFESSIONAL ENGINEER — CIVIL — No. 55048 — Exp. 9-30-2007 — STATE OF CALIFORNIA

MacLEOD AND ASSOCIATES
CIVIL ENGINEERING · LAND SURVEYING
965 CENTER STREET · SAN CARLOS · CA 94070 · (650) 593-8580

PREPARED FOR:
BIG WAVE LLC

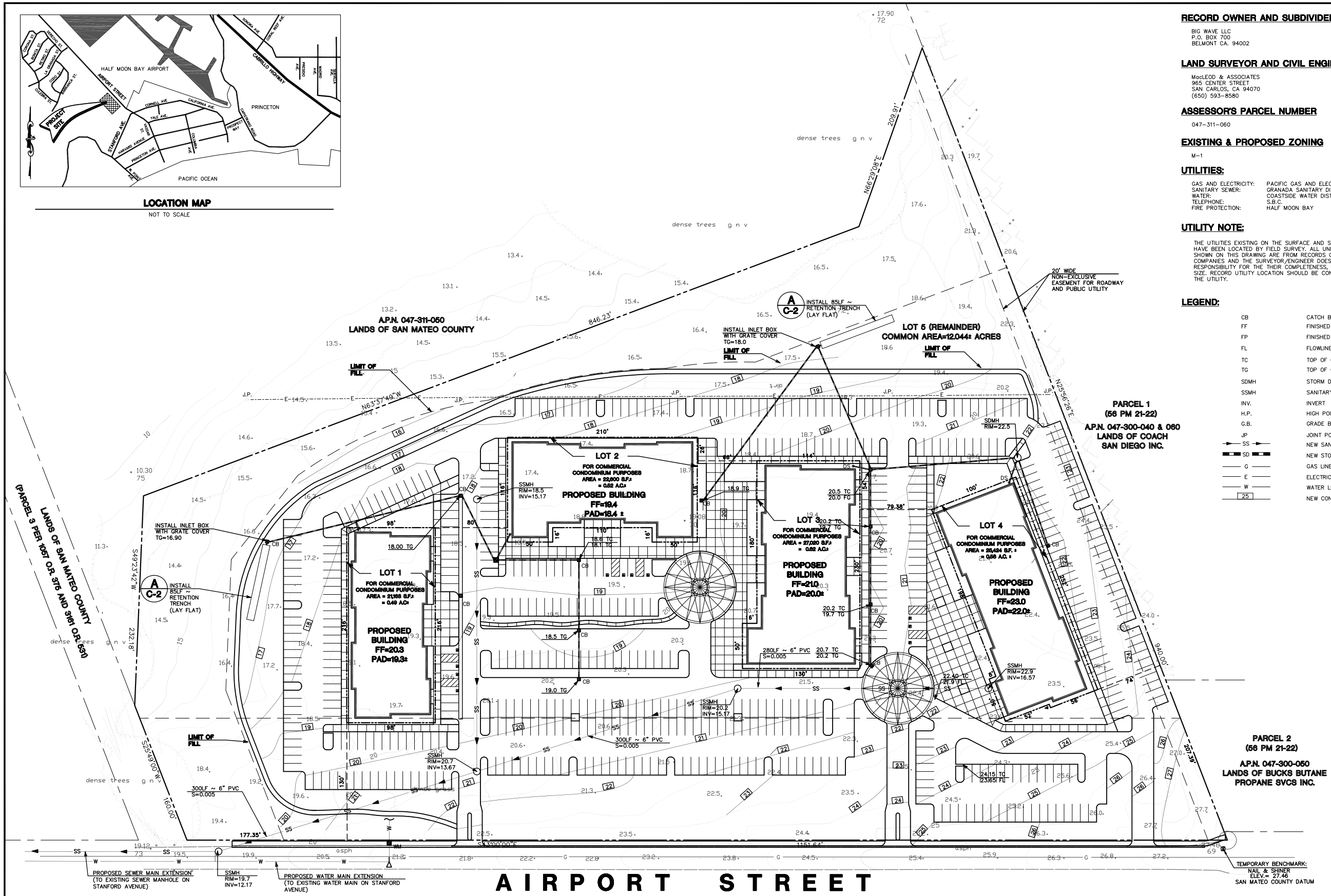
EROSION AND SEDIMENTATION CONTROL PLAN

BIG WAVE OFFICE PARK
AIRPORT STREET
SAN MATEO COUNTY, CALIFORNIA
PRINCETON BY THE CITY

DRAWN BY:	AAP
DESIGNED BY:	VPG
CHECKED BY:	DGM
SCALE:	1"= 40'
DATE:	10/14/05
DRAWING NO.	1608-00
SHEET	C-3

LOCATION MAP

NOT TO SCALE



GRAPHIC SCALE

(IN FEET)
1 inch = 40 ft.

RECORD OWNER AND SUBDIVIDER:

BIG WAVE LLC
P.O. BOX 700
BELMONT CA. 94002

LAND SURVEYOR AND CIVIL ENGINEER

MacLEOD & ASSOCIATES
965 CENTER STREET
SAN CARLOS, CA 94070
(650) 593-8580

ASSESSOR'S PARCEL NUMBER

047-311-060

EXISTING & PROPOSED ZONING

M-1

UTILITIES:

GAS AND ELECTRICITY:	PACIFIC GAS AND ELECTRIC COMPANY
SANITARY SEWER:	GRANADA SANITARY DISTRICT
WATER:	COASTSIDE WATER DISTRICT
TELEPHONE:	S.B.C.
FIRE PROTECTION:	HALF MOON BAY

UTILITY NOTE:

THE UTILITIES EXISTING ON THE SURFACE AND SHOWN ON THIS DRAWING HAVE BEEN LOCATED BY FIELD SURVEY. ALL UNDERGROUND UTILITIES SHOWN ON THIS DRAWING ARE FROM RECORDS OF THE VARIOUS UTILITY COMPANIES AND THE SURVEYOR/ENGINEER DOES NOT ASSUME RESPONSIBILITY FOR THE THEIR COMPLETENESS, INDICATED LOCATION, OR SIZE. RECORD UTILITY LOCATION SHOULD BE CONFIRMED BY EXPOSING THE UTILITY.

LEGEND:

CB	CATCH BASIN
FF	FINISHED FLOOR ELEVATION
FP	FINISHED PAVEMENT
FL	FLOWLINE
TC	TOP OF CURB
TG	TOP OF GRATE
SDMH	STORM DRAIN MANHOLE
SSMH	SANITARY SEWER MANHOLE
INV.	INVERT
H.P.	HIGH POINT
G.B.	GRADE BREAK
JP	JOINT POINT
SS	NEW SANITARY SEWER LINE
SD	NEW STORM DRAIN LINE
G	GAS LINE
E	ELECTRIC LINE
W	WATER LINE
25	NEW CONTOUR LINE

REV.	DESCRIPTION	BY:	DATE:
—	GENERAL REVISION	VPG	02/27/07

MacLEOD AND ASSOCIATES
CIVIL ENGINEERING · LAND SURVEYING
965 CENTER STREET · SAN CARLOS · CA 94070 · (650) 593-8580

PREPARED FOR:
BIG WAVE LLC

VESTING TENTATIVE SUBDIVISION MAP FOR COMMERCIAL CONDOMINIUM PURPOSES "BIG WAVE OFFICE PARK"

BEING A SUBDIVISION OF A.P.N. 047-311-060
AIRPORT STREET
SAN MATEO COUNTY CALIFORNIA

PRINCETON BY THE SEA

DRAWN BY:	AAP
DESIGNED BY:	VPG
CHECKED BY:	DGM
SCALE:	1"= 40'
DATE:	10/14/05
DRAWING NO.	1608-00
SHEET	C-1

LICENSED LAND SURVEYOR DAVID G. MACLEOD No. 5304 (exp. 12-31-2007) STATE OF CALIFORNIA

REGISTERED PROFESSIONAL ENGINEER DAVID G. MACLEOD CIVIL No. 35048 (exp. 9-30-2007) STATE OF CALIFORNIA

LOCATION MAP
NOT TO SCALE

A RETENTION TRENCH DETAIL
NO SCALE

GENERAL NOTES:

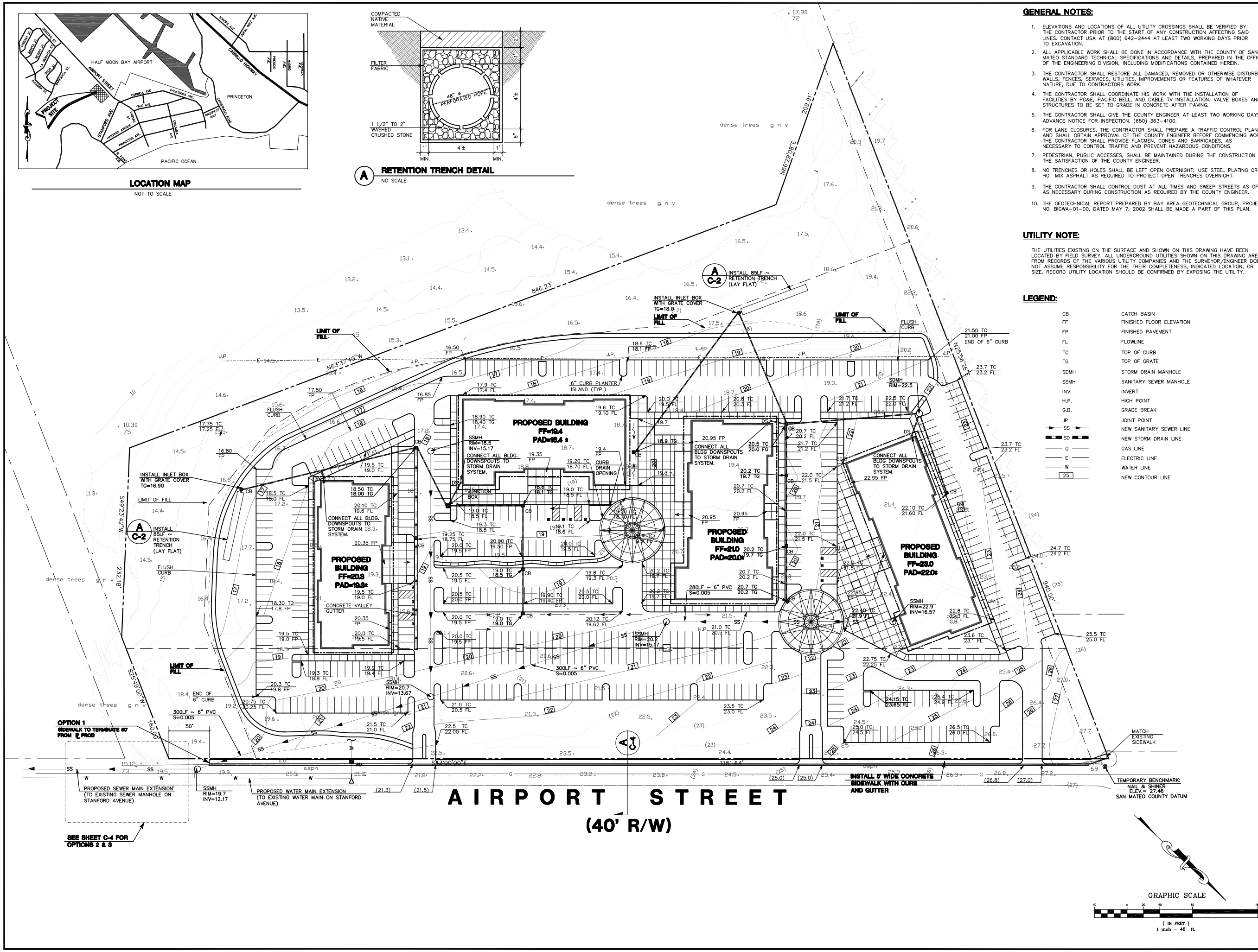
1. ELEVATIONS AND LOCATIONS OF ALL UTILITY CROSSINGS SHALL BE VERIFIED BY THE CONTRACTOR PRIOR TO THE START OF ANY CONSTRUCTION AFFECTING SAID LINES. CONTACT USA AT (800) 642-2444 AT LEAST TWO WORKING DAYS PRIOR TO EXCAVATION.
2. ALL APPLICABLE WORK SHALL BE DONE IN ACCORDANCE WITH THE COUNTY OF SAN MATEO STANDARD TECHNICAL SPECIFICATIONS AND DETAILS, PREPARED IN THE OFFICE OF THE ENGINEERING DIVISION, INCLUDING MODIFICATIONS CONTAINED HEREIN.
3. THE CONTRACTOR SHALL RESTORE ALL DAMAGED, REMOVED OR OTHERWISE DISTURBED WALLS, FENCES, SERVICES, UTILITIES, IMPROVEMENTS OR FEATURES OF WHATEVER NATURE, DUE TO CONTRACTORS WORK.
4. THE CONTRACTOR SHALL COORDINATE HIS WORK WITH THE INSTALLATION OF FACILITIES BY PG&E, PACIFIC BELL, AND CABLE TV INSTALLATION. VALVE BOXES AND STRUCTURES TO BE SET TO GRADE IN CONCRETE AFTER PAVING.
5. THE CONTRACTOR SHALL GIVE THE COUNTY ENGINEER AT LEAST TWO WORKING DAYS ADVANCE NOTICE FOR INSPECTION. (650) 363-4100.
6. FOR LANE CLOSURES, THE CONTRACTOR SHALL PREPARE A TRAFFIC CONTROL PLAN AND SHALL OBTAIN APPROVAL OF THE COUNTY ENGINEER BEFORE COMMENCING WORK. THE CONTRACTOR SHALL PROVIDE FLAGMEN, CONES AND BARRICADES, AS NECESSARY TO CONTROL TRAFFIC AND PREVENT HAZARDOUS CONDITIONS.
7. PEDESTRIAN, PUBLIC ACCESSES, SHALL BE MAINTAINED DURING THE CONSTRUCTION TO THE SATISFACTION OF THE COUNTY ENGINEER.
8. NO TRENCHES OR HOLES SHALL BE LEFT OPEN OVERNIGHT; USE STEEL PLATING OR HOT MIX ASPHALT AS REQUIRED TO PROTECT OPEN TRENCHES OVERNIGHT.
9. THE CONTRACTOR SHALL CONTROL DUST AT ALL TIMES AND SWEEP STREETS AS OFTEN AS NECESSARY DURING CONSTRUCTION AS REQUIRED BY THE COUNTY ENGINEER.
10. THE GEOTECHNICAL REPORT PREPARED BY BAY AREA GEOTECHNICAL GROUP, PROJECT NO. BIGWA-01-00, DATED MAY 7, 2002 SHALL BE MADE A PART OF THIS PLAN.

UTILITY NOTE:

THE UTILITIES EXISTING ON THE SURFACE AND SHOWN ON THIS DRAWING HAVE BEEN LOCATED BY FIELD SURVEY. ALL UNDERGROUND UTILITIES SHOWN ON THIS DRAWING ARE FROM RECORDS OF THE VARIOUS UTILITY COMPANIES AND THE SURVEYOR/ENGINEER DOES NOT ASSUME RESPONSIBILITY FOR THE THEIR COMPLETENESS, INDICATED LOCATION, OR SIZE. RECORD UTILITY LOCATION SHOULD BE CONFIRMED BY EXPOSING THE UTILITY.

LEGEND:

CB	CATCH BASIN
FF	FINISHED FLOOR ELEVATION
FP	FINISHED PAVEMENT
FL	FLOWLINE
TC	TOP OF CURB
TG	TOP OF GRATE
SDMH	STORM DRAIN MANHOLE
SSMH	SANITARY SEWER MANHOLE
INV.	INVERT
H.P.	HIGH POINT
G.B.	GRADE BREAK
JP	JOINT POINT
SS	NEW SANITARY SEWER LINE
SD	NEW STORM DRAIN LINE
G	GAS LINE
E	ELECTRIC LINE
W	WATER LINE
25	NEW CONTOUR LINE



GRAPHIC SCALE
40 0 20 40 80 160
(IN FEET)
1 inch = 40 ft.

REV.	DESCRIPTION	BY:	DATE:
—	GENERAL REVISION	VPG	02/27/07

RECORDED PROFESSIONAL ENGINEER — DANIEL E. McLEOD — CIVIL No. 35048 — Exp. 9-30-2007 — STATE OF CALIFORNIA

McLEOD AND ASSOCIATES
CIVIL ENGINEERING · LAND SURVEYING
965 CENTER STREET · SAN CARLOS · CA 94070 · (650) 593-8580

PREPARED FOR:
BIG WAVE LLC

GRADING & DRAINAGE PLAN WITH PERMANENT STORM WATER CONTROLS

BIG WAVE OFFICE PARK
AIRPORT STREET
PRINCETON BY THE SEA
SAN MATEO COUNTY
CALIFORNIA

DRAWN BY:	AAP
DESIGNED BY:	VPG
CHECKED BY:	DGM
SCALE:	1"= 40'
DATE:	10/14/05
DRAWING NO.	1608-00
SHEET	C-2

TEMPORARY BENCHMARK:
NAIL & SHINER
ELEV.= 27.46, 27.2
SAN MATEO COUNTY DATUM

AIRPORT STREET

asph

S43°00'00"E 1151.64'

S25°49'00"W 160.00'

S49°23'42"W 232.18'

N25°56'26"E 940.00'

N63°37'49"W 846.23'

N66°29'08"E 209.91'

dirt

dense grass

dense trees g n v

PARCEL AREA = 14.253 ± ACRES

GRAPHIC SCALE

40 0 20 40 80 160

(IN FEET)
1 inch = 40 ft.

REVISION NO	DESCRIPTION	DRAWN BY	CHECKED BY	APPROVED BY	DATE

TOPOGRAPHIC SURVEY PLAN

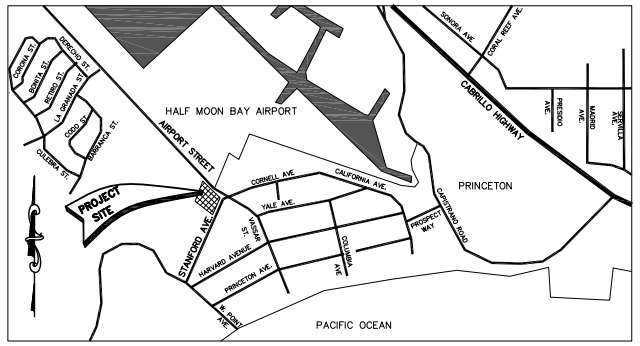
A.P.N. 047-311-060

UNINCORPORATED SAN MATEO COUNTY CALIFORNIA

PREPARED FOR: STEVE BARBER

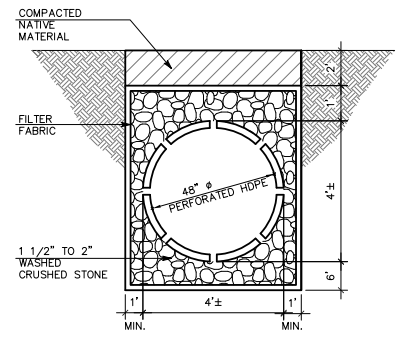
MacLEOD AND ASSOCIATES
CIVIL ENGINEERING · LAND SURVEYING
930B TANKLAGE RD. SAN CARLOS CA 94070 (650) 593-8580

DRAWN BY: G.I.	SCALE: 1"= 40'	DRAWING NO. 1608-00
DESIGNED BY: ---	DATE: 02-14-2002	
CHECKED BY: DGM	APP'D.	SHEET 1 OF 1



LOCATION MAP

SCALE: NOT TO SCALE



A RETENTION TRENCH DETAIL

NO SCALE

UTILITY NOTE:

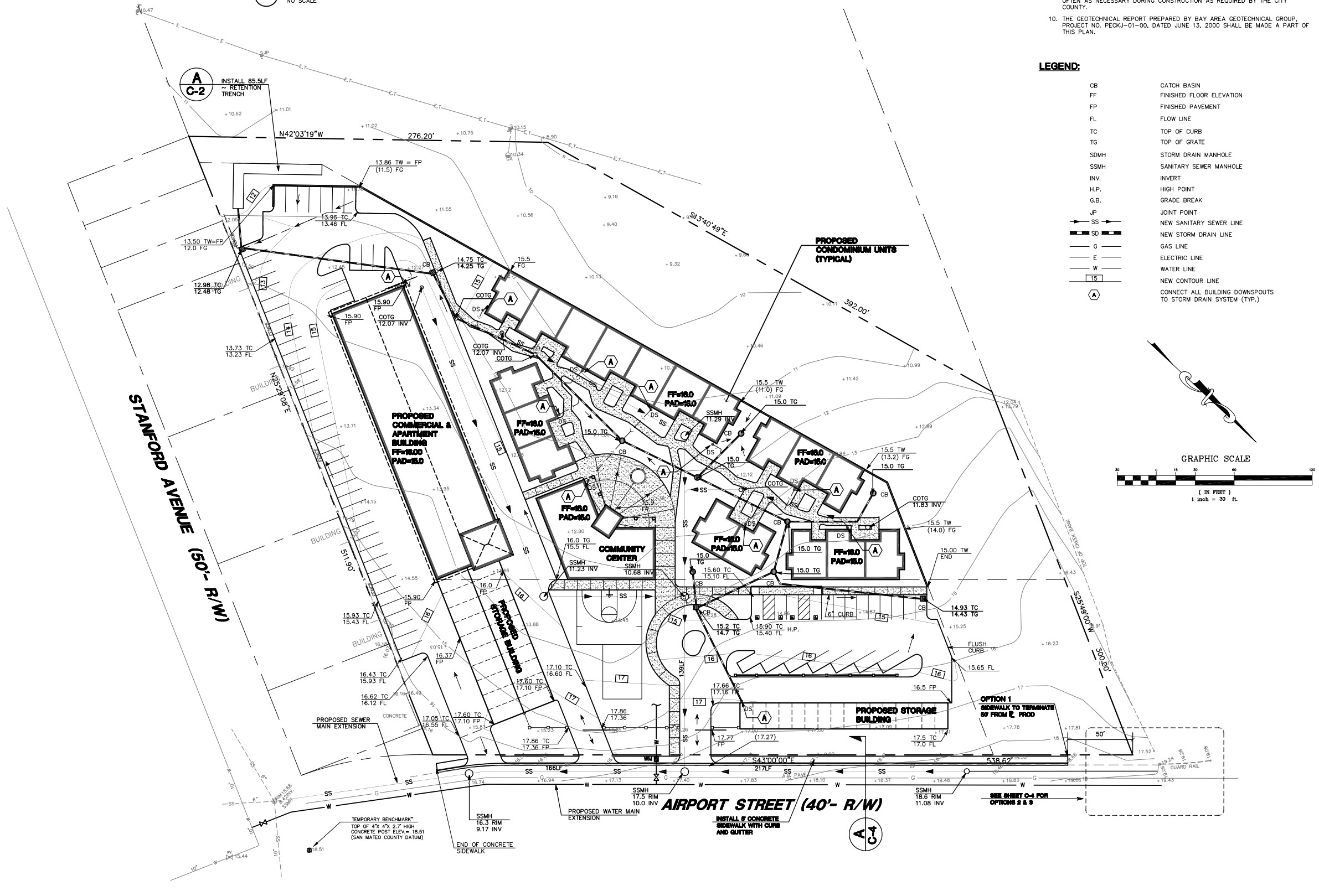
THE UTILITIES EXISTING ON THE SURFACE AND SHOWN ON THIS DRAWING HAVE BEEN LOCATED BY FIELD SURVEY. ALL UNDERGROUND UTILITIES SHOWN ON THIS DRAWING ARE FROM RECORDS OF THE VARIOUS UTILITY COMPANIES AND THE SURVEYOR/ENGINEER DOES NOT ASSUME RESPONSIBILITY FOR THE THEIR COMPLETENESS, INDICATED LOCATION, OR SIZE. RECORD UTILITY LOCATION SHOULD BE CONFIRMED BY EXPOSING THE UTILITY.

GENERAL NOTES:

1. ELEVATIONS AND LOCATIONS OF ALL UTILITY CROSSINGS SHALL BE VERIFIED BY THE CONTRACTOR PRIOR TO THE START OF ANY CONSTRUCTION AFFECTING SAID LINES. CONTACT USA AT (800) 642–2444 AT LEAST TWO WORKING DAYS PRIOR TO EXCAVATION.
2. ALL APPLICABLE WORK SHALL BE DONE IN ACCORDANCE WITH THE COUNTY OF SAN MATEO STANDARD TECHNICAL SPECIFICATIONS AND DETAILS, PREPARED IN THE OFFICE OF THE ENGINEERING DIVISION, INCLUDING MODIFICATIONS CONTAINED HEREIN.
3. THE CONTRACTOR SHALL RESTORE ALL DAMAGED, REMOVED OR OTHERWISE DISTURBED WALLS, FENCES, SERVICES, UTILITIES, IMPROVEMENTS OR FEATURES OF WHATEVER NATURE, DUE TO CONTRACTORS WORK.
4. THE CONTRACTOR SHALL COORDINATE HIS WORK WITH THE INSTALLATION OF FACILITIES BY PG&E, PACIFIC BELL, AND CABLE TV INSTALLATION. VALVE BOXES AND STRUCTURES TO BE SET TO GRADE IN CONCRETE AFTER PAVING.
5. THE CONTRACTOR SHALL GIVE THE COUNTY AT LEAST TWO WORKING DAYS ADVANCE NOTICE FOR INSPECTION. (650) 363 – 4100.
6. FOR LANE CLOSURES, THE CONTRACTOR SHALL PREPARE A TRAFFIC CONTROL PLAN AND SHALL OBTAIN APPROVAL FROM THE COUNTY BEFORE COMMENCING WORK. THE CONTRACTOR SHALL PROVIDE FLAGMEN, CONES AND BARRICADES, AS NECESSARY TO CONTROL TRAFFIC AND PREVENT HAZARDOUS CONDITIONS.
7. PEDESTRIAN, PUBLIC ACCESSES, SHALL BE MAINTAINED DURING THE CONSTRUCTION TO THE SATISFACTION OF THE COUNTY.
8. NO TRENCHES OR HOLES SHALL BE LEFT OPEN OVERNIGHT; USE STEEL PLATING OR HOT MIX ASPHALT AS REQUIRED TO PROTECT OPEN TRENCHES OVERNIGHT.
9. THE CONTRACTOR SHALL CONTROL DUST AT ALL TIMES AND SWEEP STREETS AS OFTEN AS NECESSARY DURING CONSTRUCTION AS REQUIRED BY THE CITY COUNTY.
10. THE GEOTECHNICAL REPORT PREPARED BY BAY AREA GEOTECHNICAL GROUP, PROJECT NO. PECKJ–01–00, DATED JUNE 13, 2000 SHALL BE MADE A PART OF THIS PLAN.

LEGEND:

CB	CATCH BASIN
FF	FINISHED FLOOR ELEVATION
FP	FINISHED PAVEMENT
FL	FLOW LINE
TC	TOP OF CURB
TG	TOP OF GRATE
SDMH	STORM DRAIN MANHOLE
SSMH	SANITARY SEWER MANHOLE
INV.	INVERT
H.P.	HIGH POINT
G.B.	GRADE BREAK
JP	JOINT POINT
SS	NEW SANITARY SEWER LINE
SD	NEW STORM DRAIN LINE
G	GAS LINE
E	ELECTRIC LINE
W	WATER LINE
15	NEW CONTOUR LINE
A	CONNECT ALL BUILDING DOWNSPOUTS TO STORM DRAIN SYSTEM (TYP.)



GRAPHIC SCALE

(IN FEET)
1 inch = 30 ft.

NO.	DESCRIPTION	BY:	DATE:
—	GENERAL REVISION	VPG	02/27/07

RECORD PROFESSIONAL ENGINEER DANIEL E. WESTLOCKER CIVIL No. 55048 Exp. 9-30-2007 STATE OF CALIFORNIA

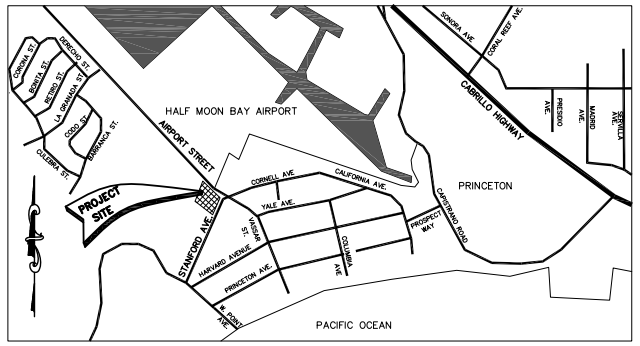
McLEOD AND ASSOCIATES
CIVIL ENGINEERING · LAND SURVEYING
965 CENTER STREET · SAN CARLOS · CA 94070 · (650) 593–8580

PREPARED FOR:
BIG WAVE LLC

GRADING & DRAINAGE PLAN WITH PERMANENT STORM WATER CONTROLS

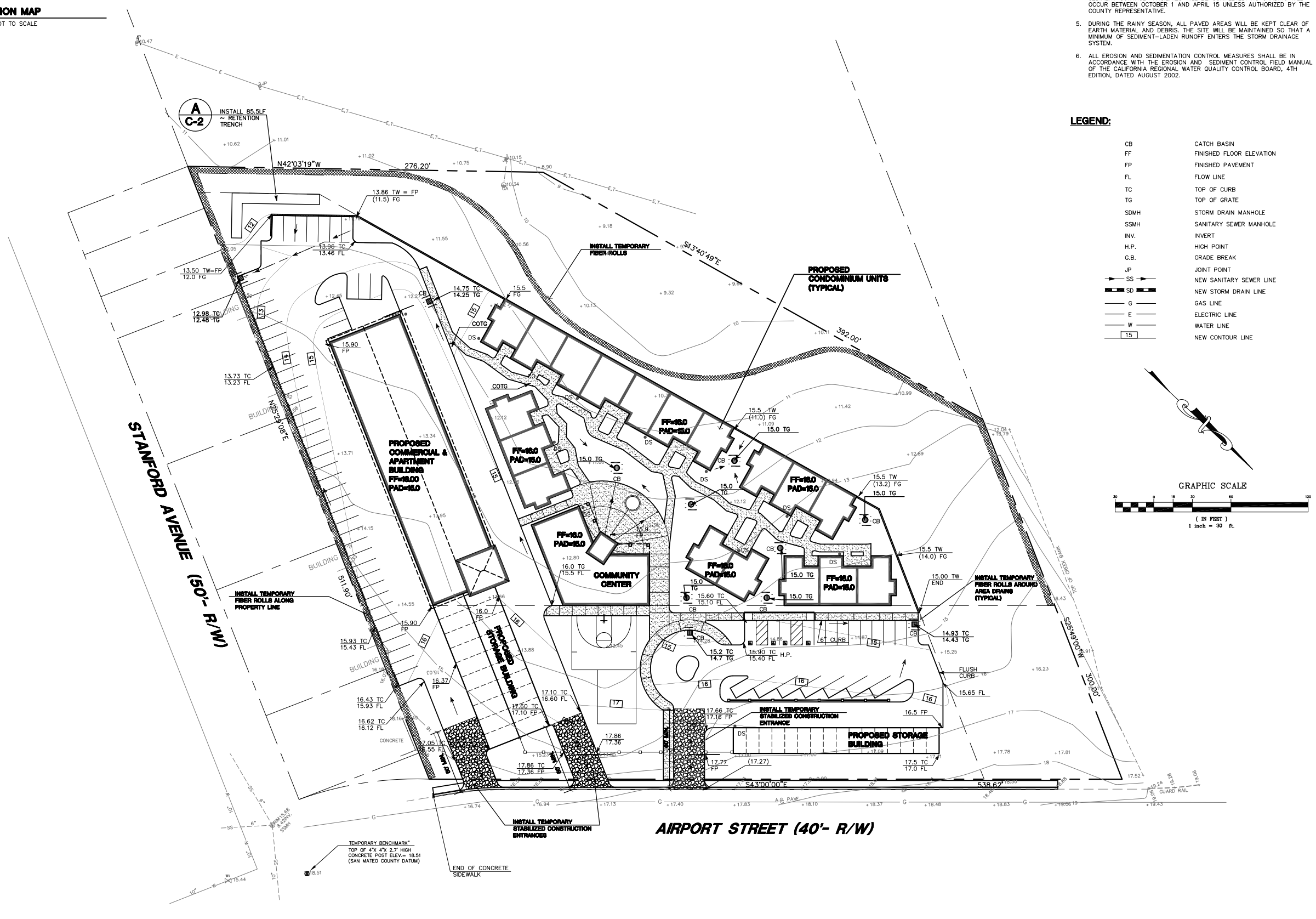
BIG WAVE DD COMMUNITY
AIRPORT STREET
PRINCETON BY THE SEA
SAN MATEO COUNTY CALIFORNIA

DRAWN BY:	AAP
DESIGNED BY:	VPG
CHECKED BY:	DGM
SCALE:	1"= 30'
DATE:	10/14/05
DRAWING NO.	1584–00
SHEET	C-2



LOCATION MAP

SCALE: NOT TO SCALE



GRAPHIC SCALE

30 0 15 30 60 120

(IN FEET)
1 inch = 30 ft.

GENERAL EROSION CONTROL NOTES:

1. THE INTENT OF THE EROSION CONTROL PLAN IS TO MINIMIZE ANY WATER QUALITY IMPACTS IN THE FORM OF SEDIMENT POLLUTION TO MAIN CREEK & TRIBUTARIES.
2. A CONSTRUCTION ENTRANCE WILL BE INSTALLED PRIOR TO START OF GRADING. LOCATION OF THE ENTRANCE MAY BE ADJUSTED BY THE CONTRACTOR TO FACILITATE GRADING OPERATIONS. ALL CONSTRUCTION TRAFFIC ENTERING THE PAVED ROAD MUST CROSS THE CONSTRUCTION ENTRANCE. THE ENTRANCE SHALL BE MAINTAINED IN A CONDITION THAT WILL PREVENT TRACKING OR FLOWING OF SEDIMENT ONTO PUBLIC RIGHTS-OF-WAY. THIS MAY REQUIRE PERIODIC TOP DRESSING WITH ADDITIONAL STONE AS CONDITION DEMAND, AND REPAIR OF ANY MEASURES USED TO TRAP SEDIMENTS.
3. WHEN NECESSARY, WHEELS SHALL BE CLEANED TO REMOVE SEDIMENT PRIOR TO ENTRANCE ONTO PUBLIC RIGHT-OF WAY. WHEN WASHING IS REQUIRED, IT SHALL BE DONE ON AN AREA STABILIZED WITH CRUSHED STONE WHICH DRAINS INTO AN APPROVED SEDIMENT BASIN. ALL SEDIMENT SHALL BE PREVENTED FROM ENTERING ANY STORM DRAIN, DITCH, OR WATERCOURSE THROUGH THE USE OF SAND BAGS, GRAVEL, BOARDS OR OTHER APPROVED METHODS.
4. THE EROSION AND SEDIMENT CONTROL MEASURES WILL BE OPERABLE DURING THE RAINY SEASON, OCTOBER 1 TO APRIL 15. BY OCTOBER 1, GRADING AND INSTALLATION OF STORM DRAINAGE AND EROSION AND SEDIMENT CONTROL FACILITIES WILL BE COMPLETED. NO GRADING WILL OCCUR BETWEEN OCTOBER 1 AND APRIL 15 UNLESS AUTHORIZED BY THE COUNTY REPRESENTATIVE.
5. DURING THE RAINY SEASON, ALL PAVED AREAS WILL BE KEPT CLEAR OF EARTH MATERIAL AND DEBRIS. THE SITE WILL BE MAINTAINED SO THAT A MINIMUM OF SEDIMENT-LADEN RUNOFF ENTERS THE STORM DRAINAGE SYSTEM.
6. ALL EROSION AND SEDIMENTATION CONTROL MEASURES SHALL BE IN ACCORDANCE WITH THE EROSION AND SEDIMENT CONTROL FIELD MANUAL OF THE CALIFORNIA REGIONAL WATER QUALITY CONTROL BOARD, 4TH EDITION, DATED AUGUST 2002.

LEGEND:

CB	CATCH BASIN
FF	FINISHED FLOOR ELEVATION
FP	FINISHED PAVEMENT
FL	FLOW LINE
TC	TOP OF CURB
TG	TOP OF GRATE
SDMH	STORM DRAIN MANHOLE
SSMH	SANITARY SEWER MANHOLE
INV.	INVERT
H.P.	HIGH POINT
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W	WATER LINE
15	NEW CONTOUR LINE

REV.	DESCRIPTION	BY:	DATE
—	GENERAL REVISION	VPG	02/27/07

RECORDED PROFESSIONAL ENGINEER — DANIEL E. McCLOSKEY — CIVIL No. 55048 Exp. 9-30-2007 — STATE OF CALIFORNIA

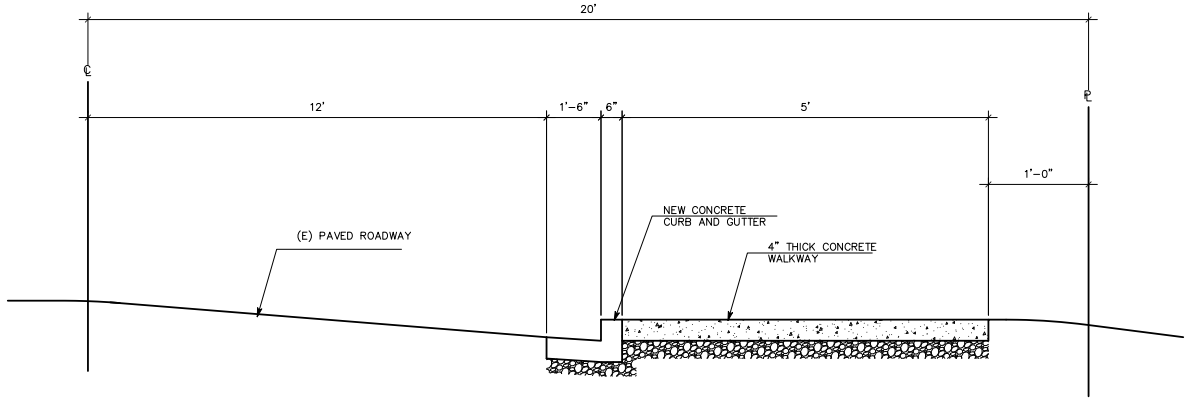
McLEOD AND ASSOCIATES
CIVIL ENGINEERING · LAND SURVEYING
965 CENTER STREET · SAN CARLOS · CA 94070 · (650) 593-8580

PREPARED FOR:
BIG WAVE LLC

EROSION AND SEDIMENTATION CONTROL PLAN

BIG WAVE DD COMMUNITY
AIRPORT STREET
PRINCETON BY THE SEA
SAN MATEO COUNTY
CALIFORNIA

DRAWN BY:	AAP
DESIGNED BY:	VPG
CHECKED BY:	DGM
SCALE:	1"= 30'
DATE:	10/14/05
DRAWING NO.	1584-00
SHEET	C-3



A **TYPICAL SECTION**
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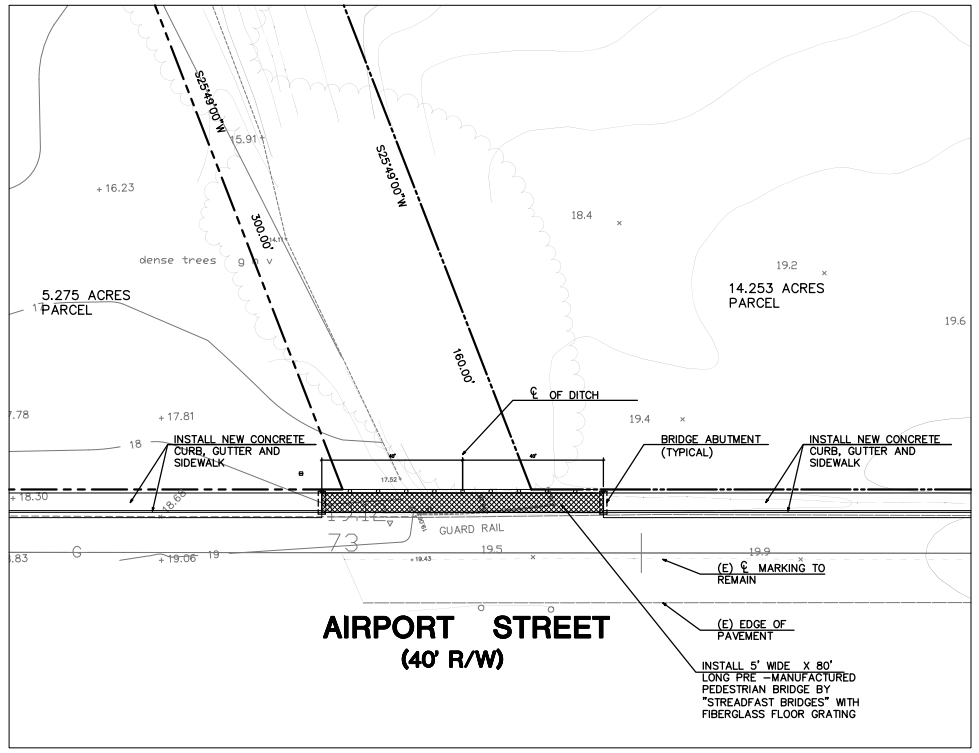
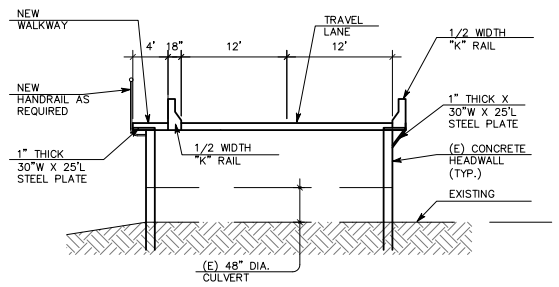


C **OPTION 3**
NO SCALE



SECTION A-A
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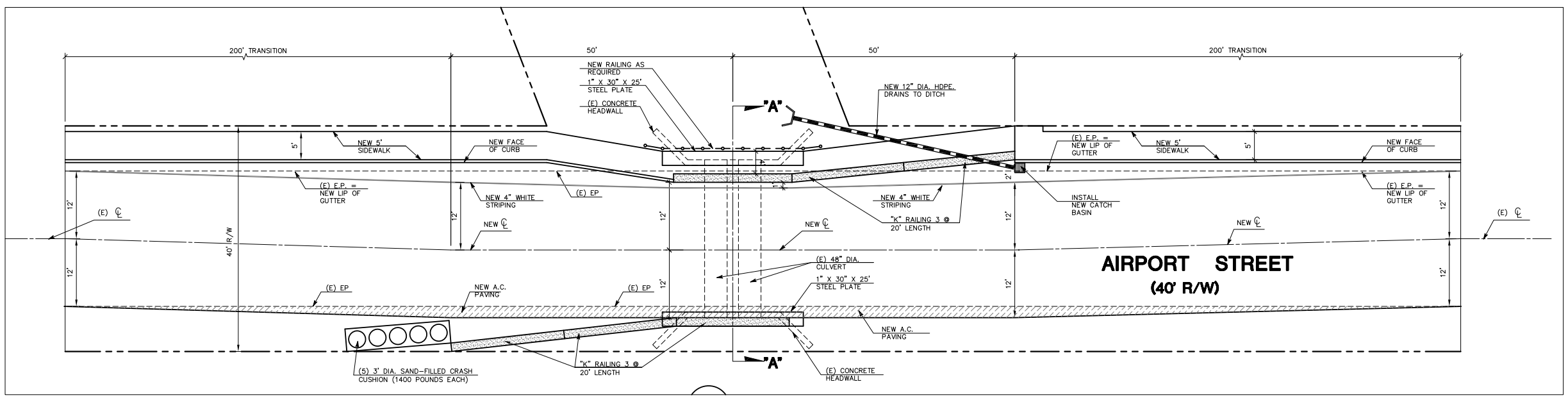

B **OPTION 2**
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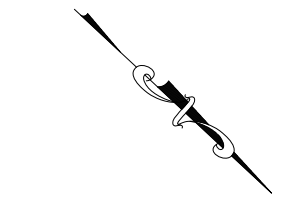


GRAPHIC SCALE
30 0 15 30 60 120
(IN FEET)
1 inch = 30 ft.

REV.	DESCRIPTION	BY:	DATE:
—	GENERAL REVISION	VPG	02/27/07

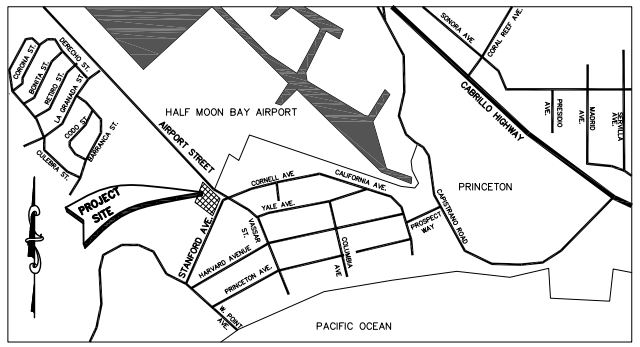
RECORDED PROFESSIONAL ENGINEER — DANIEL E. McLEOD — CIVIL No. 55048 — Exp. 9-30-2007 — STATE OF CALIFORNIA

McLEOD AND ASSOCIATES
CIVIL ENGINEERING · LAND SURVEYING
965 CENTER STREET · SAN CARLOS · CA 94070 · (650) 593-8580

PREPARED FOR:
BIG WAVE LLC

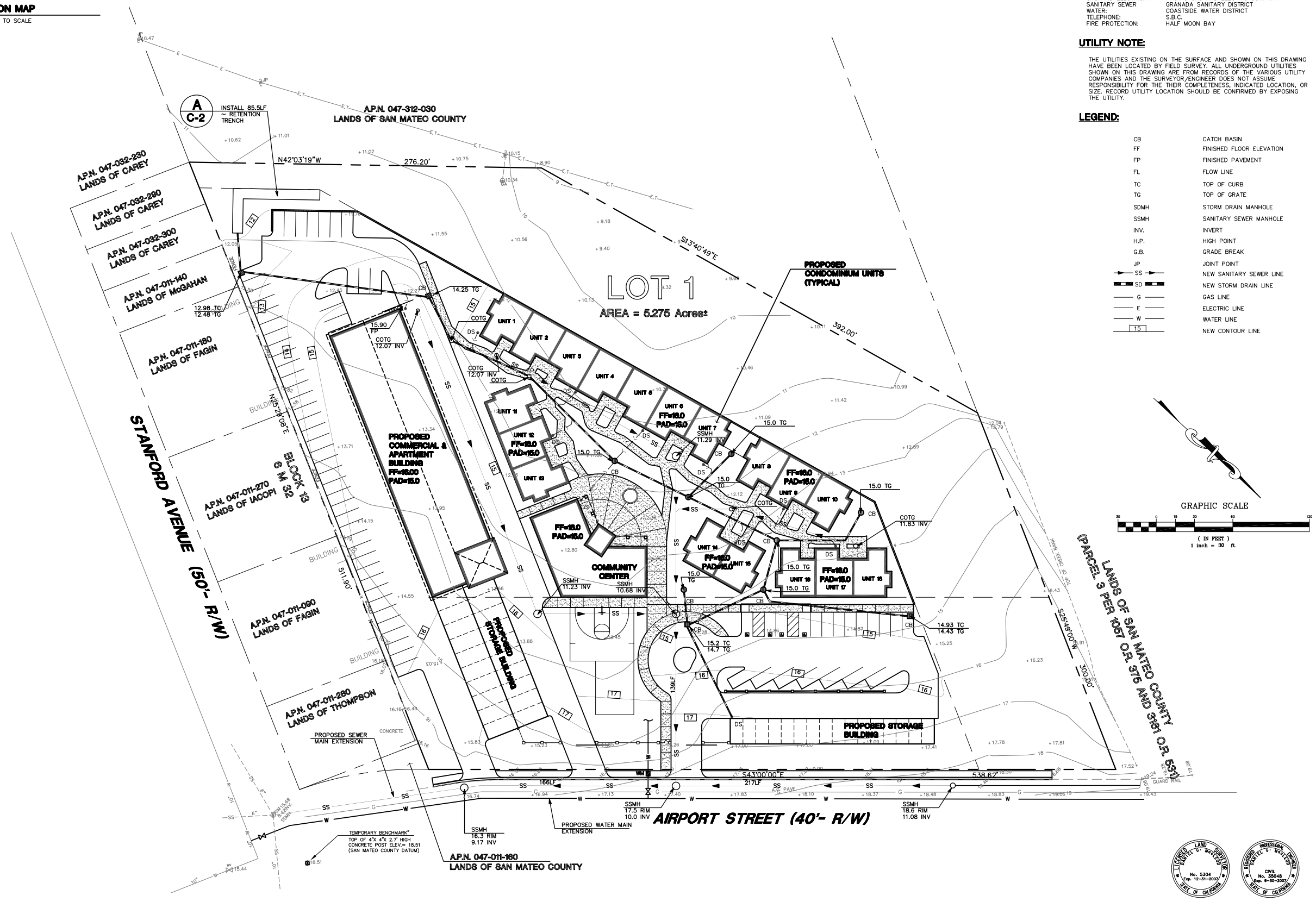
DETAIL SHEET
BIG WAVE DD COMMUNITY
AIRPORT STREET
SAN MATEO COUNTY
CALIFORNIA
PRINCETON BY THE SEA

DRAWN BY:	AAP
DESIGNED BY:	VPG
CHECKED BY:	DGM
SCALE:	NONE
DATE:	10/14/05
DRAWING NO.	1584-00
SHEET	C-4



LOCATION MAP

SCALE: NOT TO SCALE



RECORD OWNER AND SUBDIVIDER:

BIG WAVE LLC
P.O. BOX 700
BELMONT CA. 94002

LAND SURVEYOR AND CIVIL ENGINEER

MacLEOD & ASSOCIATES
965 CENTER STREET
SAN CARLOS, CA 94070
(650) 593-8580

ASSESSOR'S PARCEL NUMBER

047-312-040

EXISTING ZONING

M-1

UTILITIES:

GAS AND ELECTRICITY:	PACIFIC GAS AND ELECTRIC COMPANY
SANITARY SEWER	GRANADA SANITARY DISTRICT
WATER:	COASTSIDE WATER DISTRICT
TELEPHONE:	S.B.C.
FIRE PROTECTION:	HALF MOON BAY

UTILITY NOTE:

THE UTILITIES EXISTING ON THE SURFACE AND SHOWN ON THIS DRAWING HAVE BEEN LOCATED BY FIELD SURVEY. ALL UNDERGROUND UTILITIES SHOWN ON THIS DRAWING ARE FROM RECORDS OF THE VARIOUS UTILITY COMPANIES AND THE SURVEYOR/ENGINEER DOES NOT ASSUME RESPONSIBILITY FOR THE THEIR COMPLETENESS, INDICATED LOCATION, OR SIZE. RECORD UTILITY LOCATION SHOULD BE CONFIRMED BY EXPOSING THE UTILITY.

LEGEND:

CB	CATCH BASIN
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REV.	DESCRIPTION	BY:	DATE:
—	GENERAL REVISION	VPG	02/27/07

MacLEOD AND ASSOCIATES
CIVIL ENGINEERING · LAND SURVEYING
965 CENTER STREET · SAN CARLOS · CA 94070 · (650) 593-8580

PREPARED FOR:
BIG WAVE LLC

VESTING TENTATIVE SUBDIVISION MAP FOR CONDOMINIUM PURPOSES (18 UNITS)

BEING A SUBDIVISION OF A.P.N. 047-312-040
AIRPORT STREET
SAN MATEO COUNTY
CALIFORNIA
PRINCETON BY THE SEA

DRAWN BY:	AAP
DESIGNED BY:	VPG
CHECKED BY:	DGM
SCALE:	1"= 30'
DATE:	10/14/05
DRAWING NO.	1584-00
SHEET	C-1

REGISTERED LAND SURVEYOR DAVID G. MACLEOD No. 5304 (exp. 12-31-2007) STATE OF CALIFORNIA

REGISTERED PROFESSIONAL ENGINEER DAVID G. MACLEOD CIVIL No. 35048 Exp. 9-30-2007 STATE OF CALIFORNIA

APPENDIX B

Records Review Documentation

HEALTH DEPARTMENT

ENVIRONMENTAL HEALTH
SAN MATEO COUNTY

FACSIMILE COVER SHEET

DATE: March 12, 2007

TO: ERIK

COMPANY NAME:

FAX# 510-874-4507

FROM: MELISSA

AT: SAN MATEO COUNTY ENVIRONMENTAL HEALTH DEPT
Fax# 650-363-7882

Number of Pages (including cover page): 3 + 1 = 4

Here is the list of cases for the City of Half Moon Bay. I have also included the Request to review files form. When completing this form, please fax the request attention: Tanya @ 650-363-7882. If you have any questions regarding the file review please contact Tanya at 650-363-1922.

Thank you, Melissa

PAGE 02/04

CASE #	Global ID	CASE NAME & ADDRESS			STATUS	CASE TYPE
HALF MOON BAY						
230032	T0608101117	SEWER AUTHORITY MIDCOASTSIDE	1000	N CABRILLO HWY	9- Case Closed	Aquifer used for drinking water supply affected
238033	T0608160477	BUNES, BERGER & BUNES PROPERTY	108	N CABRILLO HWY	9- Case Closed	Aquifer used for drinking water supply affected
230009	T0608100096	CABRILLO INN	1410	S CABRILLO HWY	9- Case Closed	Aquifer used for drinking water supply affected
230018	T0608100321	McCAHON NURSERY	1450	S CABRILLO HWY	9- Case Closed	Soil only affected
230025	T0608100685	CALTRANS MAINTENANCE FACILITY	2003	S CABRILLO HWY	8- Verification Monitoring Underway	Aquifer used for drinking water supply affected
230005	T0608100099	CALTRANS	2003	S CABRILLO HWY	9- Case Closed	Soil only affected
230023	T0608100529	SWEDISH PLACE	2320	S CABRILLO HWY	9- Case Closed	Soil only affected
230012	T0608100359	NURSERYMEN'S EXCHANGE	2651	N CABRILLO HWY	9- Case Closed	Soil only affected
230031	T0608100135	CHEVRON 9-7927	375	S CABRILLO HWY	9- Case Closed	Aquifer used for drinking water supply affected
238037	T0608118229	TURNER RESIDENCE	990	CABRILLO HWY	3B- Preliminary Assessment Underway	Undetermined affected
230026	T0608100687	ERICA NURSERY	37	FRENCHMAN CREEK RD	9- Case Closed	Soil only affected
034	T0608192673	CALIFORNIA EVERGREEN NURSERY	12761	HWY 92	5C- Pollution Characterization	Aquifer used for drinking water supply affected
230029	T0608100769	SANDLIN RESIDENCE	786	JOHNSTON ST	7- Remedial Action Underway	Aquifer used for drinking water supply affected
010030	T0608101109	CABRILLO SCHOOL DISTRICT	498	KELLY AVE	9- Case Closed	Aquifer used for drinking water supply affected
230002	T0608100224	FOOD & LIQUOR #44	501	KELLY	8- Verification Monitoring Underway	Aquifer used for drinking water supply affected
230008	T0608188257	HALF MOON BAY STATE BEACH	95	KELLY AVE	9- Case Closed	Aquifer used for drinking water supply affected
239033	T0608119112	HALF MOON BAY STATE BEACH	95	KELLY AVE	9- Case Closed	Aquifer used for drinking water supply affected
230017	T0608100329	CUNHA INTERMEDIATE SCHOOL DIST	0	KELLY & CHURCH AVE	9- Case Closed	Soil only affected
239030	T0608133971	CORREA RESIDENCE	523	MAGNOLIA ST	9- Case Closed	Soil only affected
230019	T0608100375	PACIFIC BELL	1167	S MAIN ST	9- Case Closed	Soil only affected
230021	T0608100020	ANDREINI BROS	119	MAIN ST	9- Case Closed	Soil only affected
230006	T0608100533	TEXACO 21-1327, FORMER	196	MAIN ST	9- Case Closed	Aquifer used for drinking water supply affected
230027	T0608100715	THE BICYCLERY	432	MAIN ST	9- Case Closed	Soil only affected
230011	T0608100294	K.N. PROPERTIES	447	MAIN ST	9- Case Closed	Aquifer used for drinking water supply affected
007	T0608100373	GRANELLI & COOK, INC	604	MAIN ST	9- Case Closed	Aquifer used for drinking water supply affected
230022	T0608154165	GROWERS ASSOCIATION	845	MAIN ST	9- Case Closed	Aquifer used for drinking water supply affected
239035	T0608113542	MAIN STREET & ARNOLD WAY	0	MAIN STREET & ARNOLD WY	8- Verification Monitoring Underway	Soil only affected
230036	T0608149657	DAYLIGHT NURSERY	925	MIRAMONTES ST	9- Case Closed	Aquifer used for drinking water supply affected
238028	T0608100732	BOONE PROPERTY	113	PABLO CT	9- Case Closed	Soil only affected
239001	T0608170660	RICE TRUCKING	565	REDONDO BEACH RD	9- Case Closed	Soil only affected
019037	T0608166068	G.N. RENN HWY 92 TANKER SPILL	11881	SAN MATEO RD	9- Case Closed	Aquifer used for drinking water supply affected
230004	T0608100424	REPETTO NURSERY	12351	SAN MATEO RD	5C- Pollution Characterization	Aquifer used for drinking water supply affected
010033	T0608154113	PASTORINO NURSERY	12511	SAN MATEO RD	8- Verification Monitoring Underway	Aquifer used for drinking water supply affected

03/12/2007 16:15 3637882

CASE #	Global ID	CASE NAME & ADDRESS			STATUS	CASE TYPE
230003	T0608100364	OLYMPIAN OIL HMB	200	SAN MATEO RD	9- Case Closed	Aquifer used for drinking water supply affected
230013	T0608100473	SHELL OIL CO	201	SAN MATEO RD	8- Verification Monitoring Underway	Aquifer used for drinking water supply affected
230001	T0608100177	CURLEY & REDS	215	SAN MATEO RD	9- Case Closed	Soil only affected
230020	T0608100634	JAMES FORD INC	100	SEYMOUR ST	9- Case Closed	Soil only affected

HEALTH DEPARTMENT

APPLICATION TO REVIEW FILES
ENVIRONMENTAL HEALTH DIVISION RECORDS

Section 6256 of the Public Records Act requires access to public records within 10 days of request. The Division will make every effort to provide access within 10 days with advance notification for an appointment to review records. This allows us time to retrieve files from off-site and review files.

DATE: _____ **COMPANY PROJECT:** _____

NAME: _____ **PHONE NO.** _____

COMPANY NAME: _____

PLEASE PUT BACK FILES IN THE SAME CONDITION AS RECEIVED!!!!

Copy fees are $0.10 cents per page, not to exceed 20 pages. If more copies are needed reviewer has to make other arrangements for copying. *Only seven (7) files per appointment.* Only a writing instrument and note pad allowed in file review room. All other items stored in receptionist area.

COMPLETE ADDRESS OF FILES TO BE REVIEWED (Letter of request may be attached)	TYPE OF INFO (Waste, Business Plan, Groundwater)

County policy for File Review: **Only seven (7) files per appointment.** Files are expected to be returned in the same condition as received. An expedited file review appointment can be arranged for a fee of $45 and we will contact you within 72 hours to schedule your expedited appointment. ***Please indicate so you are requesting files to be expedited.*

PRINT NAME: _____ **SIGNATURE:** _____

PUBLIC HEALTH AND ENVIRONMENTAL PROTECTION DIVISION

Board of Supervisors: Mark Church • Rose Jacobs Gibson • Richard S. Gordon • Jerry Hill • Adrienne Tissier • **Health Director:** Charlene Silva

455 County Center • Redwood City, CA 94063 • phone 650.363.4305 • tdd 650.573.3206 • fax 650.363.7882

http://www.smhealth.org

The EDR Aerial Photo Decade Package

Big Wave Project
Airport Street/Stanford Avenue
Half Moon Bay, CA 94019

Inquiry Number: 1872299.5

March 07, 2007

EDR® Environmental Data Resources Inc

The Standard in Environmental Risk Management Information

440 Wheelers Farms Road
Milford, Connecticut 06461

Nationwide Customer Service

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

EDR Aerial Photo Decade Package

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

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Date EDR Searched Historical Sources:

Aerial Photography March 07, 2007

Target Property:

Airport Street/Stanford Avenue

Half Moon Bay, CA 94019

Year	***Scale***	***Details***	***Source***
1943	Aerial Photograph. Scale: 1"=555'	Flight Year: 1943	Aero
1956	Aerial Photograph. Scale: 1"=555'	Flight Year: 1956	Aero
1965	Aerial Photograph. Scale: 1"=333'	Flight Year: 1965	Cartwright
1974	Aerial Photograph. Scale: 1"=601'	Flight Year: 1974	NASA
1982	Aerial Photograph. Scale: 1"=690'	Flight Year: 1982	WSA
1993	Aerial Photograph. Scale: 1"=666'	Flight Year: 1993	USGS
1998	Aerial Photograph. Scale: 1"=666'	Flight Year: 1998	USGS
2001	Aerial Photograph. Scale: 1"=333'	Flight Year: 2001	IK Curtis

INQUIRY #: 1872299.5

YEAR: 1943

= 555'

N

EDR Environmental Data Resources Inc

INQUIRY #: 1872299.5

YEAR: 1956

= 555'

N

INQUIRY #: 1872299.5
YEAR: 1965
= 333'
N
EDR Environmental Data Resources Inc

INQUIRY #: 1872299.5
YEAR: 1974
= 601'
N
EDR Environmental Data Resources Inc

INQUIRY #: 1872299.5
YEAR: 1982
= 690'
N
EDR Environmental Data Resources Inc

INQUIRY #: 1872299.5
YEAR: 1993
= 666'
N

INQUIRY #: 1872299.5
YEAR: 1998
= 666'
N
EDR Environmental Data Resources Inc

INQUIRY #: 1872299.5
YEAR: 2001
= 333'
N
EDR Environmental Data Resources Inc

Historical Topographic Map

N	TARGET QUAD NAME: MONTARA MOUNTAIN MAP YEAR: 1997 SERIES: 7.5 SCALE: 1:24000	SITE NAME: Big Wave Project ADDRESS: Airport Street/Stanford Avenue Half Moon Bay, CA 94019 LAT/LONG: 37.5051 / 122.4934	CLIENT: Treadwell & Rollo Inc. CONTACT: Eric Morita INQUIRY#: 1872299.4 RESEARCH DATE: 03/07/2007

Historical Topographic Map

N	ADJOINING QUAD NAME: SANTA CRUZ MAP YEAR: 1902 SERIES: 30 SCALE: 1:125000	SITE NAME: Big Wave Project ADDRESS: Airport Street/Stanford Avenue Half Moon Bay, CA 94019 LAT/LONG: 37.5051 / 122.4934	CLIENT: Treadwell & Rollo Inc. CONTACT: Eric Morita INQUIRY#: 1872299.4 RESEARCH DATE: 03/07/2007

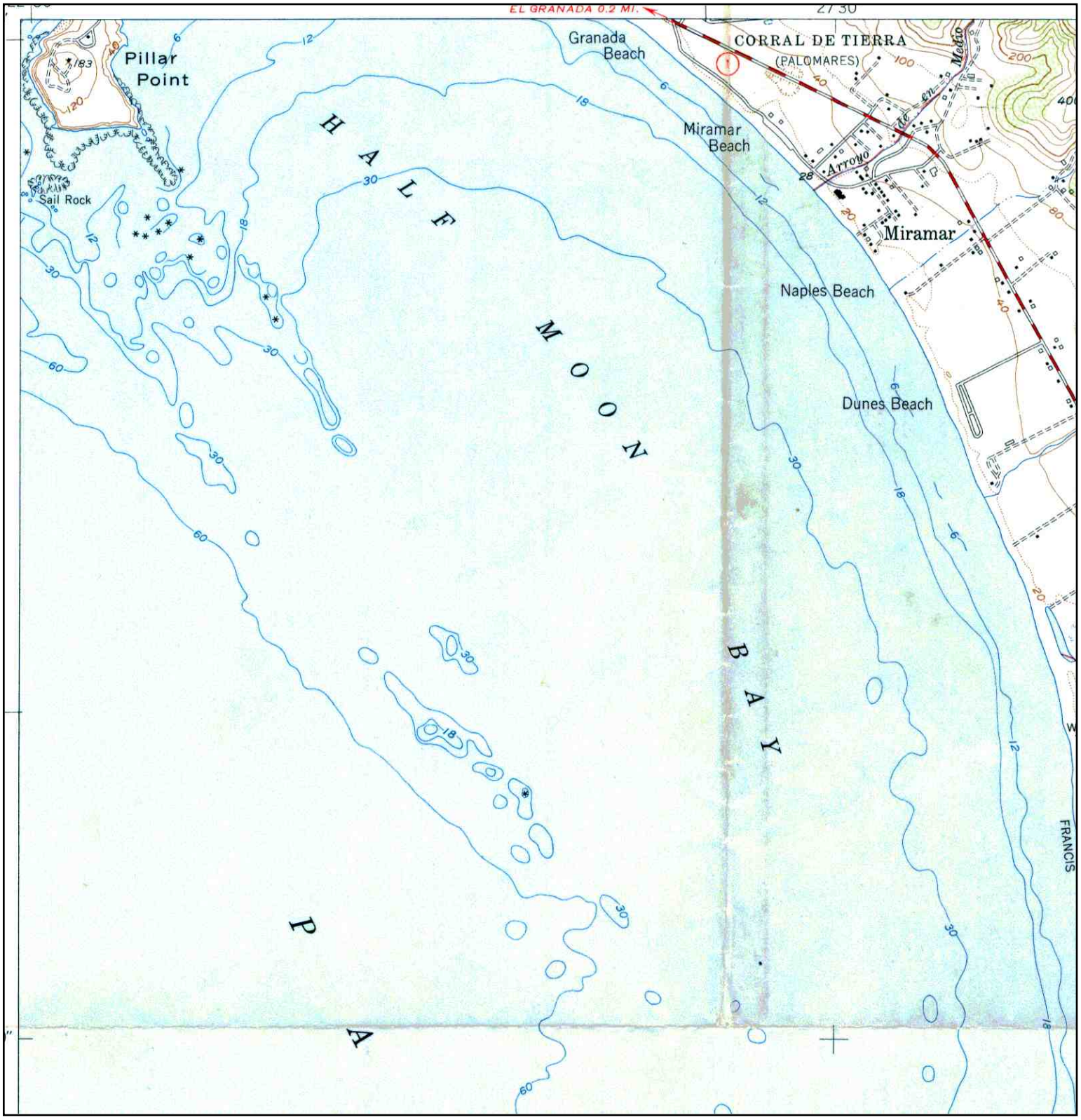
Historical Topographic Map

N	ADJOINING QUAD NAME: HALF MOON BAY MAP YEAR: 1940 SERIES: 15 SCALE: 1:62500	SITE NAME: Big Wave Project ADDRESS: Airport Street/Stanford Avenue Half Moon Bay, CA 94019 LAT/LONG: 37.5051 / 122.4934	CLIENT: Treadwell & Rollo Inc. CONTACT: Eric Morita INQUIRY#: 1872299.4 RESEARCH DATE: 03/07/2007

Historical Topographic Map

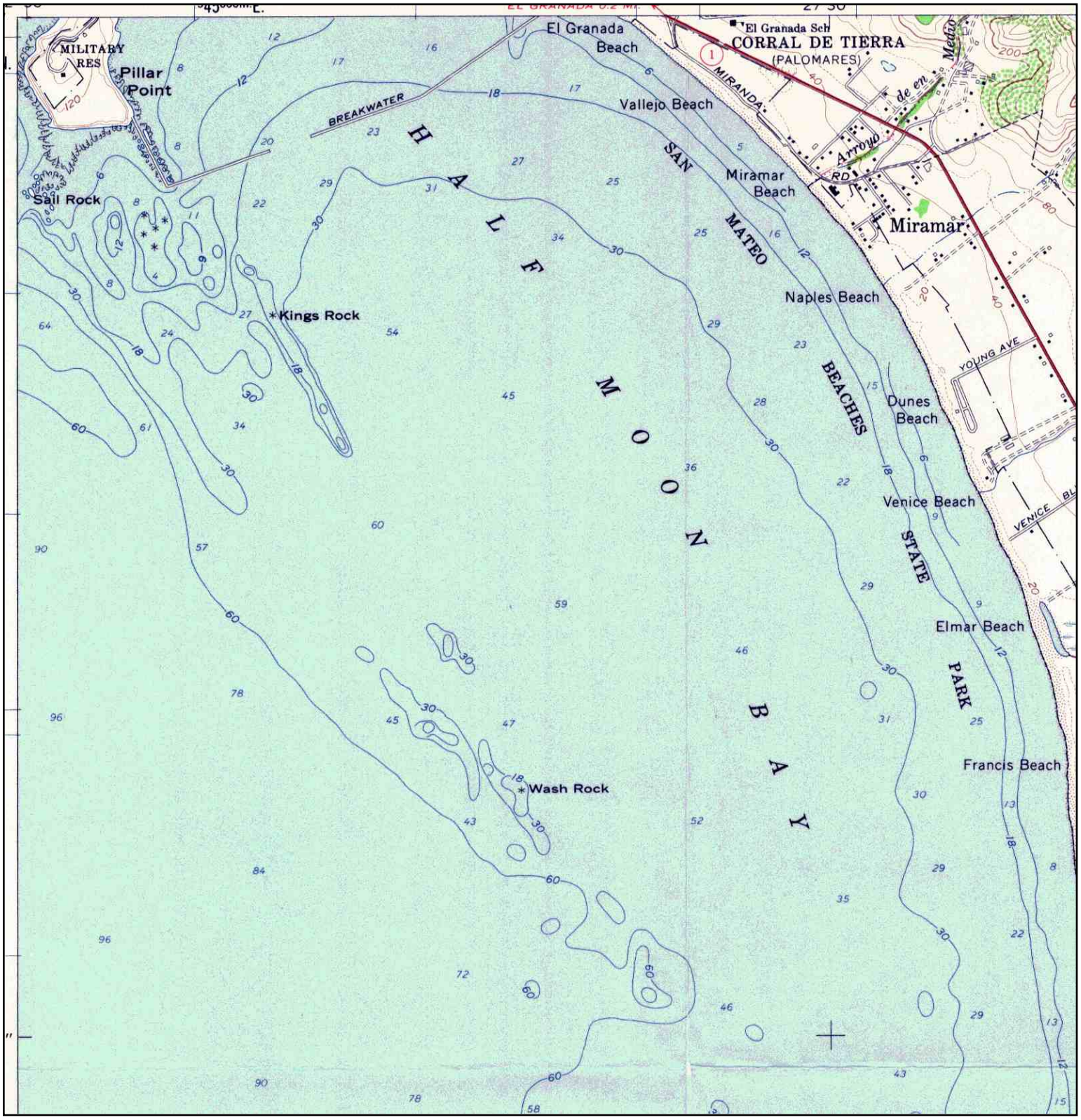
N	ADJOINING QUAD NAME: HALF MOON BAY MAP YEAR: 1948 SERIES: 15 SCALE: 1:50000	SITE NAME: Big Wave Project ADDRESS: Airport Street/Stanford Avenue Half Moon Bay, CA 94019 LAT/LONG: 37.5051 / 122.4934	CLIENT: Treadwell & Rollo Inc. CONTACT: Eric Morita INQUIRY#: 1872299.4 RESEARCH DATE: 03/07/2007

Historical Topographic Map



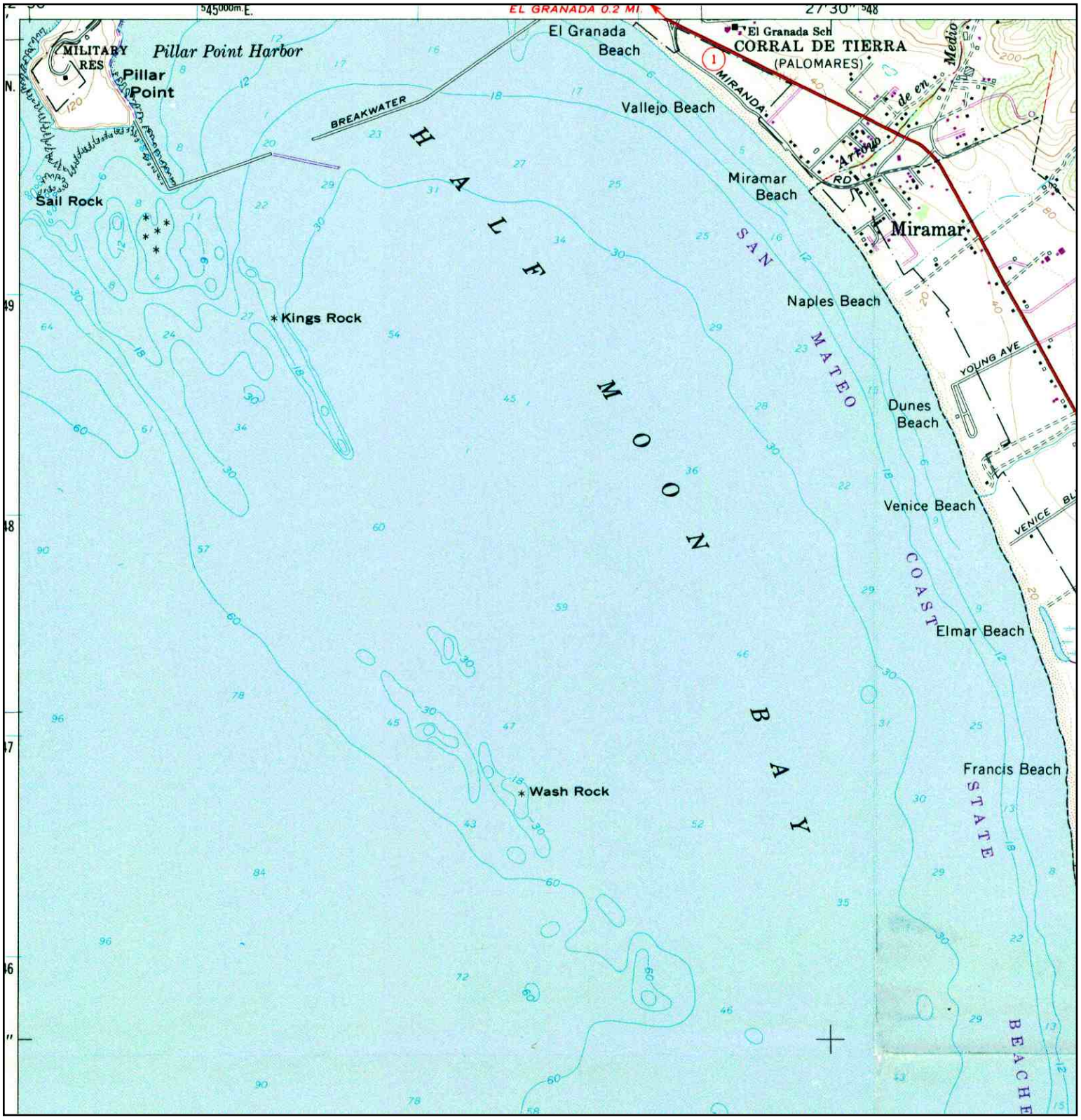
N	ADJOINING QUAD NAME: HALF MOON BAY MAP YEAR: 1952 SERIES: 7.5 SCALE: 1:24000	SITE NAME: Big Wave Project ADDRESS: Airport Street/Stanford Avenue Half Moon Bay, CA 94019 LAT/LONG: 37.5051 / 122.4934	CLIENT: Treadwell & Rollo Inc. CONTACT: Eric Morita INQUIRY#: 1872299.4 RESEARCH DATE: 03/07/2007

Historical Topographic Map



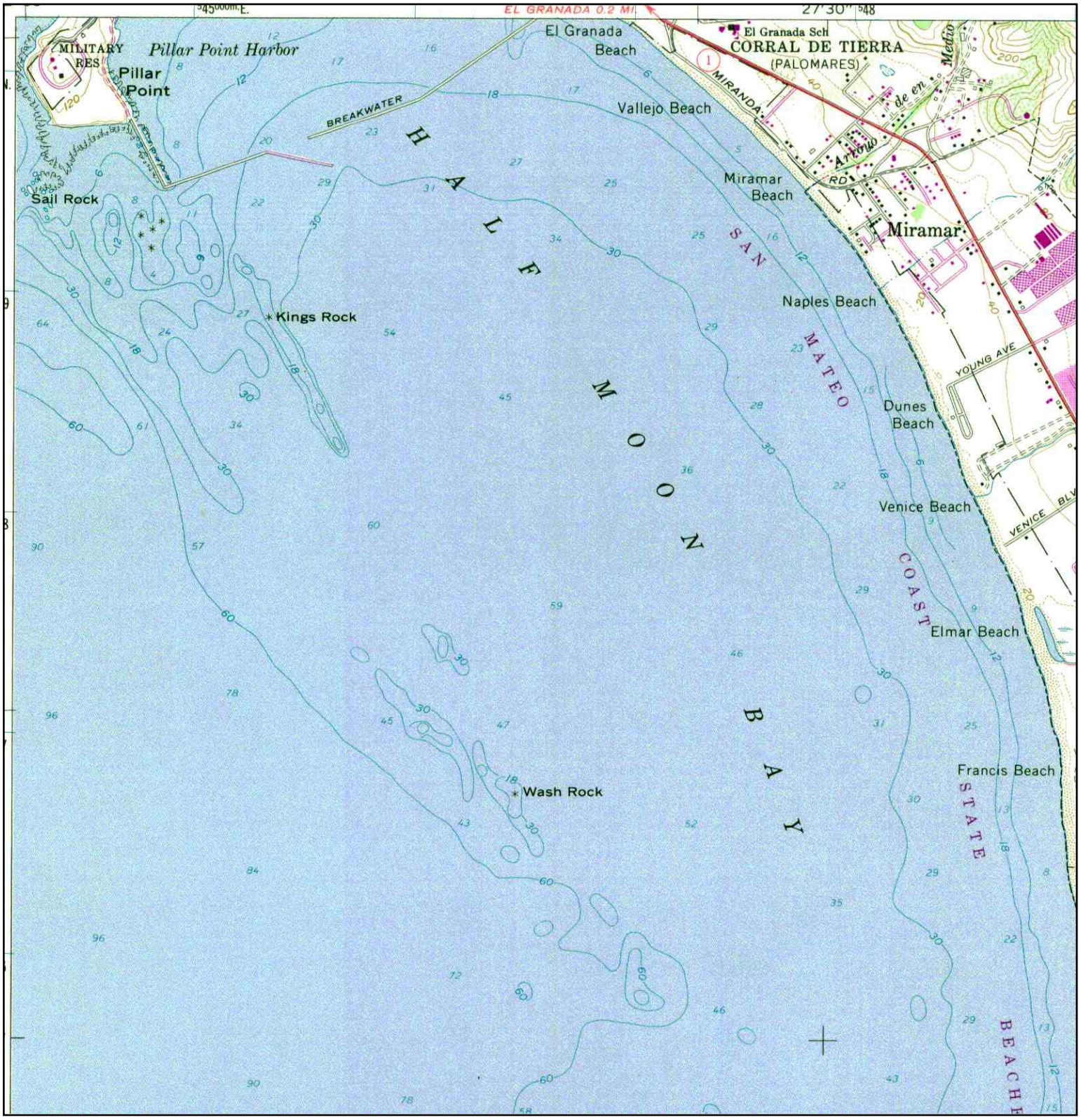
N	ADJOINING QUAD NAME: HALF MOON BAY MAP YEAR: 1961 SERIES: 7.5 SCALE: 1:24000	SITE NAME: Big Wave Project ADDRESS: Airport Street/Stanford Avenue Half Moon Bay, CA 94019 LAT/LONG: 37.5051 / 122.4934	CLIENT: Treadwell & Rollo Inc. CONTACT: Eric Morita INQUIRY#: 1872299.4 RESEARCH DATE: 03/07/2007

Historical Topographic Map



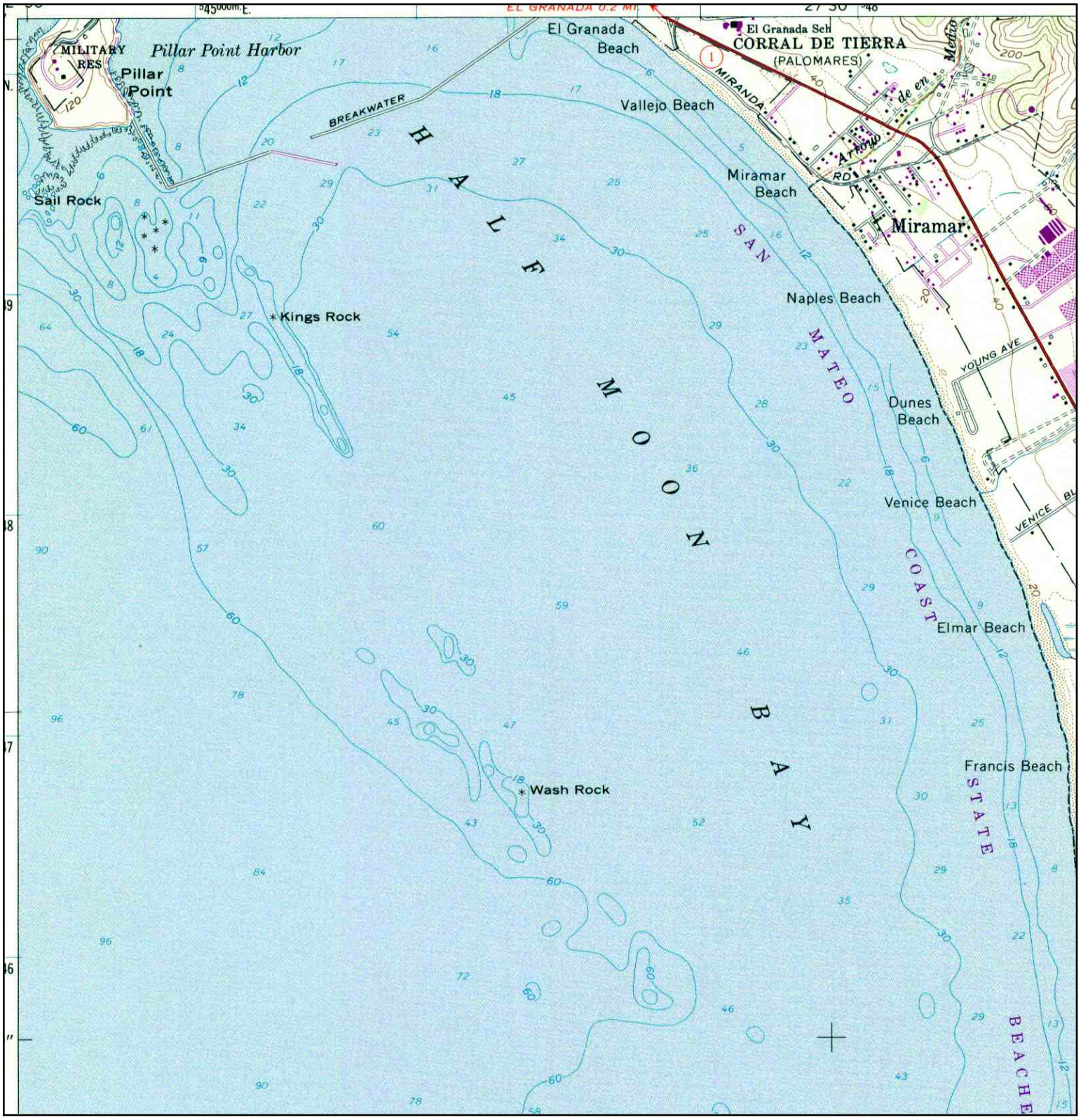
N	ADJOINING QUAD NAME: HALF MOON BAY MAP YEAR: 1968 PHOTOREVISED FROM:1961 SERIES: 7.5 SCALE: 1:24000	SITE NAME: Big Wave Project ADDRESS: Airport Street/Stanford Avenue Half Moon Bay, CA 94019 LAT/LONG: 37.5051 / 122.4934	CLIENT: Treadwell & Rollo Inc. CONTACT: Eric Morita INQUIRY#: 1872299.4 RESEARCH DATE: 03/07/2007

Historical Topographic Map



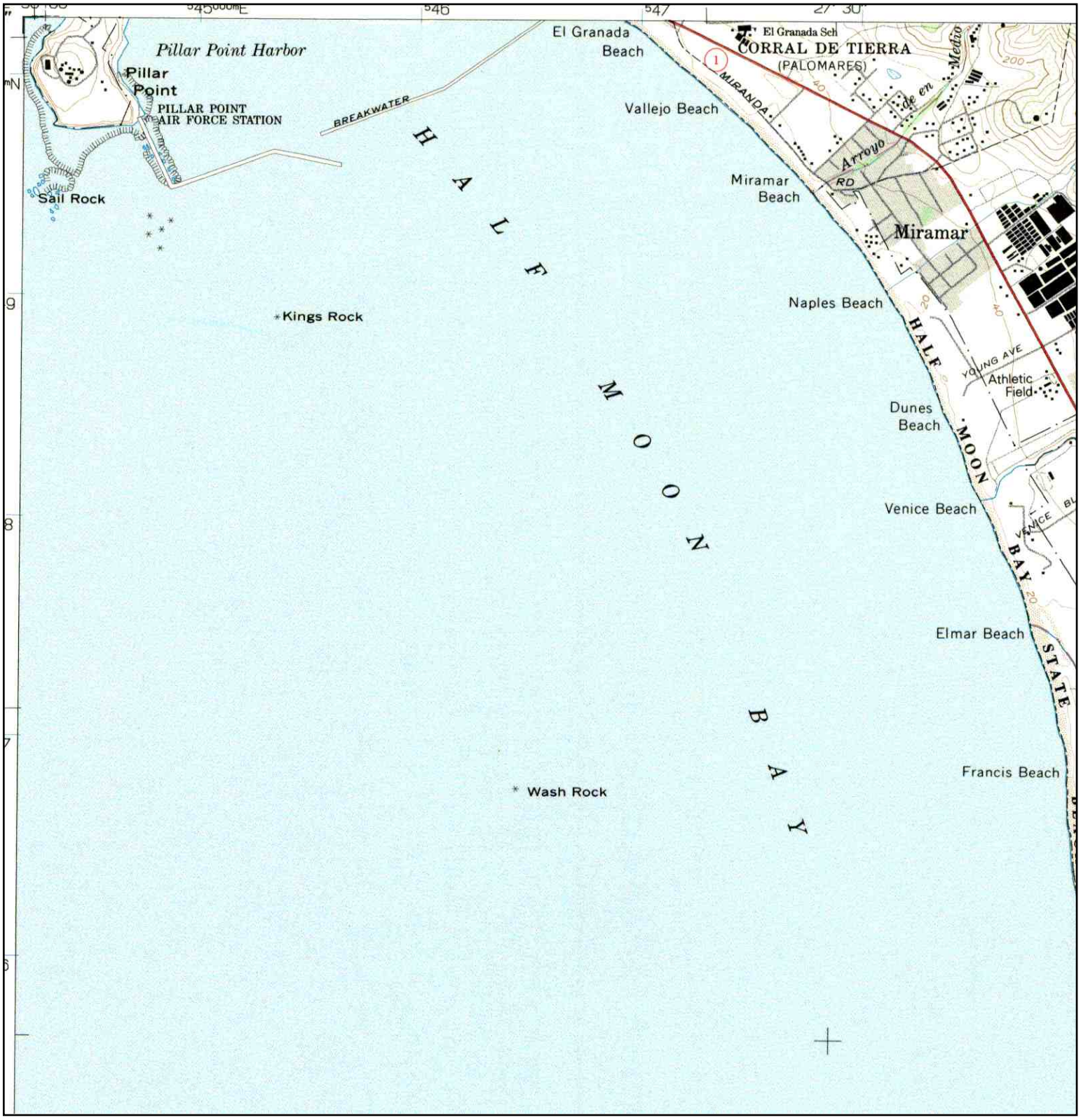
N	ADJOINING QUAD NAME: HALF MOON BAY MAP YEAR: 1973 PHOTOREVISED FROM:1961 SERIES: 7.5 SCALE: 1:24000	SITE NAME: Big Wave Project ADDRESS: Airport Street/Stanford Avenue Half Moon Bay, CA 94019 LAT/LONG: 37.5051 / 122.4934	CLIENT: Treadwell & Rollo Inc. CONTACT: Eric Morita INQUIRY#: 1872299.4 RESEARCH DATE: 03/07/2007

Historical Topographic Map



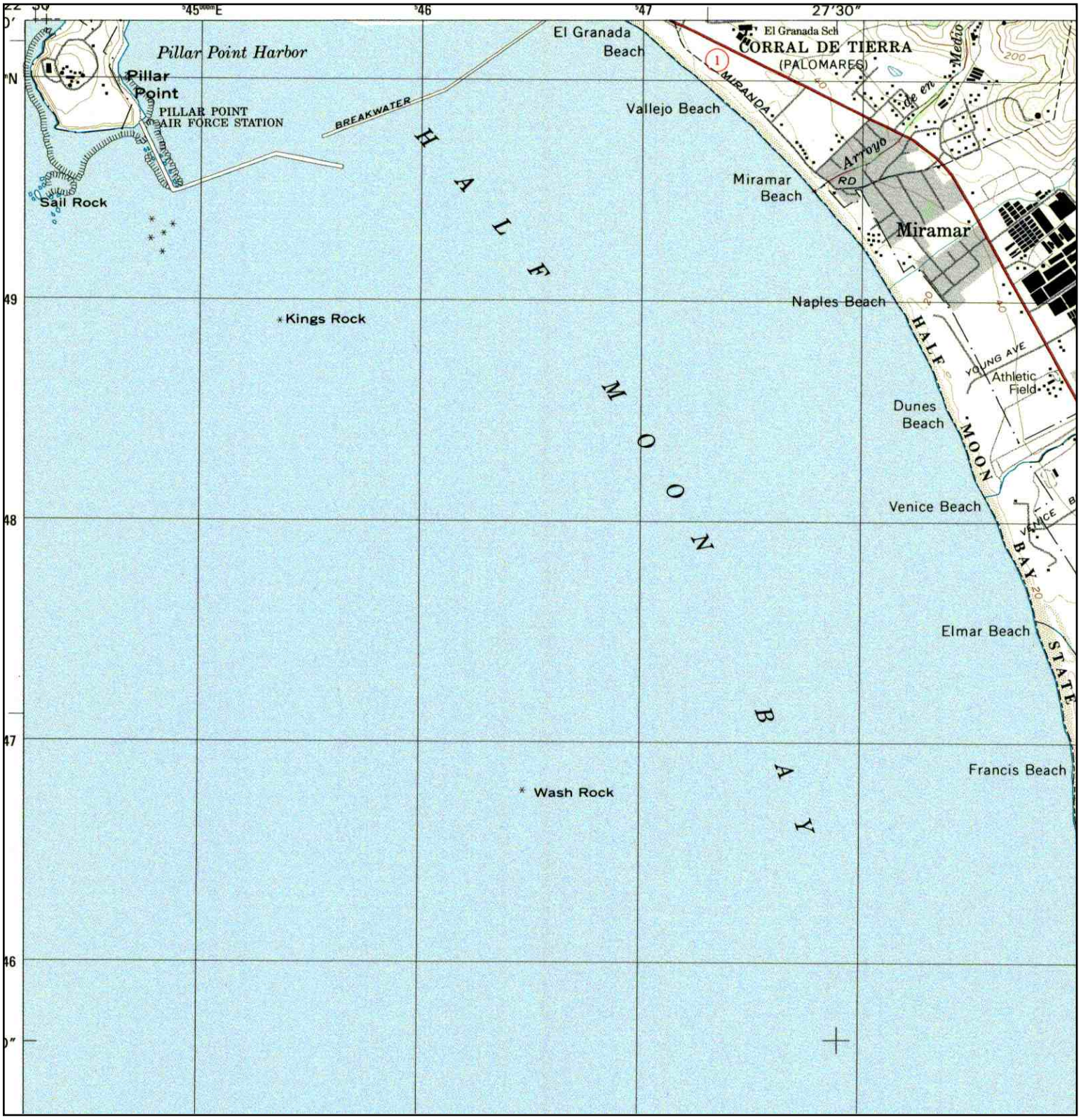
N	ADJOINING QUAD NAME: HALF MOON BAY MAP YEAR: 1978 PHOTOINSPECTED FROM: 1961 SERIES: 7.5 SCALE: 1:24000	SITE NAME: Big Wave Project ADDRESS: Airport Street/Stanford Avenue Half Moon Bay, CA 94019 LAT/LONG: 37.5051 / 122.4934	CLIENT: Treadwell & Rollo Inc. CONTACT: Eric Morita INQUIRY#: 1872299.4 RESEARCH DATE: 03/07/2007

Historical Topographic Map



N	ADJOINING QUAD NAME: HALF MOON BAY MAP YEAR: 1991 SERIES: 7.5 SCALE: 1:24000	SITE NAME: Big Wave Project ADDRESS: Airport Street/Stanford Avenue Half Moon Bay, CA 94019 LAT/LONG: 37.5051 / 122.4934	CLIENT: Treadwell & Rollo Inc. CONTACT: Eric Morita INQUIRY#: 1872299.4 RESEARCH DATE: 03/07/2007

Historical Topographic Map



N	ADJOINING QUAD NAME: HALF MOON BAY MAP YEAR: 1997 SERIES: 7.5 SCALE: 1:24000	SITE NAME: Big Wave Project ADDRESS: Airport Street/Stanford Avenue Half Moon Bay, CA 94019 LAT/LONG: 37.5051 / 122.4934	CLIENT: Treadwell & Rollo Inc. CONTACT: Eric Morita INQUIRY#: 1872299.4 RESEARCH DATE: 03/07/2007

The EDR Radius Map
with GeoCheck®

Big Wave Project
Airport Street/Stanford Avenue
Half Moon Bay, CA 94019

Inquiry Number: 1872299.2s

March 07, 2007

EDR® Environmental Data Resources Inc

The Standard in Environmental Risk Management Information

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Milford, Connecticut 06461

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GEOCHECK ADDENDUM

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EXECUTIVE SUMMARY

A search of available environmental records was conducted by Environmental Data Resources, Inc (EDR). The report was designed to assist parties seeking to meet the search requirements of EPA's Standards and Practices for All Appropriate Inquiries (40 CFR Part 312), the ASTM Standard Practice for Environmental Site Assessments (E 1527-05) or custom requirements developed for the evaluation of environmental risk associated with a parcel of real estate.

TARGET PROPERTY INFORMATION

ADDRESS

AIRPORT STREET/STANFORD AVENUE
HALF MOON BAY, CA 94019

COORDINATES

Latitude (North):	37.505100 - 37° 30' 18.4''
Longitude (West):	122.493400 - 122° 29' 36.2''
Universal Tranverse Mercator:	Zone 10
UTM X (Meters):	544776.6
UTM Y (Meters):	4150823.2
Elevation:	16 ft. above sea level

USGS TOPOGRAPHIC MAP ASSOCIATED WITH TARGET PROPERTY

Target Property Map:	37122-E4 MONTARA MOUNTAIN, CA
Most Recent Revision:	1999
South Map:	37122-D4 HALF MOON BAY, CA
Most Recent Revision:	1999

TARGET PROPERTY SEARCH RESULTS

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

DATABASES WITH NO MAPPED SITES

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

FEDERAL RECORDS

NPL ---------- National Priority List
Proposed NPL ---------- Proposed National Priority List Sites
Delisted NPL ---------- National Priority List Deletions
NPL RECOVERY ---------- Federal Superfund Liens
CERCLIS ---------- Comprehensive Environmental Response, Compensation, and Liability Information System
CERC-NFRAP ---------- CERCLIS No Further Remedial Action Planned

EXECUTIVE SUMMARY

CORRACTS Corrective Action Report
RCRA-TSDF Resource Conservation and Recovery Act Information
RCRA-LQG Resource Conservation and Recovery Act Information
ERNS Emergency Response Notification System
HMIRS Hazardous Materials Information Reporting System
US ENG CONTROLS Engineering Controls Sites List
US INST CONTROL Sites with Institutional Controls
DOD Department of Defense Sites
US BROWNFIELDS A Listing of Brownfields Sites
CONSENT Superfund (CERCLA) Consent Decrees
ROD Records Of Decision
UMTRA Uranium Mill Tailings Sites
ODI Open Dump Inventory
TRIS Toxic Chemical Release Inventory System
TSCA Toxic Substances Control Act
FTTS FIFRA/ TSCA Tracking System - FIFRA (Federal Insecticide, Fungicide, & Rodenticide Act)/TSCA (Toxic Substances Control Act)
SSTS Section 7 Tracking Systems
ICIS Integrated Compliance Information System
US CDL Clandestine Drug Labs
LUCIS Land Use Control Information System
RADINFO Radiation Information Database
PADS PCB Activity Database System
MLTS Material Licensing Tracking System
MINES Mines Master Index File
FINDS Facility Index System/Facility Registry System
RAATS RCRA Administrative Action Tracking System

STATE AND LOCAL RECORDS

HIST Cal-Sites Historical Calsites Database
CA BOND EXP. PLAN Bond Expenditure Plan
SCH School Property Evaluation Program
Toxic Pits Toxic Pits Cleanup Act Sites
SWF/LF Solid Waste Information System
CA WDS Waste Discharge System
WMUDS/SWAT Waste Management Unit Database
SWRCY Recycler Database
CA FID UST Facility Inventory Database
UST Active UST Facilities
AST Aboveground Petroleum Storage Tank Facilities
SWEEPS UST SWEEPS UST Listing
CHMIRS California Hazardous Material Incident Report System
Notify 65 Proposition 65 Records
DEED Deed Restriction Listing
VCP Voluntary Cleanup Program Properties
CLEANERS Cleaner Facilities
WIP Well Investigation Program Case List
CDL Clandestine Drug Labs
RESPONSE State Response Sites
HAZNET Facility and Manifest Data
EMI Emissions Inventory Data
ENVIROSTOR EnviroStor Database

TRIBAL RECORDS

INDIAN RESERV Indian Reservations

EXECUTIVE SUMMARY

INDIAN LUST Leaking Underground Storage Tanks on Indian Land
INDIAN UST Underground Storage Tanks on Indian Land

EDR PROPRIETARY RECORDS

Manufactured Gas Plants EDR Proprietary Manufactured Gas Plants
EDR Historical Auto Stations EDR Proprietary Historic Gas Stations
EDR Historical Cleaners EDR Proprietary Historic Dry Cleaners

SURROUNDING SITES: SEARCH RESULTS

Surrounding sites were identified in the following databases.

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

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

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

FEDERAL RECORDS

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 06/13/2006 has revealed that there are 2 RCRA-SQG sites within approximately 0.25 miles of the target property.

Lower Elevation	Address	Dist / Dir	Map ID	Page
PACIFIC SIERRA SCREEN PAINTING	***218 YALE***	***0 - 1/8 SE***	***1***	***6***
USAF PILLAR POINT AIR FORCE ST	***END OF WESTPOINT AVE***	***1/8 - 1/4 S***	***9***	***8***

FUDS: The Listing includes locations of Formerly Used Defense Sites Properties where the US Army Corps Of Engineers is actively working or will take necessary cleanup actions.

A review of the FUDS list, as provided by EDR, and dated 12/31/2005 has revealed that there are 2 FUDS sites within approximately 1 mile of the target property.

Equal/Higher Elevation	Address	Dist / Dir	Map ID	Page
PILLAR POINT MILITARY RESERVAT		1/2 - 1 SSW	15	15

Equal/Higher Elevation	Address	Dist / Dir	Map ID	Page
HALF MOON BAY FLIGHT STRIP		1/2 - 1 NNW	16	15

STATE AND LOCAL RECORDS

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, and dated 04/01/2001 has revealed that there is 1 Cortese site within approximately 0.5 miles of the target property.

Equal/Higher Elevation	Address	Dist / Dir	Map ID	Page
WESTINGHOUSE CORP	***450 CAPISTRANO***	***1/4 - 1/2 ENE***	***13***	***11***

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 01/09/2007 has revealed that there are 2 LUST sites within approximately 0.5 miles of the target property.

Equal/Higher Elevation	Address	Dist / Dir	Map ID	Page
WESTINGHOUSE CORP	***450 CAPISTRANO***	***1/4 - 1/2 ENE***	***13***	***11***
Facility Status: Case Closed				
EL GRANADA MOBILE HOME PARK	***164 CULEBRA***	***1/4 - 1/2 NW***	***14***	***13***
Facility Status: Post remedial action monitoring				

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

A review of the SLIC list, as provided by EDR, and dated 01/09/2007 has revealed that there is 1 SLIC site within approximately 0.5 miles of the target property.

Equal/Higher Elevation	Address	Dist / Dir	Map ID	Page
EL GRANADA MOBILE HOME PARK	***164 CULEBRA***	***1/4 - 1/2 NW***	***14***	***13***
Facility Status: Verification Monitoring Underway				

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 is 1 HIST UST site within approximately 0.25 miles of the target property.

Equal/Higher Elevation	Address	Dist / Dir	Map ID	Page
PRINCETON PUMPING STATION	STANFORD / WESTPOINT AV	1/8 - 1/4 SW	8	8

EXECUTIVE SUMMARY

Hazardous Materials Business Plan, Hazardous Waste Generator, Underground Storage tanks

A review of the San Mateo Co. BI list, as provided by EDR, and dated 01/24/2007 has revealed that there are 9 San Mateo Co. BI sites within approximately 0.25 miles of the target property.

Lower Elevation	Address	Dist / Dir	Map ID	Page
TEK NOVA	103 HARVARD	0 - 1/8 SSE	2	6
PRINCETON WELDING, INC.	231 HARVARD	0 - 1/8 ESE	3	6
ROMEO PACKING CO	106 PRINCETON	1/8 - 1/4 SE	A4	7
PACIFIC SIERRA SCREEN PRINTING	123 PRINCETON	1/8 - 1/4 SE	A5	7
UST SITE	155 PRINCETON	1/8 - 1/4 SE	6	7
COLIN TIURA & DAUGHTERS	231 HARVARD	1/8 - 1/4 ESE	7	7
ANCHOR MARINA	262 PRINCETON	1/8 - 1/4 SE	B10	10
PILLAR POINT BOATYARD	262 PRINCETON	1/8 - 1/4 SE	B11	11
BOAT YARD/RAY FARNOW	246 PRINCETON	1/8 - 1/4 ESE	12	11

EXECUTIVE SUMMARY

Due to poor or inadequate address information, the following sites were not mapped:

Site Name	Database(s)
EIRCA NURSERY	SWEEPS UST
ITTWC COASTAL MARINE STAT KFS	SWEEPS UST
MCCAHON NURSERY COMPANY	SWEEPS UST
1 JOHNSON PIER	CHMIRS, San Mateo Co. BI
SOUTH HALF MOON BAY	CERC-NFRAP
RASIDANOR / BRACK TURNAR	UST
HARBOR FUEL DOCK	HIST UST
SUPER-7 #18827	HIST UST
PILARCITOS QUARRY	AST
SAN MATEO COUNTY ENVIRONMENTAL HEALTH	HAZNET, San Mateo Co. BI, EMI, CA WDS
BRUCE TURNER	HAZNET, San Mateo Co. BI
OX MOUNTAIN SANITARY LANDFILL	RCRA-SQG, FINDS
PILARCITOS QUARRY	San Mateo Co. BI, CA WDS
NORTH WAVECREST PROPERTY	SCH, ENVIROSTOR
BAY CHEVRON SERVICE #7927	San Mateo Co. BI
BAY CHEVRON	San Mateo Co. BI
GIUSTI FARMS	San Mateo Co. BI
RICE TRUCKING	San Mateo Co. BI
SEWER AUTHORITY MID COASTSIDE	San Mateo Co. BI
GREENHOUSE CLEANERS	San Mateo Co. BI
SAMS CHOWDER HOUSE	San Mateo Co. BI
ERICA NURSERY	San Mateo Co. BI
RESIDENCE	San Mateo Co. BI
PODESTA RANGE	San Mateo Co. BI
BFI OX MOUNTAIN	San Mateo Co. BI
CALIFORNIA EVERGREEN RANGE	San Mateo Co. BI
AZEVEDO FEED & TRUCKING	San Mateo Co. BI
MOSS BEACH CHEVRON	San Mateo Co. BI
MOSS BEACH CHEVRON	San Mateo Co. BI
CABRILLO FARMS/DENNISTON CREEK	San Mateo Co. BI
HALF MOON BAY AERO	San Mateo Co. BI
MONTARA PEAK-SITE 8063	San Mateo Co. BI

OVERVIEW MAP - 1872299.2s

Target Property
Sites at elevations higher than or equal to the target property
Sites at elevations lower than the target property
Manufactured Gas Plants
National Priority List Sites
Landfill Sites
Dept. Defense Sites

0 1/4 1/2 1 Miles

Indian Reservations BIA
Oil & Gas pipelines
100-year flood zone
500-year flood zone
National Wetland Inventory

Areas of Concern

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

SITE NAME:	Big Wave Project	CLIENT:	Treadwell & Rollo Inc.
ADDRESS:	Airport Street/Stanford Avenue Half Moon Bay CA 94019	CONTACT:	Eric Morita
LAT/LONG:	37.5051 / 122.4934	INQUIRY #:	1872299.2s
		DATE:	March 07, 2007 2:01 pm

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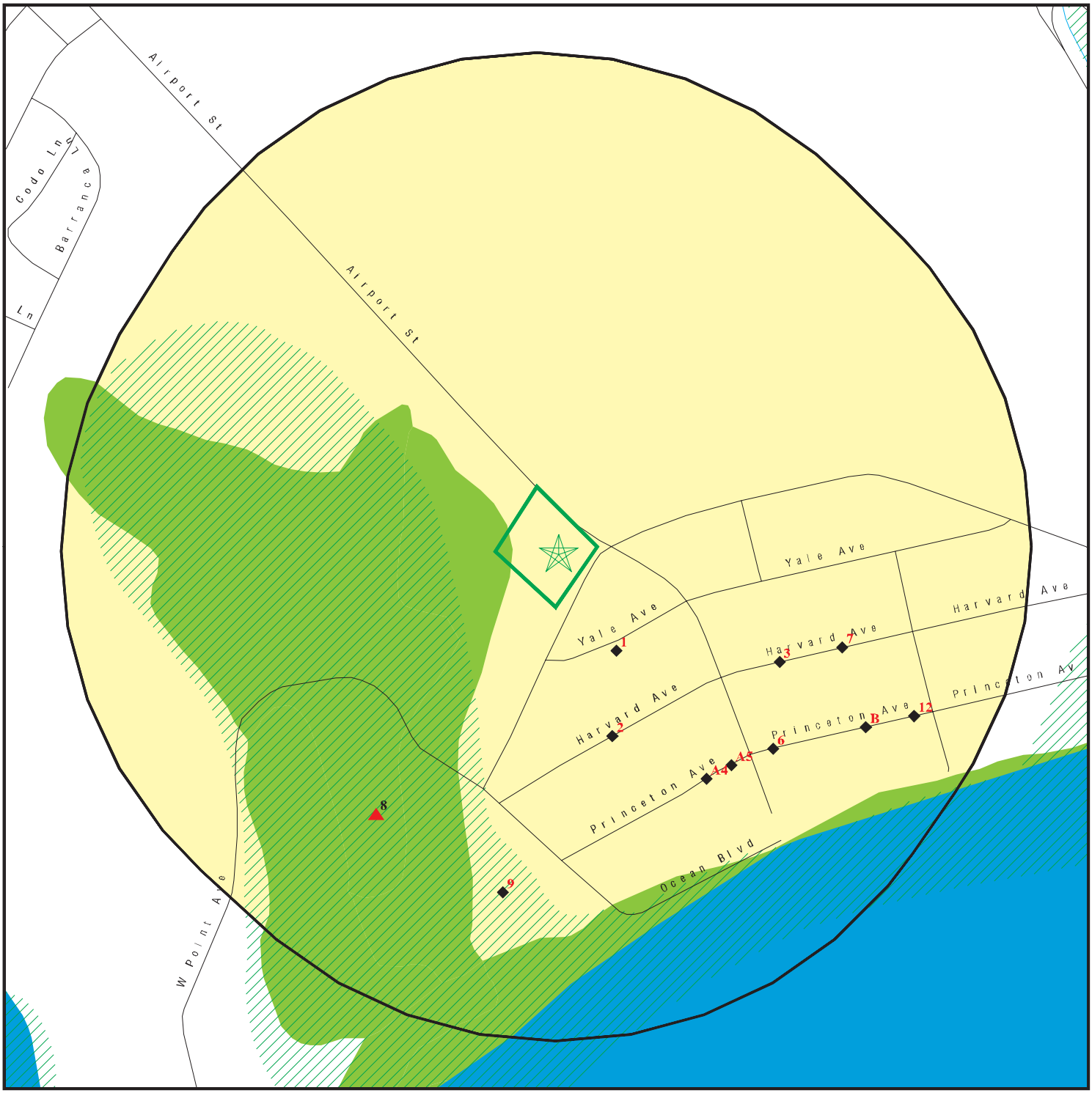
DETAIL MAP - 1872299.2s



0 1/16 1/8 1/4 Miles

- Target Property
- Sites at elevations higher than or equal to the target property
- Sites at elevations lower than the target property
- Manufactured Gas Plants
- Sensitive Receptors
- National Priority List Sites
- Landfill Sites
- Dept. Defense Sites
- Indian Reservations BIA
- Oil & Gas pipelines
- 100-year flood zone
- 500-year flood zone
- National Wetland Inventory
- Areas of Concern

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LAT/LONG: 37.5051 / 122.4934	INQUIRY #: 1872299.2s DATE: March 07, 2007 2:01 pm

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MAP FINDINGS SUMMARY

Database	Target Property	Search Distance (Miles)	< 1/8	1/8 - 1/4	1/4 - 1/2	1/2 - 1	> 1	Total Plotted
FEDERAL RECORDS								
NPL		1.000	0	0	0	0	NR	0
Proposed NPL		1.000	0	0	0	0	NR	0
Delisted NPL		1.000	0	0	0	0	NR	0
NPL RECOVERY		TP	NR	NR	NR	NR	NR	0
CERCLIS		0.500	0	0	0	NR	NR	0
CERC-NFRAP		0.500	0	0	0	NR	NR	0
CORRACTS		1.000	0	0	0	0	NR	0
RCRA TSD		0.500	0	0	0	NR	NR	0
RCRA Lg. Quan. Gen.		0.250	0	0	NR	NR	NR	0
RCRA Sm. Quan. Gen.		0.250	1	1	NR	NR	NR	2
ERNS		TP	NR	NR	NR	NR	NR	0
HMIRS		TP	NR	NR	NR	NR	NR	0
US ENG CONTROLS		0.500	0	0	0	NR	NR	0
US INST CONTROL		0.500	0	0	0	NR	NR	0
DOD		1.000	0	0	0	0	NR	0
FUDS		1.000	0	0	0	2	NR	2
US BROWNFIELDS		0.500	0	0	0	NR	NR	0
CONSENT		1.000	0	0	0	0	NR	0
ROD		1.000	0	0	0	0	NR	0
UMTRA		0.500	0	0	0	NR	NR	0
ODI		0.500	0	0	0	NR	NR	0
TRIS		TP	NR	NR	NR	NR	NR	0
TSCA		TP	NR	NR	NR	NR	NR	0
FTTS		TP	NR	NR	NR	NR	NR	0
SSTS		TP	NR	NR	NR	NR	NR	0
ICIS		TP	NR	NR	NR	NR	NR	0
CDL		TP	NR	NR	NR	NR	NR	0
LUCIS		0.500	0	0	0	NR	NR	0
RADINFO		TP	NR	NR	NR	NR	NR	0
PADS		TP	NR	NR	NR	NR	NR	0
MLTS		TP	NR	NR	NR	NR	NR	0
MINES		0.250	0	0	NR	NR	NR	0
FINDS		TP	NR	NR	NR	NR	NR	0
RAATS		TP	NR	NR	NR	NR	NR	0
STATE AND LOCAL RECORDS								
Hist Cal-Sites		1.000	0	0	0	0	NR	0
CA Bond Exp. Plan		1.000	0	0	0	0	NR	0
SCH		0.250	0	0	NR	NR	NR	0
Toxic Pits		1.000	0	0	0	0	NR	0
State Landfill		0.500	0	0	0	NR	NR	0
CA WDS		TP	NR	NR	NR	NR	NR	0
WMUDS/SWAT		0.500	0	0	0	NR	NR	0
Cortese		0.500	0	0	1	NR	NR	1
SWRCY		0.500	0	0	0	NR	NR	0
LUST		0.500	0	0	2	NR	NR	2
CA FID UST		0.250	0	0	NR	NR	NR	0

MAP FINDINGS SUMMARY

Database	Target Property	Search Distance (Miles)	< 1/8	1/8 - 1/4	1/4 - 1/2	1/2 - 1	> 1	Total Plotted
SLIC		0.500	0	0	1	NR	NR	1
UST		0.250	0	0	NR	NR	NR	0
HIST UST		0.250	0	1	NR	NR	NR	1
AST		0.250	0	0	NR	NR	NR	0
SWEEPS UST		0.250	0	0	NR	NR	NR	0
CHMIRS		TP	NR	NR	NR	NR	NR	0
Notify 65		1.000	0	0	0	0	NR	0
DEED		0.500	0	0	0	NR	NR	0
VCP		0.500	0	0	0	NR	NR	0
DRYCLEANERS		0.250	0	0	NR	NR	NR	0
WIP		0.250	0	0	NR	NR	NR	0
CDL		TP	NR	NR	NR	NR	NR	0
San Mateo Co. BI		0.250	2	7	NR	NR	NR	9
RESPONSE		1.000	0	0	0	0	NR	0
HAZNET		TP	NR	NR	NR	NR	NR	0
EMI		TP	NR	NR	NR	NR	NR	0
ENVIROSTOR		1.000	0	0	0	0	NR	0
TRIBAL RECORDS								
INDIAN RESERV		1.000	0	0	0	0	NR	0
INDIAN LUST		0.500	0	0	0	NR	NR	0
INDIAN UST		0.250	0	0	NR	NR	NR	0
EDR PROPRIETARY RECORDS								
Manufactured Gas Plants		1.000	0	0	0	0	NR	0
EDR Historical Auto Stations		0.250	0	0	NR	NR	NR	0
EDR Historical Cleaners		0.250	0	0	NR	NR	NR	0

NOTES:

TP = Target Property

NR = Not Requested at this Search Distance

Sites may be listed in more than one database

1
SE
< 1/8
228 ft.

PACIFIC SIERRA SCREEN PAINTING
218 YALE
EL GRANADA, CA 94018

RCRA-SQG
FINDS

EDR ID Number: 1000685948
EPA ID Number: CAD983629148

Relative:
Lower

Actual:
11 ft.

RCRAInfo:
Owner: DANIEL DEPP
(415) 726-6239
EPA ID: CAD983629148
Contact: DANIEL DEPP
(415) 728-5028
Classification: Small Quantity Generator
TSDF Activities: Not reported

Violation Status: No violations found

FINDS:
Other Pertinent Environmental Activity Identified at Site

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

2
SSE
< 1/8
429 ft.

TEK NOVA
103 HARVARD
HALF MOON BAY, CA 94019

San Mateo Co. BI

EDR ID Number: S106982060
EPA ID Number: N/A

Relative:
Lower

Actual:
8 ft.

San Mateo Co. BI:
Region: SAN MATEO
Facility ID: FA0025837
Prog Element Code: STORES HAZ MAT <219GAL,1,999LB, 879FT3
Description: STORES HAZ MAT <219GAL,1,999LB, 879CF

Region: SAN MATEO
Facility ID: FA0025837
Prog Element Code: GENERATES and RECYCLES WASTE OIL/SOLVENT
Description: GENERATES & RECYCLES WASTE OIL/SOLVENT

3
ESE
< 1/8
656 ft.

PRINCETON WELDING, INC.
231 HARVARD
HALF MOON BAY, CA 94019

San Mateo Co. BI

EDR ID Number: S106499447
EPA ID Number: N/A

Relative:
Lower

Actual:
13 ft.

San Mateo Co. BI:
Region: SAN MATEO
Facility ID: FA0025840
Prog Element Code: STORES HAZ MAT <219GAL,1,999LB, 879FT3
Description: STORES HAZ MAT <219GAL,1,999LB, 879CF

A4
SE
1/8-1/4
696 ft.

Relative:
Lower

Actual:
7 ft.

ROMEO PACKING CO
106 PRINCETON
PRINCETON, CA 94019

Site 1 of 2 in cluster A

San Mateo Co. BI **S102268540**
N/A

San Mateo Co. BI:
Region: SAN MATEO
Facility ID: FA0005370
Prog Element Code: STORES HAZ MAT <219GAL,1,999LB, 879FT3
Description: STORES HAZ MAT <219GAL,1,999LB, 879CF

Region: SAN MATEO
Facility ID: FA0027667
Prog Element Code: STORES HAZ MAT <1,199GAL,9,999LB,4,799FT3
Description: STORES HAZ MAT <1,199GAL,9,999LB,4,799CF

Region: SAN MATEO
Facility ID: FA0005370
Prog Element Code: GENERATES <27 GAL/YEAR
Description: GENERATES <27 GAL/YEAR

A5
SE
1/8-1/4
719 ft.

Relative:
Lower

Actual:
7 ft.

PACIFIC SIERRA SCREEN PRINTING
123 PRINCETON
PRINCETON, CA 94018

Site 2 of 2 in cluster A

San Mateo Co. BI **S106981398**
N/A

San Mateo Co. BI:
Region: SAN MATEO
Facility ID: FA0015600
Prog Element Code: GENERATES and RECYCLES WASTE OIL/SOLVENT
Description: GENERATES & RECYCLES WASTE OIL/SOLVENT

6
SE
1/8-1/4
790 ft.

Relative:
Lower

Actual:
9 ft.

UST SITE
155 PRINCETON
PRINCETON, CA 94037

San Mateo Co. BI **S106981954**
N/A

San Mateo Co. BI:
Region: SAN MATEO
Facility ID: FA0024913
Prog Element Code: UNDERGROUND TANK - GENERAL
Description: UNDERGROUND TANK - GENERAL

7
ESE
1/8-1/4
806 ft.

Relative:
Lower

Actual:
13 ft.

COLIN TIURA & DAUGHTERS
231 HARVARD
PRINCETON, CA 94018

San Mateo Co. BI **S106981434**
N/A

San Mateo Co. BI:
Region: SAN MATEO
Facility ID: FA0016025
Prog Element Code: LESS THAN 500 TIRES
Description: LESS THAN 500 TIRES

Region: SAN MATEO

COLIN TIURA & DAUGHTERS (Continued) **S106981434**

Facility ID: FA0016025
Prog Element Code: STORES HAZ MAT <219GAL,1,999LB, 879FT3
Description: STORES HAZ MAT <219GAL,1,999LB, 879CF

Region: SAN MATEO
Facility ID: FA0016025
Prog Element Code: GENERATES and RECYCLES WASTE OIL/SOLVENT
Description: GENERATES & RECYCLES WASTE OIL/SOLVENT

8
SW
1/8-1/4
833 ft.

PRINCETON PUMPING STATION **HIST UST** **U001594070**
STANFORD / WESTPOINT AVE. **N/A**
PRINCETON BY THE SEA, CA 94018

Relative:
Higher

Actual:
17 ft.

HIST UST:
Region: STATE
Facility ID: 00000052632
Tank Num: 001
Container Num: 4
Year Installed: 1981
Tank Capacity: 00002030
Facility Type: Other
Other Type: WATER POLLUTION CONT
Total Tanks: 0001
Tank Used for: PRODUCT
Type of Fuel: DIESEL
Tank Construction: Not reported
Leak Detection: None
Contact Name: A.L. DITMAN
Telephone: 4157260124
Owner Name: SEWER AUTHORITY MID-COASTSIDE
Owner Address: 1000 CABRILLO HIGHWAY NORTH
Owner City,St,Zip: HALF MOON BAY, CA 94019

9
South
1/8-1/4
883 ft.

USAF PILLAR POINT AIR FORCE STN **RCRA-SQG** **1000473203**
END OF WESTPOINT AVE **FINDS** **CA0570090555**
PRINCETON BY THE SEA, CA 94018 **HAZNET**

Relative:
Lower

Actual:
13 ft.

RCRAInfo:
Owner: US AIR FORCE
(415) 555-1212
EPA ID: CA0570090555
Contact: ENVIRONMENTAL MANAGER
(415) 728-3508
Classification: Small Quantity Generator
TSDF Activities: Not reported

USAF PILLAR POINT AIR FORCE STN (Continued) **1000473203**

Violation Status: No violations found

FINDS:

Other Pertinent Environmental Activity Identified at Site

California - Hazardous Waste Tracking System - Datamart

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

HAZNET:

Gepaid:	CA0570090555
Contact:	GARRY SANCHEZ HW PROGRAM MGR
Telephone:	8056057573
Facility Addr2:	Not reported
Mailing Name:	Not reported
Mailing Address:	806 13TH STREET SUITE 116 BLDG 7015
Mailing City,St,Zip:	VANDENBERG AFB, CA 934375242
Gen County:	San Mateo
TSD EPA ID:	Not reported
TSD County:	Santa Clara
Waste Category:	Unspecified oil-containing waste
Disposal Method:	Transfer Station
Tons:	0.50
Facility County:	Not reported

Gepaid:	CA0570090555
Contact:	GARRY SANCHEZ HW PROGRAM MGR
Telephone:	8056057573
Facility Addr2:	Not reported
Mailing Name:	Not reported
Mailing Address:	806 13TH STREET SUITE 116 BLDG 7015
Mailing City,St,Zip:	VANDENBERG AFB, CA 934375242
Gen County:	San Mateo
TSD EPA ID:	Not reported
TSD County:	Alameda
Waste Category:	Waste oil and mixed oil
Disposal Method:	Recycler
Tons:	2.58
Facility County:	Not reported

Gepaid:	CA0570090555
Contact:	UNITED STATES AIR FORCE
Telephone:	4157283246
Facility Addr2:	Not reported
Mailing Name:	Not reported
Mailing Address:	BOX 609
Mailing City,St,Zip:	EL GRANADA, CA 940180609
Gen County:	6

USAF PILLAR POINT AIR FORCE STN (Continued) **1000473203**

TSD EPA ID: CA1170090012
TSD County: 1
Waste Category: Other inorganic solid waste
Disposal Method: Transfer Station
Tons: .0210
Facility County: 6

Gepaid: CA0570090555
Contact: UNITED STATES AIR FORCE
Telephone: 4157283246
Facility Addr2: Not reported
Mailing Name: Not reported
Mailing Address: BOX 609
Mailing City,St,Zip: EL GRANADA, CA 940180609
Gen County: 6
TSD EPA ID: CA1170090012
TSD County: 1
Waste Category: Unspecified organic liquid mixture
Disposal Method: Transfer Station
Tons: .2465
Facility County: 6

Gepaid: CA0570090555
Contact: UNITED STATES AIR FORCE
Telephone: 4157283246
Facility Addr2: Not reported
Mailing Name: Not reported
Mailing Address: BOX 609
Mailing City,St,Zip: EL GRANADA, CA 940180609
Gen County: 6
TSD EPA ID: CA1170090012
TSD County: 1
Waste Category: Off-specification, aged, or surplus organics
Disposal Method: Transfer Station
Tons: .3230
Facility County: 6

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

B10 **ANCHOR MARINA** **San Mateo Co. BI** **S106981399**
SE **262 PRINCETON** **N/A**
1/8-1/4 **PRINCETON, CA 94019**
984 ft.

Site 1 of 2 in cluster B

Relative:
Lower

Actual:
8 ft.

San Mateo Co. BI:
Region: SAN MATEO
Facility ID: FA0015601
Prog Element Code: STORES HAZ MAT <219GAL,1,999LB, 879FT3
Description: STORES HAZ MAT <219GAL,1,999LB, 879CF

Region: SAN MATEO
Facility ID: FA0015601
Prog Element Code: GENERATES and RECYCLES WASTE OIL/SOLVENT
Description: GENERATES & RECYCLES WASTE OIL/SOLVENT

B11
SE
1/8-1/4
984 ft.

Relative:
Lower

Actual:
8 ft.

PILLAR POINT BOATYARD
262 PRINCETON
PRINCETON, CA 94019

Site 2 of 2 in cluster B

San Mateo Co. BI | **S106982088** | **N/A**

San Mateo Co. BI:
Region: SAN MATEO
Facility ID: FA0026099
Prog Element Code: STORES MV FUELS OR WASTE ONLY
Description: STORES MV FUELS OR WASTE ONLY

Region: SAN MATEO
Facility ID: FA0026099
Prog Element Code: GEN <1 TONS HAZ WASTE/YR
Description: GEN <1 TONS HAZ WASTE/YR

12
ESE
1/8-1/4
1093 ft.

Relative:
Lower

Actual:
9 ft.

BOAT YARD/RAY FARNOW
246 PRINCETON
EL GRANADA, CA 94018

San Mateo Co. BI | **S106981955** | **N/A**

San Mateo Co. BI:
Region: SAN MATEO
Facility ID: FA0024919
Prog Element Code: STORES HAZ MAT <219GAL,1,999LB, 879FT3
Description: STORES HAZ MAT <219GAL,1,999LB, 879CF

Region: SAN MATEO
Facility ID: FA0024919
Prog Element Code: GENERATES and RECYCLES WASTE OIL/SOLVENT
Description: GENERATES & RECYCLES WASTE OIL/SOLVENT

13
ENE
1/4-1/2
1762 ft.

Relative:
Higher

Actual:
26 ft.

WESTINGHOUSE CORP
450 CAPISTRANO
EL GRANADA, CA 94018

LUST | **S102268020**
Cortese | **N/A**
San Mateo Co. BI

LUST:
Region: STATE
Case Type: Drinking Water Aquifer affected
Cross Street: Not reported
Enf Type: NOR
Funding: Not reported
How Discovered: OM
How Stopped: Other Means
Leak Cause: Unknown
Leak Source: Unknown
Global Id: T0608100880
Stop Date: 9999-09-09 00:00:00
Confirm Leak: Not reported
Workplan: Not reported
Prelim Assess: Not reported
Pollution Char: Not reported
Remed Plan: Not reported
Remed Action: Not reported
Monitoring: Not reported
Close Date: 1997-04-24 00:00:00

WESTINGHOUSE CORP (Continued) **S102268020**

Discover Date: 1965-01-01 00:00:00
Enforcement Dt: Not reported
Release Date: 1965-01-01 00:00:00
Review Date: Not reported
Enter Date: Not reported
MTBE Date: Not reported
GW Qualifier: Not reported
Soil Qualifier: Not reported
Max MTBE GW ppb: Not reported
Max MTBE Soil ppb: Not reported
County: 41
Org Name: Not reported
Reg Board: San Francisco Bay Region
Status: Case Closed
Chemical: Misc. Motor Vehicle Fuels
Contact Person: Not reported
Responsible Party: DAN POWELL
RP Address: 11 STANWIX ST
Interim: Not reported
Oversight Prgm: LUST
MTBE Class: *
MTBE Conc: 0
MTBE Fuel: 0
MTBE Tested: Not Required to be Tested.
Staff: NK
Staff Initials: GJS
Lead Agency: Local Agency
Local Agency: 41000L
Hydr Basin #: Not reported
Beneficial: GWR
Priority: Not reported
Cleanup Fund Id: Not reported
Work Suspended: Not reported
Local Case #: 010018
Case Number: Not reported
Qty Leaked: 0
Abate Method: Not reported
Operator: Not reported
Water System Name: Not reported
Well Name: Not reported
Distance To Lust: 0
Waste Discharge Global ID: Not reported
Waste Disch Assigned Name: Not reported
Summary: LUFT Con. LC 2 Samples were not tested for MTBE since the release at the sitew09/20/1996

LUST:
Region: 2
Facility Status: Case Closed
Facility Id: Not reported
Case Number: 010018
How Discovered: OM
Leak Cause: Unknown
Leak Source: Unknown
Date Leak Confirmed: Not reported
Oversight Program: LUST
Prelim. Site Assesment Wokplan Submitted: Not reported

WESTINGHOUSE CORP (Continued) **S102268020**

Preliminary Site Assesment Began: Not reported
Pollution Characterization Began: Not reported
Pollution Remediation Plan Submitted: Not reported
Date Remediation Action Underway: Not reported
Date Post Remedial Action Monitoring Began: Not reported

LUST:
Region: SAN MATEO
Global ID: T0608100880
Facility ID: 010018
Case Type: Aquifer used for drinking water supply affected
Facility Status: 9- Case Closed

Cortese:
Region: CORTESE
Facility Addr2: 450 CAPISTRANO

San Mateo Co. BI:
Region: SAN MATEO
Facility ID: FA0023362
Prog Element Code: UNDERGROUND TANK - GENERAL
Description: UNDERGROUND TANK - GENERAL

---

14 **EL GRANADA MOBILE HOME PARK** **LUST** **S106131287**
NW **164 CULEBRA** **SLIC** **N/A**
1/4-1/2 **MOSS BEACH, CA 94038**
2563 ft.

Relative:
Higher

Actual:
16 ft.

LUST:
Region: STATE
Case Type: Drinking water wells have been affected
Cross Street: Not reported
Enf Type: LFOR
Funding: Not reported
How Discovered: OM
How Stopped: Other Means
Leak Cause: Unknown
Leak Source: Unknown
Global Id: T0608122441
Stop Date: 9999-09-09 00:00:00
Confirm Leak: Not reported
Workplan: Not reported
Prelim Assess: 1965-01-01 00:00:00
Pollution Char: Not reported
Remed Plan: Not reported
Remed Action: Not reported
Monitoring: 2002-07-30 00:00:00
Close Date: Not reported
Discover Date: 1965-01-01 00:00:00
Enforcement Dt: Not reported
Release Date: 2000-04-28 00:00:00
Review Date: Not reported
Enter Date: Not reported
MTBE Date: Not reported
GW Qualifier: Not reported
Soil Qualifier: Not reported

EL GRANADA MOBILE HOME PARK (Continued) **S106131287**

Max MTBE GW ppb: Not reported
Max MTBE Soil ppb: Not reported
County: 41
Org Name: Not reported
Reg Board: San Francisco Bay Region
Status: Post remedial action monitoring
Chemical: Solvents
Contact Person: Not reported
Responsible Party: NATE NELSON
RP Address: 5314 N 250 WEST, STE 210
Interim: Not reported
Oversight Prgm: OTHL
MTBE Class: *
MTBE Conc: 0
MTBE Fuel: 0
MTBE Tested: Not Required to be Tested.
Staff: NK
Staff Initials: GJS
Lead Agency: Local Agency
Local Agency: 41000L
Hydr Basin #: Not reported
Beneficial: GWR
Priority: Not reported
Cleanup Fund Id: Not reported
Work Suspended: Not reported
Local Case #: 019034
Case Number: Not reported
Qty Leaked: 0
Abate Method: Not reported
Operator: Not reported
Water System Name: Not reported
Well Name: Not reported
Distance To Lust: 0
Waste Discharge Global ID: Not reported
Waste Disch Assigned Name: Not reported
Summary: QRPT 3-4-99,5-5-99. LTR RC'D 7-27-99. QRPT 9-10-99. RPT RC'D 9-24-99. WTE LTR 10-25-99. QRPT 11-17-99,2-28-00,5-17-00. LTR RC'D 6-5-00. EST LTR 6-29-00. QRPT 8-31-00. SWRCB LTR RC'D 9-28-00. QRPT 10-30-00,3-21-01. WTE LTR 6-6-1. LTR RC'D 6-27-01,6-28-01,7

LUST:
Region: SAN MATEO
Global ID: T0608122441
Facility ID: 019034
Case Type: Well used for drinking water supply affected
Facility Status: 8- Verification Monitoring Underway

SLIC:
Region: STATE
Global Id: T0608122441
Assigned Name: MAINSITE
Lead Agency Contact: GREG SMITH
Lead Agency: SAN MATEO COUNTY LOP
Lead Agency Case Number: 019034
Responsible Party: NATE NELSON
Recent Dtw: Not reported

EL GRANADA MOBILE HOME PARK (Continued) **S106131287**

Substance Released: 13
Facility Status: **Verification Monitoring Underway**

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15 **PILLAR POINT MILITARY RESERVATION** **FUDS** **1007211959**
SSW **N/A**
1/2-1 **EL GRANADA, CA**
2787 ft.

Relative:
Higher

Actual:
16 ft.

FUDS:
Federal Facility ID: CA9799F5821
Facility Name: Pillar Point Military Reservation
City: El Granada
State: CA
EPA Region: 9
County: SAN MATEO
Congressional District: 12
US Army District: Sacramento District (SPK
Fiscal Year: 2005
Telephone: 916-557-7461
NPL Status: Not Listed
Description: The site is located at Half Moon Bay, 15 miles south of San
RAB: Not reported
History: On 10 October 1940, the U.S. Army purchased 12.68 acres and
Current Owner: COUNTY; PRIVATE
CTC: 171.70
Current Prog: Not reported
Future Prog: Not reported
Lattitude: 37.4980556
Longitude: -122.4983333

FUDS Description Details:

The site is located at Half Moon Bay, 15 miles south of San Francisco in San Mateo County, California. Approximately 7 acres of the site is owned by Vandenberg AFB, and 4 acres are owned by the San Mateo Harbor District (currently being developed in
to a wetlands habitat).The remaining 3 acres are privately owned and undeveloped. No remaining structures or facilities were observed.

FUDS History Details:

On 10 October 1940, the U.S. Army purchased 12.68 acres and leased 36.28 acres of undeveloped land. The land was developed to use as a harbor defense post and primary artillery site for San Francisco. Improvements included concrete barracks and bunk
ers, cyclone fences, and an overhead and underground electric system. In 1970 the USAF acquired all but approximately 7 of the leased acres by condemnation.

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16 **HALF MOON BAY FLIGHT STRIP** **FUDS** **1009484686**
NNW **N/A**
1/2-1 **MOSS BEACH, CA**
3697 ft.

Relative:
Higher

Actual:
16 ft.

FUDS:
Federal Facility ID: CA9799F5756
Facility Name: Half Moon Bay Flight Strip
City: Moss Beach
State: CA

HALF MOON BAY FLIGHT STRIP (Continued) **1009484686**

EPA Region:	9
County:	SAN MATEO
Congressional District:	12
US Army District:	Sacramento District (SPK
Fiscal Year:	2005
Telephone:	916-557-7461
NPL Status:	Not Listed
Description:	Improvements left included 2 USTs, 7 concrete undergrnd fu
RAB:	Not reported
History:	By authoriz dated 15 Oct 1942, the War Dept acquired 217.68
Current Owner:	COUNTY
CTC:	8.90
Current Prog:	Not reported
Future Prog:	Not reported
Lattitude:	37.5144444
Longitude:	-122.5000000

ORPHAN SUMMARY

City	EDR ID	Site Name	Site Address	Zip	Database(s)
HALF MOON BAY	S102268107	BAY CHEVRON SERVICE #7927	375 HWY 1	94019	San Mateo Co. BI
HALF MOON BAY	S102268109	BAY CHEVRON	375 HWY 1	94019	San Mateo Co. BI
HALF MOON BAY	S103892469	GIUSTI FARMS	2475 HWY 1	94019	San Mateo Co. BI
HALF MOON BAY	S106797820	RICE TRUCKING	2119 HWY 1	94019	San Mateo Co. BI
HALF MOON BAY	S106797824	SEWER AUTHORITY MID COASTSIDE	1000 HWY 1	94019	San Mateo Co. BI
HALF MOON BAY	S106798038	GREENHOUSE CLEANERS	80 HWY 1	94019	San Mateo Co. BI
HALF MOON BAY	S106925756	EIRCA NURSERY	RTE 1 BOX 37K, ERICA RD	94019	SWEEPS UST
HALF MOON BAY	S106927559	ITTWC COASTAL MARINE STAT KFS	HIGHWAY 1 / MEYN RD	94019	SWEEPS UST
HALF MOON BAY	S106981117	SAMS CHOWDER HOUSE	4230 HWY 1	94019	San Mateo Co. BI
HALF MOON BAY	S106981737	ERICA NURSERY	RT 1 BOX 37K	94019	San Mateo Co. BI
HALF MOON BAY	S106981838	RESIDENCE	1600 HWY 1	94019	San Mateo Co. BI
HALF MOON BAY	S106981993	PODESTA RANGE	2351 HWY 1	94019	San Mateo Co. BI
HALF MOON BAY	S105628960	NORTH WAVECREST PROPERTY	HIGHWAY 1/WAVECREST ROAD	94019	SCH, ENVIROSTOR
HALF MOON BAY	A100176522	PILARCITOS QUARRY	11700 HWY. 92	94019	AST
HALF MOON BAY	S103626256	SAN MATEO COUNTY ENVIRONMENTAL HEALTH	12310 HIGHWAY 92	94019	HAZNET, San Mateo Co. BI, EMI, CA WDS
HALF MOON BAY	S104972844	PILARCITOS QUARRY	11700 HWY 92	94019	San Mateo Co. BI, CA WDS
HALF MOON BAY	S104972845	BFI OX MOUNTAIN	12310 HWY 92	94019	San Mateo Co. BI
HALF MOON BAY	S106797780	CALIFORNIA EVERGREEN RANGE	HWY 92	94019	San Mateo Co. BI
HALF MOON BAY	U003782680	RASIDANOR / BRACK TURNAR	990 CABRILL, HWY.	94019	UST
HALF MOON BAY	S103953452	BRUCE TURNER	990 CABRILLO HWY	94019	HAZNET, San Mateo Co. BI
HALF MOON BAY	S106929244	MCCAHON NURSERY COMPANY	1450 CABRILLO HWY. SOUTH/P.O. BOX 185	94019	SWEEPS UST
HALF MOON BAY	1003879004	SOUTH HALF MOON BAY	HALF MOON BAY	94019	CERC-NFRAP
HALF MOON BAY	U001594092	HARBOR FUEL DOCK	JOHNSON PIER - PRINCETON-BY-TH	94019	HIST UST
HALF MOON BAY	S103892477		1 JOHNSON PIER	94019	CHMIRS, San Mateo Co. BI
HALF MOON BAY	S106797891	AZEVEDO FEED & TRUCKING	MIRAMONTE POINT	94019	San Mateo Co. BI
HALF MOON BAY	1000123782	OX MOUNTAIN SANITARY LANDFILL	2 MI N-E HALF MOON BAY OFF HWY 92	94019	RCRA-SQG, FINDS
MOSS BEACH	U001594289	SUPER-7 #18827	HIGHWAY #1	94038	HIST UST
MOSS BEACH	S102445214	MOSS BEACH CHEVRON	9400 HWY 1	94038	San Mateo Co. BI
MOSS BEACH	S106798111	MOSS BEACH CHEVRON	HWY 1 AT VERMONT	94038	San Mateo Co. BI
MOSS BEACH	S106797922	CABRILLO FARMS/DENNISTON CREEK	981 CABRILLO HWY	94038	San Mateo Co. BI
MOSS BEACH	S106981100	HALF MOON BAY AERO	COAST HWY	94038	San Mateo Co. BI
MOSS BEACH	S106798108	MONTARA PEAK-SITE 8063	MCNESS STATE PARK TRL	94038	San Mateo Co. BI

GOVERNMENT RECORDS SEARCHED / DATA CURRENCY TRACKING

To maintain currency of the following federal and state databases, EDR contacts the appropriate governmental agency on a monthly or quarterly basis, as required.

Number of Days to Update: Provides confirmation that EDR is reporting records that have been updated within 90 days from the date the government agency made the information available to the public.

FEDERAL RECORDS

NPL: National Priority List

National Priorities List (Superfund). The NPL is a subset of CERCLIS and identifies over 1,200 sites for priority cleanup under the Superfund Program. NPL sites may encompass relatively large areas. As such, EDR provides polygon coverage for over 1,000 NPL site boundaries produced by EPA's Environmental Photographic Interpretation Center (EPIC) and regional EPA offices.

Date of Government Version: 09/27/2006
Date Data Arrived at EDR: 11/01/2006
Date Made Active in Reports: 11/22/2006
Number of Days to Update: 21

Source: EPA
Telephone: N/A
Last EDR Contact: 01/31/2007
Next Scheduled EDR Contact: 04/30/2007
Data Release Frequency: Quarterly

NPL Site Boundaries

Sources:

EPA's Environmental Photographic Interpretation Center (EPIC)
Telephone: 202-564-7333

EPA Region 1
Telephone 617-918-1143

EPA Region 3
Telephone 215-814-5418

EPA Region 4
Telephone 404-562-8033

EPA Region 5
Telephone 312-886-6686

EPA Region 10
Telephone 206-553-8665

EPA Region 6
Telephone: 214-655-6659

EPA Region 7
Telephone: 913-551-7247

EPA Region 8
Telephone: 303-312-6774

EPA Region 9
Telephone: 415-947-4246

Proposed NPL: Proposed National Priority List Sites

A site that has been proposed for listing on the National Priorities List through the issuance of a proposed rule in the Federal Register. EPA then accepts public comments on the site, responds to the comments, and places on the NPL those sites that continue to meet the requirements for listing.

Date of Government Version: 09/27/2006
Date Data Arrived at EDR: 11/01/2006
Date Made Active in Reports: 11/22/2006
Number of Days to Update: 21

Source: EPA
Telephone: N/A
Last EDR Contact: 02/23/2007
Next Scheduled EDR Contact: 04/30/2007
Data Release Frequency: Quarterly

DELISTED NPL: National Priority List Deletions

The National Oil and Hazardous Substances Pollution Contingency Plan (NCP) establishes the criteria that the EPA uses to delete sites from the NPL. In accordance with 40 CFR 300.425.(e), sites may be deleted from the NPL where no further response is appropriate.

Date of Government Version: 09/27/2006
Date Data Arrived at EDR: 11/01/2006
Date Made Active in Reports: 11/22/2006
Number of Days to Update: 21

Source: EPA
Telephone: N/A
Last EDR Contact: 01/31/2007
Next Scheduled EDR Contact: 04/30/2007
Data Release Frequency: Quarterly

GOVERNMENT RECORDS SEARCHED / DATA CURRENCY TRACKING

NPL RECOVERY: Federal Superfund Liens

Federal Superfund Liens. Under the authority granted the USEPA by CERCLA of 1980, the USEPA has the authority to file liens against real property in order to recover remedial action expenditures or when the property owner received notification of potential liability. USEPA compiles a listing of filed notices of Superfund Liens.

Date of Government Version: 10/15/1991
Date Data Arrived at EDR: 02/02/1994
Date Made Active in Reports: 03/30/1994
Number of Days to Update: 56

Source: EPA
Telephone: 202-564-4267
Last EDR Contact: 02/19/2007
Next Scheduled EDR Contact: 05/21/2007
Data Release Frequency: No Update Planned

CERCLIS: Comprehensive Environmental Response, Compensation, and Liability Information System

CERCLIS contains data on potentially hazardous waste sites that have been reported to the USEPA by states, municipalities, private companies and private persons, pursuant to Section 103 of the Comprehensive Environmental Response, Compensation, and Liability Act (CERCLA). CERCLIS contains sites which are either proposed to or on the National Priorities List (NPL) and sites which are in the screening and assessment phase for possible inclusion on the NPL.

Date of Government Version: 11/28/2006
Date Data Arrived at EDR: 12/19/2006
Date Made Active in Reports: 01/29/2007
Number of Days to Update: 41

Source: EPA
Telephone: 703-603-8960
Last EDR Contact: 12/19/2006
Next Scheduled EDR Contact: 03/19/2007
Data Release Frequency: Quarterly

CERCLIS-NFRAP: CERCLIS No Further Remedial Action Planned

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

Date of Government Version: 12/20/2006
Date Data Arrived at EDR: 01/29/2007
Date Made Active in Reports: 02/27/2007
Number of Days to Update: 29

Source: EPA
Telephone: 703-603-8960
Last EDR Contact: 12/18/2006
Next Scheduled EDR Contact: 03/19/2007
Data Release Frequency: Quarterly

CORRACTS: Corrective Action Report

CORRACTS identifies hazardous waste handlers with RCRA corrective action activity.

Date of Government Version: 01/04/2007
Date Data Arrived at EDR: 01/18/2007
Date Made Active in Reports: 02/27/2007
Number of Days to Update: 40

Source: EPA
Telephone: 800-424-9346
Last EDR Contact: 03/05/2007
Next Scheduled EDR Contact: 06/04/2007
Data Release Frequency: Quarterly

RCRA: Resource Conservation and Recovery Act Information

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 (LQGs) 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 off-site to a facility that can recycle, treat, store, or dispose of the waste. TSDFs treat, store, or dispose of the waste.

Date of Government Version: 06/13/2006
Date Data Arrived at EDR: 06/28/2006
Date Made Active in Reports: 08/23/2006
Number of Days to Update: 56

Source: EPA
Telephone: 800-424-9346
Last EDR Contact: 02/27/2007
Next Scheduled EDR Contact: 04/16/2007
Data Release Frequency: Quarterly

ERNS: Emergency Response Notification System

Emergency Response Notification System. ERNS records and stores information on reported releases of oil and hazardous substances.

Date of Government Version: 12/31/2005
Date Data Arrived at EDR: 01/12/2006
Date Made Active in Reports: 02/21/2006
Number of Days to Update: 40

Source: National Response Center, United States Coast Guard
Telephone: 202-260-2342
Last EDR Contact: 01/24/2007
Next Scheduled EDR Contact: 04/23/2007
Data Release Frequency: Annually

HMIRS: Hazardous Materials Information Reporting System

Hazardous Materials Incident Report System. HMIRS contains hazardous material spill incidents reported to DOT.

Date of Government Version: 11/28/2006
Date Data Arrived at EDR: 01/17/2007
Date Made Active in Reports: 02/27/2007
Number of Days to Update: 41

Source: U.S. Department of Transportation
Telephone: 202-366-4555
Last EDR Contact: 01/17/2007
Next Scheduled EDR Contact: 04/16/2007
Data Release Frequency: Annually

US ENG CONTROLS: Engineering Controls Sites List

A listing of sites with engineering controls in place. Engineering controls include various forms of caps, building foundations, liners, and treatment methods to create pathway elimination for regulated substances to enter environmental media or effect human health.

Date of Government Version: 10/18/2006
Date Data Arrived at EDR: 12/14/2006
Date Made Active in Reports: 01/11/2007
Number of Days to Update: 28

Source: Environmental Protection Agency
Telephone: 703-603-8905
Last EDR Contact: 01/02/2007
Next Scheduled EDR Contact: 04/02/2007
Data Release Frequency: Varies

US INST CONTROL: Sites with Institutional Controls

A listing of sites with institutional controls in place. Institutional controls include administrative measures, such as groundwater use restrictions, construction restrictions, property use restrictions, and post remediation care requirements intended to prevent exposure to contaminants remaining on site. Deed restrictions are generally required as part of the institutional controls.

Date of Government Version: 01/24/2007
Date Data Arrived at EDR: 01/31/2007
Date Made Active in Reports: 02/27/2007
Number of Days to Update: 27

Source: Environmental Protection Agency
Telephone: 703-603-8905
Last EDR Contact: 01/02/2007
Next Scheduled EDR Contact: 04/02/2007
Data Release Frequency: Varies

GOVERNMENT RECORDS SEARCHED / DATA CURRENCY TRACKING

DOD: Department of Defense Sites

This data set consists of federally owned or administered lands, administered by the Department of Defense, that have any area equal to or greater than 640 acres of the United States, Puerto Rico, and the U.S. Virgin Islands.

Date of Government Version: 12/31/2005
Date Data Arrived at EDR: 11/10/2006
Date Made Active in Reports: 01/11/2007
Number of Days to Update: 62

Source: USGS
Telephone: 703-692-8801
Last EDR Contact: 02/08/2007
Next Scheduled EDR Contact: 05/07/2007
Data Release Frequency: Semi-Annually

FUDS: Formerly Used Defense Sites

The listing includes locations of Formerly Used Defense Sites properties where the US Army Corps of Engineers is actively working or will take necessary cleanup actions.

Date of Government Version: 12/31/2005
Date Data Arrived at EDR: 09/20/2006
Date Made Active in Reports: 11/22/2006
Number of Days to Update: 63

Source: U.S. Army Corps of Engineers
Telephone: 202-528-4285
Last EDR Contact: 01/02/2007
Next Scheduled EDR Contact: 04/02/2007
Data Release Frequency: Varies

US BROWNFIELDS: A Listing of Brownfields Sites

Included in the listing are brownfields properties addresses by Cooperative Agreement Recipients and brownfields properties addressed by Targeted Brownfields Assessments. Targeted Brownfields Assessments-EPA's Targeted Brownfields Assessments (TBA) program is designed to help states, tribes, and municipalities--especially those without EPA Brownfields Assessment Demonstration Pilots--minimize the uncertainties of contamination often associated with brownfields. Under the TBA program, EPA provides funding and/or technical assistance for environmental assessments at brownfields sites throughout the country. Targeted Brownfields Assessments supplement and work with other efforts under EPA's Brownfields Initiative to promote cleanup and redevelopment of brownfields. Cooperative Agreement Recipients-States, political subdivisions, territories, and Indian tribes become Brownfields Cleanup Revolving Loan Fund (BCRLF) cooperative agreement recipients when they enter into BCRLF cooperative agreements with the U.S. EPA. EPA selects BCRLF cooperative agreement recipients based on a proposal and application process. BCRLF cooperative agreement recipients must use EPA funds provided through BCRLF cooperative agreement for specified brownfields-related cleanup activities.

Date of Government Version: 10/17/2006
Date Data Arrived at EDR: 10/20/2006
Date Made Active in Reports: 12/13/2006
Number of Days to Update: 54

Source: Environmental Protection Agency
Telephone: 202-566-2777
Last EDR Contact: 12/11/2006
Next Scheduled EDR Contact: 03/12/2007
Data Release Frequency: Semi-Annually

CONSENT: Superfund (CERCLA) Consent Decrees

Major legal settlements that establish responsibility and standards for cleanup at NPL (Superfund) sites. Released periodically by United States District Courts after settlement by parties to litigation matters.

Date of Government Version: 12/14/2004
Date Data Arrived at EDR: 02/15/2005
Date Made Active in Reports: 04/25/2005
Number of Days to Update: 69

Source: Department of Justice, Consent Decree Library
Telephone: Varies
Last EDR Contact: 02/06/2007
Next Scheduled EDR Contact: 04/23/2007
Data Release Frequency: Varies

ROD: Records Of Decision

Record of Decision. ROD documents mandate a permanent remedy at an NPL (Superfund) site containing technical and health information to aid in the cleanup.

Date of Government Version: 01/10/2007
Date Data Arrived at EDR: 01/24/2007
Date Made Active in Reports: 02/27/2007
Number of Days to Update: 34

Source: EPA
Telephone: 703-416-0223
Last EDR Contact: 01/22/2007
Next Scheduled EDR Contact: 04/02/2007
Data Release Frequency: Annually

UMTRA: Uranium Mill Tailings Sites

Uranium ore was mined by private companies for federal government use in national defense programs. When the mills shut down, large piles of the sand-like material (mill tailings) remain after uranium has been extracted from the ore. Levels of human exposure to radioactive materials from the piles are low; however, in some cases tailings were used as construction materials before the potential health hazards of the tailings were recognized.

Date of Government Version: 12/31/2005
Date Data Arrived at EDR: 11/08/2006
Date Made Active in Reports: 01/29/2007
Number of Days to Update: 82

Source: Department of Energy
Telephone: 505-845-0011
Last EDR Contact: 12/18/2006
Next Scheduled EDR Contact: 03/19/2007
Data Release Frequency: Varies

ODI: Open Dump Inventory

An open dump is defined as a disposal facility that does not comply with one or more of the Part 257 or Part 258 Subtitle D Criteria.

Date of Government Version: 06/30/1985
Date Data Arrived at EDR: 08/09/2004
Date Made Active in Reports: 09/17/2004
Number of Days to Update: 39

Source: Environmental Protection Agency
Telephone: 800-424-9346
Last EDR Contact: 06/09/2004
Next Scheduled EDR Contact: N/A
Data Release Frequency: No Update Planned

TRIS: Toxic Chemical Release Inventory System

Toxic Release Inventory System. TRIS identifies facilities which release toxic chemicals to the air, water and land in reportable quantities under SARA Title III Section 313.

Date of Government Version: 12/31/2004
Date Data Arrived at EDR: 06/22/2006
Date Made Active in Reports: 08/23/2006
Number of Days to Update: 62

Source: EPA
Telephone: 202-566-0250
Last EDR Contact: 12/19/2006
Next Scheduled EDR Contact: 03/19/2007
Data Release Frequency: Annually

TSCA: Toxic Substances Control Act

Toxic Substances Control Act. TSCA identifies manufacturers and importers of chemical substances included on the TSCA Chemical Substance Inventory list. It includes data on the production volume of these substances by plant site.

Date of Government Version: 12/31/2002
Date Data Arrived at EDR: 04/14/2006
Date Made Active in Reports: 05/30/2006
Number of Days to Update: 46

Source: EPA
Telephone: 202-260-5521
Last EDR Contact: 01/15/2007
Next Scheduled EDR Contact: 04/16/2007
Data Release Frequency: Every 4 Years

FTTS: FIFRA/ TSCA Tracking System - FIFRA (Federal Insecticide, Fungicide, & Rodenticide Act)/TSCA (Toxic Substances Control Act)

FTTS tracks administrative cases and pesticide enforcement actions and compliance activities related to FIFRA, TSCA and EPCRA (Emergency Planning and Community Right-to-Know Act). To maintain currency, EDR contacts the Agency on a quarterly basis.

Date of Government Version: 10/19/2006
Date Data Arrived at EDR: 10/27/2006
Date Made Active in Reports: 11/22/2006
Number of Days to Update: 26

Source: EPA/Office of Prevention, Pesticides and Toxic Substances
Telephone: 202-566-1667
Last EDR Contact: 12/18/2006
Next Scheduled EDR Contact: 03/19/2007
Data Release Frequency: Quarterly

FTTS INSP: FIFRA/ TSCA Tracking System - FIFRA (Federal Insecticide, Fungicide, & Rodenticide Act)/TSCA (Toxic Substances Control Act)

A listing of FIFRA/TSCA Tracking System (FTTS) inspections and enforcements.

Date of Government Version: 10/19/2006
Date Data Arrived at EDR: 10/27/2006
Date Made Active in Reports: 11/22/2006
Number of Days to Update: 26

Source: EPA
Telephone: 202-566-1667
Last EDR Contact: 12/18/2006
Next Scheduled EDR Contact: 03/19/2007
Data Release Frequency: Quarterly

SSTS: Section 7 Tracking Systems

Section 7 of the Federal Insecticide, Fungicide and Rodenticide Act, as amended (92 Stat. 829) requires all registered pesticide-producing establishments to submit a report to the Environmental Protection Agency by March 1st each year. Each establishment must report the types and amounts of pesticides, active ingredients and devices being produced, and those having been produced and sold or distributed in the past year.

Date of Government Version: 12/31/2004
Date Data Arrived at EDR: 05/11/2006
Date Made Active in Reports: 05/22/2006
Number of Days to Update: 11

Source: EPA
Telephone: 202-564-4203
Last EDR Contact: 01/29/2007
Next Scheduled EDR Contact: 04/16/2007
Data Release Frequency: Annually

ICIS: Integrated Compliance Information System

The Integrated Compliance Information System (ICIS) supports the information needs of the national enforcement and compliance program as well as the unique needs of the National Pollutant Discharge Elimination System (NPDES) program.

Date of Government Version: 02/13/2006
Date Data Arrived at EDR: 04/21/2006
Date Made Active in Reports: 05/11/2006
Number of Days to Update: 20

Source: Environmental Protection Agency
Telephone: 202-564-5088
Last EDR Contact: 01/15/2007
Next Scheduled EDR Contact: 04/16/2007
Data Release Frequency: Quarterly

LUCIS: Land Use Control Information System

LUCIS contains records of land use control information pertaining to the former Navy Base Realignment and Closure properties.

Date of Government Version: 12/09/2005
Date Data Arrived at EDR: 12/11/2006
Date Made Active in Reports: 01/11/2007
Number of Days to Update: 31

Source: Department of the Navy
Telephone: 843-820-7326
Last EDR Contact: 12/11/2006
Next Scheduled EDR Contact: 03/12/2007
Data Release Frequency: Varies

RADINFO: Radiation Information Database

The Radiation Information Database (RADINFO) contains information about facilities that are regulated by U.S. Environmental Protection Agency (EPA) regulations for radiation and radioactivity.

Date of Government Version: 01/30/2007
Date Data Arrived at EDR: 01/31/2007
Date Made Active in Reports: 02/27/2007
Number of Days to Update: 27

Source: Environmental Protection Agency
Telephone: 202-343-9775
Last EDR Contact: 01/31/2007
Next Scheduled EDR Contact: 04/30/2007
Data Release Frequency: Quarterly

CDL: Clandestine Drug Labs

A listing of clandestine drug lab locations. The U.S. Department of Justice ("the Department") provides this web site as a public service. It contains addresses of some locations where law enforcement agencies reported they found chemicals or other items that indicated the presence of either clandestine drug laboratories or dumpsites. In most cases, the source of the entries is not the Department, and the Department has not verified the entry and does not guarantee its accuracy. Members of the public must verify the accuracy of all entries by, for example, contacting local law enforcement and local health departments.

Date of Government Version: 12/01/2006
Date Data Arrived at EDR: 01/08/2007
Date Made Active in Reports: 01/11/2007
Number of Days to Update: 3

Source: Drug Enforcement Administration
Telephone: 202-307-1000
Last EDR Contact: 01/08/2007
Next Scheduled EDR Contact: 03/26/2007
Data Release Frequency: Quarterly

PADS: PCB Activity Database System

PCB Activity Database. PADS Identifies generators, transporters, commercial storers and/or brokers and disposers of PCB's who are required to notify the EPA of such activities.

Date of Government Version: 10/17/2006
Date Data Arrived at EDR: 11/29/2006
Date Made Active in Reports: 01/11/2007
Number of Days to Update: 43

Source: EPA
Telephone: 202-566-0500
Last EDR Contact: 03/02/2007
Next Scheduled EDR Contact: 05/07/2007
Data Release Frequency: Annually

MLTS: Material Licensing Tracking System

MLTS is maintained by the Nuclear Regulatory Commission and contains a list of approximately 8,100 sites which possess or use radioactive materials and which are subject to NRC licensing requirements. To maintain currency, EDR contacts the Agency on a quarterly basis.

Date of Government Version: 01/11/2007
Date Data Arrived at EDR: 01/26/2007
Date Made Active in Reports: 02/27/2007
Number of Days to Update: 32

Source: Nuclear Regulatory Commission
Telephone: 301-415-7169
Last EDR Contact: 01/02/2007
Next Scheduled EDR Contact: 04/02/2007
Data Release Frequency: Quarterly

MINES: Mines Master Index File

Contains all mine identification numbers issued for mines active or opened since 1971. The data also includes violation information.

Date of Government Version: 11/15/2006
Date Data Arrived at EDR: 12/28/2006
Date Made Active in Reports: 01/29/2007
Number of Days to Update: 32

Source: Department of Labor, Mine Safety and Health Administration
Telephone: 303-231-5959
Last EDR Contact: 12/28/2006
Next Scheduled EDR Contact: 03/26/2007
Data Release Frequency: Semi-Annually

FINDS: Facility Index System/Facility Registry System

Facility Index System. FINDS contains both facility information and 'pointers' to other sources that contain more detail. EDR includes the following FINDS databases in this report: PCS (Permit Compliance System), AIRS (Aerometric Information Retrieval System), DOCKET (Enforcement Docket used to manage and track information on civil judicial enforcement cases for all environmental statutes), FURS (Federal Underground Injection Control), C-DOCKET (Criminal Docket System used to track criminal enforcement actions for all environmental statutes), FFIS (Federal Facilities Information System), STATE (State Environmental Laws and Statutes), and PADS (PCB Activity Data System).

Date of Government Version: 01/18/2007
Date Data Arrived at EDR: 01/23/2007
Date Made Active in Reports: 02/27/2007
Number of Days to Update: 35

Source: EPA
Telephone: N/A
Last EDR Contact: 01/02/2007
Next Scheduled EDR Contact: 04/02/2007
Data Release Frequency: Quarterly

RAATS: RCRA Administrative Action Tracking System

RCRA Administration Action Tracking System. RAATS contains records based on enforcement actions issued under RCRA pertaining to major violators and includes administrative and civil actions brought by the EPA. For administration actions after September 30, 1995, data entry in the RAATS database was discontinued. EPA will retain a copy of the database for historical records. It was necessary to terminate RAATS because a decrease in agency resources made it impossible to continue to update the information contained in the database.

Date of Government Version: 04/17/1995
Date Data Arrived at EDR: 07/03/1995
Date Made Active in Reports: 08/07/1995
Number of Days to Update: 35

Source: EPA
Telephone: 202-564-4104
Last EDR Contact: 03/05/2007
Next Scheduled EDR Contact: 06/04/2007
Data Release Frequency: No Update Planned

BRS: Biennial Reporting System

The Biennial Reporting System is a national system administered by the EPA that collects data on the generation and management of hazardous waste. BRS captures detailed data from two groups: Large Quantity Generators (LQG) and Treatment, Storage, and Disposal Facilities.

Date of Government Version: 12/31/2003
Date Data Arrived at EDR: 06/17/2005
Date Made Active in Reports: 08/04/2005
Number of Days to Update: 48

Source: EPA/NTIS
Telephone: 800-424-9346
Last EDR Contact: 03/06/2007
Next Scheduled EDR Contact: 06/11/2007
Data Release Frequency: Biennially

STATE AND LOCAL RECORDS

HIST CAL-SITES: Calsites Database

The Calsites database contains potential or confirmed hazardous substance release properties. In 1996, California EPA reevaluated and significantly reduced the number of sites in the Calsites database. No longer updated by the state agency. It has been replaced by ENVIROSTOR.

Date of Government Version: 08/08/2005
Date Data Arrived at EDR: 08/03/2006
Date Made Active in Reports: 08/24/2006
Number of Days to Update: 21

Source: Department of Toxic Substance Control
Telephone: 916-323-3400
Last EDR Contact: 02/26/2007
Next Scheduled EDR Contact: 05/28/2007
Data Release Frequency: No Update Planned

CA BOND EXP. PLAN: Bond Expenditure Plan

Department of Health Services developed a site-specific expenditure plan as the basis for an appropriation of Hazardous Substance Cleanup Bond Act funds. It is not updated.

Date of Government Version: 01/01/1989
Date Data Arrived at EDR: 07/27/1994
Date Made Active in Reports: 08/02/1994
Number of Days to Update: 6

Source: Department of Health Services
Telephone: 916-255-2118
Last EDR Contact: 05/31/1994
Next Scheduled EDR Contact: N/A
Data Release Frequency: No Update Planned

SCH: School Property Evaluation Program

This category contains proposed and existing school sites that are being evaluated by DTSC for possible hazardous materials contamination. In some cases, these properties may be listed in the CalSites category depending on the level of threat to public health and safety or the environment they pose.

Date of Government Version: 11/28/2006
Date Data Arrived at EDR: 11/29/2006
Date Made Active in Reports: 01/03/2007
Number of Days to Update: 35

Source: Department of Toxic Substances Control
Telephone: 916-323-3400
Last EDR Contact: 02/28/2007
Next Scheduled EDR Contact: 05/28/2007
Data Release Frequency: Quarterly

TOXIC PITS: Toxic Pits Cleanup Act Sites

Toxic PITS Cleanup Act Sites. TOXIC PITS identifies sites suspected of containing hazardous substances where cleanup has not yet been completed.

Date of Government Version: 07/01/1995
Date Data Arrived at EDR: 08/30/1995
Date Made Active in Reports: 09/26/1995
Number of Days to Update: 27

Source: State Water Resources Control Board
Telephone: 916-227-4364
Last EDR Contact: 01/29/2007
Next Scheduled EDR Contact: 04/30/2007
Data Release Frequency: No Update Planned

SWF/LF (SWIS): Solid Waste Information System

Active, Closed and Inactive Landfills. SWF/LF records typically contain an inve ntory of solid waste disposal facilities or landfills. These may be active or i nactive facilities or open dumps that failed to meet RCRA Section 4004 criteria for solid waste landfills or disposal sites.

Date of Government Version: 12/11/2006
Date Data Arrived at EDR: 12/13/2006
Date Made Active in Reports: 01/24/2007
Number of Days to Update: 42

Source: Integrated Waste Management Board
Telephone: 916-341-6320
Last EDR Contact: 12/13/2006
Next Scheduled EDR Contact: 03/12/2007
Data Release Frequency: Quarterly

GOVERNMENT RECORDS SEARCHED / DATA CURRENCY TRACKING

CA WDS: Waste Discharge System
Sites which have been issued waste discharge requirements.

Date of Government Version: 12/19/2006
Date Data Arrived at EDR: 12/19/2006
Date Made Active in Reports: 01/24/2007
Number of Days to Update: 36
Source: State Water Resources Control Board
Telephone: 916-341-5227
Last EDR Contact: 12/19/2006
Next Scheduled EDR Contact: 03/19/2007
Data Release Frequency: Quarterly

WMUDS/SWAT: Waste Management Unit Database
Waste Management Unit Database System. WMUDS is used by the State Water Resources Control Board staff and the Regional Water Quality Control Boards for program tracking and inventory of waste management units. WMUDS is composed of the following databases: Facility Information, Scheduled Inspections Information, Waste Management Unit Information, SWAT Program Information, SWAT Report Summary Information, SWAT Report Summary Data, Chapter 15 (formerly Subchapter 15) Information, Chapter 15 Monitoring Parameters, TPCA Program Information, RCRA Program Information, Closure Information, and Interested Parties Information.

Date of Government Version: 04/01/2000
Date Data Arrived at EDR: 04/10/2000
Date Made Active in Reports: 05/10/2000
Number of Days to Update: 30
Source: State Water Resources Control Board
Telephone: 916-227-4448
Last EDR Contact: 03/05/2007
Next Scheduled EDR Contact: 06/04/2007
Data Release Frequency: Quarterly

CORTESE: "Cortese" Hazardous Waste & Substances Sites List
The sites for the list are designated by the State Water Resource Control Board (LUST), the Integrated Waste Board (SWF/LS), and the Department of Toxic Substances Control (Cal-Sites). This listing is no longer updated by the state agency.

Date of Government Version: 04/01/2001
Date Data Arrived at EDR: 05/29/2001
Date Made Active in Reports: 07/26/2001
Number of Days to Update: 58
Source: CAL EPA/Office of Emergency Information
Telephone: 916-323-3400
Last EDR Contact: 01/22/2007
Next Scheduled EDR Contact: 04/23/2007
Data Release Frequency: No Update Planned

SWRCY: Recycler Database
A listing of recycling facilities in California.

Date of Government Version: 01/08/2007
Date Data Arrived at EDR: 01/09/2007
Date Made Active in Reports: 01/24/2007
Number of Days to Update: 15
Source: Department of Conservation
Telephone: 916-323-3836
Last EDR Contact: 01/09/2007
Next Scheduled EDR Contact: 04/09/2007
Data Release Frequency: Quarterly

LUST: Geotracker's Leaking Underground Fuel Tank Report
Leaking Underground Storage Tank Incident Reports. LUST records contain an inventory of reported leaking underground storage tank incidents. Not all states maintain these records, and the information stored varies by state.

Date of Government Version: 01/09/2007
Date Data Arrived at EDR: 01/09/2007
Date Made Active in Reports: 01/24/2007
Number of Days to Update: 15
Source: State Water Resources Control Board
Telephone: 866-480-1028
Last EDR Contact: 01/09/2007
Next Scheduled EDR Contact: 04/09/2007
Data Release Frequency: Quarterly

LUST REG 5: Leaking Underground Storage Tank Database
Leaking Underground Storage Tank locations. Alameda, Alpine, Amador, Butte, Colusa, Contra Costa, Calveras, El Dorado, Fresno, Glenn, Kern, Kings, Lake, Lassen, Madera, Mariposa, Merced, Modoc, Napa, Nevada, Placer, Plumas, Sacramento, San Joaquin, Shasta, Solano, Stanislaus, Sutter, Tehama, Tulare, Tuolumne, Yolo, Yuba counties.

Date of Government Version: 01/01/2007
Date Data Arrived at EDR: 01/23/2007
Date Made Active in Reports: 02/27/2007
Number of Days to Update: 35
Source: California Regional Water Quality Control Board Central Valley Region (5)
Telephone: 916-464-3291
Last EDR Contact: 01/23/2007
Next Scheduled EDR Contact: 04/02/2007
Data Release Frequency: Quarterly

LUST REG 6V: Leaking Underground Storage Tank Case Listing
Leaking Underground Storage Tank locations. Inyo, Kern, Los Angeles, Mono, San Bernardino counties.

Date of Government Version: 06/07/2005
Date Data Arrived at EDR: 06/07/2005
Date Made Active in Reports: 06/29/2005
Number of Days to Update: 22

Source: California Regional Water Quality Control Board Victorville Branch Office (6)
Telephone: 760-346-7491
Last EDR Contact: 01/02/2007
Next Scheduled EDR Contact: 04/02/2007
Data Release Frequency: No Update Planned

LUST REG 8: Leaking Underground Storage Tanks
California Regional Water Quality Control Board Santa Ana Region (8). For more current information, please refer to the State Water Resources Control Board's LUST database.

Date of Government Version: 02/14/2005
Date Data Arrived at EDR: 02/15/2005
Date Made Active in Reports: 03/28/2005
Number of Days to Update: 41

Source: California Regional Water Quality Control Board Santa Ana Region (8)
Telephone: 951-782-4130
Last EDR Contact: 02/05/2007
Next Scheduled EDR Contact: 05/07/2007
Data Release Frequency: Varies

LUST REG 9: Leaking Underground Storage Tank Report
Orange, Riverside, San Diego counties. For more current information, please refer to the State Water Resources Control Board's LUST database.

Date of Government Version: 03/01/2001
Date Data Arrived at EDR: 04/23/2001
Date Made Active in Reports: 05/21/2001
Number of Days to Update: 28

Source: California Regional Water Quality Control Board San Diego Region (9)
Telephone: 858-467-2980
Last EDR Contact: 01/15/2007
Next Scheduled EDR Contact: 04/16/2007
Data Release Frequency: No Update Planned

LUST REG 7: Leaking Underground Storage Tank Case Listing
Leaking Underground Storage Tank locations. Imperial, Riverside, San Diego, Santa Barbara counties.

Date of Government Version: 02/26/2004
Date Data Arrived at EDR: 02/26/2004
Date Made Active in Reports: 03/24/2004
Number of Days to Update: 27

Source: California Regional Water Quality Control Board Colorado River Basin Region (7)
Telephone: 760-346-7491
Last EDR Contact: 02/19/2007
Next Scheduled EDR Contact: 05/21/2007
Data Release Frequency: No Update Planned

LUST REG 6L: Leaking Underground Storage Tank Case Listing
For more current information, please refer to the State Water Resources Control Board's LUST database.

Date of Government Version: 09/09/2003
Date Data Arrived at EDR: 09/10/2003
Date Made Active in Reports: 10/07/2003
Number of Days to Update: 27

Source: California Regional Water Quality Control Board Lahontan Region (6)
Telephone: 916-542-5424
Last EDR Contact: 03/05/2007
Next Scheduled EDR Contact: 06/04/2007
Data Release Frequency: No Update Planned

LUST REG 4: Underground Storage Tank Leak List
Los Angeles, Ventura counties. For more current information, please refer to the State Water Resources Control Board's LUST database.

Date of Government Version: 09/07/2004
Date Data Arrived at EDR: 09/07/2004
Date Made Active in Reports: 10/12/2004
Number of Days to Update: 35

Source: California Regional Water Quality Control Board Los Angeles Region (4)
Telephone: 213-576-6600
Last EDR Contact: 12/27/2006
Next Scheduled EDR Contact: 03/26/2007
Data Release Frequency: No Update Planned

LUST REG 1: Active Toxic Site Investigation
Del Norte, Humboldt, Lake, Mendocino, Modoc, Siskiyou, Sonoma, Trinity counties. For more current information, please refer to the State Water Resources Control Board's LUST database.

Date of Government Version: 02/01/2001
Date Data Arrived at EDR: 02/28/2001
Date Made Active in Reports: 03/29/2001
Number of Days to Update: 29

Source: California Regional Water Quality Control Board North Coast (1)
Telephone: 707-576-2220
Last EDR Contact: 02/19/2007
Next Scheduled EDR Contact: 05/21/2007
Data Release Frequency: No Update Planned

LUST REG 2: Fuel Leak List

Leaking Underground Storage Tank locations. Alameda, Contra Costa, Marin, Napa, San Francisco, San Mateo, Santa Clara, Solano, Sonoma counties.

Date of Government Version: 09/30/2004
Date Data Arrived at EDR: 10/20/2004
Date Made Active in Reports: 11/19/2004
Number of Days to Update: 30

Source: California Regional Water Quality Control Board San Francisco Bay Region (2)
Telephone: 510-286-0457
Last EDR Contact: 01/08/2007
Next Scheduled EDR Contact: 04/09/2007
Data Release Frequency: Quarterly

LUST REG 3: Leaking Underground Storage Tank Database

Leaking Underground Storage Tank locations. Monterey, San Benito, San Luis Obispo, Santa Barbara, Santa Cruz counties.

Date of Government Version: 05/19/2003
Date Data Arrived at EDR: 05/19/2003
Date Made Active in Reports: 06/02/2003
Number of Days to Update: 14

Source: California Regional Water Quality Control Board Central Coast Region (3)
Telephone: 805-549-3147
Last EDR Contact: 02/12/2007
Next Scheduled EDR Contact: 05/14/2007
Data Release Frequency: No Update Planned

CA FID UST: Facility Inventory Database

The Facility Inventory Database (FID) contains a historical listing of active and inactive underground storage tank locations from the State Water Resource Control Board. Refer to local/county source for current data.

Date of Government Version: 10/31/1994
Date Data Arrived at EDR: 09/05/1995
Date Made Active in Reports: 09/29/1995
Number of Days to Update: 24

Source: California Environmental Protection Agency
Telephone: 916-341-5851
Last EDR Contact: 12/28/1998
Next Scheduled EDR Contact: N/A
Data Release Frequency: No Update Planned

SLIC: Statewide SLIC Cases

The SLIC (Spills, Leaks, Investigations and Cleanup) program is designed to protect and restore water quality from spills, leaks, and similar discharges.

Date of Government Version: 01/09/2007
Date Data Arrived at EDR: 01/09/2007
Date Made Active in Reports: 01/24/2007
Number of Days to Update: 15

Source: State Water Resources Control Board
Telephone: 866-480-1028
Last EDR Contact: 01/09/2007
Next Scheduled EDR Contact: 04/09/2007
Data Release Frequency: Varies

SLIC REG 1: Active Toxic Site Investigations

The SLIC (Spills, Leaks, Investigations and Cleanup) program is designed to protect and restore water quality from spills, leaks, and similar discharges.

Date of Government Version: 04/03/2003
Date Data Arrived at EDR: 04/07/2003
Date Made Active in Reports: 04/25/2003
Number of Days to Update: 18

Source: California Regional Water Quality Control Board, North Coast Region (1)
Telephone: 707-576-2220
Last EDR Contact: 02/19/2007
Next Scheduled EDR Contact: 05/21/2007
Data Release Frequency: No Update Planned

SLIC REG 2: Spills, Leaks, Investigation & Cleanup Cost Recovery Listing

The SLIC (Spills, Leaks, Investigations and Cleanup) program is designed to protect and restore water quality from spills, leaks, and similar discharges.

Date of Government Version: 09/30/2004
Date Data Arrived at EDR: 10/20/2004
Date Made Active in Reports: 11/19/2004
Number of Days to Update: 30

Source: Regional Water Quality Control Board San Francisco Bay Region (2)
Telephone: 510-286-0457
Last EDR Contact: 01/08/2007
Next Scheduled EDR Contact: 04/09/2007
Data Release Frequency: Quarterly

SLIC REG 3: Spills, Leaks, Investigation & Cleanup Cost Recovery Listing

The SLIC (Spills, Leaks, Investigations and Cleanup) program is designed to protect and restore water quality from spills, leaks, and similar discharges.

Date of Government Version: 05/18/2006
Date Data Arrived at EDR: 05/18/2006
Date Made Active in Reports: 06/15/2006
Number of Days to Update: 28

Source: California Regional Water Quality Control Board Central Coast Region (3)
Telephone: 805-549-3147
Last EDR Contact: 02/12/2007
Next Scheduled EDR Contact: 05/14/2007
Data Release Frequency: Semi-Annually

SLIC REG 4: Spills, Leaks, Investigation & Cleanup Cost Recovery Listing

The SLIC (Spills, Leaks, Investigations and Cleanup) program is designed to protect and restore water quality from spills, leaks, and similar discharges.

Date of Government Version: 11/17/2004
Date Data Arrived at EDR: 11/18/2004
Date Made Active in Reports: 01/04/2005
Number of Days to Update: 47

Source: Region Water Quality Control Board Los Angeles Region (4)
Telephone: 213-576-6600
Last EDR Contact: 01/22/2007
Next Scheduled EDR Contact: 04/23/2007
Data Release Frequency: Varies

SLIC REG 5: Spills, Leaks, Investigation & Cleanup Cost Recovery Listing

The SLIC (Spills, Leaks, Investigations and Cleanup) program is designed to protect and restore water quality from spills, leaks, and similar discharges.

Date of Government Version: 04/01/2005
Date Data Arrived at EDR: 04/05/2005
Date Made Active in Reports: 04/21/2005
Number of Days to Update: 16

Source: Regional Water Quality Control Board Central Valley Region (5)
Telephone: 916-464-3291
Last EDR Contact: 01/03/2007
Next Scheduled EDR Contact: 04/02/2007
Data Release Frequency: Semi-Annually

SLIC REG 6V: Spills, Leaks, Investigation & Cleanup Cost Recovery Listing

The SLIC (Spills, Leaks, Investigations and Cleanup) program is designed to protect and restore water quality from spills, leaks, and similar discharges.

Date of Government Version: 05/24/2005
Date Data Arrived at EDR: 05/25/2005
Date Made Active in Reports: 06/16/2005
Number of Days to Update: 22

Source: Regional Water Quality Control Board, Victorville Branch
Telephone: 619-241-6583
Last EDR Contact: 01/02/2007
Next Scheduled EDR Contact: 04/02/2007
Data Release Frequency: Semi-Annually

SLIC REG 6L: SLIC Sites

The SLIC (Spills, Leaks, Investigations and Cleanup) program is designed to protect and restore water quality from spills, leaks, and similar discharges.

Date of Government Version: 09/07/2004
Date Data Arrived at EDR: 09/07/2004
Date Made Active in Reports: 10/12/2004
Number of Days to Update: 35

Source: California Regional Water Quality Control Board, Lahontan Region
Telephone: 530-542-5574
Last EDR Contact: 03/05/2007
Next Scheduled EDR Contact: 06/04/2007
Data Release Frequency: No Update Planned

SLIC REG 7: SLIC List

The SLIC (Spills, Leaks, Investigations and Cleanup) program is designed to protect and restore water quality from spills, leaks, and similar discharges.

Date of Government Version: 11/24/2004
Date Data Arrived at EDR: 11/29/2004
Date Made Active in Reports: 01/04/2005
Number of Days to Update: 36

Source: California Regional Quality Control Board, Colorado River Basin Region
Telephone: 760-346-7491
Last EDR Contact: 02/19/2007
Next Scheduled EDR Contact: 05/21/2007
Data Release Frequency: No Update Planned

SLIC REG 8: Spills, Leaks, Investigation & Cleanup Cost Recovery Listing

The SLIC (Spills, Leaks, Investigations and Cleanup) program is designed to protect and restore water quality from spills, leaks, and similar discharges.

Date of Government Version: 04/06/2006
Date Data Arrived at EDR: 04/06/2006
Date Made Active in Reports: 05/11/2006
Number of Days to Update: 35

Source: California Region Water Quality Control Board Santa Ana Region (8)
Telephone: 951-782-3298
Last EDR Contact: 01/02/2007
Next Scheduled EDR Contact: 04/02/2007
Data Release Frequency: Semi-Annually

SLIC REG 9: Spills, Leaks, Investigation & Cleanup Cost Recovery Listing

The SLIC (Spills, Leaks, Investigations and Cleanup) program is designed to protect and restore water quality from spills, leaks, and similar discharges.

Date of Government Version: 11/27/2006
Date Data Arrived at EDR: 11/27/2006
Date Made Active in Reports: 01/03/2007
Number of Days to Update: 37

Source: California Regional Water Quality Control Board San Diego Region (9)
Telephone: 858-467-2980
Last EDR Contact: 02/26/2007
Next Scheduled EDR Contact: 05/28/2007
Data Release Frequency: Annually

UST: Active UST Facilities

Active UST facilities gathered from the local regulatory agencies

Date of Government Version: 01/09/2007
Date Data Arrived at EDR: 01/09/2007
Date Made Active in Reports: 01/23/2007
Number of Days to Update: 14

Source: SWRCB
Telephone: 916-480-1028
Last EDR Contact: 01/09/2007
Next Scheduled EDR Contact: 04/09/2007
Data Release Frequency: Semi-Annually

HIST UST: Hazardous Substance Storage Container Database

The Hazardous Substance Storage Container Database is a historical listing of UST sites. Refer to local/county source for current data.

Date of Government Version: 10/15/1990
Date Data Arrived at EDR: 01/25/1991
Date Made Active in Reports: 02/12/1991
Number of Days to Update: 18

Source: State Water Resources Control Board
Telephone: 916-341-5851
Last EDR Contact: 07/26/2001
Next Scheduled EDR Contact: N/A
Data Release Frequency: No Update Planned

AST: Aboveground Petroleum Storage Tank Facilities

Registered Aboveground Storage Tanks.

Date of Government Version: 11/02/2006
Date Data Arrived at EDR: 11/03/2006
Date Made Active in Reports: 12/08/2006
Number of Days to Update: 35

Source: State Water Resources Control Board
Telephone: 916-341-5712
Last EDR Contact: 01/29/2007
Next Scheduled EDR Contact: 04/30/2007
Data Release Frequency: Quarterly

SWEEPS UST: SWEEPS UST Listing

Statewide Environmental Evaluation and Planning System. This underground storage tank listing was updated and maintained by a company contacted by the SWRCB in the early 1980's. The listing is no longer updated or maintained. The local agency is the contact for more information on a site on the SWEEPS list.

Date of Government Version: 06/01/1994
Date Data Arrived at EDR: 07/07/2005
Date Made Active in Reports: 08/11/2005
Number of Days to Update: 35

Source: State Water Resources Control Board
Telephone: N/A
Last EDR Contact: 06/03/2005
Next Scheduled EDR Contact: N/A
Data Release Frequency: No Update Planned

CHMIRS: California Hazardous Material Incident Report System

California Hazardous Material Incident Reporting System. CHMIRS contains information on reported hazardous material incidents (accidental releases or spills).

Date of Government Version: 12/31/2004
Date Data Arrived at EDR: 11/30/2005
Date Made Active in Reports: 01/19/2006
Number of Days to Update: 50

Source: Office of Emergency Services
Telephone: 916-845-8400
Last EDR Contact: 02/19/2007
Next Scheduled EDR Contact: 05/21/2007
Data Release Frequency: Varies

NOTIFY 65: Proposition 65 Records

Proposition 65 Notification Records. NOTIFY 65 contains facility notifications about any release which could impact drinking water and thereby expose the public to a potential health risk.

Date of Government Version: 10/21/1993
Date Data Arrived at EDR: 11/01/1993
Date Made Active in Reports: 11/19/1993
Number of Days to Update: 18

Source: State Water Resources Control Board
Telephone: 916-445-3846
Last EDR Contact: 01/15/2007
Next Scheduled EDR Contact: 04/16/2007
Data Release Frequency: No Update Planned

DEED: Deed Restriction Listing

Site Mitigation and Brownfields Reuse Program Facility Sites with Deed Restrictions & Hazardous Waste Management Program Facility Sites with Deed / Land Use Restriction. The DTSC Site Mitigation and Brownfields Reuse Program (SMBRP) list includes sites cleaned up under the program's oversight and generally does not include current or former hazardous waste facilities that required a hazardous waste facility permit. The list represents deed restrictions that are active. Some sites have multiple deed restrictions. The DTSC Hazardous Waste Management Program (HWMP) has developed a list of current or former hazardous waste facilities that have a recorded land use restriction at the local county recorder's office. The land use restrictions on this list were required by the DTSC HWMP as a result of the presence of hazardous substances that remain on site after the facility (or part of the facility) has been closed or cleaned up. The types of land use restriction include deed notice, deed restriction, or a land use restriction that binds current and future owners.

Date of Government Version: 01/15/2007
Date Data Arrived at EDR: 01/16/2007
Date Made Active in Reports: 02/27/2007
Number of Days to Update: 42

Source: Department of Toxic Substances Control
Telephone: 916-323-3400
Last EDR Contact: 01/16/2007
Next Scheduled EDR Contact: 04/02/2007
Data Release Frequency: Semi-Annually

VCP: Voluntary Cleanup Program Properties

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

Date of Government Version: 11/28/2006
Date Data Arrived at EDR: 11/29/2006
Date Made Active in Reports: 01/03/2007
Number of Days to Update: 35

Source: Department of Toxic Substances Control
Telephone: 916-323-3400
Last EDR Contact: 02/28/2007
Next Scheduled EDR Contact: 05/28/2007
Data Release Frequency: Quarterly

DRYCLEANERS: Cleaner Facilities

A list of drycleaner related facilities that have EPA ID numbers. These are facilities with certain SIC codes: power laundries, family and commercial; garment pressing and cleaner's agents; linen supply; coin-operated laundries and cleaning; drycleaning plants, except rugs; carpet and upholster cleaning; industrial launderers; laundry and garment services.

Date of Government Version: 04/18/2005
Date Data Arrived at EDR: 04/18/2005
Date Made Active in Reports: 05/06/2005
Number of Days to Update: 18

Source: Department of Toxic Substance Control
Telephone: 916-327-4498
Last EDR Contact: 03/05/2007
Next Scheduled EDR Contact: 04/02/2007
Data Release Frequency: Annually

WIP: Well Investigation Program Case List

Well Investigation Program case in the San Gabriel and San Fernando Valley area.

Date of Government Version: 10/25/2006
Date Data Arrived at EDR: 10/31/2006
Date Made Active in Reports: 11/28/2006
Number of Days to Update: 28

Source: Los Angeles Water Quality Control Board
Telephone: 213-576-6726
Last EDR Contact: 03/05/2007
Next Scheduled EDR Contact: 04/23/2007
Data Release Frequency: Varies

CDL: Clandestine Drug Labs

A listing of drug lab locations. Listing of a location in this database does not indicate that any illegal drug lab materials were or were not present there, and does not constitute a determination that the location either requires or does not require additional cleanup work.

Date of Government Version: 05/17/2006
Date Data Arrived at EDR: 05/17/2006
Date Made Active in Reports: 06/15/2006
Number of Days to Update: 29

Source: Department of Toxic Substances Control
Telephone: 916-255-6504
Last EDR Contact: 02/26/2007
Next Scheduled EDR Contact: 04/23/2007
Data Release Frequency: Varies

RESPONSE: State Response Sites

Identifies confirmed release sites where DTSC is involved in remediation, either in a lead or oversight capacity. These confirmed release sites are generally high-priority and high potential risk.

Date of Government Version: 11/28/2006
Date Data Arrived at EDR: 11/29/2006
Date Made Active in Reports: 01/03/2007
Number of Days to Update: 35

Source: Department of Toxic Substances Control
Telephone: 916-323-3400
Last EDR Contact: 02/28/2007
Next Scheduled EDR Contact: 05/28/2007
Data Release Frequency: Quarterly

HAZNET: Facility and Manifest Data

Facility and Manifest Data. The data is extracted from the copies of hazardous waste manifests received each year by the DTSC. The annual volume of manifests is typically 700,000 - 1,000,000 annually, representing approximately 350,000 - 500,000 shipments. Data are from the manifests submitted without correction, and therefore many contain some invalid values for data elements such as generator ID, TSD ID, waste category, and disposal method.

Date of Government Version: 12/31/2005
Date Data Arrived at EDR: 11/20/2006
Date Made Active in Reports: 01/03/2007
Number of Days to Update: 44

Source: California Environmental Protection Agency
Telephone: 916-255-1136
Last EDR Contact: 02/06/2007
Next Scheduled EDR Contact: 05/07/2007
Data Release Frequency: Annually

EMI: Emissions Inventory Data

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

Date of Government Version: 12/31/2004
Date Data Arrived at EDR: 04/14/2006
Date Made Active in Reports: 05/11/2006
Number of Days to Update: 27

Source: California Air Resources Board
Telephone: 916-322-2990
Last EDR Contact: 01/19/2007
Next Scheduled EDR Contact: 04/16/2007
Data Release Frequency: Varies

ENVIROSTOR: EnviroStor Database

The Department of Toxic Substances Control's (DTSC's) Site Mitigation and Brownfields Reuse Program's (SMBRP's) EnviroStor database identifes sites that have known contamination or sites for which there may be reasons to investigate further. The database includes the following site types: Federal Superfund sites (National Priorities List (NPL)); State Response, including Military Facilities and State Superfund; Voluntary Cleanup; and School sites. EnviroStor provides similar information to the information that was available in CalSites, and provides additional site information, including, but not limited to, identification of formerly-contaminated properties that have been released for reuse, properties where environmental deed restrictions have been recorded to prevent inappropriate land uses, and risk characterization information that is used to assess potential impacts to public health and the environment at contaminated sites.

Date of Government Version: 11/28/2006
Date Data Arrived at EDR: 11/29/2006
Date Made Active in Reports: 01/03/2007
Number of Days to Update: 35
Source: Department of Toxic Substances Control
Telephone: 916-323-3400
Last EDR Contact: 02/28/2007
Next Scheduled EDR Contact: 05/28/2007
Data Release Frequency: Quarterly

TRIBAL RECORDS

INDIAN RESERV: Indian Reservations
This map layer portrays Indian administered lands of the United States that have any area equal to or greater than 640 acres.

Date of Government Version: 12/31/2005
Date Data Arrived at EDR: 02/06/2006
Date Made Active in Reports: 01/11/2007
Number of Days to Update: 339
Source: USGS
Telephone: 202-208-3710
Last EDR Contact: 02/08/2007
Next Scheduled EDR Contact: 05/07/2007
Data Release Frequency: Semi-Annually

INDIAN LUST R1: Leaking Underground Storage Tanks on Indian Land
A listing of leaking underground storage tank locations on Indian Land.

Date of Government Version: 12/01/2006
Date Data Arrived at EDR: 12/01/2006
Date Made Active in Reports: 01/29/2007
Number of Days to Update: 59
Source: EPA Region 1
Telephone: 617-918-1313
Last EDR Contact: 02/19/2007
Next Scheduled EDR Contact: 05/21/2007
Data Release Frequency: Varies

INDIAN LUST R6: Leaking Underground Storage Tanks on Indian Land
LUSTs on Indian land in New Mexico and Oklahoma.

Date of Government Version: 01/04/2005
Date Data Arrived at EDR: 01/21/2005
Date Made Active in Reports: 02/28/2005
Number of Days to Update: 38
Source: EPA Region 6
Telephone: 214-665-6597
Last EDR Contact: 02/19/2007
Next Scheduled EDR Contact: 05/21/2007
Data Release Frequency: Varies

INDIAN LUST R8: Leaking Underground Storage Tanks on Indian Land
LUSTs on Indian land in Colorado, Montana, North Dakota, South Dakota, Utah and Wyoming.

Date of Government Version: 11/30/2006
Date Data Arrived at EDR: 12/08/2006
Date Made Active in Reports: 01/29/2007
Number of Days to Update: 52
Source: EPA Region 8
Telephone: 303-312-6271
Last EDR Contact: 02/19/2007
Next Scheduled EDR Contact: 05/21/2007
Data Release Frequency: Quarterly

INDIAN LUST R10: Leaking Underground Storage Tanks on Indian Land
LUSTs on Indian land in Alaska, Idaho, Oregon and Washington.

Date of Government Version: 11/21/2006
Date Data Arrived at EDR: 12/08/2006
Date Made Active in Reports: 01/29/2007
Number of Days to Update: 52
Source: EPA Region 10
Telephone: 206-553-2857
Last EDR Contact: 02/19/2007
Next Scheduled EDR Contact: 02/21/2007
Data Release Frequency: Quarterly

INDIAN LUST R9: Leaking Underground Storage Tanks on Indian Land
LUSTs on Indian land in Arizona, California, New Mexico and Nevada

Date of Government Version: 12/19/2006
Date Data Arrived at EDR: 12/19/2006
Date Made Active in Reports: 01/29/2007
Number of Days to Update: 41
Source: Environmental Protection Agency
Telephone: 415-972-3372
Last EDR Contact: 02/19/2007
Next Scheduled EDR Contact: 05/21/2007
Data Release Frequency: Quarterly

INDIAN LUST R7: Leaking Underground Storage Tanks on Indian Land
LUSTs on Indian land in Iowa, Kansas, and Nebraska

Date of Government Version: 09/06/2006
Date Data Arrived at EDR: 10/04/2006
Date Made Active in Reports: 11/08/2006
Number of Days to Update: 35
Source: EPA Region 7
Telephone: 913-551-7003
Last EDR Contact: 02/19/2007
Next Scheduled EDR Contact: 05/21/2007
Data Release Frequency: Varies

INDIAN LUST R4: Leaking Underground Storage Tanks on Indian Land
LUSTs on Indian land in Florida, Minnesota, Mississippi and North Carolina.

Date of Government Version: 08/24/2006
Date Data Arrived at EDR: 09/11/2006
Date Made Active in Reports: 11/08/2006
Number of Days to Update: 58
Source: EPA Region 4
Telephone: 404-562-8677
Last EDR Contact: 02/19/2007
Next Scheduled EDR Contact: 05/21/2007
Data Release Frequency: Semi-Annually

INDIAN UST R4: Underground Storage Tanks on Indian Land

Date of Government Version: 08/24/2006
Date Data Arrived at EDR: 09/11/2006
Date Made Active in Reports: 11/08/2006
Number of Days to Update: 58
Source: EPA Region 4
Telephone: 404-562-9424
Last EDR Contact: 02/19/2007
Next Scheduled EDR Contact: 05/21/2007
Data Release Frequency: Semi-Annually

INDIAN UST R10: Underground Storage Tanks on Indian Land

Date of Government Version: 11/21/2006
Date Data Arrived at EDR: 12/08/2006
Date Made Active in Reports: 01/29/2007
Number of Days to Update: 52
Source: EPA Region 10
Telephone: 206-553-2857
Last EDR Contact: 02/19/2007
Next Scheduled EDR Contact: 05/21/2007
Data Release Frequency: Quarterly

INDIAN UST R5: Underground Storage Tanks on Indian Land

Date of Government Version: 12/02/2004
Date Data Arrived at EDR: 12/29/2004
Date Made Active in Reports: 02/04/2005
Number of Days to Update: 37
Source: EPA Region 5
Telephone: 312-886-6136
Last EDR Contact: 02/19/2007
Next Scheduled EDR Contact: 05/21/2007
Data Release Frequency: Varies

INDIAN UST R8: Underground Storage Tanks on Indian Land

Date of Government Version: 11/30/2006
Date Data Arrived at EDR: 12/08/2006
Date Made Active in Reports: 01/29/2007
Number of Days to Update: 52
Source: EPA Region 8
Telephone: 303-312-6137
Last EDR Contact: 02/19/2007
Next Scheduled EDR Contact: 05/21/2007
Data Release Frequency: Quarterly

INDIAN UST R6: Underground Storage Tanks on Indian Land

Date of Government Version: 01/11/2007
Date Data Arrived at EDR: 01/12/2007
Date Made Active in Reports: 01/29/2007
Number of Days to Update: 17
Source: EPA Region 6
Telephone: 214-665-7591
Last EDR Contact: 02/19/2007
Next Scheduled EDR Contact: 05/21/2007
Data Release Frequency: Semi-Annually

INDIAN UST R1: Underground Storage Tanks on Indian Land
A listing of underground storage tank locations on Indian Land.

Date of Government Version: 12/01/2006
Date Data Arrived at EDR: 12/01/2006
Date Made Active in Reports: 01/29/2007
Number of Days to Update: 59

Source: EPA, Region 1
Telephone: 617-918-1313
Last EDR Contact: 02/19/2007
Next Scheduled EDR Contact: 05/21/2007
Data Release Frequency: Varies

INDIAN UST R7: Underground Storage Tanks on Indian Land

Date of Government Version: 09/06/2006
Date Data Arrived at EDR: 10/04/2006
Date Made Active in Reports: 11/08/2006
Number of Days to Update: 35

Source: EPA Region 7
Telephone: 913-551-7003
Last EDR Contact: 02/19/2007
Next Scheduled EDR Contact: 05/21/2007
Data Release Frequency: Varies

INDIAN UST R9: Underground Storage Tanks on Indian Land

Date of Government Version: 12/19/2006
Date Data Arrived at EDR: 12/19/2006
Date Made Active in Reports: 01/29/2007
Number of Days to Update: 41

Source: EPA Region 9
Telephone: 415-972-3368
Last EDR Contact: 02/19/2007
Next Scheduled EDR Contact: 05/21/2007
Data Release Frequency: Quarterly

EDR PROPRIETARY RECORDS

Manufactured Gas Plants: EDR Proprietary Manufactured Gas Plants

The EDR Proprietary Manufactured Gas Plant Database includes records of coal gas plants (manufactured gas plants) compiled by EDR's researchers. Manufactured gas sites were used in the United States from the 1800's to 1950's to produce a gas that could be distributed and used as fuel. These plants used whale oil, rosin, coal, or a mixture of coal, oil, and water that also produced a significant amount of waste. Many of the byproducts of the gas production, such as coal tar (oily waste containing volatile and non-volatile chemicals), sludges, oils and other compounds are potentially hazardous to human health and the environment. The byproduct from this process was frequently disposed of directly at the plant site and can remain or spread slowly, serving as a continuous source of soil and groundwater contamination.

Date of Government Version: N/A
Date Data Arrived at EDR: N/A
Date Made Active in Reports: N/A
Number of Days to Update: N/A

Source: EDR, Inc.
Telephone: N/A
Last EDR Contact: N/A
Next Scheduled EDR Contact: N/A
Data Release Frequency: No Update Planned

EDR Historical Auto Stations: EDR Proprietary Historic Gas Stations

EDR has searched selected national collections of business directories and has collected listings of potential gas station/filling station/service station sites that were available to EDR researchers. EDR's review was limited to those categories of sources that might, in EDR's opinion, include gas station/filling station/service station establishments. The categories reviewed included, but were not limited to gas, gas station, gasoline station, filling station, auto, automobile repair, auto service station, service station, etc.

Date of Government Version: N/A
Date Data Arrived at EDR: N/A
Date Made Active in Reports: N/A
Number of Days to Update: N/A

Source: EDR, Inc.
Telephone: N/A
Last EDR Contact: N/A
Next Scheduled EDR Contact: N/A
Data Release Frequency: Varies

EDR Historical Cleaners: EDR Proprietary Historic Dry Cleaners

EDR has searched selected national collections of business directories and has collected listings of potential dry cleaner sites that were available to EDR researchers. EDR's review was limited to those categories of sources that might, in EDR's opinion, include dry cleaning establishments. The categories reviewed included, but were not limited to dry cleaners, cleaners, laundry, laundromat, cleaning/laundry, wash & dry etc.

Date of Government Version: N/A
Date Data Arrived at EDR: N/A
Date Made Active in Reports: N/A
Number of Days to Update: N/A

Source: EDR, Inc.
Telephone: N/A
Last EDR Contact: N/A
Next Scheduled EDR Contact: N/A
Data Release Frequency: Varies

GOVERNMENT RECORDS SEARCHED / DATA CURRENCY TRACKING

COUNTY RECORDS

ALAMEDA COUNTY:

Contaminated Sites

A listing of contaminated sites overseen by the Toxic Release Program (oil and groundwater contamination from chemical releases and spills) and the Leaking Underground Storage Tank Program (soil and ground water contamination from leaking petroleum USTs).

Date of Government Version: 01/31/2007
Date Data Arrived at EDR: 02/02/2007
Date Made Active in Reports: 02/27/2007
Number of Days to Update: 25

Source: Alameda County Environmental Health Services
Telephone: 510-567-6700
Last EDR Contact: 01/22/2007
Next Scheduled EDR Contact: 04/23/2007
Data Release Frequency: Semi-Annually

Underground Tanks

Underground storage tank sites located in Alameda county.

Date of Government Version: 10/26/2006
Date Data Arrived at EDR: 10/27/2006
Date Made Active in Reports: 11/13/2006
Number of Days to Update: 17

Source: Alameda County Environmental Health Services
Telephone: 510-567-6700
Last EDR Contact: 01/22/2007
Next Scheduled EDR Contact: 04/23/2007
Data Release Frequency: Semi-Annually

CONTRA COSTA COUNTY:

Site List

List includes sites from the underground tank, hazardous waste generator and business plan/2185 programs.

Date of Government Version: 11/28/2006
Date Data Arrived at EDR: 11/29/2006
Date Made Active in Reports: 01/03/2007
Number of Days to Update: 35

Source: Contra Costa Health Services Department
Telephone: 925-646-2286
Last EDR Contact: 02/26/2007
Next Scheduled EDR Contact: 05/28/2007
Data Release Frequency: Semi-Annually

FRESNO COUNTY:

CUPA Resources List

Certified Unified Program Agency. CUPA's are responsible for implementing a unified hazardous materials and hazardous waste management regulatory program. The agency provides oversight of businesses that deal with hazardous materials, operate underground storage tanks or aboveground storage tanks.

Date of Government Version: 01/13/2007
Date Data Arrived at EDR: 01/16/2007
Date Made Active in Reports: 02/27/2007
Number of Days to Update: 42

Source: Dept. of Community Health
Telephone: 559-445-3271
Last EDR Contact: 01/16/2007
Next Scheduled EDR Contact: 05/07/2007
Data Release Frequency: Semi-Annually

KERN COUNTY:

Underground Storage Tank Sites & Tank Listing

Kern County Sites and Tanks Listing.

Date of Government Version: 12/06/2006
Date Data Arrived at EDR: 12/07/2006
Date Made Active in Reports: 01/04/2007
Number of Days to Update: 28

Source: Kern County Environment Health Services Department
Telephone: 661-862-8700
Last EDR Contact: 03/05/2007
Next Scheduled EDR Contact: 06/04/2007
Data Release Frequency: Quarterly

LOS ANGELES COUNTY:

San Gabriel Valley Areas of Concern

San Gabriel Valley areas where VOC contamination is at or above the MCL as designated by region 9 EPA office.

Date of Government Version: 12/31/1998
Date Data Arrived at EDR: 07/07/1999
Date Made Active in Reports: N/A
Number of Days to Update: 0

Source: EPA Region 9
Telephone: 415-972-3178
Last EDR Contact: 05/16/2006
Next Scheduled EDR Contact: N/A
Data Release Frequency: No Update Planned

HMS: Street Number List

Industrial Waste and Underground Storage Tank Sites.

Date of Government Version: 10/31/2006
Date Data Arrived at EDR: 12/29/2006
Date Made Active in Reports: 01/24/2007
Number of Days to Update: 26

Source: Department of Public Works
Telephone: 626-458-3517
Last EDR Contact: 11/13/2006
Next Scheduled EDR Contact: 02/12/2007
Data Release Frequency: Semi-Annually

List of Solid Waste Facilities

Solid Waste Facilities in Los Angeles County.

Date of Government Version: 11/13/2006
Date Data Arrived at EDR: 11/28/2006
Date Made Active in Reports: 01/03/2007
Number of Days to Update: 36

Source: La County Department of Public Works
Telephone: 818-458-5185
Last EDR Contact: 02/13/2007
Next Scheduled EDR Contact: 05/14/2007
Data Release Frequency: Varies

City of Los Angeles Landfills

Landfills owned and maintained by the City of Los Angeles.

Date of Government Version: 03/01/2006
Date Data Arrived at EDR: 04/06/2006
Date Made Active in Reports: 05/11/2006
Number of Days to Update: 35

Source: Engineering & Construction Division
Telephone: 213-473-7869
Last EDR Contact: 12/11/2006
Next Scheduled EDR Contact: 03/12/2007
Data Release Frequency: Varies

Site Mitigation List

Industrial sites that have had some sort of spill or complaint.

Date of Government Version: 12/04/2006
Date Data Arrived at EDR: 01/09/2007
Date Made Active in Reports: 01/24/2007
Number of Days to Update: 15

Source: Community Health Services
Telephone: 323-890-7806
Last EDR Contact: 02/12/2007
Next Scheduled EDR Contact: 05/14/2007
Data Release Frequency: Annually

City of El Segundo Underground Storage Tank

Underground storage tank sites located in El Segundo city.

Date of Government Version: 12/14/2006
Date Data Arrived at EDR: 12/15/2006
Date Made Active in Reports: 01/23/2007
Number of Days to Update: 39

Source: City of El Segundo Fire Department
Telephone: 310-524-2236
Last EDR Contact: 03/05/2007
Next Scheduled EDR Contact: 05/14/2007
Data Release Frequency: Semi-Annually

City of Long Beach Underground Storage Tank

Underground storage tank sites located in the city of Long Beach.

Date of Government Version: 03/28/2003
Date Data Arrived at EDR: 10/23/2003
Date Made Active in Reports: 11/26/2003
Number of Days to Update: 34

Source: City of Long Beach Fire Department
Telephone: 562-570-2563
Last EDR Contact: 02/19/2007
Next Scheduled EDR Contact: 05/21/2007
Data Release Frequency: Annually

City of Torrance Underground Storage Tank
Underground storage tank sites located in the city of Torrance.

Date of Government Version: 11/13/2006
Date Data Arrived at EDR: 11/13/2006
Date Made Active in Reports: 12/12/2006
Number of Days to Update: 29

Source: City of Torrance Fire Department
Telephone: 310-618-2973
Last EDR Contact: 02/12/2007
Next Scheduled EDR Contact: 05/14/2007
Data Release Frequency: Semi-Annually

MARIN COUNTY:

Underground Storage Tank Sites
Currently permitted USTs in Marin County.

Date of Government Version: 11/06/2006
Date Data Arrived at EDR: 11/28/2006
Date Made Active in Reports: 01/04/2007
Number of Days to Update: 37

Source: Public Works Department Waste Management
Telephone: 415-499-6647
Last EDR Contact: 01/29/2007
Next Scheduled EDR Contact: 04/30/2007
Data Release Frequency: Semi-Annually

NAPA COUNTY:

Sites With Reported Contamination
A listing of leaking underground storage tank sites located in Napa county.

Date of Government Version: 01/09/2007
Date Data Arrived at EDR: 01/10/2007
Date Made Active in Reports: 01/24/2007
Number of Days to Update: 14

Source: Napa County Department of Environmental Management
Telephone: 707-253-4269
Last EDR Contact: 01/08/2007
Next Scheduled EDR Contact: 03/26/2007
Data Release Frequency: Semi-Annually

Closed and Operating Underground Storage Tank Sites
Underground storage tank sites located in Napa county.

Date of Government Version: 01/09/2007
Date Data Arrived at EDR: 01/10/2007
Date Made Active in Reports: 01/23/2007
Number of Days to Update: 13

Source: Napa County Department of Environmental Management
Telephone: 707-253-4269
Last EDR Contact: 01/08/2007
Next Scheduled EDR Contact: 03/26/2007
Data Release Frequency: Annually

ORANGE COUNTY:

List of Industrial Site Cleanups
Petroleum and non-petroleum spills.

Date of Government Version: 12/01/2006
Date Data Arrived at EDR: 01/04/2007
Date Made Active in Reports: 01/24/2007
Number of Days to Update: 20

Source: Health Care Agency
Telephone: 714-834-3446
Last EDR Contact: 12/06/2006
Next Scheduled EDR Contact: 03/05/2007
Data Release Frequency: Annually

List of Underground Storage Tank Cleanups
Orange County Underground Storage Tank Cleanups (LUST).

Date of Government Version: 12/01/2006
Date Data Arrived at EDR: 01/04/2007
Date Made Active in Reports: 01/24/2007
Number of Days to Update: 20

Source: Health Care Agency
Telephone: 714-834-3446
Last EDR Contact: 12/06/2006
Next Scheduled EDR Contact: 03/05/2007
Data Release Frequency: Quarterly

List of Underground Storage Tank Facilities

Orange County Underground Storage Tank Facilities (UST).

Date of Government Version: 12/01/2006
Date Data Arrived at EDR: 01/04/2007
Date Made Active in Reports: 01/23/2007
Number of Days to Update: 19

Source: Health Care Agency
Telephone: 714-834-3446
Last EDR Contact: 12/06/2006
Next Scheduled EDR Contact: 03/05/2007
Data Release Frequency: Quarterly

PLACER COUNTY:

Master List of Facilities

List includes aboveground tanks, underground tanks and cleanup sites.

Date of Government Version: 01/17/2007
Date Data Arrived at EDR: 01/18/2007
Date Made Active in Reports: 02/27/2007
Number of Days to Update: 40

Source: Placer County Health and Human Services
Telephone: 530-889-7312
Last EDR Contact: 12/29/2006
Next Scheduled EDR Contact: 03/19/2007
Data Release Frequency: Semi-Annually

RIVERSIDE COUNTY:

Listing of Underground Tank Cleanup Sites

Riverside County Underground Storage Tank Cleanup Sites (LUST).

Date of Government Version: 02/06/2007
Date Data Arrived at EDR: 02/07/2007
Date Made Active in Reports: 02/27/2007
Number of Days to Update: 20

Source: Department of Public Health
Telephone: 951-358-5055
Last EDR Contact: 01/15/2007
Next Scheduled EDR Contact: 04/16/2007
Data Release Frequency: Quarterly

Underground Storage Tank Tank List

Underground storage tank sites located in Riverside county.

Date of Government Version: 11/09/2006
Date Data Arrived at EDR: 11/10/2006
Date Made Active in Reports: 12/21/2006
Number of Days to Update: 41

Source: Health Services Agency
Telephone: 951-358-5055
Last EDR Contact: 01/15/2007
Next Scheduled EDR Contact: 04/16/2007
Data Release Frequency: Quarterly

SACRAMENTO COUNTY:

Contaminated Sites

List of sites where unauthorized releases of potentially hazardous materials have occurred.

Date of Government Version: 01/31/2007
Date Data Arrived at EDR: 02/16/2007
Date Made Active in Reports: 02/27/2007
Number of Days to Update: 11

Source: Sacramento County Environmental Management
Telephone: 916-875-8406
Last EDR Contact: 01/31/2007
Next Scheduled EDR Contact: 04/30/2007
Data Release Frequency: Quarterly

ML - Regulatory Compliance Master List

Any business that has hazardous materials on site - hazardous material storage sites, underground storage tanks, waste generators.

Date of Government Version: 01/31/2007
Date Data Arrived at EDR: 02/15/2007
Date Made Active in Reports: 02/27/2007
Number of Days to Update: 12

Source: Sacramento County Environmental Management
Telephone: 916-875-8406
Last EDR Contact: 01/31/2007
Next Scheduled EDR Contact: 04/30/2007
Data Release Frequency: Quarterly

SAN BERNARDINO COUNTY:

Hazardous Material Permits

This listing includes underground storage tanks, medical waste handlers/generators, hazardous materials handlers, hazardous waste generators, and waste oil generators/handlers.

Date of Government Version: 01/04/2007
Date Data Arrived at EDR: 01/05/2007
Date Made Active in Reports: 01/24/2007
Number of Days to Update: 19

Source: San Bernardino County Fire Department Hazardous Materials Division
Telephone: 909-387-3041
Last EDR Contact: 03/05/2007
Next Scheduled EDR Contact: 06/04/2007
Data Release Frequency: Quarterly

SAN DIEGO COUNTY:

Hazardous Materials Management Division Database

The database includes: HE58 - This report contains the business name, site address, business phone number, establishment 'H' permit number, type of permit, and the business status. HE17 - In addition to providing the same information provided in the HE58 listing, HE17 provides inspection dates, violations received by the establishment, hazardous waste generated, the quantity, method of storage, treatment/disposal of waste and the hauler, and information on underground storage tanks. Unauthorized Release List - Includes a summary of environmental contamination cases in San Diego County (underground tank cases, non-tank cases, groundwater contamination, and soil contamination are included.)

Date of Government Version: 05/16/2005
Date Data Arrived at EDR: 05/18/2005
Date Made Active in Reports: 06/16/2005
Number of Days to Update: 29

Source: Hazardous Materials Management Division
Telephone: 619-338-2268
Last EDR Contact: 01/03/2007
Next Scheduled EDR Contact: 04/02/2007
Data Release Frequency: Quarterly

Solid Waste Facilities

San Diego County Solid Waste Facilities.

Date of Government Version: 11/01/2006
Date Data Arrived at EDR: 01/03/2007
Date Made Active in Reports: 01/24/2007
Number of Days to Update: 21

Source: Department of Health Services
Telephone: 619-338-2209
Last EDR Contact: 02/19/2007
Next Scheduled EDR Contact: 05/21/2007
Data Release Frequency: Varies

SAN FRANCISCO COUNTY:

Local Oversite Facilities

A listing of leaking underground storage tank sites located in San Francisco county.

Date of Government Version: 12/21/2006
Date Data Arrived at EDR: 12/22/2006
Date Made Active in Reports: 01/24/2007
Number of Days to Update: 33

Source: Department Of Public Health San Francisco County
Telephone: 415-252-3920
Last EDR Contact: 03/05/2007
Next Scheduled EDR Contact: 06/04/2007
Data Release Frequency: Quarterly

Underground Storage Tank Information

Underground storage tank sites located in San Francisco county.

Date of Government Version: 12/21/2006
Date Data Arrived at EDR: 12/22/2006
Date Made Active in Reports: 01/23/2007
Number of Days to Update: 32

Source: Department of Public Health
Telephone: 415-252-3920
Last EDR Contact: 03/05/2007
Next Scheduled EDR Contact: 06/04/2007
Data Release Frequency: Quarterly

SAN JOAQUIN COUNTY:

San Joaquin Co. UST

A listing of underground storage tank locations in San Joaquin county.

Date of Government Version: 10/16/2006
Date Data Arrived at EDR: 12/13/2006
Date Made Active in Reports: 01/23/2007
Number of Days to Update: 41

Source: Environmental Health Department
Telephone: N/A
Last EDR Contact: 01/15/2007
Next Scheduled EDR Contact: 04/16/2007
Data Release Frequency: Semi-Annually

SAN MATEO COUNTY:

Business Inventory

List includes Hazardous Materials Business Plan, hazardous waste generators, and underground storage tanks.

Date of Government Version: 01/24/2007
Date Data Arrived at EDR: 01/25/2007
Date Made Active in Reports: 02/27/2007
Number of Days to Update: 33

Source: San Mateo County Environmental Health Services Division
Telephone: 650-363-1921
Last EDR Contact: 01/08/2007
Next Scheduled EDR Contact: 04/09/2007
Data Release Frequency: Annually

Fuel Leak List

A listing of leaking underground storage tank sites located in San Mateo county.

Date of Government Version: 01/09/2007
Date Data Arrived at EDR: 01/09/2007
Date Made Active in Reports: 01/24/2007
Number of Days to Update: 15

Source: San Mateo County Environmental Health Services Division
Telephone: 650-363-1921
Last EDR Contact: 01/08/2007
Next Scheduled EDR Contact: 04/09/2007
Data Release Frequency: Semi-Annually

SANTA CLARA COUNTY:

HIST LUST - Fuel Leak Site Activity Report

A listing of open and closed leaking underground storage tanks. This listing is no longer updated by the county. Leaking underground storage tanks are now handled by the Department of Environmental Health.

Date of Government Version: 03/29/2005
Date Data Arrived at EDR: 03/30/2005
Date Made Active in Reports: 04/21/2005
Number of Days to Update: 22

Source: Santa Clara Valley Water District
Telephone: 408-265-2600
Last EDR Contact: 12/27/2006
Next Scheduled EDR Contact: 03/26/2007
Data Release Frequency: No Update Planned

LOP Listing

A listing of leaking underground storage tanks located in Santa Clara county.

Date of Government Version: 09/29/2006
Date Data Arrived at EDR: 10/02/2006
Date Made Active in Reports: 10/25/2006
Number of Days to Update: 23

Source: Department of Environmental Health
Telephone: 408-918-3417
Last EDR Contact: 12/27/2006
Next Scheduled EDR Contact: 03/26/2007
Data Release Frequency: Varies

Hazardous Material Facilities

Hazardous material facilities, including underground storage tank sites.

Date of Government Version: 12/07/2006
Date Data Arrived at EDR: 12/07/2006
Date Made Active in Reports: 01/03/2007
Number of Days to Update: 27

Source: City of San Jose Fire Department
Telephone: 408-277-4659
Last EDR Contact: 03/05/2007
Next Scheduled EDR Contact: 06/04/2007
Data Release Frequency: Annually

SOLANO COUNTY:

Leaking Underground Storage Tanks

A listing of leaking underground storage tank sites located in Solano county.

Date of Government Version: 01/08/2007
Date Data Arrived at EDR: 02/06/2007
Date Made Active in Reports: 02/27/2007
Number of Days to Update: 21

Source: Solano County Department of Environmental Management
Telephone: 707-784-6770
Last EDR Contact: 12/27/2006
Next Scheduled EDR Contact: 03/26/2007
Data Release Frequency: Quarterly

Underground Storage Tanks

Underground storage tank sites located in Solano county.

Date of Government Version: 01/02/2007
Date Data Arrived at EDR: 01/16/2007
Date Made Active in Reports: 01/23/2007
Number of Days to Update: 7

Source: Solano County Department of Environmental Management
Telephone: 707-784-6770
Last EDR Contact: 12/27/2006
Next Scheduled EDR Contact: 03/26/2007
Data Release Frequency: Quarterly

SONOMA COUNTY:

Leaking Underground Storage Tank Sites

A listing of leaking underground storage tank sites located in Sonoma county.

Date of Government Version: 01/22/2007
Date Data Arrived at EDR: 01/23/2007
Date Made Active in Reports: 02/27/2007
Number of Days to Update: 35

Source: Department of Health Services
Telephone: 707-565-6565
Last EDR Contact: 01/22/2007
Next Scheduled EDR Contact: 04/23/2007
Data Release Frequency: Quarterly

SUTTER COUNTY:

Underground Storage Tanks

Underground storage tank sites located in Sutter county.

Date of Government Version: 12/31/0005
Date Data Arrived at EDR: 01/05/2006
Date Made Active in Reports: 01/31/2006
Number of Days to Update: 26

Source: Sutter County Department of Agriculture
Telephone: 530-822-7500
Last EDR Contact: 01/29/2007
Next Scheduled EDR Contact: 04/02/2007
Data Release Frequency: Semi-Annually

VENTURA COUNTY:

Business Plan, Hazardous Waste Producers, and Operating Underground Tanks

The BWT list indicates by site address whether the Environmental Health Division has Business Plan (B), Waste Producer (W), and/or Underground Tank (T) information.

Date of Government Version: 11/28/2006
Date Data Arrived at EDR: 01/09/2007
Date Made Active in Reports: 01/24/2007
Number of Days to Update: 15

Source: Ventura County Environmental Health Division
Telephone: 805-654-2813
Last EDR Contact: 12/13/2006
Next Scheduled EDR Contact: 03/12/2007
Data Release Frequency: Quarterly

Inventory of Illegal Abandoned and Inactive Sites

Ventura County Inventory of Closed, Illegal Abandoned, and Inactive Sites.

Date of Government Version: 08/01/2006
Date Data Arrived at EDR: 09/05/2006
Date Made Active in Reports: 10/05/2006
Number of Days to Update: 30

Source: Environmental Health Division
Telephone: 805-654-2813
Last EDR Contact: 02/19/2007
Next Scheduled EDR Contact: 05/21/2007
Data Release Frequency: Annually

Listing of Underground Tank Cleanup Sites

Ventura County Underground Storage Tank Cleanup Sites (LUST).

Date of Government Version: 11/28/2006
Date Data Arrived at EDR: 01/09/2007
Date Made Active in Reports: 01/24/2007
Number of Days to Update: 15

Source: Environmental Health Division
Telephone: 805-654-2813
Last EDR Contact: 12/13/2006
Next Scheduled EDR Contact: 03/12/2007
Data Release Frequency: Quarterly

Underground Tank Closed Sites List

Ventura County Operating Underground Storage Tank Sites (UST)/Underground Tank Closed Sites List.

Date of Government Version: 09/27/2006
Date Data Arrived at EDR: 11/01/2006
Date Made Active in Reports: 12/12/2006
Number of Days to Update: 41

Source: Environmental Health Division
Telephone: 805-654-2813
Last EDR Contact: 01/10/2007
Next Scheduled EDR Contact: 04/09/2007
Data Release Frequency: Quarterly

YOLO COUNTY:

Underground Storage Tank Comprehensive Facility Report

Underground storage tank sites located in Yolo county.

Date of Government Version: 11/13/2006
Date Data Arrived at EDR: 11/28/2006
Date Made Active in Reports: 01/04/2007
Number of Days to Update: 37

Source: Yolo County Department of Health
Telephone: 530-666-8646
Last EDR Contact: 01/29/2007
Next Scheduled EDR Contact: 04/16/2007
Data Release Frequency: Annually

OTHER DATABASE(S)

Depending on the geographic area covered by this report, the data provided in these specialty databases may or may not be complete. For example, the existence of wetlands information data in a specific report does not mean that all wetlands in the area covered by the report are included. Moreover, the absence of any reported wetlands information does not necessarily mean that wetlands do not exist in the area covered by the report.

CT MANIFEST: Hazardous Waste Manifest Data

Facility and manifest data. Manifest is a document that lists and tracks hazardous waste from the generator through transporters to a tsd facility.

Date of Government Version: 12/31/2004
Date Data Arrived at EDR: 02/17/2006
Date Made Active in Reports: 04/07/2006
Number of Days to Update: 49

Source: Department of Environmental Protection
Telephone: 860-424-3375
Last EDR Contact: 12/11/2006
Next Scheduled EDR Contact: 03/12/2007
Data Release Frequency: Annually

NJ MANIFEST: Manifest Information

Hazardous waste manifest information.

Date of Government Version: 01/01/2007
Date Data Arrived at EDR: 01/04/2007
Date Made Active in Reports: 02/13/2007
Number of Days to Update: 40

Source: Department of Environmental Protection
Telephone: N/A
Last EDR Contact: 01/04/2007
Next Scheduled EDR Contact: 04/02/2007
Data Release Frequency: Annually

NY MANIFEST: Facility and Manifest Data

Manifest is a document that lists and tracks hazardous waste from the generator through transporters to a TSD facility.

Date of Government Version: 10/26/2006
Date Data Arrived at EDR: 11/29/2006
Date Made Active in Reports: 01/05/2007
Number of Days to Update: 37

Source: Department of Environmental Conservation
Telephone: 518-402-8651
Last EDR Contact: 03/02/2007
Next Scheduled EDR Contact: 05/28/2007
Data Release Frequency: Annually

PA MANIFEST: Manifest Information
Hazardous waste manifest information.

Date of Government Version: 12/31/2005
Date Data Arrived at EDR: 03/17/2006
Date Made Active in Reports: 06/06/2006
Number of Days to Update: 81

Source: Department of Environmental Protection
Telephone: N/A
Last EDR Contact: 12/11/2006
Next Scheduled EDR Contact: 03/12/2007
Data Release Frequency: Annually

RI MANIFEST: Manifest information
Hazardous waste manifest information

Date of Government Version: 04/11/2006
Date Data Arrived at EDR: 10/31/2006
Date Made Active in Reports: 12/18/2006
Number of Days to Update: 48

Source: Department of Environmental Management
Telephone: 401-222-2797
Last EDR Contact: 12/18/2006
Next Scheduled EDR Contact: 03/19/2007
Data Release Frequency: Annually

WI MANIFEST: Manifest Information
Hazardous waste manifest information.

Date of Government Version: 12/31/2005
Date Data Arrived at EDR: 03/17/2006
Date Made Active in Reports: 05/02/2006
Number of Days to Update: 46

Source: Department of Natural Resources
Telephone: N/A
Last EDR Contact: 02/06/2007
Next Scheduled EDR Contact: 04/09/2007
Data Release Frequency: Annually

Oil/Gas Pipelines: This data was obtained by EDR from the USGS in 1994. It is referred to by USGS as GeoData Digital Line Graphs from 1:100,000-Scale Maps. It was extracted from the transportation category including some oil, but primarily gas pipelines.

Electric Power Transmission Line Data
Source: PennWell Corporation
Telephone: (800) 823-6277
This map includes information copyrighted by PennWell Corporation. This information is provided on a best effort basis and PennWell Corporation does not guarantee its accuracy nor warrant its fitness for any particular purpose. Such information has been reprinted with the permission of PennWell.

Sensitive Receptors: There are individuals deemed sensitive receptors due to their fragile immune systems and special sensitivity to environmental discharges. These sensitive receptors typically include the elderly, the sick, and children. While the location of all sensitive receptors cannot be determined, EDR indicates those buildings and facilities - schools, daycares, hospitals, medical centers, and nursing homes - where individuals who are sensitive receptors are likely to be located.

AHA Hospitals:
Source: American Hospital Association, Inc.
Telephone: 312-280-5991
The database includes a listing of hospitals based on the American Hospital Association's annual survey of hospitals.

Medical Centers: Provider of Services Listing
Source: Centers for Medicare & Medicaid Services
Telephone: 410-786-3000
A listing of hospitals with Medicare provider number, produced by Centers of Medicare & Medicaid Services, a federal agency within the U.S. Department of Health and Human Services.

Nursing Homes
Source: National Institutes of Health
Telephone: 301-594-6248
Information on Medicare and Medicaid certified nursing homes in the United States.

Public Schools
Source: National Center for Education Statistics
Telephone: 202-502-7300
The National Center for Education Statistics' primary database on elementary and secondary public education in the United States. It is a comprehensive, annual, national statistical database of all public elementary and secondary schools and school districts, which contains data that are comparable across all states.

Private Schools
Source: National Center for Education Statistics
Telephone: 202-502-7300
The National Center for Education Statistics' primary database on private school locations in the United States.

Daycare Centers: Licensed Facilities
Source: Department of Social Services
Telephone: 916-657-4041

Flood Zone Data: This data, available in select counties across the country, was obtained by EDR in 1999 from the Federal Emergency Management Agency (FEMA). Data depicts 100-year and 500-year flood zones as defined by FEMA.

NWI: National Wetlands Inventory. This data, available in select counties across the country, was obtained by EDR in 2002 and 2005 from the U.S. Fish and Wildlife Service.

Scanned Digital USGS 7.5' Topographic Map (DRG)
Source: United States Geologic Survey
A digital raster graphic (DRG) is a scanned image of a U.S. Geological Survey topographic map. The map images are made by scanning published paper maps on high-resolution scanners. The raster image is georeferenced and fit to the Universal Transverse Mercator (UTM) projection.

STREET AND ADDRESS INFORMATION

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GEOCHECK ®- PHYSICAL SETTING SOURCE ADDENDUM

TARGET PROPERTY ADDRESS

BIG WAVE PROJECT
AIRPORT STREET/STANFORD AVENUE
HALF MOON BAY, CA 94019

TARGET PROPERTY COORDINATES

Latitude (North):	37.50510 - 37° 30' 18.4''
Longitude (West):	122.4934 - 122° 29' 36.2''
Universal Tranverse Mercator:	Zone 10
UTM X (Meters):	544776.6
UTM Y (Meters):	4150823.2
Elevation:	16 ft. above sea level

USGS TOPOGRAPHIC MAP

Target Property Map:	37122-E4 MONTARA MOUNTAIN, CA
Most Recent Revision:	1999
South Map:	37122-D4 HALF MOON BAY, CA
Most Recent Revision:	1999

EDR's GeoCheck Physical Setting Source Addendum is provided to assist the environmental professional in forming an opinion about the impact of potential contaminant migration.

Assessment of the impact of contaminant migration generally has two principle investigative components:

1. Groundwater flow direction, and
2. Groundwater flow velocity.

Groundwater flow direction may be impacted by surface topography, hydrology, hydrogeology, characteristics of the soil, and nearby wells. Groundwater flow velocity is generally impacted by the nature of the geologic strata.

GEOCHECK® - PHYSICAL SETTING SOURCE SUMMARY

GROUNDWATER FLOW DIRECTION INFORMATION

Groundwater flow direction for a particular site is best determined by a qualified environmental professional using site-specific well data. If such data is not reasonably ascertainable, it may be necessary to rely on other sources of information, such as surface topographic information, hydrologic information, hydrogeologic data collected on nearby properties, and regional groundwater flow information (from deep aquifers).

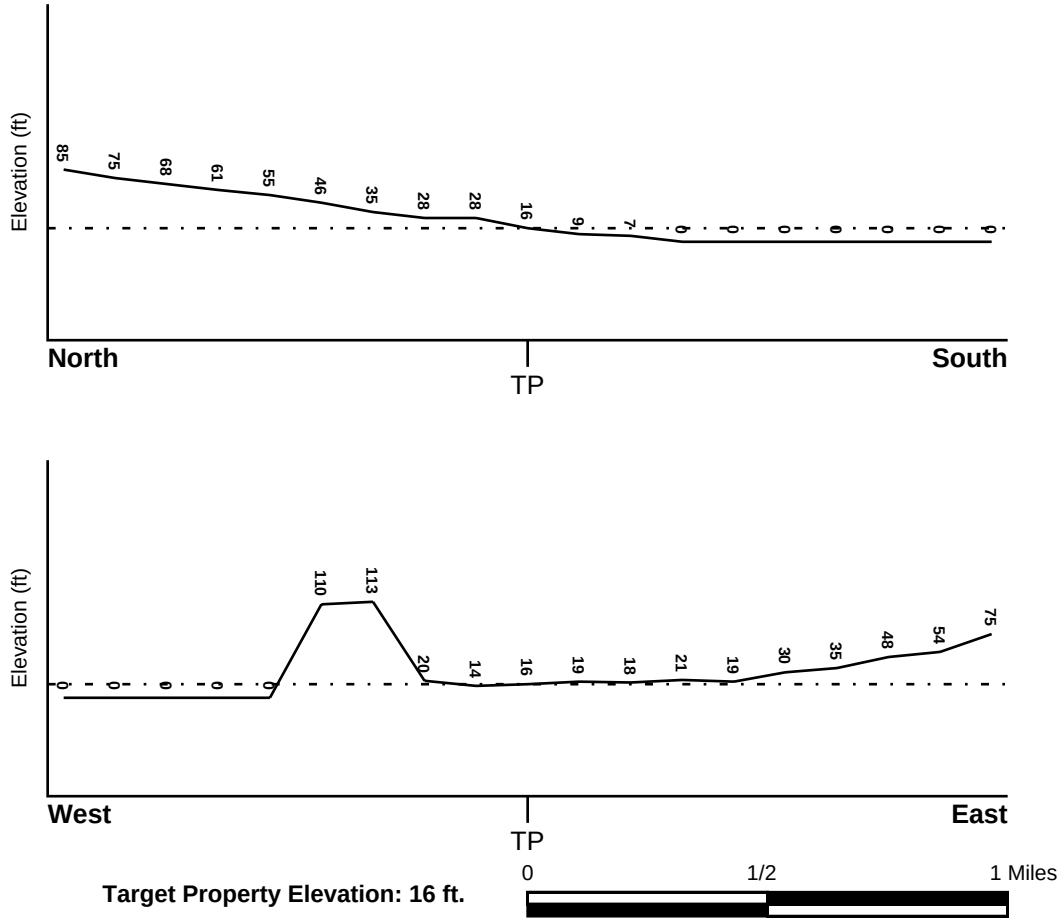
TOPOGRAPHIC INFORMATION

Surface topography may be indicative of the direction of surficial groundwater flow. This information can be used to assist the environmental professional in forming an opinion about the impact of nearby contaminated properties or, should contamination exist on the target property, what downgradient sites might be impacted.

TARGET PROPERTY TOPOGRAPHY

General Topographic Gradient: General SSE

SURROUNDING TOPOGRAPHY: ELEVATION PROFILES



Target Property Elevation: 16 ft.

Source: Topography has been determined from the USGS 7.5' Digital Elevation Model and should be evaluated on a relative (not an absolute) basis. Relative elevation information between sites of close proximity should be field verified.

GEOCHECK® - PHYSICAL SETTING SOURCE SUMMARY

HYDROLOGIC INFORMATION

Surface water can act as a hydrologic barrier to groundwater flow. Such hydrologic information can be used to assist the environmental professional in forming an opinion about the impact of nearby contaminated properties or, should contamination exist on the target property, what downgradient sites might be impacted.

Refer to the Physical Setting Source Map following this summary for hydrologic information (major waterways and bodies of water).

FEMA FLOOD ZONE

Target Property County	FEMA Flood Electronic Data
SAN MATEO, CA	YES - refer to the Overview Map and Detail Map

Flood Plain Panel at Target Property: 0603110113B

Additional Panels in search area: 0603110094B
0603110225B

NATIONAL WETLAND INVENTORY

NWI Quad at Target Property	NWI Electronic Data Coverage
MONTARA MOUNTAIN	YES - refer to the Overview Map and Detail Map

HYDROGEOLOGIC INFORMATION

Hydrogeologic information obtained by installation of wells on a specific site can often be an indicator of groundwater flow direction in the immediate area. Such hydrogeologic information can be used to assist the environmental professional in forming an opinion about the impact of nearby contaminated properties or, should contamination exist on the target property, what downgradient sites might be impacted.

Site-Specific Hydrogeological Data*:

Search Radius: 1.25 miles
Status: Not found

AQUIFLOW®

Search Radius: 1.000 Mile.

EDR has developed the AQUIFLOW Information System to provide data on the general direction of groundwater flow at specific points. EDR has reviewed reports submitted by environmental professionals to regulatory authorities at select sites and has extracted the date of the report, groundwater flow direction as determined hydrogeologically, and the depth to water table.

MAP ID	LOCATION FROM TP	GENERAL DIRECTION GROUNDWATER FLOW
1	1/4 - 1/2 Mile East	SSW

For additional site information, refer to Physical Setting Source Map Findings.

* ©1996 Site−specific hydrogeological data gathered by CERCLIS Alerts, Inc., Bainbridge Island, WA. All rights reserved. All of the information and opinions presented are those of the cited EPA report(s), which were completed under a Comprehensive Environmental Response Compensation and Liability Information System (CERCLIS) investigation.

GEOCHECK® - PHYSICAL SETTING SOURCE SUMMARY

GROUNDWATER FLOW VELOCITY INFORMATION

Groundwater flow velocity information for a particular site is best determined by a qualified environmental professional using site specific geologic and soil strata data. If such data are not reasonably ascertainable, it may be necessary to rely on other sources of information, including geologic age identification, rock stratigraphic unit and soil characteristics data collected on nearby properties and regional soil information. In general, contaminant plumes move more quickly through sandy-gravelly types of soils than silty-clayey types of soils.

GEOLOGIC INFORMATION IN GENERAL AREA OF TARGET PROPERTY

Geologic information can be used by the environmental professional in forming an opinion about the relative speed at which contaminant migration may be occurring.

ROCK STRATIGRAPHIC UNIT

Era:	Mesozoic
System:	Cretaceous
Series:	Cretaceous granitic rocks
Code:	Kg *(decoded above as Era, System & Series)*

GEOLOGIC AGE IDENTIFICATION

Category: Plutonic and Intrusive Rocks

Geologic Age and Rock Stratigraphic Unit Source: P.G. Schruben, R.E. Arndt and W.J. Bawiec, Geology of the Conterminous U.S. at 1:2,500,000 Scale - a digital representation of the 1974 P.B. King and H.M. Beikman Map, USGS Digital Data Series DDS - 11 (1994).

DOMINANT SOIL COMPOSITION IN GENERAL AREA OF TARGET PROPERTY

The U.S. Department of Agriculture's (USDA) Soil Conservation Service (SCS) leads the National Cooperative Soil Survey (NCSS) and is responsible for collecting, storing, maintaining and distributing soil survey information for privately owned lands in the United States. A soil map in a soil survey is a representation of soil patterns in a landscape. Soil maps for STATSGO are compiled by generalizing more detailed (SSURGO) soil survey maps. The following information is based on Soil Conservation Service STATSGO data.

Soil Component Name:	WATSONVILLE
Soil Surface Texture:	loam
Hydrologic Group:	Class D - Very slow infiltration rates. Soils are clayey, have a high water table, or are shallow to an impervious layer.
Soil Drainage Class:	Somewhat poorly. Soils commonly have a layer with low hydraulic conductivity, wet state high in profile, etc. Depth to water table is 1 to 3 feet.

Hydric Status: Soil does not meet the requirements for a hydric soil.

Corrosion Potential - Uncoated Steel:	HIGH
Depth to Bedrock Min:	> 60 inches
Depth to Bedrock Max:	> 60 inches

GEOCHECK® - PHYSICAL SETTING SOURCE SUMMARY

Soil Layer Information							
	Boundary			Classification			
Layer	Upper	Lower	Soil Texture Class	AASHTO Group	Unified Soil	Permeability Rate (in/hr)	Soil Reaction (pH)
1	0 inches	18 inches	loam	Silt-Clay Materials (more than 35 pct. passing No. 200), Silty Soils.	FINE-GRAINED SOILS, Silts and Clays (liquid limit less than 50%), silt.	Max: 2.00 Min: 0.60	Max: 7.30 Min: 5.60
2	18 inches	39 inches	clay	Silt-Clay Materials (more than 35 pct. passing No. 200), Clayey Soils.	FINE-GRAINED SOILS, Silts and Clays (liquid limit less than 50%), Lean Clay	Max: 0.06 Min: 0.00	Max: 8.40 Min: 5.60
3	39 inches	63 inches	sandy clay loam	Silt-Clay Materials (more than 35 pct. passing No. 200), Clayey Soils.	COARSE-GRAINED SOILS, Sands, Sands with fines, Clayey sand.	Max: 0.20 Min: 0.06	Max: 7.30 Min: 5.60

OTHER SOIL TYPES IN AREA

Based on Soil Conservation Service STATSGO data, the following additional subordinant soil types may appear within the general area of target property.

Soil Surface Textures:
sandy loam
loamy sand
clay
gravelly - sandy loam
unweathered bedrock

Surficial Soil Types:
sandy loam
loamy sand
clay
gravelly - sandy loam
unweathered bedrock

Shallow Soil Types:
clay
gravelly - sandy clay loam
silty clay
silt loam
gravelly - coarse sandy loam
loamy sand

Deeper Soil Types:
stratified
weathered bedrock
loam
fine sand
sandy loam
very fine sandy loam
unweathered bedrock

GEOCHECK® - PHYSICAL SETTING SOURCE SUMMARY

LOCAL / REGIONAL WATER AGENCY RECORDS

EDR Local/Regional Water Agency records provide water well information to assist the environmental professional in assessing sources that may impact ground water flow direction, and in forming an opinion about the impact of contaminant migration on nearby drinking water wells.

WELL SEARCH DISTANCE INFORMATION

DATABASE	SEARCH DISTANCE (miles)
Federal USGS	1.000
Federal FRDS PWS	Nearest PWS within 1 mile
State Database	1.000

FEDERAL USGS WELL INFORMATION

MAP ID	WELL ID	LOCATION FROM TP
B7	USGS3236047	1/2 - 1 Mile North
C9	USGS3236046	1/2 - 1 Mile NW
D11	USGS3236048	1/2 - 1 Mile North

FEDERAL FRDS PUBLIC WATER SUPPLY SYSTEM INFORMATION

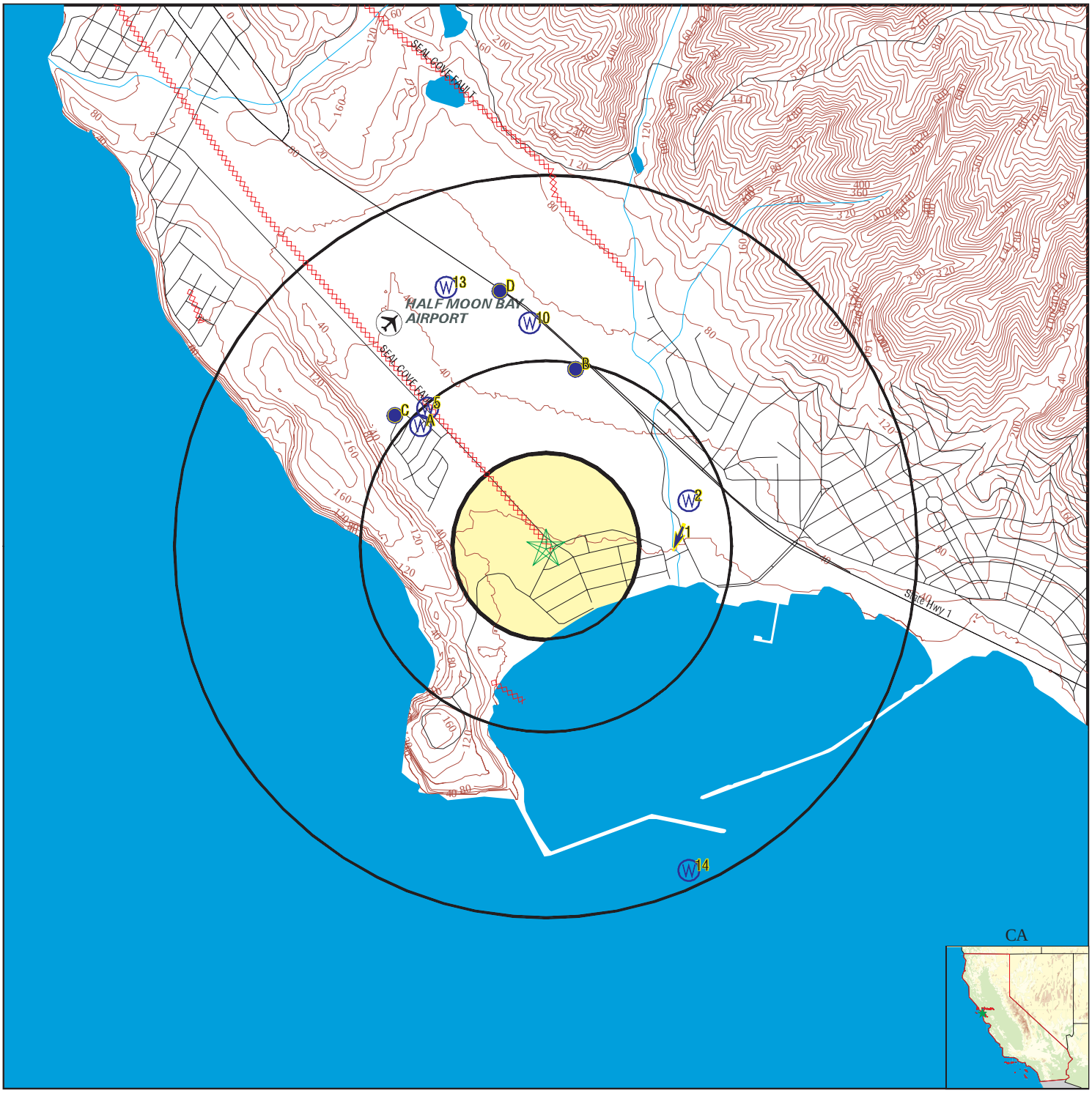
MAP ID	WELL ID	LOCATION FROM TP
No PWS System Found		

Note: PWS System location is not always the same as well location.

STATE DATABASE WELL INFORMATION

MAP ID	WELL ID	LOCATION FROM TP
2	22419	1/4 - 1/2 Mile ENE
A3	19633	1/4 - 1/2 Mile NW
B4	5994	1/4 - 1/2 Mile NNE
5	19632	1/4 - 1/2 Mile NW
A6	CADW00000037007	1/4 - 1/2 Mile NW
C8	19634	1/2 - 1 Mile NW
10	5997	1/2 - 1 Mile North
D12	5993	1/2 - 1 Mile North
13	5996	1/2 - 1 Mile NNW
14	6005	1/2 - 1 Mile SSE

PHYSICAL SETTING SOURCE MAP - 1872299.2s



- County Boundary
- Major Roads
- Contour Lines
- Earthquake Fault Lines
- Airports
- Earthquake epicenter, Richter 5 or greater
- Water Wells
- Public Water Supply Wells
- Cluster of Multiple Icons

0 1/4 1/2 1 Miles

- Groundwater Flow Direction
- GI Indeterminate Groundwater Flow at Location
- GV Groundwater Flow Varies at Location
- HD Closest Hydrogeological Data
- Oil, gas or related wells

SITE NAME:	Big Wave Project	CLIENT:	Treadwell & Rollo Inc.
ADDRESS:	Airport Street/Stanford Avenue Half Moon Bay CA 94019	CONTACT:	Eric Morita
LAT/LONG:	37.5051 / 122.4934	INQUIRY #:	1872299.2s
		DATE:	March 07, 2007 2:01 pm

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GEOCHECK® - PHYSICAL SETTING SOURCE MAP FINDINGS

Map ID
Direction
Distance
Elevation

			Database	EDR ID Number
1 **East** **1/4 - 1/2 Mile** **Higher**	Site ID: Groundwater Flow: Shallow Water Depth: Deep Water Depth: Average Water Depth: Date:	41-0959 SSW Not Reported Not Reported 9 09/26/1995	**AQUIFLOW**	**64265**

2
ENE
1/4 - 1/2 Mile
Higher

CA WELLS **22419**

Water System Information:

Prime Station Code:	D41/011-PILBLND	User ID:	ENG
FRDS Number:	4110011018	County:	San Mateo
District Number:	04	Station Type:	WELL/AMBNT/MUN/INTAKE
Water Type:	Well/Groundwater	Well Status:	Active Raw
Source Lat/Long:	373025.0 1222907.0	Precision:	0.5 Mile (30 Seconds)
Source Name:	PILLARCITOS WELL FIELD BLEND 3,3A,4 & 5		
System Number:	4110011		
System Name:	Coastside County Water Dist		
Organization That Operates System:			
	766 Main Street		
	Hlaf Moon Bay, CA 94019		
Pop Served:	12000	Connections:	4351
Area Served:	HALF MOON BAY		
Sample Collected:	01/09/2006 00:00:00	Findings:	36 MG/L
Chemical:	ALKALINITY (TOTAL) AS CACO3		
Sample Collected:	01/09/2006 00:00:00	Findings:	850 UG/L
Chemical:	IRON		
Sample Collected:	01/09/2006 00:00:00	Findings:	16 NTU
Chemical:	TURBIDITY, LABORATORY		
Sample Collected:	01/09/2006 00:00:00	Findings:	2.3 MG/L
Chemical:	TOTAL ORGANIC CARBON (TOC)		
Sample Collected:	02/06/2006 00:00:00	Findings:	470 UG/L
Chemical:	IRON		
Sample Collected:	02/06/2006 00:00:00	Findings:	30 UNITS
Chemical:	COLOR		
Sample Collected:	02/06/2006 00:00:00	Findings:	3 TON
Chemical:	ODOR THRESHOLD @ 60 C		
Sample Collected:	02/06/2006 00:00:00	Findings:	86 MG/L
Chemical:	ALKALINITY (TOTAL) AS CACO3		
Sample Collected:	02/06/2006 00:00:00	Findings:	10 NTU
Chemical:	TURBIDITY, LABORATORY		
Sample Collected:	02/06/2006 00:00:00	Findings:	2.4 MG/L
Chemical:	TOTAL ORGANIC CARBON (TOC)		

Sample Collected:	02/13/2006 00:00:00	Findings:	22 UNITS
Chemical:	COLOR		
Sample Collected:	02/13/2006 00:00:00	Findings:	3 TON
Chemical:	ODOR THRESHOLD @ 60 C		
Sample Collected:	02/13/2006 00:00:00	Findings:	420 US
Chemical:	SPECIFIC CONDUCTANCE		
Sample Collected:	02/13/2006 00:00:00	Findings:	7.7
Chemical:	PH, LABORATORY		
Sample Collected:	02/13/2006 00:00:00	Findings:	140 MG/L
Chemical:	ALKALINITY (TOTAL) AS CACO3		
Sample Collected:	02/13/2006 00:00:00	Findings:	170.8 MG/L
Chemical:	BICARBONATE ALKALINITY		
Sample Collected:	02/13/2006 00:00:00	Findings:	157 MG/L
Chemical:	HARDNESS (TOTAL) AS CACO3		
Sample Collected:	02/13/2006 00:00:00	Findings:	43 MG/L
Chemical:	CALCIUM		
Sample Collected:	02/13/2006 00:00:00	Findings:	12 MG/L
Chemical:	MAGNESIUM		
Sample Collected:	02/13/2006 00:00:00	Findings:	27 MG/L
Chemical:	SODIUM		
Sample Collected:	02/13/2006 00:00:00	Findings:	1.2 MG/L
Chemical:	POTASSIUM		
Sample Collected:	02/13/2006 00:00:00	Findings:	33 MG/L
Chemical:	CHLORIDE		
Sample Collected:	02/13/2006 00:00:00	Findings:	.15 MG/L
Chemical:	FLUORIDE (F) (NATURAL-SOURCE)		
Sample Collected:	02/13/2006 00:00:00	Findings:	630 UG/L
Chemical:	IRON		
Sample Collected:	02/13/2006 00:00:00	Findings:	75 UG/L
Chemical:	MANGANESE		
Sample Collected:	02/13/2006 00:00:00	Findings:	75 UG/L
Chemical:	ALUMINUM		
Sample Collected:	02/13/2006 00:00:00	Findings:	225 MG/L
Chemical:	TOTAL DISSOLVED SOLIDS		
Sample Collected:	02/13/2006 00:00:00	Findings:	.61
Chemical:	LANGELIER INDEX @ 60 C		
Sample Collected:	02/13/2006 00:00:00	Findings:	6 MG/L
Chemical:	NITRATE (AS NO3)		
Sample Collected:	02/13/2006 00:00:00	Findings:	7.1 NTU
Chemical:	TURBIDITY, LABORATORY		
Sample Collected:	02/13/2006 00:00:00	Findings:	.06 MG/L
Chemical:	FOAMING AGENTS (MBAS)		
Sample Collected:	02/13/2006 00:00:00	Findings:	.025 UG/L
Chemical:	DIELDRIN		

Sample Collected:	03/13/2006 00:00:00	Findings:	35 UNITS
Chemical:	COLOR		
Sample Collected:	03/13/2006 00:00:00	Findings:	3 TON
Chemical:	ODOR THRESHOLD @ 60 C		
Sample Collected:	03/13/2006 00:00:00	Findings:	76 MG/L
Chemical:	ALKALINITY (TOTAL) AS CACO3		
Sample Collected:	03/13/2006 00:00:00	Findings:	408 UG/L
Chemical:	IRON		
Sample Collected:	03/13/2006 00:00:00	Findings:	7.6 NTU
Chemical:	TURBIDITY, LABORATORY		
Sample Collected:	02/28/2000 00:00:00	Findings:	.41 PCI/L
Chemical:	GROSS ALPHA COUNTING ERROR		
Sample Collected:	02/28/2000 00:00:00	Findings:	100 UNITS
Chemical:	COLOR		
Sample Collected:	02/28/2000 00:00:00	Findings:	270 US
Chemical:	SPECIFIC CONDUCTANCE		
Sample Collected:	02/28/2000 00:00:00	Findings:	7.2
Chemical:	PH, FIELD		
Sample Collected:	02/28/2000 00:00:00	Findings:	7.2
Chemical:	PH, LABORATORY		
Sample Collected:	02/28/2000 00:00:00	Findings:	89 MG/L
Chemical:	ALKALINITY (TOTAL) AS CACO3		
Sample Collected:	02/28/2000 00:00:00	Findings:	89 MG/L
Chemical:	BICARBONATE ALKALINITY		
Sample Collected:	02/28/2000 00:00:00	Findings:	110 MG/L
Chemical:	HARDNESS (TOTAL) AS CACO3		
Sample Collected:	02/28/2000 00:00:00	Findings:	30 MG/L
Chemical:	CALCIUM		
Sample Collected:	02/28/2000 00:00:00	Findings:	8.9 MG/L
Chemical:	MAGNESIUM		
Sample Collected:	02/28/2000 00:00:00	Findings:	18 MG/L
Chemical:	SODIUM		
Sample Collected:	02/28/2000 00:00:00	Findings:	2.2 MG/L
Chemical:	POTASSIUM		
Sample Collected:	02/28/2000 00:00:00	Findings:	22 MG/L
Chemical:	CHLORIDE		
Sample Collected:	02/28/2000 00:00:00	Findings:	240 UG/L
Chemical:	IRON		
Sample Collected:	02/28/2000 00:00:00	Findings:	100 UG/L
Chemical:	ALUMINUM		
Sample Collected:	02/28/2000 00:00:00	Findings:	230 MG/L
Chemical:	TOTAL DISSOLVED SOLIDS		
Sample Collected:	02/28/2000 00:00:00	Findings:	7.6 NTU
Chemical:	TURBIDITY, LABORATORY		

Sample Collected:	03/29/2001 00:00:00	Findings:	10 UNITS
Chemical:	COLOR		
Sample Collected:	03/29/2001 00:00:00	Findings:	310 US
Chemical:	SPECIFIC CONDUCTANCE		
Sample Collected:	03/29/2001 00:00:00	Findings:	7.5
Chemical:	PH, LABORATORY		
Sample Collected:	03/29/2001 00:00:00	Findings:	140 MG/L
Chemical:	ALKALINITY (TOTAL) AS CACO3		
Sample Collected:	03/29/2001 00:00:00	Findings:	140 MG/L
Chemical:	BICARBONATE ALKALINITY		
Sample Collected:	03/29/2001 00:00:00	Findings:	120 MG/L
Chemical:	HARDNESS (TOTAL) AS CACO3		
Sample Collected:	03/29/2001 00:00:00	Findings:	33 MG/L
Chemical:	CALCIUM		
Sample Collected:	03/29/2001 00:00:00	Findings:	10 MG/L
Chemical:	MAGNESIUM		
Sample Collected:	03/29/2001 00:00:00	Findings:	18 MG/L
Chemical:	SODIUM		
Sample Collected:	03/29/2001 00:00:00	Findings:	25 MG/L
Chemical:	CHLORIDE		
Sample Collected:	03/29/2001 00:00:00	Findings:	130 UG/L
Chemical:	IRON		
Sample Collected:	03/29/2001 00:00:00	Findings:	35 UG/L
Chemical:	MANGANESE		
Sample Collected:	03/29/2001 00:00:00	Findings:	250 MG/L
Chemical:	TOTAL DISSOLVED SOLIDS		
Sample Collected:	03/29/2001 00:00:00	Findings:	3.9 MG/L
Chemical:	NITRATE (AS NO3)		
Sample Collected:	03/29/2001 00:00:00	Findings:	.9 NTU
Chemical:	TURBIDITY, LABORATORY		
Sample Collected:	03/29/2001 00:00:00	Findings:	380 US
Chemical:	SPECIFIC CONDUCTANCE		
Sample Collected:	03/29/2001 00:00:00	Findings:	.54 PCI/L
Chemical:	GROSS ALPHA COUNTING ERROR		
Sample Collected:	03/25/2002 00:00:00	Findings:	20 UNITS
Chemical:	COLOR		
Sample Collected:	03/25/2002 00:00:00	Findings:	270 US
Chemical:	SPECIFIC CONDUCTANCE		
Sample Collected:	03/25/2002 00:00:00	Findings:	7.4
Chemical:	PH, LABORATORY		
Sample Collected:	03/25/2002 00:00:00	Findings:	90 MG/L
Chemical:	ALKALINITY (TOTAL) AS CACO3		
Sample Collected:	03/25/2002 00:00:00	Findings:	90 MG/L
Chemical:	BICARBONATE ALKALINITY		

Sample Collected:	03/25/2002 00:00:00	Findings:	100 MG/L
Chemical:	HARDNESS (TOTAL) AS CACO3		
Sample Collected:	03/25/2002 00:00:00	Findings:	27 MG/L
Chemical:	CALCIUM		
Sample Collected:	03/25/2002 00:00:00	Findings:	8 MG/L
Chemical:	MAGNESIUM		
Sample Collected:	03/25/2002 00:00:00	Findings:	16 MG/L
Chemical:	SODIUM		
Sample Collected:	03/25/2002 00:00:00	Findings:	23 MG/L
Chemical:	CHLORIDE		
Sample Collected:	03/25/2002 00:00:00	Findings:	130 UG/L
Chemical:	IRON		
Sample Collected:	03/25/2002 00:00:00	Findings:	77 UG/L
Chemical:	ALUMINUM		
Sample Collected:	03/25/2002 00:00:00	Findings:	.15 MG/L
Chemical:	FOAMING AGENTS (MBAS)		
Sample Collected:	03/25/2002 00:00:00	Findings:	.51 UG/L
Chemical:	PENTACHLOROPHENOL		
Sample Collected:	03/25/2002 00:00:00	Findings:	180 MG/L
Chemical:	TOTAL DISSOLVED SOLIDS		
Sample Collected:	03/25/2002 00:00:00	Findings:	2.6 NTU
Chemical:	TURBIDITY, LABORATORY		
Sample Collected:	03/25/2002 00:00:00	Findings:	300 MG/L
Chemical:	FLUORIDE (TREATMENT RELATED-DISTRIBUTION)		
Sample Collected:	12/23/2002 00:00:00	Findings:	5.9 MG/L
Chemical:	NITRATE (AS NO3)		
Sample Collected:	03/03/2003 00:00:00	Findings:	420 US
Chemical:	SPECIFIC CONDUCTANCE		
Sample Collected:	03/03/2003 00:00:00	Findings:	30 MG/L
Chemical:	CHLORIDE		
Sample Collected:	03/03/2003 00:00:00	Findings:	280 MG/L
Chemical:	TOTAL DISSOLVED SOLIDS		
Sample Collected:	03/03/2003 00:00:00	Findings:	5.1 MG/L
Chemical:	NITRATE (AS NO3)		
Sample Collected:	03/03/2003 00:00:00	Findings:	310 MG/L
Chemical:	FLUORIDE (TREATMENT RELATED-DISTRIBUTION)		
Sample Collected:	02/17/2004 00:00:00	Findings:	2 UNITS
Chemical:	COLOR		
Sample Collected:	02/17/2004 00:00:00	Findings:	437 US
Chemical:	SPECIFIC CONDUCTANCE		
Sample Collected:	02/17/2004 00:00:00	Findings:	7.5
Chemical:	PH, LABORATORY		
Sample Collected:	02/17/2004 00:00:00	Findings:	146 MG/L
Chemical:	ALKALINITY (TOTAL) AS CACO3		

Sample Collected:	02/17/2004 00:00:00	Findings:	178.1 MG/L
Chemical:	BICARBONATE ALKALINITY		
Sample Collected:	02/17/2004 00:00:00	Findings:	168 MG/L
Chemical:	HARDNESS (TOTAL) AS CACO3		
Sample Collected:	02/17/2004 00:00:00	Findings:	46 MG/L
Chemical:	CALCIUM		
Sample Collected:	02/17/2004 00:00:00	Findings:	13 MG/L
Chemical:	MAGNESIUM		
Sample Collected:	02/17/2004 00:00:00	Findings:	22 MG/L
Chemical:	SODIUM		
Sample Collected:	02/17/2004 00:00:00	Findings:	1 MG/L
Chemical:	POTASSIUM		
Sample Collected:	02/17/2004 00:00:00	Findings:	31 MG/L
Chemical:	CHLORIDE		
Sample Collected:	02/17/2004 00:00:00	Findings:	.13 MG/L
Chemical:	FLUORIDE (F) (NATURAL-SOURCE)		
Sample Collected:	02/17/2004 00:00:00	Findings:	274 MG/L
Chemical:	TOTAL DISSOLVED SOLIDS		
Sample Collected:	02/17/2004 00:00:00	Findings:	- .26
Chemical:	LANGELIER INDEX @ 60 C		
Sample Collected:	02/17/2004 00:00:00	Findings:	6 MG/L
Chemical:	NITRATE (AS NO3)		
Sample Collected:	02/17/2004 00:00:00	Findings:	.28 NTU
Chemical:	TURBIDITY, LABORATORY		
Sample Collected:	12/20/2004 00:00:00	Findings:	4 MG/L
Chemical:	NITRATE (AS NO3)		
Sample Collected:	01/03/2005 00:00:00	Findings:	130 UNITS
Chemical:	COLOR		
Sample Collected:	01/03/2005 00:00:00	Findings:	3 TON
Chemical:	ODOR THRESHOLD @ 60 C		
Sample Collected:	01/03/2005 00:00:00	Findings:	84 MG/L
Chemical:	ALKALINITY (TOTAL) AS CACO3		
Sample Collected:	01/03/2005 00:00:00	Findings:	19 NTU
Chemical:	TURBIDITY, LABORATORY		
Sample Collected:	02/07/2005 00:00:00	Findings:	13 UNITS
Chemical:	COLOR		
Sample Collected:	02/07/2005 00:00:00	Findings:	82 MG/L
Chemical:	ALKALINITY (TOTAL) AS CACO3		
Sample Collected:	02/07/2005 00:00:00	Findings:	112 UG/L
Chemical:	IRON		
Sample Collected:	02/07/2005 00:00:00	Findings:	3.1 NTU
Chemical:	TURBIDITY, LABORATORY		
Sample Collected:	03/14/2005 00:00:00	Findings:	37 UNITS
Chemical:	COLOR		

Sample Collected:	03/14/2005 00:00:00	Findings:	2 TON
Chemical:	ODOR THRESHOLD @ 60 C		
Sample Collected:	03/14/2005 00:00:00	Findings:	260 US
Chemical:	SPECIFIC CONDUCTANCE		
Sample Collected:	03/14/2005 00:00:00	Findings:	7.7
Chemical:	PH, LABORATORY		
Sample Collected:	03/14/2005 00:00:00	Findings:	84 MG/L
Chemical:	ALKALINITY (TOTAL) AS CACO3		
Sample Collected:	03/14/2005 00:00:00	Findings:	102.5 MG/L
Chemical:	BICARBONATE ALKALINITY		
Sample Collected:	03/14/2005 00:00:00	Findings:	86.3 MG/L
Chemical:	HARDNESS (TOTAL) AS CACO3		
Sample Collected:	03/14/2005 00:00:00	Findings:	23 MG/L
Chemical:	CALCIUM		
Sample Collected:	03/14/2005 00:00:00	Findings:	7 MG/L
Chemical:	MAGNESIUM		
Sample Collected:	03/14/2005 00:00:00	Findings:	15 MG/L
Chemical:	SODIUM		
Sample Collected:	03/14/2005 00:00:00	Findings:	.7 MG/L
Chemical:	POTASSIUM		
Sample Collected:	03/14/2005 00:00:00	Findings:	22 MG/L
Chemical:	CHLORIDE		
Sample Collected:	03/14/2005 00:00:00	Findings:	135 UG/L
Chemical:	IRON		
Sample Collected:	03/14/2005 00:00:00	Findings:	122 UG/L
Chemical:	ALUMINUM		
Sample Collected:	03/14/2005 00:00:00	Findings:	116 MG/L
Chemical:	TOTAL DISSOLVED SOLIDS		
Sample Collected:	03/14/2005 00:00:00	Findings:	.17
Chemical:	LANGELIER INDEX @ 60 C		
Sample Collected:	03/14/2005 00:00:00	Findings:	3 MG/L
Chemical:	NITRATE (AS NO3)		
Sample Collected:	03/14/2005 00:00:00	Findings:	3.8 NTU
Chemical:	TURBIDITY, LABORATORY		
Sample Collected:	03/21/2005 00:00:00	Findings:	131 UG/L
Chemical:	IRON		
Sample Collected:	04/04/2005 00:00:00	Findings:	260 UG/L
Chemical:	IRON		
Sample Collected:	04/04/2005 00:00:00	Findings:	20 UNITS
Chemical:	COLOR		
Sample Collected:	04/04/2005 00:00:00	Findings:	3 TON
Chemical:	ODOR THRESHOLD @ 60 C		
Sample Collected:	04/04/2005 00:00:00	Findings:	70 MG/L
Chemical:	ALKALINITY (TOTAL) AS CACO3		

Sample Collected:	04/04/2005 00:00:00	Findings:	7.9 NTU
Chemical:	TURBIDITY, LABORATORY		
Sample Collected:	05/02/2005 00:00:00	Findings:	30 UNITS
Chemical:	COLOR		
Sample Collected:	05/02/2005 00:00:00	Findings:	3 TON
Chemical:	ODOR THRESHOLD @ 60 C		
Sample Collected:	05/02/2005 00:00:00	Findings:	82 MG/L
Chemical:	ALKALINITY (TOTAL) AS CACO3		
Sample Collected:	05/02/2005 00:00:00	Findings:	133 UG/L
Chemical:	IRON		
Sample Collected:	05/02/2005 00:00:00	Findings:	2.3 NTU
Chemical:	TURBIDITY, LABORATORY		
Sample Collected:	06/06/2005 00:00:00	Findings:	25 UNITS
Chemical:	COLOR		
Sample Collected:	06/06/2005 00:00:00	Findings:	2 TON
Chemical:	ODOR THRESHOLD @ 60 C		
Sample Collected:	06/06/2005 00:00:00	Findings:	80 MG/L
Chemical:	ALKALINITY (TOTAL) AS CACO3		
Sample Collected:	06/06/2005 00:00:00	Findings:	1.9 NTU
Chemical:	TURBIDITY, LABORATORY		
Sample Collected:	06/06/2005 00:00:00	Findings:	2.2 MG/L
Chemical:	TOTAL ORGANIC CARBON (TOC)		
Sample Collected:	07/05/2005 00:00:00	Findings:	17 UNITS
Chemical:	COLOR		
Sample Collected:	07/05/2005 00:00:00	Findings:	2 TON
Chemical:	ODOR THRESHOLD @ 60 C		
Sample Collected:	07/05/2005 00:00:00	Findings:	74 MG/L
Chemical:	ALKALINITY (TOTAL) AS CACO3		
Sample Collected:	07/05/2005 00:00:00	Findings:	1.2 NTU
Chemical:	TURBIDITY, LABORATORY		
Sample Collected:	07/05/2005 00:00:00	Findings:	2.3 MG/L
Chemical:	TOTAL ORGANIC CARBON (TOC)		
Sample Collected:	08/01/2005 00:00:00	Findings:	20 UNITS
Chemical:	COLOR		
Sample Collected:	08/01/2005 00:00:00	Findings:	2 TON
Chemical:	ODOR THRESHOLD @ 60 C		
Sample Collected:	08/01/2005 00:00:00	Findings:	54 MG/L
Chemical:	ALKALINITY (TOTAL) AS CACO3		
Sample Collected:	08/01/2005 00:00:00	Findings:	104 UG/L
Chemical:	IRON		
Sample Collected:	08/01/2005 00:00:00	Findings:	1.2 NTU
Chemical:	TURBIDITY, LABORATORY		
Sample Collected:	08/01/2005 00:00:00	Findings:	2.1 MG/L
Chemical:	TOTAL ORGANIC CARBON (TOC)		

Sample Collected:	09/12/2005 00:00:00	Findings:	2.5 MG/L
Chemical:	TOTAL ORGANIC CARBON (TOC)		
Sample Collected:	10/03/2005 00:00:00	Findings:	12 UNITS
Chemical:	COLOR		
Sample Collected:	10/03/2005 00:00:00	Findings:	3 TON
Chemical:	ODOR THRESHOLD @ 60 C		
Sample Collected:	10/03/2005 00:00:00	Findings:	32 MG/L
Chemical:	ALKALINITY (TOTAL) AS CACO3		
Sample Collected:	10/03/2005 00:00:00	Findings:	1.5 NTU
Chemical:	TURBIDITY, LABORATORY		
Sample Collected:	11/07/2005 00:00:00	Findings:	10 UNITS
Chemical:	COLOR		
Sample Collected:	11/07/2005 00:00:00	Findings:	2 TON
Chemical:	ODOR THRESHOLD @ 60 C		
Sample Collected:	11/07/2005 00:00:00	Findings:	24 MG/L
Chemical:	ALKALINITY (TOTAL) AS CACO3		
Sample Collected:	11/07/2005 00:00:00	Findings:	1.7 NTU
Chemical:	TURBIDITY, LABORATORY		
Sample Collected:	11/07/2005 00:00:00	Findings:	1.9 MG/L
Chemical:	TOTAL ORGANIC CARBON (TOC)		
Sample Collected:	12/05/2005 00:00:00	Findings:	40 UNITS
Chemical:	COLOR		
Sample Collected:	12/05/2005 00:00:00	Findings:	2 TON
Chemical:	ODOR THRESHOLD @ 60 C		
Sample Collected:	12/05/2005 00:00:00	Findings:	48 MG/L
Chemical:	ALKALINITY (TOTAL) AS CACO3		
Sample Collected:	12/05/2005 00:00:00	Findings:	5.3 NTU
Chemical:	TURBIDITY, LABORATORY		
Sample Collected:	01/09/2006 00:00:00	Findings:	45 UNITS
Chemical:	COLOR		
Sample Collected:	01/09/2006 00:00:00	Findings:	2 TON
Chemical:	ODOR THRESHOLD @ 60 C		

A3
NW
1/4 - 1/2 Mile
Higher

CA WELLS **19633**

Water System Information:

Prime Station Code:	4110028-003	User ID:	ENG
FRDS Number:	4110028003	County:	San Mateo
District Number:	04	Station Type:	WELL/AMBNT
Water Type:	Well/Groundwater	Well Status:	Active Raw
Source Lat/Long:	373034.4 1222954.6	Precision:	100 Feet (one Second)
Source Name:	RETIRO WELL		
System Number:	4110028		
System Name:	El Granada MHP		
Organization That Operates System:			
	164 Culebra		
	Moss Beach, CA 94038		
Pop Served:	900	Connections:	228
Area Served:	Not Reported		

Sample Collected:	07/20/2006 00:00:00	Findings:	1.1 MG/L
Chemical:	FLUORIDE (F) (NATURAL-SOURCE)		
Sample Collected:	07/17/2005 00:00:00	Findings:	1.1 MG/L
Chemical:	FLUORIDE (F) (NATURAL-SOURCE)		
Sample Collected:	08/25/2005 00:00:00	Findings:	210 UG/L
Chemical:	BORON		
Sample Collected:	04/20/2006 00:00:00	Findings:	1.3 MG/L
Chemical:	FLUORIDE (F) (NATURAL-SOURCE)		
Sample Collected:	01/05/1999 00:00:00	Findings:	.96 PCI/L
Chemical:	GROSS ALPHA COUNTING ERROR		
Sample Collected:	01/05/1999 00:00:00	Findings:	.52 PCI/L
Chemical:	GROSS BETA COUNTING ERROR		
Sample Collected:	02/01/1999 00:00:00	Findings:	.32 PCI/L
Chemical:	GROSS ALPHA COUNTING ERROR		
Sample Collected:	02/01/1999 00:00:00	Findings:	3.37 PCI/L
Chemical:	GROSS BETA		
Sample Collected:	02/01/1999 00:00:00	Findings:	.44 PCI/L
Chemical:	GROSS BETA COUNTING ERROR		
Sample Collected:	04/16/2001 00:00:00	Findings:	1.1 MG/L
Chemical:	FLUORIDE (F) (NATURAL-SOURCE)		
Sample Collected:	07/16/2001 00:00:00	Findings:	1.2 MG/L
Chemical:	FLUORIDE (F) (NATURAL-SOURCE)		
Sample Collected:	06/07/1999 00:00:00	Findings:	.817 UG/L
Chemical:	VINYL CHLORIDE		
Sample Collected:	06/07/1999 00:00:00	Findings:	.658 UG/L
Chemical:	CIS-1,2-DICHLOROETHYLENE		
Sample Collected:	07/05/1999 00:00:00	Findings:	3.25 PCI/L
Chemical:	GROSS ALPHA		
Sample Collected:	07/05/1999 00:00:00	Findings:	1.22 PCI/L
Chemical:	GROSS ALPHA COUNTING ERROR		
Sample Collected:	07/05/1999 00:00:00	Findings:	.26 PCI/L
Chemical:	GROSS BETA COUNTING ERROR		
Sample Collected:	07/05/1999 00:00:00	Findings:	3.25 PCI/L
Chemical:	GROSS ALPHA		
Sample Collected:	07/05/1999 00:00:00	Findings:	1.22 PCI/L
Chemical:	GROSS ALPHA COUNTING ERROR		
Sample Collected:	07/05/1999 00:00:00	Findings:	.26 PCI/L
Chemical:	GROSS BETA COUNTING ERROR		
Sample Collected:	12/20/1999 00:00:00	Findings:	1 PCI/L
Chemical:	GROSS ALPHA COUNTING ERROR		
Sample Collected:	12/20/1999 00:00:00	Findings:	1.44 PCI/L
Chemical:	GROSS BETA		
Sample Collected:	12/20/1999 00:00:00	Findings:	.87 PCI/L
Chemical:	GROSS BETA COUNTING ERROR		

Sample Collected:	01/21/2002 00:00:00	Findings:	.52 UG/L
Chemical:	TOTAL TRIHALOMETHANES		
Sample Collected:	05/13/2002 00:00:00	Findings:	1.6 MG/L
Chemical:	FLUORIDE (F) (NATURAL-SOURCE)		
Sample Collected:	05/13/2002 00:00:00	Findings:	3.8 UG/L
Chemical:	BROMODICHLORMETHANE (THM)		
Sample Collected:	05/13/2002 00:00:00	Findings:	2.5 UG/L
Chemical:	BROMOFORM (THM)		
Sample Collected:	05/13/2002 00:00:00	Findings:	3.5 UG/L
Chemical:	DIBROMOCHLOROMETHANE (THM)		
Sample Collected:	05/13/2002 00:00:00	Findings:	6.9 UG/L
Chemical:	CHLOROFORM (THM)		
Sample Collected:	05/13/2002 00:00:00	Findings:	2.6 UG/L
Chemical:	TOLUENE		
Sample Collected:	05/13/2002 00:00:00	Findings:	18 UG/L
Chemical:	BROMOMETHANE		
Sample Collected:	05/13/2002 00:00:00	Findings:	15 UG/L
Chemical:	CHLOROMETHANE		
Sample Collected:	05/13/2002 00:00:00	Findings:	17 UG/L
Chemical:	TOTAL TRIHALOMETHANES		
Sample Collected:	01/21/2002 00:00:00	Findings:	1 MG/L
Chemical:	FLUORIDE (F) (NATURAL-SOURCE)		
Sample Collected:	01/27/2003 00:00:00	Findings:	47 UG/L
Chemical:	ACETONE		
Sample Collected:	01/27/2003 00:00:00	Findings:	20.6 UG/L
Chemical:	TOTAL TRIHALOMETHANES		
Sample Collected:	01/27/2003 00:00:00	Findings:	2 PCI/L
Chemical:	GROSS ALPHA COUNTING ERROR		
Sample Collected:	01/27/2003 00:00:00	Findings:	1.6 PCI/L
Chemical:	GROSS BETA COUNTING ERROR		
Sample Collected:	01/27/2003 00:00:00	Findings:	.62 PCI/L
Chemical:	URANIUM COUNTING ERROR		
Sample Collected:	01/27/2003 00:00:00	Findings:	180 PCI/L
Chemical:	TRITIUM COUNTING ERROR		
Sample Collected:	01/27/2003 00:00:00	Findings:	.239 PCI/L
Chemical:	RADIUM 226 COUNTING ERROR		
Sample Collected:	01/27/2003 00:00:00	Findings:	.731 PCI/L
Chemical:	STRONTIUM-90 COUNTING ERROR		
Sample Collected:	04/14/2003 00:00:00	Findings:	200 UG/L
Chemical:	BORON		
Sample Collected:	04/14/2003 00:00:00	Findings:	.51 UG/L
Chemical:	CIS-1,2-DICHLOROETHYLENE		
Sample Collected:	07/15/2002 00:00:00	Findings:	.93 MG/L
Chemical:	FLUORIDE (F) (NATURAL-SOURCE)		

Sample Collected:	10/14/2002 00:00:00	Findings:	1.1 MG/L
Chemical:	FLUORIDE (F) (NATURAL-SOURCE)		
Sample Collected:	01/27/2003 00:00:00	Findings:	1.1 MG/L
Chemical:	FLUORIDE (F) (NATURAL-SOURCE)		
Sample Collected:	01/27/2003 00:00:00	Findings:	5.9 UG/L
Chemical:	BROMODICHLORMETHANE (THM)		
Sample Collected:	01/27/2003 00:00:00	Findings:	1.5 UG/L
Chemical:	BROMOFORM (THM)		
Sample Collected:	01/27/2003 00:00:00	Findings:	4.7 UG/L
Chemical:	DIBROMOCHLOROMETHANE (THM)		
Sample Collected:	01/27/2003 00:00:00	Findings:	8.5 UG/L
Chemical:	CHLOROFORM (THM)		
Sample Collected:	01/27/2003 00:00:00	Findings:	7.2 UG/L
Chemical:	CHLOROETHANE		
Sample Collected:	01/27/2003 00:00:00	Findings:	3.9 UG/L
Chemical:	BROMOMETHANE		
Sample Collected:	10/13/2003 00:00:00	Findings:	2 UG/L
Chemical:	BROMOMETHANE		
Sample Collected:	10/13/2003 00:00:00	Findings:	19 UG/L
Chemical:	CHLOROMETHANE		
Sample Collected:	10/13/2003 00:00:00	Findings:	11 UG/L
Chemical:	TOTAL TRIHALOMETHANES		
Sample Collected:	11/10/2003 00:00:00	Findings:	.95 PCI/L
Chemical:	GROSS ALPHA COUNTING ERROR		
Sample Collected:	11/10/2003 00:00:00	Findings:	.98 PCI/L
Chemical:	GROSS BETA COUNTING ERROR		
Sample Collected:	11/10/2003 00:00:00	Findings:	188 PCI/L
Chemical:	TRITIUM COUNTING ERROR		
Sample Collected:	11/10/2003 00:00:00	Findings:	.17 PCI/L
Chemical:	RADIUM 226 COUNTING ERROR		
Sample Collected:	11/10/2003 00:00:00	Findings:	.37 PCI/L
Chemical:	RADIUM 228 COUNTING ERROR		
Sample Collected:	11/10/2003 00:00:00	Findings:	.78 PCI/L
Chemical:	STRONTIUM-90 COUNTING ERROR		
Sample Collected:	11/10/2003 00:00:00	Findings:	.5 PCI/L
Chemical:	URANIUM COUNTING ERROR		
Sample Collected:	12/08/2003 00:00:00	Findings:	40 UNITS
Chemical:	COLOR		
Sample Collected:	12/08/2003 00:00:00	Findings:	790 US
Chemical:	SPECIFIC CONDUCTANCE		
Sample Collected:	12/08/2003 00:00:00	Findings:	7.24
Chemical:	PH, LABORATORY		
Sample Collected:	12/08/2003 00:00:00	Findings:	240 MG/L
Chemical:	ALKALINITY (TOTAL) AS CACO3		

Sample Collected:	12/08/2003 00:00:00	Findings:	293 MG/L
Chemical:	BICARBONATE ALKALINITY		
Sample Collected:	12/08/2003 00:00:00	Findings:	250 MG/L
Chemical:	HARDNESS (TOTAL) AS CACO3		
Sample Collected:	12/08/2003 00:00:00	Findings:	51 MG/L
Chemical:	CALCIUM		
Sample Collected:	12/08/2003 00:00:00	Findings:	30 MG/L
Chemical:	MAGNESIUM		
Sample Collected:	12/08/2003 00:00:00	Findings:	99 MG/L
Chemical:	SODIUM		
Sample Collected:	12/08/2003 00:00:00	Findings:	2.5 MG/L
Chemical:	POTASSIUM		
Sample Collected:	12/08/2003 00:00:00	Findings:	100 MG/L
Chemical:	CHLORIDE		
Sample Collected:	12/08/2003 00:00:00	Findings:	1.1 MG/L
Chemical:	FLUORIDE (F) (NATURAL-SOURCE)		
Sample Collected:	12/08/2003 00:00:00	Findings:	25 MG/L
Chemical:	SILICA		
Sample Collected:	12/08/2003 00:00:00	Findings:	2.5 UG/L
Chemical:	ARSENIC		
Sample Collected:	12/08/2003 00:00:00	Findings:	230 UG/L
Chemical:	BORON		
Sample Collected:	12/08/2003 00:00:00	Findings:	3500 UG/L
Chemical:	IRON		
Sample Collected:	12/08/2003 00:00:00	Findings:	350 UG/L
Chemical:	MANGANESE		
Sample Collected:	04/14/2003 00:00:00	Findings:	1 MG/L
Chemical:	FLUORIDE (TREATMENT RELATED-DISTRIBUTION)		
Sample Collected:	06/23/2003 00:00:00	Findings:	.4 PCI/L
Chemical:	GROSS ALPHA COUNTING ERROR		
Sample Collected:	06/23/2003 00:00:00	Findings:	.4 PCI/L
Chemical:	GROSS BETA COUNTING ERROR		
Sample Collected:	06/23/2003 00:00:00	Findings:	190 PCI/L
Chemical:	TRITIUM COUNTING ERROR		
Sample Collected:	06/23/2003 00:00:00	Findings:	.358 PCI/L
Chemical:	RADIUM 226 COUNTING ERROR		
Sample Collected:	06/23/2003 00:00:00	Findings:	180 PCI/L
Chemical:	STRONTIUM-90 COUNTING ERROR		
Sample Collected:	07/14/2003 00:00:00	Findings:	1.4 MG/L
Chemical:	FLUORIDE (F) (NATURAL-SOURCE)		
Sample Collected:	08/11/2003 00:00:00	Findings:	180 UG/L
Chemical:	BORON		
Sample Collected:	08/11/2003 00:00:00	Findings:	1.2 UG/L
Chemical:	CHROMIUM, HEXAVALENT		

Sample Collected:	08/11/2003 00:00:00	Findings:	1.37 PCI/L
Chemical:	GROSS ALPHA COUNTING ERROR		
Sample Collected:	08/11/2003 00:00:00	Findings:	1.56 PCI/L
Chemical:	GROSS BETA		
Sample Collected:	08/11/2003 00:00:00	Findings:	.912 PCI/L
Chemical:	GROSS BETA COUNTING ERROR		
Sample Collected:	08/11/2003 00:00:00	Findings:	186 PCI/L
Chemical:	TRITIUM COUNTING ERROR		
Sample Collected:	08/11/2003 00:00:00	Findings:	.173 PCI/L
Chemical:	RADIUM 226 COUNTING ERROR		
Sample Collected:	08/11/2003 00:00:00	Findings:	1.26 PCI/L
Chemical:	RADIUM 228 COUNTING ERROR		
Sample Collected:	08/11/2003 00:00:00	Findings:	.762 PCI/L
Chemical:	STRONTIUM-90 COUNTING ERROR		
Sample Collected:	08/11/2003 00:00:00	Findings:	1.28 PCI/L
Chemical:	URANIUM (PCI/L)		
Sample Collected:	08/11/2003 00:00:00	Findings:	.523 PCI/L
Chemical:	URANIUM COUNTING ERROR		
Sample Collected:	10/13/2003 00:00:00	Findings:	1.4 MG/L
Chemical:	FLUORIDE (F) (NATURAL-SOURCE)		
Sample Collected:	10/13/2003 00:00:00	Findings:	2.6 UG/L
Chemical:	BROMODICHLORMETHANE (THM)		
Sample Collected:	10/13/2003 00:00:00	Findings:	3.5 UG/L
Chemical:	DIBROMOCHLOROMETHANE (THM)		
Sample Collected:	10/13/2003 00:00:00	Findings:	4.9 UG/L
Chemical:	CHLOROFORM (THM)		
Sample Collected:	03/15/2004 00:00:00	Findings:	260 UG/L
Chemical:	BORON		
Sample Collected:	04/12/2004 00:00:00	Findings:	1 MG/L
Chemical:	FLUORIDE (F) (NATURAL-SOURCE)		
Sample Collected:	07/12/2004 00:00:00	Findings:	1.2 MG/L
Chemical:	FLUORIDE (F) (NATURAL-SOURCE)		
Sample Collected:	12/08/2003 00:00:00	Findings:	510 MG/L
Chemical:	TOTAL DISSOLVED SOLIDS		
Sample Collected:	12/08/2003 00:00:00	Findings:	20 NTU
Chemical:	TURBIDITY, LABORATORY		
Sample Collected:	01/26/2004 00:00:00	Findings:	1.1 MG/L
Chemical:	FLUORIDE (F) (NATURAL-SOURCE)		
Sample Collected:	02/18/2005 00:00:00	Findings:	250 UG/L
Chemical:	BORON		
Sample Collected:	04/19/2005 00:00:00	Findings:	1.3 MG/L
Chemical:	FLUORIDE (F) (NATURAL-SOURCE)		
Sample Collected:	08/09/2004 00:00:00	Findings:	260 UG/L
Chemical:	BORON		

Sample Collected:	10/11/2004 00:00:00	Findings:	1.2 MG/L
Chemical:	FLUORIDE (F) (NATURAL-SOURCE)		
Sample Collected:	10/11/2004 00:00:00	Findings:	.52 UG/L
Chemical:	CIS-1,2-DICHLOROETHYLENE		
Sample Collected:	01/24/2005 00:00:00	Findings:	1.1 MG/L
Chemical:	FLUORIDE (F) (NATURAL-SOURCE)		

B4
NNE **CA WELLS** **5994**
1/4 - 1/2 Mile
Higher

Water System Information:

Prime Station Code:	05S/06W-10K01 M	User ID:	ENG
FRDS Number:	4110011008	County:	San Mateo
District Number:	04	Station Type:	WELL/AMBNT/MUN/INTAKE
Water Type:	Well/Groundwater	Well Status:	Active Raw
Source Lat/Long:	373042.0 1222926.0	Precision:	100 Feet (one Second)
Source Name:	DENNISTON WELL 09		
System Number:	4110011		
System Name:	Coastside County Water Dist		
Organization That Operates System:			
	766 Main Street		
	Hlaf Moon Bay, CA 94019		
Pop Served:	12000	Connections:	4351
Area Served:	HALF MOON BAY		
Sample Collected:	08/30/1999 00:00:00	Findings:	1 PCI/L
Chemical:	GROSS ALPHA COUNTING ERROR		
Sample Collected:	02/28/2000 00:00:00	Findings:	.75 PCI/L
Chemical:	GROSS ALPHA COUNTING ERROR		
Sample Collected:	03/01/2005 00:00:00	Findings:	217 UNITS
Chemical:	COLOR		
Sample Collected:	03/01/2005 00:00:00	Findings:	2 TON
Chemical:	ODOR THRESHOLD @ 60 C		
Sample Collected:	03/01/2005 00:00:00	Findings:	840 US
Chemical:	SPECIFIC CONDUCTANCE		
Sample Collected:	03/01/2005 00:00:00	Findings:	7.7
Chemical:	PH, LABORATORY		
Sample Collected:	03/01/2005 00:00:00	Findings:	176 MG/L
Chemical:	ALKALINITY (TOTAL) AS CACO3		
Sample Collected:	03/01/2005 00:00:00	Findings:	214.7 MG/L
Chemical:	BICARBONATE ALKALINITY		
Sample Collected:	03/01/2005 00:00:00	Findings:	185 MG/L
Chemical:	HARDNESS (TOTAL) AS CACO3		
Sample Collected:	03/01/2005 00:00:00	Findings:	38 MG/L
Chemical:	CALCIUM		
Sample Collected:	03/01/2005 00:00:00	Findings:	22 MG/L
Chemical:	MAGNESIUM		

Sample Collected:	03/01/2005 00:00:00	Findings:	92 MG/L
Chemical:	SODIUM		
Sample Collected:	03/01/2005 00:00:00	Findings:	2 MG/L
Chemical:	POTASSIUM		
Sample Collected:	03/01/2005 00:00:00	Findings:	118 MG/L
Chemical:	CHLORIDE		
Sample Collected:	03/01/2005 00:00:00	Findings:	.53 MG/L
Chemical:	FLUORIDE (F) (NATURAL-SOURCE)		
Sample Collected:	03/01/2005 00:00:00	Findings:	4 UG/L
Chemical:	ARSENIC		
Sample Collected:	03/01/2005 00:00:00	Findings:	3146 UG/L
Chemical:	IRON		
Sample Collected:	03/01/2005 00:00:00	Findings:	296 UG/L
Chemical:	MANGANESE		
Sample Collected:	03/01/2005 00:00:00	Findings:	520 MG/L
Chemical:	TOTAL DISSOLVED SOLIDS		
Sample Collected:	03/01/2005 00:00:00	Findings:	.58
Chemical:	LANGELIER INDEX @ 60 C		
Sample Collected:	03/01/2005 00:00:00	Findings:	40 NTU
Chemical:	TURBIDITY, LABORATORY		
Sample Collected:	03/14/2005 00:00:00	Findings:	.49 PCI/L
Chemical:	GROSS ALPHA COUNTING ERROR		
Sample Collected:	05/16/2005 00:00:00	Findings:	.53 PCI/L
Chemical:	GROSS ALPHA COUNTING ERROR		
Sample Collected:	01/26/1999 00:00:00	Findings:	.4 MG/L
Chemical:	FLUORIDE (F) (NATURAL-SOURCE)		

5
NW **CA WELLS** **19632**
1/4 - 1/2 Mile
Higher

Water System Information:

Prime Station Code:	4110028-002	User ID:	ENG
FRDS Number:	4110028002	County:	San Mateo
District Number:	04	Station Type:	WELL/AMBNT
Water Type:	Well/Groundwater	Well Status:	Active Raw
Source Lat/Long:	373038.5 1222953.1	Precision:	100 Feet (one Second)
Source Name:	CORONA WELL		
System Number:	4110028		
System Name:	El Granada MHP		
Organization That Operates System:			
	164 Culebra		
	Moss Beach, CA 94038		
Pop Served:	900	Connections:	228
Area Served:	Not Reported		
Sample Collected:	08/09/2004 00:00:00	Findings:	210 UG/L
Chemical:	BORON		

Sample Collected:	10/11/2004 00:00:00	Findings:	.96 MG/L
Chemical:	FLUORIDE (F) (NATURAL-SOURCE)		
Sample Collected:	10/11/2004 00:00:00	Findings:	1.6 UG/L
Chemical:	CHLOROFORM (THM)		
Sample Collected:	10/11/2004 00:00:00	Findings:	.76 UG/L
Chemical:	TRICHLOROETHYLENE		
Sample Collected:	01/24/2005 00:00:00	Findings:	1.2 MG/L
Chemical:	FLUORIDE (F) (NATURAL-SOURCE)		
Sample Collected:	01/24/2005 00:00:00	Findings:	1.6 UG/L
Chemical:	CHLOROFORM (THM)		
Sample Collected:	01/24/2005 00:00:00	Findings:	1.1 UG/L
Chemical:	TRANS-1,2-DICHLOROETHYLENE		
Sample Collected:	01/24/2005 00:00:00	Findings:	8.1 UG/L
Chemical:	TRICHLOROETHYLENE		
Sample Collected:	01/24/2005 00:00:00	Findings:	3.6 UG/L
Chemical:	CIS-1,2-DICHLOROETHYLENE		
Sample Collected:	01/05/1999 00:00:00	Findings:	1 PCI/L
Chemical:	GROSS ALPHA COUNTING ERROR		
Sample Collected:	01/05/1999 00:00:00	Findings:	1.93 PCI/L
Chemical:	GROSS BETA		
Sample Collected:	01/05/1999 00:00:00	Findings:	.96 PCI/L
Chemical:	GROSS BETA COUNTING ERROR		
Sample Collected:	02/01/1999 00:00:00	Findings:	.27 PCI/L
Chemical:	GROSS ALPHA COUNTING ERROR		
Sample Collected:	02/01/1999 00:00:00	Findings:	5.61 PCI/L
Chemical:	GROSS BETA		
Sample Collected:	02/01/1999 00:00:00	Findings:	.48 PCI/L
Chemical:	GROSS BETA COUNTING ERROR		
Sample Collected:	03/04/1999 00:00:00	Findings:	1.27 UG/L
Chemical:	BROMODICHLORMETHANE (THM)		
Sample Collected:	03/04/1999 00:00:00	Findings:	12.9 UG/L
Chemical:	BROMOFORM (THM)		
Sample Collected:	03/04/1999 00:00:00	Findings:	2.52 UG/L
Chemical:	DIBROMOCHLOROMETHANE (THM)		
Sample Collected:	03/04/1999 00:00:00	Findings:	1.99 UG/L
Chemical:	CHLOROFORM (THM)		
Sample Collected:	03/04/1999 00:00:00	Findings:	.82 UG/L
Chemical:	CHLOROMETHANE		
Sample Collected:	03/04/1999 00:00:00	Findings:	3.95 UG/L
Chemical:	TRICHLOROETHYLENE		
Sample Collected:	03/04/1999 00:00:00	Findings:	18.68 UG/L
Chemical:	TOTAL TRIHALOMETHANES		
Sample Collected:	06/07/1999 00:00:00	Findings:	1.57 UG/L
Chemical:	TETRACHLOROETHYLENE		

Sample Collected:	06/07/1999 00:00:00	Findings:	.701 UG/L
Chemical:	VINYL CHLORIDE		
Sample Collected:	06/07/1999 00:00:00	Findings:	14.6 UG/L
Chemical:	TRICHLOROETHYLENE		
Sample Collected:	06/07/1999 00:00:00	Findings:	1.95 UG/L
Chemical:	CIS-1,2-DICHLOROETHYLENE		
Sample Collected:	07/05/1999 00:00:00	Findings:	.92 PCI/L
Chemical:	GROSS ALPHA COUNTING ERROR		
Sample Collected:	07/05/1999 00:00:00	Findings:	4.36 PCI/L
Chemical:	GROSS BETA		
Sample Collected:	07/05/1999 00:00:00	Findings:	1 PCI/L
Chemical:	GROSS BETA COUNTING ERROR		
Sample Collected:	07/05/1999 00:00:00	Findings:	.92 PCI/L
Chemical:	GROSS ALPHA COUNTING ERROR		
Sample Collected:	07/05/1999 00:00:00	Findings:	4.36 PCI/L
Chemical:	GROSS BETA		
Sample Collected:	07/05/1999 00:00:00	Findings:	1 PCI/L
Chemical:	GROSS BETA COUNTING ERROR		
Sample Collected:	12/06/1999 00:00:00	Findings:	.78 UG/L
Chemical:	TRICHLOROETHYLENE		
Sample Collected:	12/20/1999 00:00:00	Findings:	.48 PCI/L
Chemical:	GROSS ALPHA COUNTING ERROR		
Sample Collected:	12/20/1999 00:00:00	Findings:	4 PCI/L
Chemical:	GROSS BETA COUNTING ERROR		
Sample Collected:	03/06/2000 00:00:00	Findings:	.53 UG/L
Chemical:	TETRACHLOROETHYLENE		
Sample Collected:	03/06/2000 00:00:00	Findings:	7.7 UG/L
Chemical:	TRICHLOROETHYLENE		
Sample Collected:	03/06/2000 00:00:00	Findings:	1.4 UG/L
Chemical:	CIS-1,2-DICHLOROETHYLENE		
Sample Collected:	04/16/2001 00:00:00	Findings:	1.1 MG/L
Chemical:	FLUORIDE (F) (NATURAL-SOURCE)		
Sample Collected:	04/16/2001 00:00:00	Findings:	7.1 UG/L
Chemical:	TRICHLOROETHYLENE		
Sample Collected:	04/16/2001 00:00:00	Findings:	1.4 UG/L
Chemical:	CIS-1,2-DICHLOROETHYLENE		
Sample Collected:	07/16/2001 00:00:00	Findings:	1.1 MG/L
Chemical:	FLUORIDE (F) (NATURAL-SOURCE)		
Sample Collected:	07/16/2001 00:00:00	Findings:	6.5 UG/L
Chemical:	TRICHLOROETHYLENE		
Sample Collected:	07/16/2001 00:00:00	Findings:	1.4 UG/L
Chemical:	CIS-1,2-DICHLOROETHYLENE		
Sample Collected:	01/21/2002 00:00:00	Findings:	1.1 MG/L
Chemical:	FLUORIDE (F) (NATURAL-SOURCE)		

Sample Collected:	01/21/2002 00:00:00	Findings:	7.3 UG/L
Chemical:	CHLOROFORM (THM)		
Sample Collected:	01/21/2002 00:00:00	Findings:	.64 UG/L
Chemical:	TETRACHLOROETHYLENE		
Sample Collected:	01/21/2002 00:00:00	Findings:	8.7 UG/L
Chemical:	TRICHLOROETHYLENE		
Sample Collected:	01/21/2002 00:00:00	Findings:	1.6 UG/L
Chemical:	CIS-1,2-DICHLOROETHYLENE		
Sample Collected:	01/21/2002 00:00:00	Findings:	7.3 UG/L
Chemical:	TOTAL TRIHALOMETHANES		
Sample Collected:	05/13/2002 00:00:00	Findings:	.92 MG/L
Chemical:	FLUORIDE (F) (NATURAL-SOURCE)		
Sample Collected:	05/13/2002 00:00:00	Findings:	.66 UG/L
Chemical:	TETRACHLOROETHYLENE		
Sample Collected:	05/13/2002 00:00:00	Findings:	.57 UG/L
Chemical:	TRANS-1,2-DICHLOROETHYLENE		
Sample Collected:	05/13/2002 00:00:00	Findings:	9.5 UG/L
Chemical:	TRICHLOROETHYLENE		
Sample Collected:	05/13/2002 00:00:00	Findings:	1.6 UG/L
Chemical:	CIS-1,2-DICHLOROETHYLENE		
Sample Collected:	07/15/2002 00:00:00	Findings:	.98 MG/L
Chemical:	FLUORIDE (F) (NATURAL-SOURCE)		
Sample Collected:	07/15/2002 00:00:00	Findings:	.65 UG/L
Chemical:	TETRACHLOROETHYLENE		
Sample Collected:	07/15/2002 00:00:00	Findings:	6.3 UG/L
Chemical:	TRICHLOROETHYLENE		
Sample Collected:	07/15/2002 00:00:00	Findings:	1.5 UG/L
Chemical:	CIS-1,2-DICHLOROETHYLENE		
Sample Collected:	07/15/2002 00:00:00	Findings:	.5 UG/L
Chemical:	TOTAL TRIHALOMETHANES		
Sample Collected:	10/14/2002 00:00:00	Findings:	1.2 MG/L
Chemical:	FLUORIDE (F) (NATURAL-SOURCE)		
Sample Collected:	10/14/2002 00:00:00	Findings:	1.7 UG/L
Chemical:	TETRACHLOROETHYLENE		
Sample Collected:	10/14/2002 00:00:00	Findings:	6.7 UG/L
Chemical:	TRICHLOROETHYLENE		
Sample Collected:	10/14/2002 00:00:00	Findings:	1.2 UG/L
Chemical:	CIS-1,2-DICHLOROETHYLENE		
Sample Collected:	01/27/2003 00:00:00	Findings:	1.5 MG/L
Chemical:	FLUORIDE (F) (NATURAL-SOURCE)		
Sample Collected:	01/27/2003 00:00:00	Findings:	13 UG/L
Chemical:	CHLOROFORM (THM)		
Sample Collected:	01/27/2003 00:00:00	Findings:	.79 UG/L
Chemical:	TRANS-1,2-DICHLOROETHYLENE		

Sample Collected:	01/27/2003 00:00:00	Findings:	6.1 UG/L
Chemical:	TRICHLOROETHYLENE		
Sample Collected:	01/27/2003 00:00:00	Findings:	2.9 UG/L
Chemical:	CIS-1,2-DICHLOROETHYLENE		
Sample Collected:	01/27/2003 00:00:00	Findings:	13 UG/L
Chemical:	TOTAL TRIHALOMETHANES		
Sample Collected:	01/27/2003 00:00:00	Findings:	1.3 PCI/L
Chemical:	GROSS ALPHA COUNTING ERROR		
Sample Collected:	01/27/2003 00:00:00	Findings:	1.1 PCI/L
Chemical:	GROSS BETA COUNTING ERROR		
Sample Collected:	01/27/2003 00:00:00	Findings:	.69 PCI/L
Chemical:	URANIUM COUNTING ERROR		
Sample Collected:	01/27/2003 00:00:00	Findings:	185 PCI/L
Chemical:	TRITIUM COUNTING ERROR		
Sample Collected:	01/27/2003 00:00:00	Findings:	.215 PCI/L
Chemical:	RADIUM 226 COUNTING ERROR		
Sample Collected:	01/27/2003 00:00:00	Findings:	.715 PCI/L
Chemical:	STRONTIUM-90 COUNTING ERROR		
Sample Collected:	04/14/2003 00:00:00	Findings:	180 UG/L
Chemical:	BORON		
Sample Collected:	04/14/2003 00:00:00	Findings:	.85 UG/L
Chemical:	TRANS-1,2-DICHLOROETHYLENE		
Sample Collected:	04/14/2003 00:00:00	Findings:	6.9 UG/L
Chemical:	TRICHLOROETHYLENE		
Sample Collected:	04/14/2003 00:00:00	Findings:	3.2 UG/L
Chemical:	CIS-1,2-DICHLOROETHYLENE		
Sample Collected:	04/14/2003 00:00:00	Findings:	.95 MG/L
Chemical:	FLUORIDE (TREATMENT RELATED-DISTRIBUTION)		
Sample Collected:	06/23/2003 00:00:00	Findings:	.45 PCI/L
Chemical:	GROSS ALPHA COUNTING ERROR		
Sample Collected:	06/23/2003 00:00:00	Findings:	.4 PCI/L
Chemical:	GROSS BETA COUNTING ERROR		
Sample Collected:	06/23/2003 00:00:00	Findings:	186 PCI/L
Chemical:	TRITIUM COUNTING ERROR		
Sample Collected:	06/23/2003 00:00:00	Findings:	.357 PCI/L
Chemical:	RADIUM 226 COUNTING ERROR		
Sample Collected:	06/23/2003 00:00:00	Findings:	.831 PCI/L
Chemical:	STRONTIUM-90 COUNTING ERROR		
Sample Collected:	07/14/2003 00:00:00	Findings:	1.5 MG/L
Chemical:	FLUORIDE (F) (NATURAL-SOURCE)		
Sample Collected:	07/14/2003 00:00:00	Findings:	.71 UG/L
Chemical:	TRANS-1,2-DICHLOROETHYLENE		
Sample Collected:	07/14/2003 00:00:00	Findings:	6.7 UG/L
Chemical:	TRICHLOROETHYLENE		

Sample Collected:	07/14/2003 00:00:00	Findings:	2.8 UG/L
Chemical:	CIS-1,2-DICHLOROETHYLENE		
Sample Collected:	08/11/2003 00:00:00	Findings:	190 UG/L
Chemical:	BORON		
Sample Collected:	08/11/2003 00:00:00	Findings:	.81 PCI/L
Chemical:	GROSS ALPHA COUNTING ERROR		
Sample Collected:	08/11/2003 00:00:00	Findings:	.565 PCI/L
Chemical:	GROSS BETA COUNTING ERROR		
Sample Collected:	08/11/2003 00:00:00	Findings:	184 PCI/L
Chemical:	TRITIUM COUNTING ERROR		
Sample Collected:	08/11/2003 00:00:00	Findings:	.174 PCI/L
Chemical:	RADIUM 226 COUNTING ERROR		
Sample Collected:	08/11/2003 00:00:00	Findings:	.52 PCI/L
Chemical:	RADIUM 228 COUNTING ERROR		
Sample Collected:	08/11/2003 00:00:00	Findings:	.745 PCI/L
Chemical:	STRONTIUM-90 COUNTING ERROR		
Sample Collected:	08/11/2003 00:00:00	Findings:	1.25 PCI/L
Chemical:	URANIUM (PCI/L)		
Sample Collected:	08/11/2003 00:00:00	Findings:	.49 PCI/L
Chemical:	URANIUM COUNTING ERROR		
Sample Collected:	10/13/2003 00:00:00	Findings:	1.7 MG/L
Chemical:	FLUORIDE (F) (NATURAL-SOURCE)		
Sample Collected:	10/13/2003 00:00:00	Findings:	.85 UG/L
Chemical:	TRANS-1,2-DICHLOROETHYLENE		
Sample Collected:	10/13/2003 00:00:00	Findings:	6.8 UG/L
Chemical:	TRICHLOROETHYLENE		
Sample Collected:	10/13/2003 00:00:00	Findings:	3.1 UG/L
Chemical:	CIS-1,2-DICHLOROETHYLENE		
Sample Collected:	11/10/2003 00:00:00	Findings:	.65 PCI/L
Chemical:	GROSS ALPHA COUNTING ERROR		
Sample Collected:	11/10/2003 00:00:00	Findings:	.69 PCI/L
Chemical:	GROSS BETA COUNTING ERROR		
Sample Collected:	11/10/2003 00:00:00	Findings:	186 PCI/L
Chemical:	TRITIUM COUNTING ERROR		
Sample Collected:	11/10/2003 00:00:00	Findings:	.19 PCI/L
Chemical:	RADIUM 226 COUNTING ERROR		
Sample Collected:	11/10/2003 00:00:00	Findings:	.61 PCI/L
Chemical:	RADIUM 228 COUNTING ERROR		
Sample Collected:	11/10/2003 00:00:00	Findings:	.83 PCI/L
Chemical:	STRONTIUM-90 COUNTING ERROR		
Sample Collected:	11/10/2003 00:00:00	Findings:	.34 PCI/L
Chemical:	URANIUM COUNTING ERROR		
Sample Collected:	12/08/2003 00:00:00	Findings:	80 UNITS
Chemical:	COLOR		

Sample Collected:	12/08/2003 00:00:00	Findings:	590 US
Chemical:	SPECIFIC CONDUCTANCE		
Sample Collected:	12/08/2003 00:00:00	Findings:	7.16
Chemical:	PH, LABORATORY		
Sample Collected:	12/08/2003 00:00:00	Findings:	150 MG/L
Chemical:	ALKALINITY (TOTAL) AS CACO3		
Sample Collected:	12/08/2003 00:00:00	Findings:	183 MG/L
Chemical:	BICARBONATE ALKALINITY		
Sample Collected:	12/08/2003 00:00:00	Findings:	160 MG/L
Chemical:	HARDNESS (TOTAL) AS CACO3		
Sample Collected:	12/08/2003 00:00:00	Findings:	34 MG/L
Chemical:	CALCIUM		
Sample Collected:	12/08/2003 00:00:00	Findings:	18 MG/L
Chemical:	MAGNESIUM		
Sample Collected:	12/08/2003 00:00:00	Findings:	71 MG/L
Chemical:	SODIUM		
Sample Collected:	12/08/2003 00:00:00	Findings:	2.3 MG/L
Chemical:	POTASSIUM		
Sample Collected:	12/08/2003 00:00:00	Findings:	92 MG/L
Chemical:	CHLORIDE		
Sample Collected:	12/08/2003 00:00:00	Findings:	1.3 MG/L
Chemical:	FLUORIDE (F) (NATURAL-SOURCE)		
Sample Collected:	12/08/2003 00:00:00	Findings:	2.2 UG/L
Chemical:	ARSENIC		
Sample Collected:	12/08/2003 00:00:00	Findings:	220 UG/L
Chemical:	BORON		
Sample Collected:	12/08/2003 00:00:00	Findings:	5100 UG/L
Chemical:	IRON		
Sample Collected:	12/08/2003 00:00:00	Findings:	250 UG/L
Chemical:	MANGANESE		
Sample Collected:	12/08/2003 00:00:00	Findings:	360 MG/L
Chemical:	TOTAL DISSOLVED SOLIDS		
Sample Collected:	12/08/2003 00:00:00	Findings:	37 NTU
Chemical:	TURBIDITY, LABORATORY		
Sample Collected:	01/26/2004 00:00:00	Findings:	1.2 MG/L
Chemical:	FLUORIDE (F) (NATURAL-SOURCE)		
Sample Collected:	01/26/2004 00:00:00	Findings:	1.1 UG/L
Chemical:	TRANS-1,2-DICHLOROETHYLENE		
Sample Collected:	01/26/2004 00:00:00	Findings:	9 UG/L
Chemical:	TRICHLOROETHYLENE		
Sample Collected:	01/26/2004 00:00:00	Findings:	5 UG/L
Chemical:	CIS-1,2-DICHLOROETHYLENE		
Sample Collected:	03/15/2004 00:00:00	Findings:	190 UG/L
Chemical:	BORON		

Sample Collected:	04/12/2004 00:00:00	Findings:	1.2 MG/L
Chemical:	FLUORIDE (F) (NATURAL-SOURCE)		
Sample Collected:	04/12/2004 00:00:00	Findings:	1 UG/L
Chemical:	TRANS-1,2-DICHLOROETHYLENE		
Sample Collected:	04/12/2004 00:00:00	Findings:	7.2 UG/L
Chemical:	TRICHLOROETHYLENE		
Sample Collected:	04/12/2004 00:00:00	Findings:	4.2 UG/L
Chemical:	CIS-1,2-DICHLOROETHYLENE		
Sample Collected:	07/12/2004 00:00:00	Findings:	1.2 MG/L
Chemical:	FLUORIDE (F) (NATURAL-SOURCE)		
Sample Collected:	07/12/2004 00:00:00	Findings:	.59 UG/L
Chemical:	TRANS-1,2-DICHLOROETHYLENE		
Sample Collected:	07/12/2004 00:00:00	Findings:	5.1 UG/L
Chemical:	TRICHLOROETHYLENE		
Sample Collected:	07/12/2004 00:00:00	Findings:	2.3 UG/L
Chemical:	CIS-1,2-DICHLOROETHYLENE		
Sample Collected:	01/24/2005 00:00:00	Findings:	1.6 UG/L
Chemical:	TOTAL TRIHALOMETHANES		
Sample Collected:	02/18/2005 00:00:00	Findings:	200 UG/L
Chemical:	BORON		
Sample Collected:	04/19/2005 00:00:00	Findings:	1.4 MG/L
Chemical:	FLUORIDE (F) (NATURAL-SOURCE)		
Sample Collected:	04/19/2005 00:00:00	Findings:	.79 UG/L
Chemical:	TRANS-1,2-DICHLOROETHYLENE		
Sample Collected:	04/19/2005 00:00:00	Findings:	7.5 UG/L
Chemical:	TRICHLOROETHYLENE		
Sample Collected:	04/19/2005 00:00:00	Findings:	2.9 UG/L
Chemical:	CIS-1,2-DICHLOROETHYLENE		
Sample Collected:	07/17/2005 00:00:00	Findings:	1.2 MG/L
Chemical:	FLUORIDE (F) (NATURAL-SOURCE)		
Sample Collected:	07/20/2006 00:00:00	Findings:	1.3 MG/L
Chemical:	FLUORIDE (F) (NATURAL-SOURCE)		
Sample Collected:	07/20/2006 00:00:00	Findings:	1.2 UG/L
Chemical:	TRANS-1,2-DICHLOROETHYLENE		
Sample Collected:	07/20/2006 00:00:00	Findings:	6.5 UG/L
Chemical:	TRICHLOROETHYLENE		
Sample Collected:	07/20/2006 00:00:00	Findings:	3.6 UG/L
Chemical:	CIS-1,2-DICHLOROETHYLENE		
Sample Collected:	07/17/2005 00:00:00	Findings:	.86 UG/L
Chemical:	TRANS-1,2-DICHLOROETHYLENE		
Sample Collected:	07/17/2005 00:00:00	Findings:	6.4 UG/L
Chemical:	TRICHLOROETHYLENE		
Sample Collected:	07/17/2005 00:00:00	Findings:	3 UG/L
Chemical:	CIS-1,2-DICHLOROETHYLENE		

Sample Collected:	08/25/2005 00:00:00	Findings:	210 UG/L
Chemical:	BORON		
Sample Collected:	04/20/2006 00:00:00	Findings:	1.4 MG/L
Chemical:	FLUORIDE (F) (NATURAL-SOURCE)		
Sample Collected:	04/20/2006 00:00:00	Findings:	1.2 UG/L
Chemical:	TRANS-1,2-DICHLOROETHYLENE		
Sample Collected:	04/20/2006 00:00:00	Findings:	6.3 UG/L
Chemical:	TRICHLOROETHYLENE		
Sample Collected:	04/20/2006 00:00:00	Findings:	4.1 UG/L
Chemical:	CIS-1,2-DICHLOROETHYLENE		

A6
NW
1/4 - 1/2 Mile
Higher

CA WELLS **CADW00000037007**

Longn:	-122.4986		
Latn:	37.5103		
Stwellno:	05S06W10J001M		
Districtco:	7		
Wellusecod:	IS		
Countycode:	41		
Gwcode:	202200	County:	San Mateo
State:	CA	Gw name:	Half Moon Bay Terrace
District:	Central District		
Descriptio:	Irrigation & Stock		

B7
North
1/2 - 1 Mile
Higher

FED USGS **USGS3236047**

Agency cd:	USGS	Site no:	373045122292801
Site name:	005S006W11E003M		
Latitude:	373045		
Longitude:	1222928	Dec lat:	37.51244071
Dec lon:	-122.49220006	Coor meth:	M
Coor accr:	S	Latlong datum:	NAD27
Dec latlong datum:	NAD83	District:	06
State:	06	County:	081
Country:	US	Land net:	SESES11 T05S R06W M
Location map:	HALF MOON BAY	Map scale:	24000
Altitude:	49.00		
Altitude method:	Interpolated from topographic map		
Altitude accuracy:	Not Reported		
Altitude datum:	National Geodetic Vertical Datum of 1929		
Hydrologic:	San Francisco Coastal South. California. Area = 256 sq.mi.		
Topographic:	Flat surface		
Site type:	Ground-water other than Spring	Date construction:	19570426
Date inventoried:	Not Reported	Mean greenwich time offset:	PST
Local standard time flag:	Y		
Type of ground water site:	Single well, other than collector or Ranney type		
Aquifer Type:	Not Reported		
Aquifer:	Not Reported		
Well depth:	87.0	Hole depth:	92.0
Source of depth data:	Not Reported		
Project number:	9479200205		
Real time data flag:	0	Daily flow data begin date:	0000-00-00
Daily flow data end date:	0000-00-00	Daily flow data count:	0
Peak flow data begin date:	0000-00-00	Peak flow data end date:	0000-00-00

Peak flow data count: 0
Water quality data begin date: 0000-00-00
Water quality data end date: 0000-00-00
Water quality data count: 0
Ground water data begin date: 1979-04-18
Ground water data end date: 1994-04-14
Ground water data count: 33

Ground-water levels, Number of Measurements: 33

Date	Feet below Surface	Feet to Sealevel	Date	Feet below Surface	Feet to Sealevel
1994-04-14	4.84		1993-10-20	8.81	
1993-04-26	2.44		1992-10-14	9.61	
1992-04-15	3.10		1991-11-20	39.34	
1991-10-08	38.19		1991-04-17	42.19	
1990-10-10	44.43		1990-04-27	26.78	
1989-10-25	44.09				
Note: A nearby site that taps the same aquifer was being pumped.					
1989-10-12	45.17				
1989-04-13	24.50				
Note: A nearby site that taps the same aquifer was being pumped.					
1989-04-11	24.57		1988-10-20	24.66	
1988-03-25	22.75		1987-10-06	24.48	
1986-10-30	24.52		1986-05-07	20.85	
1985-10-13	25.04		1985-03-30	16.75	
1984-10-23	25.04		1984-04-14	15.12	
1983-10-13	19.54		1983-04-12	15.12	
1982-10-13	19.54				
1982-09-14	22.94				
Note: A nearby site that taps the same aquifer was being pumped.					
1982-04-15	20.14		1981-09-15	29.54	
1981-04-20	18.85				
1980-04-16	17.34				
Note: A nearby site that taps the same aquifer was being pumped.					
1979-10-02	25.69		1979-04-18	17.46	

C8
NW
1/2 - 1 Mile
Higher

CA WELLS **19634**

Water System Information:

Prime Station Code: 4110028-004
User ID: ENG
FRDS Number: 4110028004
County: San Mateo
District Number: 04
Station Type: WELL/AMBNT
Water Type: Well/Groundwater
Well Status: Active Raw
Source Lat/Long: 373037.6 1222959.8
Precision: 100 Feet (one Second)
Source Name: CULEBRA WELL
System Number: 4110028
System Name: El Granada MHP
Organization That Operates System:
164 Culebra
Moss Beach, CA 94038
Pop Served: 900
Connections: 228
Area Served: Not Reported

Sample Collected:	01/05/1999 00:00:00	Findings:	1 PCI/L
Chemical:	GROSS ALPHA COUNTING ERROR		
Sample Collected:	01/05/1999 00:00:00	Findings:	1.59 PCI/L
Chemical:	GROSS BETA		
Sample Collected:	01/05/1999 00:00:00	Findings:	.77 PCI/L
Chemical:	GROSS BETA COUNTING ERROR		
Sample Collected:	01/28/1999 00:00:00	Findings:	.75 PCI/L
Chemical:	GROSS ALPHA COUNTING ERROR		
Sample Collected:	01/28/1999 00:00:00	Findings:	1.89 PCI/L
Chemical:	GROSS BETA		
Sample Collected:	01/28/1999 00:00:00	Findings:	.76 PCI/L
Chemical:	GROSS BETA COUNTING ERROR		
Sample Collected:	02/01/1999 00:00:00	Findings:	.37 PCI/L
Chemical:	GROSS ALPHA COUNTING ERROR		
Sample Collected:	02/01/1999 00:00:00	Findings:	5.11 PCI/L
Chemical:	GROSS BETA		
Sample Collected:	02/01/1999 00:00:00	Findings:	.5 PCI/L
Chemical:	GROSS BETA COUNTING ERROR		
Sample Collected:	07/05/1999 00:00:00	Findings:	.49 PCI/L
Chemical:	GROSS ALPHA COUNTING ERROR		
Sample Collected:	07/05/1999 00:00:00	Findings:	3.57 PCI/L
Chemical:	GROSS BETA		
Sample Collected:	07/05/1999 00:00:00	Findings:	.8 PCI/L
Chemical:	GROSS BETA COUNTING ERROR		
Sample Collected:	07/05/1999 00:00:00	Findings:	.49 PCI/L
Chemical:	GROSS ALPHA COUNTING ERROR		
Sample Collected:	07/05/1999 00:00:00	Findings:	3.57 PCI/L
Chemical:	GROSS BETA		
Sample Collected:	07/05/1999 00:00:00	Findings:	.8 PCI/L
Chemical:	GROSS BETA COUNTING ERROR		
Sample Collected:	12/20/1999 00:00:00	Findings:	.51 PCI/L
Chemical:	GROSS ALPHA COUNTING ERROR		
Sample Collected:	12/20/1999 00:00:00	Findings:	1.65 PCI/L
Chemical:	GROSS BETA		
Sample Collected:	12/20/1999 00:00:00	Findings:	.7 PCI/L
Chemical:	GROSS BETA COUNTING ERROR		
Sample Collected:	03/05/2001 00:00:00	Findings:	4800 UG/L
Chemical:	IRON		
Sample Collected:	03/05/2001 00:00:00	Findings:	370 UG/L
Chemical:	MANGANESE		
Sample Collected:	04/16/2001 00:00:00	Findings:	1.1 MG/L
Chemical:	FLUORIDE (F) (NATURAL-SOURCE)		
Sample Collected:	04/16/2001 00:00:00	Findings:	8.8 UG/L
Chemical:	TRICHLOROETHYLENE		

Sample Collected:	04/16/2001 00:00:00	Findings:	1.3 UG/L
Chemical:	CIS-1,2-DICHLOROETHYLENE		
Sample Collected:	07/16/2001 00:00:00	Findings:	1.1 MG/L
Chemical:	FLUORIDE (F) (NATURAL-SOURCE)		
Sample Collected:	07/16/2001 00:00:00	Findings:	9 UG/L
Chemical:	TRICHLOROETHYLENE		
Sample Collected:	07/16/2001 00:00:00	Findings:	2.2 UG/L
Chemical:	CIS-1,2-DICHLOROETHYLENE		
Sample Collected:	02/11/2002 00:00:00	Findings:	.94 MG/L
Chemical:	FLUORIDE (F) (NATURAL-SOURCE)		
Sample Collected:	02/11/2002 00:00:00	Findings:	2 UG/L
Chemical:	DIBROMOCHLOROMETHANE (THM)		
Sample Collected:	02/11/2002 00:00:00	Findings:	6.2 UG/L
Chemical:	TRICHLOROETHYLENE		
Sample Collected:	02/11/2002 00:00:00	Findings:	1.7 UG/L
Chemical:	CIS-1,2-DICHLOROETHYLENE		
Sample Collected:	02/11/2002 00:00:00	Findings:	2 UG/L
Chemical:	TOTAL TRIHALOMETHANES		
Sample Collected:	05/13/2002 00:00:00	Findings:	1 MG/L
Chemical:	FLUORIDE (F) (NATURAL-SOURCE)		
Sample Collected:	05/13/2002 00:00:00	Findings:	.67 UG/L
Chemical:	TETRACHLOROETHYLENE		
Sample Collected:	05/13/2002 00:00:00	Findings:	7.1 UG/L
Chemical:	TRICHLOROETHYLENE		
Sample Collected:	05/13/2002 00:00:00	Findings:	1.6 UG/L
Chemical:	CIS-1,2-DICHLOROETHYLENE		
Sample Collected:	07/15/2002 00:00:00	Findings:	.7 MG/L
Chemical:	FLUORIDE (F) (NATURAL-SOURCE)		
Sample Collected:	10/14/2002 00:00:00	Findings:	.83 MG/L
Chemical:	FLUORIDE (F) (NATURAL-SOURCE)		
Sample Collected:	01/27/2003 00:00:00	Findings:	.95 MG/L
Chemical:	FLUORIDE (F) (NATURAL-SOURCE)		
Sample Collected:	01/27/2003 00:00:00	Findings:	2.5 UG/L
Chemical:	CHLOROFORM (THM)		
Sample Collected:	01/27/2003 00:00:00	Findings:	4.26 UG/L
Chemical:	TOTAL TRIHALOMETHANES		
Sample Collected:	01/27/2003 00:00:00	Findings:	1.6 PCI/L
Chemical:	GROSS ALPHA COUNTING ERROR		
Sample Collected:	01/27/2003 00:00:00	Findings:	1.3 PCI/L
Chemical:	GROSS BETA COUNTING ERROR		
Sample Collected:	01/27/2003 00:00:00	Findings:	.68 PCI/L
Chemical:	URANIUM COUNTING ERROR		
Sample Collected:	01/27/2003 00:00:00	Findings:	179 PCI/L
Chemical:	TRITIUM COUNTING ERROR		

Sample Collected:	01/27/2003 00:00:00	Findings:	.239 PCI/L
Chemical:	RADIUM 226 COUNTING ERROR		
Sample Collected:	01/27/2003 00:00:00	Findings:	.733 PCI/L
Chemical:	STRONTIUM-90 COUNTING ERROR		
Sample Collected:	04/14/2003 00:00:00	Findings:	160 UG/L
Chemical:	BORON		
Sample Collected:	04/14/2003 00:00:00	Findings:	.71 MG/L
Chemical:	FLUORIDE (TREATMENT RELATED-DISTRIBUTION)		
Sample Collected:	06/23/2003 00:00:00	Findings:	.5 PCI/L
Chemical:	GROSS ALPHA COUNTING ERROR		
Sample Collected:	06/23/2003 00:00:00	Findings:	.5 PCI/L
Chemical:	GROSS BETA COUNTING ERROR		
Sample Collected:	06/23/2003 00:00:00	Findings:	188 PCI/L
Chemical:	TRITIUM COUNTING ERROR		
Sample Collected:	06/23/2003 00:00:00	Findings:	.195 PCI/L
Chemical:	RADIUM 226 COUNTING ERROR		
Sample Collected:	06/23/2003 00:00:00	Findings:	181 PCI/L
Chemical:	STRONTIUM-90 COUNTING ERROR		
Sample Collected:	07/14/2003 00:00:00	Findings:	.86 MG/L
Chemical:	FLUORIDE (F) (NATURAL-SOURCE)		
Sample Collected:	08/11/2003 00:00:00	Findings:	220 UG/L
Chemical:	BORON		
Sample Collected:	08/11/2003 00:00:00	Findings:	.758 PCI/L
Chemical:	GROSS ALPHA COUNTING ERROR		
Sample Collected:	08/11/2003 00:00:00	Findings:	1.03 PCI/L
Chemical:	GROSS BETA		
Sample Collected:	08/11/2003 00:00:00	Findings:	.946 PCI/L
Chemical:	GROSS BETA COUNTING ERROR		
Sample Collected:	08/11/2003 00:00:00	Findings:	187 PCI/L
Chemical:	TRITIUM COUNTING ERROR		
Sample Collected:	08/11/2003 00:00:00	Findings:	.199 PCI/L
Chemical:	RADIUM 226 COUNTING ERROR		
Sample Collected:	08/11/2003 00:00:00	Findings:	.493 PCI/L
Chemical:	RADIUM 228 COUNTING ERROR		
Sample Collected:	08/11/2003 00:00:00	Findings:	.839 PCI/L
Chemical:	STRONTIUM-90 COUNTING ERROR		
Sample Collected:	08/11/2003 00:00:00	Findings:	1.37 PCI/L
Chemical:	URANIUM (PCI/L)		
Sample Collected:	08/11/2003 00:00:00	Findings:	.509 PCI/L
Chemical:	URANIUM COUNTING ERROR		
Sample Collected:	10/13/2003 00:00:00	Findings:	1.1 MG/L
Chemical:	FLUORIDE (F) (NATURAL-SOURCE)		
Sample Collected:	11/10/2003 00:00:00	Findings:	1.27 PCI/L
Chemical:	GROSS ALPHA COUNTING ERROR		

Sample Collected:	11/10/2003 00:00:00	Findings:	1.03 PCI/L
Chemical:	GROSS BETA COUNTING ERROR		
Sample Collected:	11/10/2003 00:00:00	Findings:	186 PCI/L
Chemical:	TRITIUM COUNTING ERROR		
Sample Collected:	11/10/2003 00:00:00	Findings:	.24 PCI/L
Chemical:	RADIUM 226 COUNTING ERROR		
Sample Collected:	11/10/2003 00:00:00	Findings:	.35 PCI/L
Chemical:	RADIUM 228 COUNTING ERROR		
Sample Collected:	11/10/2003 00:00:00	Findings:	.79 PCI/L
Chemical:	STRONTIUM-90 COUNTING ERROR		
Sample Collected:	11/10/2003 00:00:00	Findings:	.45 PCI/L
Chemical:	URANIUM COUNTING ERROR		
Sample Collected:	12/08/2003 00:00:00	Findings:	60 UNITS
Chemical:	COLOR		
Sample Collected:	12/08/2003 00:00:00	Findings:	720 US
Chemical:	SPECIFIC CONDUCTANCE		
Sample Collected:	12/08/2003 00:00:00	Findings:	7.21
Chemical:	PH, LABORATORY		
Sample Collected:	12/08/2003 00:00:00	Findings:	190 MG/L
Chemical:	ALKALINITY (TOTAL) AS CACO3		
Sample Collected:	12/08/2003 00:00:00	Findings:	232 MG/L
Chemical:	BICARBONATE ALKALINITY		
Sample Collected:	12/08/2003 00:00:00	Findings:	190 MG/L
Chemical:	HARDNESS (TOTAL) AS CACO3		
Sample Collected:	12/08/2003 00:00:00	Findings:	41 MG/L
Chemical:	CALCIUM		
Sample Collected:	12/08/2003 00:00:00	Findings:	22 MG/L
Chemical:	MAGNESIUM		
Sample Collected:	12/08/2003 00:00:00	Findings:	88 MG/L
Chemical:	SODIUM		
Sample Collected:	12/08/2003 00:00:00	Findings:	2.9 MG/L
Chemical:	POTASSIUM		
Sample Collected:	12/08/2003 00:00:00	Findings:	120 MG/L
Chemical:	CHLORIDE		
Sample Collected:	12/08/2003 00:00:00	Findings:	.83 MG/L
Chemical:	FLUORIDE (F) (NATURAL-SOURCE)		
Sample Collected:	12/08/2003 00:00:00	Findings:	24 MG/L
Chemical:	SILICA		
Sample Collected:	12/08/2003 00:00:00	Findings:	230 UG/L
Chemical:	BORON		
Sample Collected:	12/08/2003 00:00:00	Findings:	5200 UG/L
Chemical:	IRON		
Sample Collected:	12/08/2003 00:00:00	Findings:	340 UG/L
Chemical:	MANGANESE		

Sample Collected:	12/08/2003 00:00:00	Findings:	450 MG/L
Chemical:	TOTAL DISSOLVED SOLIDS		
Sample Collected:	12/08/2003 00:00:00	Findings:	26 NTU
Chemical:	TURBIDITY, LABORATORY		
Sample Collected:	01/26/2004 00:00:00	Findings:	.82 MG/L
Chemical:	FLUORIDE (F) (NATURAL-SOURCE)		
Sample Collected:	03/15/2004 00:00:00	Findings:	170 UG/L
Chemical:	BORON		
Sample Collected:	04/12/2004 00:00:00	Findings:	.76 MG/L
Chemical:	FLUORIDE (F) (NATURAL-SOURCE)		
Sample Collected:	07/12/2004 00:00:00	Findings:	.79 MG/L
Chemical:	FLUORIDE (F) (NATURAL-SOURCE)		
Sample Collected:	08/09/2004 00:00:00	Findings:	180 UG/L
Chemical:	BORON		
Sample Collected:	10/11/2004 00:00:00	Findings:	.93 MG/L
Chemical:	FLUORIDE (F) (NATURAL-SOURCE)		
Sample Collected:	01/24/2005 00:00:00	Findings:	.74 MG/L
Chemical:	FLUORIDE (F) (NATURAL-SOURCE)		
Sample Collected:	02/18/2005 00:00:00	Findings:	170 UG/L
Chemical:	BORON		
Sample Collected:	04/19/2005 00:00:00	Findings:	.91 MG/L
Chemical:	FLUORIDE (F) (NATURAL-SOURCE)		
Sample Collected:	07/17/2005 00:00:00	Findings:	.74 MG/L
Chemical:	FLUORIDE (F) (NATURAL-SOURCE)		
Sample Collected:	08/25/2005 00:00:00	Findings:	150 UG/L
Chemical:	BORON		
Sample Collected:	10/17/2005 00:00:00	Findings:	.71 MG/L
Chemical:	FLUORIDE (F) (NATURAL-SOURCE)		
Sample Collected:	01/19/2006 00:00:00	Findings:	.86 MG/L
Chemical:	FLUORIDE (F) (NATURAL-SOURCE)		
Sample Collected:	04/20/2006 00:00:00	Findings:	.94 MG/L
Chemical:	FLUORIDE (F) (NATURAL-SOURCE)		
Sample Collected:	07/20/2006 00:00:00	Findings:	.82 MG/L
Chemical:	FLUORIDE (F) (NATURAL-SOURCE)		

C9
NW
1/2 - 1 Mile
Higher

FED USGS **USGS3236046**

Agency cd:	USGS	Site no:	373037122295901
Site name:	005S006W10J002M		
Latitude:	373037		
Longitude:	1222959	Dec lat:	37.51021873
Dec lon:	-122.50081165	Coor meth:	M
Coor accr:	S	Latlong datum:	NAD27
Dec latlong datum:	NAD83	District:	06
State:	06	County:	081
Country:	US	Land net:	Not Reported
Location map:	MONTARA MOUNTAIN	Map scale:	24000

Altitude:	30		
Altitude method:	Interpolated from topographic map		
Altitude accuracy:	12		
Altitude datum:	National Geodetic Vertical Datum of 1929		
Hydrologic:	San Francisco Coastal South. California. Area = 256 sq.mi.		
Topographic:	Valley flat		
Site type:	Ground-water other than Spring	Date construction:	19840427
Date inventoried:	Not Reported	Mean greenwich time offset:	PST
Local standard time flag:	Y		
Type of ground water site:	Single well, other than collector or Ranney type		
Aquifer Type:	Not Reported		
Aquifer:	Not Reported		
Well depth:	125	Hole depth:	135
Source of depth data:	driller		
Project number:	470649300		
Real time data flag:	Not Reported	Daily flow data begin date:	Not Reported
Daily flow data end date:	Not Reported	Daily flow data count:	Not Reported
Peak flow data begin date:	Not Reported	Peak flow data end date:	Not Reported
Peak flow data count:	Not Reported	Water quality data begin date:	Not Reported
Water quality data end date:	Not Reported	Water quality data count:	Not Reported
Ground water data begin date:	Not Reported	Ground water data end date:	Not Reported
Ground water data count:	Not Reported		

Ground-water levels, Number of Measurements: 0

10
North **CA WELLS** **5997**
1/2 - 1 Mile
Higher

Water System Information:

Prime Station Code:	05S/06W-11E02 M	User ID:	ENG
FRDS Number:	4110010012	County:	San Mateo
District Number:	04	Station Type:	WELL/AMBNT/MUN/INTAKE
Water Type:	Well/Groundwater	Well Status:	Active Raw
Source Lat/Long:	373050.0 1222935.0	Precision:	1,000 Feet (10 Seconds)
Source Name:	S AIRPORT WELL		
System Number:	4110010		
System Name:	Citizens Utilities Comp of CA		
Organization That Operates System:			
	P.O. Box 15468		
	Sacramento, CA 95468		
Pop Served:	4058	Connections:	1623
Area Served:	Montara-Moss Beach		
Sample Collected:	03/10/1999 00:00:00	Findings:	.84 PCI/L
Chemical:	GROSS ALPHA COUNTING ERROR		
Sample Collected:	06/22/1999 00:00:00	Findings:	.85 PCI/L
Chemical:	GROSS ALPHA COUNTING ERROR		
Sample Collected:	12/01/1999 00:00:00	Findings:	440 US
Chemical:	SPECIFIC CONDUCTANCE		
Sample Collected:	12/01/1999 00:00:00	Findings:	6.88
Chemical:	PH, LABORATORY		

Sample Collected:	12/01/1999 00:00:00	Findings:	110 MG/L
Chemical:	ALKALINITY (TOTAL) AS CACO3		
Sample Collected:	12/01/1999 00:00:00	Findings:	110 MG/L
Chemical:	BICARBONATE ALKALINITY		
Sample Collected:	12/01/1999 00:00:00	Findings:	170 MG/L
Chemical:	HARDNESS (TOTAL) AS CACO3		
Sample Collected:	12/01/1999 00:00:00	Findings:	40 MG/L
Chemical:	CALCIUM		
Sample Collected:	12/01/1999 00:00:00	Findings:	17 MG/L
Chemical:	MAGNESIUM		
Sample Collected:	12/01/1999 00:00:00	Findings:	48 MG/L
Chemical:	SODIUM		
Sample Collected:	12/01/1999 00:00:00	Findings:	72 MG/L
Chemical:	CHLORIDE		
Sample Collected:	12/01/1999 00:00:00	Findings:	.4 MG/L
Chemical:	FLUORIDE (F) (NATURAL-SOURCE)		
Sample Collected:	12/01/1999 00:00:00	Findings:	150 UG/L
Chemical:	MANGANESE		
Sample Collected:	12/01/1999 00:00:00	Findings:	320 MG/L
Chemical:	TOTAL DISSOLVED SOLIDS		
Sample Collected:	12/01/1999 00:00:00	Findings:	- .69
Chemical:	LANGELIER INDEX @ 60 C		
Sample Collected:	12/01/1999 00:00:00	Findings:	5 MG/L
Chemical:	NITRATE (AS NO3)		
Sample Collected:	02/28/2000 00:00:00	Findings:	230 UG/L
Chemical:	MANGANESE		
Sample Collected:	06/28/2000 00:00:00	Findings:	6 MG/L
Chemical:	NITRATE (AS NO3)		
Sample Collected:	09/12/2000 00:00:00	Findings:	230 UG/L
Chemical:	MANGANESE		
Sample Collected:	12/07/2000 00:00:00	Findings:	170 UG/L
Chemical:	MANGANESE		
Sample Collected:	12/07/2000 00:00:00	Findings:	6 MG/L
Chemical:	NITRATE (AS NO3)		
Sample Collected:	03/15/2001 00:00:00	Findings:	350 UG/L
Chemical:	MANGANESE		
Sample Collected:	03/15/2001 00:00:00	Findings:	4 MG/L
Chemical:	NITRATE (AS NO3)		
Sample Collected:	06/26/2001 00:00:00	Findings:	220 UG/L
Chemical:	MANGANESE		
Sample Collected:	06/27/2001 00:00:00	Findings:	10 MG/L
Chemical:	NITRATE (AS NO3)		
Sample Collected:	09/27/2001 00:00:00	Findings:	160 UG/L
Chemical:	MANGANESE		

Sample Collected:	09/27/2001 00:00:00	Findings:	5 MG/L
Chemical:	NITRATE (AS NO3)		
Sample Collected:	09/27/2001 00:00:00	Findings:	.1 NTU
Chemical:	TURBIDITY, LABORATORY		
Sample Collected:	12/18/2001 00:00:00	Findings:	5 MG/L
Chemical:	NITRATE (AS NO3)		
Sample Collected:	12/18/2001 00:00:00	Findings:	180 UG/L
Chemical:	MANGANESE		
Sample Collected:	12/18/2001 00:00:00	Findings:	.5 NTU
Chemical:	TURBIDITY, LABORATORY		
Sample Collected:	02/27/2002 00:00:00	Findings:	550 US
Chemical:	SPECIFIC CONDUCTANCE		
Sample Collected:	03/27/2002 00:00:00	Findings:	290 UG/L
Chemical:	MANGANESE		
Sample Collected:	03/27/2002 00:00:00	Findings:	6 MG/L
Chemical:	NITRATE (AS NO3)		
Sample Collected:	03/27/2002 00:00:00	Findings:	.8 NTU
Chemical:	TURBIDITY, LABORATORY		
Sample Collected:	05/15/2002 00:00:00	Findings:	6.5 MG/L
Chemical:	NITRATE (AS NO3)		
Sample Collected:	06/12/2002 00:00:00	Findings:	7 MG/L
Chemical:	NITRATE (AS NO3)		
Sample Collected:	06/20/2002 00:00:00	Findings:	160 UG/L
Chemical:	MANGANESE		
Sample Collected:	06/27/2002 00:00:00	Findings:	170 UG/L
Chemical:	MANGANESE		
Sample Collected:	06/27/2002 00:00:00	Findings:	4 MG/L
Chemical:	NITRATE (AS NO3)		
Sample Collected:	07/10/2002 00:00:00	Findings:	4 MG/L
Chemical:	NITRATE (AS NO3)		
Sample Collected:	07/25/2002 00:00:00	Findings:	540 US
Chemical:	SPECIFIC CONDUCTANCE		
Sample Collected:	08/07/2002 00:00:00	Findings:	4 MG/L
Chemical:	NITRATE (AS NO3)		
Sample Collected:	09/09/2002 00:00:00	Findings:	3 MG/L
Chemical:	NITRATE (AS NO3)		
Sample Collected:	09/24/2002 00:00:00	Findings:	150 UG/L
Chemical:	MANGANESE		
Sample Collected:	09/24/2002 00:00:00	Findings:	.5 NTU
Chemical:	TURBIDITY, LABORATORY		
Sample Collected:	09/24/2002 00:00:00	Findings:	.45 PCI/L
Chemical:	GROSS ALPHA COUNTING ERROR		
Sample Collected:	10/17/2002 00:00:00	Findings:	3 MG/L
Chemical:	NITRATE (AS NO3)		

Sample Collected:	11/20/2002 00:00:00	Findings:	3.11 PCI/L
Chemical:	GROSS ALPHA		
Sample Collected:	11/20/2002 00:00:00	Findings:	2.05 PCI/L
Chemical:	GROSS ALPHA COUNTING ERROR		
Sample Collected:	11/20/2002 00:00:00	Findings:	.22 PCI/L
Chemical:	RADIUM 226 COUNTING ERROR		
Sample Collected:	11/20/2002 00:00:00	Findings:	.5 PCI/L
Chemical:	RADIUM 228 COUNTING ERROR		
Sample Collected:	12/05/2002 00:00:00	Findings:	540 US
Chemical:	SPECIFIC CONDUCTANCE		
Sample Collected:	12/05/2002 00:00:00	Findings:	6.6
Chemical:	PH, LABORATORY		
Sample Collected:	12/05/2002 00:00:00	Findings:	120 MG/L
Chemical:	ALKALINITY (TOTAL) AS CACO3		
Sample Collected:	12/05/2002 00:00:00	Findings:	120 MG/L
Chemical:	BICARBONATE ALKALINITY		
Sample Collected:	12/05/2002 00:00:00	Findings:	170 MG/L
Chemical:	HARDNESS (TOTAL) AS CACO3		
Sample Collected:	12/05/2002 00:00:00	Findings:	40 MG/L
Chemical:	CALCIUM		
Sample Collected:	12/05/2002 00:00:00	Findings:	17 MG/L
Chemical:	MAGNESIUM		
Sample Collected:	12/05/2002 00:00:00	Findings:	49 MG/L
Chemical:	SODIUM		
Sample Collected:	12/05/2002 00:00:00	Findings:	75 MG/L
Chemical:	CHLORIDE		
Sample Collected:	12/05/2002 00:00:00	Findings:	150 UG/L
Chemical:	MANGANESE		
Sample Collected:	12/05/2002 00:00:00	Findings:	320 MG/L
Chemical:	TOTAL DISSOLVED SOLIDS		
Sample Collected:	12/05/2002 00:00:00	Findings:	- .95
Chemical:	LANGELIER INDEX @ 60 C		
Sample Collected:	12/05/2002 00:00:00	Findings:	3 MG/L
Chemical:	NITRATE (AS NO3)		
Sample Collected:	12/05/2002 00:00:00	Findings:	400 MG/L
Chemical:	FLUORIDE (TREATMENT RELATED-DISTRIBUTION)		
Sample Collected:	12/17/2002 00:00:00	Findings:	140 UG/L
Chemical:	MANGANESE		
Sample Collected:	12/17/2002 00:00:00	Findings:	.1 NTU
Chemical:	TURBIDITY, LABORATORY		
Sample Collected:	01/27/2003 00:00:00	Findings:	3.409 MG/L
Chemical:	NITRATE (AS NO3)		
Sample Collected:	02/19/2003 00:00:00	Findings:	4 MG/L
Chemical:	NITRATE (AS NO3)		

Sample Collected:	03/12/2003 00:00:00	Findings:	4 MG/L
Chemical:	NITRATE (AS NO3)		
Sample Collected:	03/19/2003 00:00:00	Findings:	4 MG/L
Chemical:	NITRATE (AS NO3)		
Sample Collected:	03/26/2003 00:00:00	Findings:	220 UG/L
Chemical:	MANGANESE		
Sample Collected:	04/09/2003 00:00:00	Findings:	4 MG/L
Chemical:	NITRATE (AS NO3)		
Sample Collected:	05/19/2003 00:00:00	Findings:	4 MG/L
Chemical:	NITRATE (AS NO3)		
Sample Collected:	06/16/2003 00:00:00	Findings:	4 MG/L
Chemical:	NITRATE (AS NO3)		
Sample Collected:	07/22/2003 00:00:00	Findings:	4 MG/L
Chemical:	NITRATE (AS NO3)		
Sample Collected:	08/19/2003 00:00:00	Findings:	4 MG/L
Chemical:	NITRATE (AS NO3)		
Sample Collected:	09/10/2003 00:00:00	Findings:	4 MG/L
Chemical:	NITRATE (AS NO3)		
Sample Collected:	09/17/2003 00:00:00	Findings:	540 US
Chemical:	SPECIFIC CONDUCTANCE		
Sample Collected:	09/17/2003 00:00:00	Findings:	7.6
Chemical:	PH, LABORATORY		
Sample Collected:	09/17/2003 00:00:00	Findings:	120 MG/L
Chemical:	ALKALINITY (TOTAL) AS CACO3		
Sample Collected:	09/17/2003 00:00:00	Findings:	120 MG/L
Chemical:	BICARBONATE ALKALINITY		
Sample Collected:	09/17/2003 00:00:00	Findings:	170 MG/L
Chemical:	HARDNESS (TOTAL) AS CACO3		
Sample Collected:	09/17/2003 00:00:00	Findings:	40 MG/L
Chemical:	CALCIUM		
Sample Collected:	09/17/2003 00:00:00	Findings:	18 MG/L
Chemical:	MAGNESIUM		
Sample Collected:	09/17/2003 00:00:00	Findings:	53 MG/L
Chemical:	SODIUM		
Sample Collected:	09/17/2003 00:00:00	Findings:	78 MG/L
Chemical:	CHLORIDE		
Sample Collected:	09/17/2003 00:00:00	Findings:	180 UG/L
Chemical:	MANGANESE		
Sample Collected:	09/17/2003 00:00:00	Findings:	360 MG/L
Chemical:	TOTAL DISSOLVED SOLIDS		
Sample Collected:	09/17/2003 00:00:00	Findings:	.041
Chemical:	LANGELIER INDEX @ 60 C		
Sample Collected:	09/17/2003 00:00:00	Findings:	.1 NTU
Chemical:	TURBIDITY, LABORATORY		

Sample Collected:	09/24/2003 00:00:00	Findings:	170 UG/L
Chemical:	MANGANESE		
Sample Collected:	10/15/2003 00:00:00	Findings:	4 MG/L
Chemical:	NITRATE (AS NO3)		
Sample Collected:	11/12/2003 00:00:00	Findings:	4 MG/L
Chemical:	NITRATE (AS NO3)		
Sample Collected:	11/13/2003 00:00:00	Findings:	4 MG/L
Chemical:	NITRATE (AS NO3)		
Sample Collected:	12/16/2003 00:00:00	Findings:	190 UG/L
Chemical:	MANGANESE		
Sample Collected:	12/16/2003 00:00:00	Findings:	4 MG/L
Chemical:	NITRATE (AS NO3)		
Sample Collected:	01/06/2004 00:00:00	Findings:	4 MG/L
Chemical:	NITRATE (AS NO3)		
Sample Collected:	02/10/2004 00:00:00	Findings:	5 MG/L
Chemical:	NITRATE (AS NO3)		
Sample Collected:	03/09/2004 00:00:00	Findings:	5 MG/L
Chemical:	NITRATE (AS NO3)		
Sample Collected:	03/30/2004 00:00:00	Findings:	5 MG/L
Chemical:	NITRATE (AS NO3)		
Sample Collected:	04/06/2004 00:00:00	Findings:	5 MG/L
Chemical:	NITRATE (AS NO3)		
Sample Collected:	04/12/2004 00:00:00	Findings:	5 MG/L
Chemical:	NITRATE (AS NO3)		
Sample Collected:	04/19/2004 00:00:00	Findings:	5 MG/L
Chemical:	NITRATE (AS NO3)		
Sample Collected:	04/26/2004 00:00:00	Findings:	5 MG/L
Chemical:	NITRATE (AS NO3)		
Sample Collected:	05/03/2004 00:00:00	Findings:	5 MG/L
Chemical:	NITRATE (AS NO3)		
Sample Collected:	05/10/2004 00:00:00	Findings:	5 MG/L
Chemical:	NITRATE (AS NO3)		
Sample Collected:	05/17/2004 00:00:00	Findings:	5 MG/L
Chemical:	NITRATE (AS NO3)		
Sample Collected:	05/24/2004 00:00:00	Findings:	4 MG/L
Chemical:	NITRATE (AS NO3)		
Sample Collected:	06/01/2004 00:00:00	Findings:	5 MG/L
Chemical:	NITRATE (AS NO3)		
Sample Collected:	06/07/2004 00:00:00	Findings:	5 MG/L
Chemical:	NITRATE (AS NO3)		
Sample Collected:	06/14/2004 00:00:00	Findings:	5 MG/L
Chemical:	NITRATE (AS NO3)		
Sample Collected:	06/21/2004 00:00:00	Findings:	5 MG/L
Chemical:	NITRATE (AS NO3)		

Sample Collected:	06/28/2004 00:00:00	Findings:	5 MG/L
Chemical:	NITRATE (AS NO3)		
Sample Collected:	07/06/2004 00:00:00	Findings:	5 MG/L
Chemical:	NITRATE (AS NO3)		
Sample Collected:	07/12/2004 00:00:00	Findings:	5 MG/L
Chemical:	NITRATE (AS NO3)		
Sample Collected:	07/19/2004 00:00:00	Findings:	5 MG/L
Chemical:	NITRATE (AS NO3)		
Sample Collected:	07/26/2004 00:00:00	Findings:	5 MG/L
Chemical:	NITRATE (AS NO3)		
Sample Collected:	08/02/2004 00:00:00	Findings:	5 MG/L
Chemical:	NITRATE (AS NO3)		
Sample Collected:	08/09/2004 00:00:00	Findings:	5 MG/L
Chemical:	NITRATE (AS NO3)		
Sample Collected:	08/16/2004 00:00:00	Findings:	5 MG/L
Chemical:	NITRATE (AS NO3)		
Sample Collected:	08/30/2004 00:00:00	Findings:	5 MG/L
Chemical:	NITRATE (AS NO3)		
Sample Collected:	09/08/2004 00:00:00	Findings:	4 MG/L
Chemical:	NITRATE (AS NO3)		
Sample Collected:	09/13/2004 00:00:00	Findings:	5 MG/L
Chemical:	NITRATE (AS NO3)		
Sample Collected:	09/27/2004 00:00:00	Findings:	4 MG/L
Chemical:	NITRATE (AS NO3)		
Sample Collected:	10/04/2004 00:00:00	Findings:	4 MG/L
Chemical:	NITRATE (AS NO3)		
Sample Collected:	11/09/2004 00:00:00	Findings:	4 MG/L
Chemical:	NITRATE (AS NO3)		
Sample Collected:	11/16/2004 00:00:00	Findings:	4 MG/L
Chemical:	NITRATE (AS NO3)		
Sample Collected:	11/29/2004 00:00:00	Findings:	4 MG/L
Chemical:	NITRATE (AS NO3)		
Sample Collected:	11/30/2004 00:00:00	Findings:	4 MG/L
Chemical:	NITRATE (AS NO3)		
Sample Collected:	12/06/2004 00:00:00	Findings:	4 MG/L
Chemical:	NITRATE (AS NO3)		
Sample Collected:	12/14/2004 00:00:00	Findings:	4 MG/L
Chemical:	NITRATE (AS NO3)		
Sample Collected:	12/20/2004 00:00:00	Findings:	4 MG/L
Chemical:	NITRATE (AS NO3)		
Sample Collected:	01/10/2005 00:00:00	Findings:	4 MG/L
Chemical:	NITRATE (AS NO3)		
Sample Collected:	01/31/2005 00:00:00	Findings:	5 MG/L
Chemical:	NITRATE (AS NO3)		

Sample Collected:	02/08/2005 00:00:00	Findings:	5 MG/L
Chemical:	NITRATE (AS NO3)		
Sample Collected:	03/08/2005 00:00:00	Findings:	5 MG/L
Chemical:	NITRATE (AS NO3)		
Sample Collected:	03/23/2005 00:00:00	Findings:	5 MG/L
Chemical:	NITRATE (AS NO3)		
Sample Collected:	03/24/2005 00:00:00	Findings:	5 MG/L
Chemical:	NITRATE (AS NO3)		
Sample Collected:	04/12/2005 00:00:00	Findings:	5 MG/L
Chemical:	NITRATE (AS NO3)		
Sample Collected:	04/21/2005 00:00:00	Findings:	5 MG/L
Chemical:	NITRATE (AS NO3)		
Sample Collected:	04/25/2005 00:00:00	Findings:	5 MG/L
Chemical:	NITRATE (AS NO3)		
Sample Collected:	04/25/2005 00:00:00	Findings:	5 MG/L
Chemical:	NITRATE (AS NO3)		
Sample Collected:	05/04/2005 00:00:00	Findings:	5 MG/L
Chemical:	NITRATE (AS NO3)		
Sample Collected:	05/17/2005 00:00:00	Findings:	5 MG/L
Chemical:	NITRATE (AS NO3)		
Sample Collected:	06/07/2005 00:00:00	Findings:	5 MG/L
Chemical:	NITRATE (AS NO3)		
Sample Collected:	06/16/2005 00:00:00	Findings:	.38 PCI/L
Chemical:	GROSS ALPHA COUNTING ERROR		
Sample Collected:	07/11/2005 00:00:00	Findings:	5 MG/L
Chemical:	NITRATE (AS NO3)		
Sample Collected:	07/18/2005 00:00:00	Findings:	5 MG/L
Chemical:	NITRATE (AS NO3)		
Sample Collected:	08/02/2005 00:00:00	Findings:	5 MG/L
Chemical:	NITRATE (AS NO3)		
Sample Collected:	09/13/2005 00:00:00	Findings:	5 MG/L
Chemical:	NITRATE (AS NO3)		
Sample Collected:	10/12/2005 00:00:00	Findings:	5 MG/L
Chemical:	NITRATE (AS NO3)		
Sample Collected:	11/08/2005 00:00:00	Findings:	5 MG/L
Chemical:	NITRATE (AS NO3)		
Sample Collected:	12/14/2005 00:00:00	Findings:	.5 MG/L
Chemical:	FLUORIDE (F) (NATURAL-SOURCE)		
Sample Collected:	12/14/2005 00:00:00	Findings:	5 MG/L
Chemical:	NITRATE (AS NO3)		
Sample Collected:	12/14/2005 00:00:00	Findings:	.48 PCI/L
Chemical:	GROSS ALPHA COUNTING ERROR		
Sample Collected:	03/13/2006 00:00:00	Findings:	- .3 PCI/L
Chemical:	RADIUM 228 COUNTING ERROR		

Sample Collected:	03/13/2006 00:00:00	Findings:	280 UG/L
Chemical:	MANGANESE		
Sample Collected:	03/13/2006 00:00:00	Findings:	.59 PCI/L
Chemical:	GROSS ALPHA COUNTING ERROR		
Sample Collected:	06/23/2006 00:00:00	Findings:	250 UG/L
Chemical:	MANGANESE		
Sample Collected:	09/19/2006 00:00:00	Findings:	240 UG/L
Chemical:	MANGANESE		
Sample Collected:	09/20/2006 00:00:00	Findings:	5 UNITS
Chemical:	COLOR		
Sample Collected:	09/20/2006 00:00:00	Findings:	560 US
Chemical:	SPECIFIC CONDUCTANCE		
Sample Collected:	09/20/2006 00:00:00	Findings:	7.3
Chemical:	PH, LABORATORY		
Sample Collected:	09/20/2006 00:00:00	Findings:	130 MG/L
Chemical:	ALKALINITY (TOTAL) AS CACO3		
Sample Collected:	09/20/2006 00:00:00	Findings:	160 MG/L
Chemical:	BICARBONATE ALKALINITY		
Sample Collected:	09/20/2006 00:00:00	Findings:	150 MG/L
Chemical:	HARDNESS (TOTAL) AS CACO3		
Sample Collected:	09/20/2006 00:00:00	Findings:	37 MG/L
Chemical:	CALCIUM		
Sample Collected:	09/20/2006 00:00:00	Findings:	15 MG/L
Chemical:	MAGNESIUM		
Sample Collected:	09/20/2006 00:00:00	Findings:	44 MG/L
Chemical:	SODIUM		
Sample Collected:	09/20/2006 00:00:00	Findings:	75 MG/L
Chemical:	CHLORIDE		
Sample Collected:	09/20/2006 00:00:00	Findings:	210 UG/L
Chemical:	MANGANESE		
Sample Collected:	09/20/2006 00:00:00	Findings:	350 MG/L
Chemical:	TOTAL DISSOLVED SOLIDS		
Sample Collected:	09/20/2006 00:00:00	Findings:	- .28
Chemical:	LANGELIER INDEX @ 60 C		
Sample Collected:	09/20/2006 00:00:00	Findings:	.22 NTU
Chemical:	TURBIDITY, LABORATORY		
Sample Collected:	09/20/2006 00:00:00	Findings:	11
Chemical:	AGGRSSIVE INDEX (CORROSIVITY)		

D11
North
1/2 - 1 Mile
Higher

FED USGS **USGS3236048**

Agency cd:	USGS	Site no:	373054122294101
Site name:	005S006W11E001M		
Latitude:	373054		
Longitude:	1222941	Dec lat:	37.51494067
Dec lon:	-122.49581128	Coor meth:	M
Coor accr:	S	Latlong datum:	NAD27
Dec latlong datum:	NAD83	District:	06
State:	06	County:	081
Country:	US	Land net:	SWSWNWS11 T05S R06W M
Location map:	MONTARA MOUNTAIN	Map scale:	24000
Altitude:	50.00		
Altitude method:	Interpolated from topographic map		
Altitude accuracy:	005		
Altitude datum:	National Geodetic Vertical Datum of 1929		
Hydrologic:	TomalesDrake Bays. California. Area = 339 sq.mi.		
Topographic:	Flat surface		
Site type:	Ground-water other than Spring	Date construction:	Not Reported
Date inventoried:	Not Reported	Mean greenwich time offset:	PST
Local standard time flag:	Y		
Type of ground water site:	Single well, other than collector or Ranney type		
Aquifer Type:	Not Reported		
Aquifer:	Not Reported		
Well depth:	Not Reported	Hole depth:	Not Reported
Source of depth data:	Not Reported		
Project number:	479200200		
Real time data flag:	0	Daily flow data begin date:	0000-00-00
Daily flow data end date:	0000-00-00	Daily flow data count:	0
Peak flow data begin date:	0000-00-00	Peak flow data end date:	0000-00-00
Peak flow data count:	0	Water quality data begin date:	1981-08-05
Water quality data end date:	1981-09-15	Water quality data count:	2
Ground water data begin date:	1972-11-20	Ground water data end date:	1972-12-01
Ground water data count:	2		

Ground-water levels, Number of Measurements: 2

Date	Feet below Surface	Feet to Sealevel	Date	Feet below Surface	Feet to Sealevel
1972-12-01	16.32				
1972-11-20	20.70				

Note: The site had been pumped recently.

D12
North
1/2 - 1 Mile
Higher

CA WELLS **5993**

Water System Information:

Prime Station Code:	05S/06W-10H01 M	User ID:	ENG
FRDS Number:	4110010001	County:	San Mateo
District Number:	04	Station Type:	WELL/AMBNT/MUN/INTAKE/SUPPLY
Water Type:	Well/Groundwater	Well Status:	Active Raw
Source Lat/Long:	373055.0 1222940.0	Precision:	1,000 Feet (10 Seconds)
Source Name:	AIRPORT WELL 03		
System Number:	4110010		
System Name:	Citizens Utilities Comp of CA		
Organization That Operates System:	P.O. Box 15468 Sacramento, CA 95468		
Pop Served:	4058	Connections:	1623
Area Served:	Montara-Moss Beach		

Sample Collected:	01/07/1999 00:00:00	Findings:	36 MG/L
Chemical:	NITRATE (AS NO3)		
Sample Collected:	03/10/1999 00:00:00	Findings:	15 MG/L
Chemical:	NITRATE (AS NO3)		
Sample Collected:	06/22/1999 00:00:00	Findings:	27 MG/L
Chemical:	NITRATE (AS NO3)		
Sample Collected:	08/25/1999 00:00:00	Findings:	820 US
Chemical:	SPECIFIC CONDUCTANCE		
Sample Collected:	08/25/1999 00:00:00	Findings:	7.93
Chemical:	PH, LABORATORY		
Sample Collected:	08/25/1999 00:00:00	Findings:	110 MG/L
Chemical:	ALKALINITY (TOTAL) AS CACO3		
Sample Collected:	08/25/1999 00:00:00	Findings:	110 MG/L
Chemical:	BICARBONATE ALKALINITY		
Sample Collected:	08/25/1999 00:00:00	Findings:	210 MG/L
Chemical:	HARDNESS (TOTAL) AS CACO3		
Sample Collected:	08/25/1999 00:00:00	Findings:	45 MG/L
Chemical:	CALCIUM		
Sample Collected:	08/25/1999 00:00:00	Findings:	23 MG/L
Chemical:	MAGNESIUM		
Sample Collected:	08/25/1999 00:00:00	Findings:	80 MG/L
Chemical:	SODIUM		
Sample Collected:	08/25/1999 00:00:00	Findings:	1.7 MG/L
Chemical:	POTASSIUM		
Sample Collected:	08/25/1999 00:00:00	Findings:	110 MG/L
Chemical:	CHLORIDE		
Sample Collected:	08/25/1999 00:00:00	Findings:	100 UG/L
Chemical:	MANGANESE		
Sample Collected:	08/25/1999 00:00:00	Findings:	460 MG/L
Chemical:	TOTAL DISSOLVED SOLIDS		
Sample Collected:	08/25/1999 00:00:00	Findings:	.39
Chemical:	LANGELIER INDEX @ 60 C		
Sample Collected:	08/25/1999 00:00:00	Findings:	29 MG/L
Chemical:	NITRATE (AS NO3)		
Sample Collected:	12/01/1999 00:00:00	Findings:	90 UG/L
Chemical:	MANGANESE		
Sample Collected:	12/01/1999 00:00:00	Findings:	29 MG/L
Chemical:	NITRATE (AS NO3)		
Sample Collected:	02/28/2000 00:00:00	Findings:	100 UG/L
Chemical:	MANGANESE		
Sample Collected:	02/28/2000 00:00:00	Findings:	30 MG/L
Chemical:	NITRATE (AS NO3)		
Sample Collected:	06/21/2000 00:00:00	Findings:	5400 UG/L
Chemical:	MANGANESE		

Sample Collected:	06/21/2000 00:00:00	Findings:	7 MG/L
Chemical:	NITRATE (AS NO3)		
Sample Collected:	06/28/2000 00:00:00	Findings:	4200 UG/L
Chemical:	MANGANESE		
Sample Collected:	07/31/2000 00:00:00	Findings:	29 MG/L
Chemical:	NITRATE (AS NO3)		
Sample Collected:	07/31/2000 00:00:00	Findings:	90 UG/L
Chemical:	MANGANESE		
Sample Collected:	09/12/2000 00:00:00	Findings:	110 UG/L
Chemical:	MANGANESE		
Sample Collected:	09/12/2000 00:00:00	Findings:	27 MG/L
Chemical:	NITRATE (AS NO3)		
Sample Collected:	12/07/2000 00:00:00	Findings:	90 UG/L
Chemical:	MANGANESE		
Sample Collected:	12/07/2000 00:00:00	Findings:	31 MG/L
Chemical:	NITRATE (AS NO3)		
Sample Collected:	03/15/2001 00:00:00	Findings:	90 UG/L
Chemical:	MANGANESE		
Sample Collected:	03/15/2001 00:00:00	Findings:	36 MG/L
Chemical:	NITRATE (AS NO3)		
Sample Collected:	06/26/2001 00:00:00	Findings:	120 UG/L
Chemical:	MANGANESE		
Sample Collected:	06/26/2001 00:00:00	Findings:	.6 NTU
Chemical:	TURBIDITY, LABORATORY		
Sample Collected:	09/27/2001 00:00:00	Findings:	80 UG/L
Chemical:	MANGANESE		
Sample Collected:	09/27/2001 00:00:00	Findings:	29 MG/L
Chemical:	NITRATE (AS NO3)		
Sample Collected:	09/27/2001 00:00:00	Findings:	.1 NTU
Chemical:	TURBIDITY, LABORATORY		
Sample Collected:	09/27/2001 00:00:00	Findings:	.29 PCI/L
Chemical:	GROSS ALPHA COUNTING ERROR		
Sample Collected:	12/18/2001 00:00:00	Findings:	2 MG/L
Chemical:	TOTAL ORGANIC CARBON (TOC)		
Sample Collected:	12/18/2001 00:00:00	Findings:	32 MG/L
Chemical:	NITRATE (AS NO3)		
Sample Collected:	12/18/2001 00:00:00	Findings:	.44 PCI/L
Chemical:	GROSS ALPHA COUNTING ERROR		
Sample Collected:	12/18/2001 00:00:00	Findings:	80 UG/L
Chemical:	MANGANESE		
Sample Collected:	12/18/2001 00:00:00	Findings:	.3 NTU
Chemical:	TURBIDITY, LABORATORY		
Sample Collected:	02/27/2002 00:00:00	Findings:	810 US
Chemical:	SPECIFIC CONDUCTANCE		

Sample Collected:	02/27/2002 00:00:00	Findings:	1.2 UG/L
Chemical:	CHROMIUM, HEXAVALENT		
Sample Collected:	02/27/2002 00:00:00	Findings:	.009 UG/L
Chemical:	1,2,3-TRICHLOROPROPANE		
Sample Collected:	02/27/2002 00:00:00	Findings:	.76 UG/L
Chemical:	XYLENES (TOTAL)		
Sample Collected:	03/27/2002 00:00:00	Findings:	80 UG/L
Chemical:	MANGANESE		
Sample Collected:	03/27/2002 00:00:00	Findings:	31 MG/L
Chemical:	NITRATE (AS NO3)		
Sample Collected:	03/27/2002 00:00:00	Findings:	.6 NTU
Chemical:	TURBIDITY, LABORATORY		
Sample Collected:	03/27/2002 00:00:00	Findings:	.5 PCI/L
Chemical:	GROSS ALPHA COUNTING ERROR		
Sample Collected:	05/15/2002 00:00:00	Findings:	30 MG/L
Chemical:	NITRATE (AS NO3)		
Sample Collected:	06/12/2002 00:00:00	Findings:	7 MG/L
Chemical:	NITRATE (AS NO3)		
Sample Collected:	06/19/2002 00:00:00	Findings:	.65 PCI/L
Chemical:	GROSS ALPHA COUNTING ERROR		
Sample Collected:	06/20/2002 00:00:00	Findings:	90 UG/L
Chemical:	MANGANESE		
Sample Collected:	06/20/2002 00:00:00	Findings:	.2 NTU
Chemical:	TURBIDITY, LABORATORY		
Sample Collected:	06/27/2002 00:00:00	Findings:	90 UG/L
Chemical:	MANGANESE		
Sample Collected:	06/27/2002 00:00:00	Findings:	27 MG/L
Chemical:	NITRATE (AS NO3)		
Sample Collected:	06/27/2002 00:00:00	Findings:	.2 NTU
Chemical:	TURBIDITY, LABORATORY		
Sample Collected:	07/10/2002 00:00:00	Findings:	30 MG/L
Chemical:	NITRATE (AS NO3)		
Sample Collected:	07/25/2002 00:00:00	Findings:	800 US
Chemical:	SPECIFIC CONDUCTANCE		
Sample Collected:	07/25/2002 00:00:00	Findings:	.012 UG/L
Chemical:	1,2,3-TRICHLOROPROPANE		
Sample Collected:	08/07/2002 00:00:00	Findings:	31 MG/L
Chemical:	NITRATE (AS NO3)		
Sample Collected:	09/09/2002 00:00:00	Findings:	28 MG/L
Chemical:	NITRATE (AS NO3)		
Sample Collected:	09/24/2002 00:00:00	Findings:	800 US
Chemical:	SPECIFIC CONDUCTANCE		
Sample Collected:	09/24/2002 00:00:00	Findings:	6.6
Chemical:	PH, LABORATORY		

Sample Collected:	09/24/2002 00:00:00	Findings:	130 MG/L
Chemical:	ALKALINITY (TOTAL) AS CACO3		
Sample Collected:	09/24/2002 00:00:00	Findings:	130 MG/L
Chemical:	BICARBONATE ALKALINITY		
Sample Collected:	09/24/2002 00:00:00	Findings:	220 MG/L
Chemical:	HARDNESS (TOTAL) AS CACO3		
Sample Collected:	09/24/2002 00:00:00	Findings:	48 MG/L
Chemical:	CALCIUM		
Sample Collected:	09/24/2002 00:00:00	Findings:	25 MG/L
Chemical:	MAGNESIUM		
Sample Collected:	09/24/2002 00:00:00	Findings:	88 MG/L
Chemical:	SODIUM		
Sample Collected:	09/24/2002 00:00:00	Findings:	120 MG/L
Chemical:	CHLORIDE		
Sample Collected:	09/24/2002 00:00:00	Findings:	100 UG/L
Chemical:	MANGANESE		
Sample Collected:	09/24/2002 00:00:00	Findings:	60 UG/L
Chemical:	ALUMINUM		
Sample Collected:	09/24/2002 00:00:00	Findings:	490 MG/L
Chemical:	TOTAL DISSOLVED SOLIDS		
Sample Collected:	09/24/2002 00:00:00	Findings:	- .84
Chemical:	LANGELIER INDEX @ 60 C		
Sample Collected:	09/24/2002 00:00:00	Findings:	28 MG/L
Chemical:	NITRATE (AS NO3)		
Sample Collected:	09/24/2002 00:00:00	Findings:	.3 NTU
Chemical:	TURBIDITY, LABORATORY		
Sample Collected:	09/24/2002 00:00:00	Findings:	3 UG/L
Chemical:	CHROMIUM (TOTAL CR-CRVI SCREEN)		
Sample Collected:	10/17/2002 00:00:00	Findings:	30 MG/L
Chemical:	NITRATE (AS NO3)		
Sample Collected:	11/02/2002 00:00:00	Findings:	5.79 PCI/L
Chemical:	GROSS ALPHA		
Sample Collected:	11/02/2002 00:00:00	Findings:	2.89 PCI/L
Chemical:	GROSS ALPHA COUNTING ERROR		
Sample Collected:	11/02/2002 00:00:00	Findings:	.25 PCI/L
Chemical:	RADIUM 226 COUNTING ERROR		
Sample Collected:	11/02/2002 00:00:00	Findings:	2.14 PCI/L
Chemical:	RADIUM 228		
Sample Collected:	11/02/2002 00:00:00	Findings:	.59 PCI/L
Chemical:	RADIUM 228 COUNTING ERROR		
Sample Collected:	12/17/2002 00:00:00	Findings:	120 UG/L
Chemical:	MANGANESE		
Sample Collected:	12/17/2002 00:00:00	Findings:	.6 NTU
Chemical:	TURBIDITY, LABORATORY		

Sample Collected:	01/27/2003 00:00:00	Findings:	29.088 MG/L
Chemical:	NITRATE (AS NO3)		
Sample Collected:	02/19/2003 00:00:00	Findings:	29 MG/L
Chemical:	NITRATE (AS NO3)		
Sample Collected:	03/12/2003 00:00:00	Findings:	28 MG/L
Chemical:	NITRATE (AS NO3)		
Sample Collected:	03/19/2003 00:00:00	Findings:	28 MG/L
Chemical:	NITRATE (AS NO3)		
Sample Collected:	03/26/2003 00:00:00	Findings:	80 UG/L
Chemical:	MANGANESE		
Sample Collected:	04/09/2003 00:00:00	Findings:	28 MG/L
Chemical:	NITRATE (AS NO3)		
Sample Collected:	05/19/2003 00:00:00	Findings:	29 MG/L
Chemical:	NITRATE (AS NO3)		
Sample Collected:	06/16/2003 00:00:00	Findings:	35 MG/L
Chemical:	NITRATE (AS NO3)		
Sample Collected:	07/22/2003 00:00:00	Findings:	28 MG/L
Chemical:	NITRATE (AS NO3)		
Sample Collected:	08/19/2003 00:00:00	Findings:	29 MG/L
Chemical:	NITRATE (AS NO3)		
Sample Collected:	09/10/2003 00:00:00	Findings:	28 MG/L
Chemical:	NITRATE (AS NO3)		
Sample Collected:	09/17/2003 00:00:00	Findings:	800 US
Chemical:	SPECIFIC CONDUCTANCE		
Sample Collected:	09/17/2003 00:00:00	Findings:	7.5
Chemical:	PH, LABORATORY		
Sample Collected:	09/17/2003 00:00:00	Findings:	130 MG/L
Chemical:	ALKALINITY (TOTAL) AS CACO3		
Sample Collected:	09/17/2003 00:00:00	Findings:	130 MG/L
Chemical:	BICARBONATE ALKALINITY		
Sample Collected:	09/17/2003 00:00:00	Findings:	220 MG/L
Chemical:	HARDNESS (TOTAL) AS CACO3		
Sample Collected:	09/17/2003 00:00:00	Findings:	47 MG/L
Chemical:	CALCIUM		
Sample Collected:	09/17/2003 00:00:00	Findings:	25 MG/L
Chemical:	MAGNESIUM		
Sample Collected:	09/17/2003 00:00:00	Findings:	94 MG/L
Chemical:	SODIUM		
Sample Collected:	09/17/2003 00:00:00	Findings:	120 MG/L
Chemical:	CHLORIDE		
Sample Collected:	09/17/2003 00:00:00	Findings:	.8 MG/L
Chemical:	FLUORIDE (F) (NATURAL-SOURCE)		
Sample Collected:	09/17/2003 00:00:00	Findings:	100 UG/L
Chemical:	MANGANESE		

Sample Collected:	09/17/2003 00:00:00	Findings:	530 MG/L
Chemical:	TOTAL DISSOLVED SOLIDS		
Sample Collected:	09/17/2003 00:00:00	Findings:	.052
Chemical:	LANGELIER INDEX @ 60 C		
Sample Collected:	09/17/2003 00:00:00	Findings:	29 MG/L
Chemical:	NITRATE (AS NO3)		
Sample Collected:	09/17/2003 00:00:00	Findings:	.2 NTU
Chemical:	TURBIDITY, LABORATORY		
Sample Collected:	09/17/2003 00:00:00	Findings:	3 UG/L
Chemical:	CHROMIUM (TOTAL CR-CRVI SCREEN)		
Sample Collected:	09/24/2003 00:00:00	Findings:	100 UG/L
Chemical:	MANGANESE		
Sample Collected:	10/15/2003 00:00:00	Findings:	28 MG/L
Chemical:	NITRATE (AS NO3)		
Sample Collected:	11/12/2003 00:00:00	Findings:	27 MG/L
Chemical:	NITRATE (AS NO3)		
Sample Collected:	12/16/2003 00:00:00	Findings:	80 UG/L
Chemical:	MANGANESE		
Sample Collected:	12/16/2003 00:00:00	Findings:	29 MG/L
Chemical:	NITRATE (AS NO3)		
Sample Collected:	12/18/2003 00:00:00	Findings:	.009 UG/L
Chemical:	1,2,3-TRICHLOROPROPANE		
Sample Collected:	12/30/2003 00:00:00	Findings:	.011 UG/L
Chemical:	1,2,3-TRICHLOROPROPANE		
Sample Collected:	01/06/2004 00:00:00	Findings:	30 MG/L
Chemical:	NITRATE (AS NO3)		
Sample Collected:	01/08/2004 00:00:00	Findings:	.009 UG/L
Chemical:	1,2,3-TRICHLOROPROPANE		
Sample Collected:	02/10/2004 00:00:00	Findings:	31 MG/L
Chemical:	NITRATE (AS NO3)		
Sample Collected:	03/09/2004 00:00:00	Findings:	31 MG/L
Chemical:	NITRATE (AS NO3)		
Sample Collected:	04/06/2004 00:00:00	Findings:	32 MG/L
Chemical:	NITRATE (AS NO3)		
Sample Collected:	04/12/2004 00:00:00	Findings:	33 MG/L
Chemical:	NITRATE (AS NO3)		
Sample Collected:	04/19/2004 00:00:00	Findings:	32 MG/L
Chemical:	NITRATE (AS NO3)		
Sample Collected:	04/26/2004 00:00:00	Findings:	32 MG/L
Chemical:	NITRATE (AS NO3)		
Sample Collected:	05/03/2004 00:00:00	Findings:	31 MG/L
Chemical:	NITRATE (AS NO3)		
Sample Collected:	05/10/2004 00:00:00	Findings:	31 MG/L
Chemical:	NITRATE (AS NO3)		

Sample Collected:	05/17/2004 00:00:00	Findings:	31 MG/L
Chemical:	NITRATE (AS NO3)		
Sample Collected:	05/24/2004 00:00:00	Findings:	32 MG/L
Chemical:	NITRATE (AS NO3)		
Sample Collected:	06/01/2004 00:00:00	Findings:	31 MG/L
Chemical:	NITRATE (AS NO3)		
Sample Collected:	06/07/2004 00:00:00	Findings:	29 MG/L
Chemical:	NITRATE (AS NO3)		
Sample Collected:	06/07/2004 00:00:00	Findings:	.009 UG/L
Chemical:	1,2,3-TRICHLOROPROPANE		
Sample Collected:	06/14/2004 00:00:00	Findings:	32 MG/L
Chemical:	NITRATE (AS NO3)		
Sample Collected:	06/14/2004 00:00:00	Findings:	.01 UG/L
Chemical:	1,2,3-TRICHLOROPROPANE		
Sample Collected:	06/14/2004 00:00:00	Findings:	.01 UG/L
Chemical:	1,2,3-TRICHLOROPROPANE		
Sample Collected:	06/16/2004 00:00:00	Findings:	.01 UG/L
Chemical:	1,2,3-TRICHLOROPROPANE		
Sample Collected:	06/21/2004 00:00:00	Findings:	31 MG/L
Chemical:	NITRATE (AS NO3)		
Sample Collected:	06/23/2004 00:00:00	Findings:	.012 UG/L
Chemical:	1,2,3-TRICHLOROPROPANE		
Sample Collected:	06/28/2004 00:00:00	Findings:	32 MG/L
Chemical:	NITRATE (AS NO3)		
Sample Collected:	06/28/2004 00:00:00	Findings:	.01 UG/L
Chemical:	1,2,3-TRICHLOROPROPANE		
Sample Collected:	07/06/2004 00:00:00	Findings:	32 MG/L
Chemical:	NITRATE (AS NO3)		
Sample Collected:	07/12/2004 00:00:00	Findings:	32 MG/L
Chemical:	NITRATE (AS NO3)		
Sample Collected:	07/19/2004 00:00:00	Findings:	31 MG/L
Chemical:	NITRATE (AS NO3)		
Sample Collected:	07/26/2004 00:00:00	Findings:	32 MG/L
Chemical:	NITRATE (AS NO3)		
Sample Collected:	08/02/2004 00:00:00	Findings:	32 MG/L
Chemical:	NITRATE (AS NO3)		
Sample Collected:	08/09/2004 00:00:00	Findings:	33 MG/L
Chemical:	NITRATE (AS NO3)		
Sample Collected:	08/09/2004 00:00:00	Findings:	.01 UG/L
Chemical:	1,2,3-TRICHLOROPROPANE		
Sample Collected:	08/11/2004 00:00:00	Findings:	.01 UG/L
Chemical:	1,2,3-TRICHLOROPROPANE		
Sample Collected:	08/16/2004 00:00:00	Findings:	32 MG/L
Chemical:	NITRATE (AS NO3)		

Sample Collected:	08/17/2004 00:00:00	Findings:	.009 UG/L
Chemical:	1,2,3-TRICHLOROPROPANE		
Sample Collected:	08/19/2004 00:00:00	Findings:	.009 UG/L
Chemical:	1,2,3-TRICHLOROPROPANE		
Sample Collected:	08/30/2004 00:00:00	Findings:	31 MG/L
Chemical:	NITRATE (AS NO3)		
Sample Collected:	09/08/2004 00:00:00	Findings:	30 MG/L
Chemical:	NITRATE (AS NO3)		
Sample Collected:	09/13/2004 00:00:00	Findings:	31 MG/L
Chemical:	NITRATE (AS NO3)		
Sample Collected:	09/20/2004 00:00:00	Findings:	31 MG/L
Chemical:	NITRATE (AS NO3)		
Sample Collected:	09/27/2004 00:00:00	Findings:	31 MG/L
Chemical:	NITRATE (AS NO3)		
Sample Collected:	10/04/2004 00:00:00	Findings:	31 MG/L
Chemical:	NITRATE (AS NO3)		
Sample Collected:	11/09/2004 00:00:00	Findings:	.01 UG/L
Chemical:	1,2,3-TRICHLOROPROPANE		
Sample Collected:	11/09/2004 00:00:00	Findings:	5 MG/L
Chemical:	NITRATE (AS NO3)		
Sample Collected:	11/11/2004 00:00:00	Findings:	.011 UG/L
Chemical:	1,2,3-TRICHLOROPROPANE		
Sample Collected:	11/29/2004 00:00:00	Findings:	3 MG/L
Chemical:	NITRATE (AS NO3)		
Sample Collected:	12/06/2004 00:00:00	Findings:	3 MG/L
Chemical:	NITRATE (AS NO3)		
Sample Collected:	12/20/2004 00:00:00	Findings:	31 MG/L
Chemical:	NITRATE (AS NO3)		
Sample Collected:	01/10/2005 00:00:00	Findings:	32 MG/L
Chemical:	NITRATE (AS NO3)		
Sample Collected:	01/31/2005 00:00:00	Findings:	32 MG/L
Chemical:	NITRATE (AS NO3)		
Sample Collected:	02/08/2005 00:00:00	Findings:	35 MG/L
Chemical:	NITRATE (AS NO3)		
Sample Collected:	03/08/2005 00:00:00	Findings:	38 MG/L
Chemical:	NITRATE (AS NO3)		
Sample Collected:	03/23/2005 00:00:00	Findings:	.67 PCI/L
Chemical:	GROSS ALPHA COUNTING ERROR		
Sample Collected:	03/23/2005 00:00:00	Findings:	28 MG/L
Chemical:	NITRATE (AS NO3)		
Sample Collected:	04/12/2005 00:00:00	Findings:	34 MG/L
Chemical:	NITRATE (AS NO3)		
Sample Collected:	05/17/2005 00:00:00	Findings:	28 MG/L
Chemical:	NITRATE (AS NO3)		

Sample Collected:	06/07/2005 00:00:00	Findings:	32 MG/L
Chemical:	NITRATE (AS NO3)		
Sample Collected:	06/16/2005 00:00:00	Findings:	.57 PCI/L
Chemical:	GROSS ALPHA COUNTING ERROR		
Sample Collected:	07/11/2005 00:00:00	Findings:	32 MG/L
Chemical:	NITRATE (AS NO3)		
Sample Collected:	07/18/2005 00:00:00	Findings:	32 MG/L
Chemical:	NITRATE (AS NO3)		
Sample Collected:	08/02/2005 00:00:00	Findings:	32 MG/L
Chemical:	NITRATE (AS NO3)		
Sample Collected:	09/13/2005 00:00:00	Findings:	32 MG/L
Chemical:	NITRATE (AS NO3)		
Sample Collected:	10/12/2005 00:00:00	Findings:	32 MG/L
Chemical:	NITRATE (AS NO3)		
Sample Collected:	11/08/2005 00:00:00	Findings:	32 MG/L
Chemical:	NITRATE (AS NO3)		
Sample Collected:	12/14/2005 00:00:00	Findings:	.51 PCI/L
Chemical:	GROSS ALPHA COUNTING ERROR		
Sample Collected:	03/13/2006 00:00:00	Findings:	- .33 PCI/L
Chemical:	RADIUM 228 COUNTING ERROR		
Sample Collected:	03/13/2006 00:00:00	Findings:	140 UG/L
Chemical:	MANGANESE		
Sample Collected:	03/13/2006 00:00:00	Findings:	.65 PCI/L
Chemical:	GROSS ALPHA COUNTING ERROR		
Sample Collected:	03/13/2006 00:00:00	Findings:	- .32 PCI/L
Chemical:	RADIUM 228 COUNTING ERROR		
Sample Collected:	06/14/2006 00:00:00	Findings:	33 MG/L
Chemical:	NITRATE (AS NO3)		
Sample Collected:	06/23/2006 00:00:00	Findings:	130 UG/L
Chemical:	MANGANESE		
Sample Collected:	09/19/2006 00:00:00	Findings:	140 UG/L
Chemical:	MANGANESE		
Sample Collected:	09/20/2006 00:00:00	Findings:	830 US
Chemical:	SPECIFIC CONDUCTANCE		
Sample Collected:	09/20/2006 00:00:00	Findings:	7.2
Chemical:	PH, LABORATORY		
Sample Collected:	09/20/2006 00:00:00	Findings:	190 MG/L
Chemical:	ALKALINITY (TOTAL) AS CACO3		
Sample Collected:	09/20/2006 00:00:00	Findings:	230 MG/L
Chemical:	BICARBONATE ALKALINITY		
Sample Collected:	09/20/2006 00:00:00	Findings:	200 MG/L
Chemical:	HARDNESS (TOTAL) AS CACO3		
Sample Collected:	09/20/2006 00:00:00	Findings:	43 MG/L
Chemical:	CALCIUM		

Sample Collected:	09/20/2006 00:00:00	Findings:	22 MG/L
Chemical:	MAGNESIUM		
Sample Collected:	09/20/2006 00:00:00	Findings:	77 MG/L
Chemical:	SODIUM		
Sample Collected:	09/20/2006 00:00:00	Findings:	120 MG/L
Chemical:	CHLORIDE		
Sample Collected:	09/20/2006 00:00:00	Findings:	.8 MG/L
Chemical:	FLUORIDE (F) (NATURAL-SOURCE)		
Sample Collected:	09/20/2006 00:00:00	Findings:	120 UG/L
Chemical:	MANGANESE		
Sample Collected:	09/20/2006 00:00:00	Findings:	490 MG/L
Chemical:	TOTAL DISSOLVED SOLIDS		
Sample Collected:	09/20/2006 00:00:00	Findings:	- .12
Chemical:	LANGELIER INDEX @ 60 C		
Sample Collected:	09/20/2006 00:00:00	Findings:	35 MG/L
Chemical:	NITRATE (AS NO3)		
Sample Collected:	09/20/2006 00:00:00	Findings:	12
Chemical:	AGGRSSIVE INDEX (CORROSIVITY)		

13
NNW **CA WELLS** **5996**
1/2 - 1 Mile
Higher

Water System Information:

Prime Station Code:	05S/06W-11E01 M	User ID:	ENG
FRDS Number:	4110010005	County:	San Mateo
District Number:	04	Station Type:	WELL/AMBNT/MUN/INTAKE
Water Type:	Well/Groundwater	Well Status:	Monitoring Well
Source Lat/Long:	373055.0 1222950.0	Precision:	1,000 Feet (10 Seconds)
Source Name:	N AIRPORT WELL - MONITORING WELL		
System Number:	4110010		
System Name:	Citizens Utilities Comp of CA		
Organization That Operates System:			
	P.O. Box 15468 Sacramento, CA 95468		
Pop Served:	4058	Connections:	1623
Area Served:	Montara-Moss Beach		
Sample Collected:	05/19/2003 00:00:00	Findings:	40 MG/L
Chemical:	NITRATE (AS NO3)		

14
SSE **CA WELLS** **6005**
1/2 - 1 Mile
Lower

Water System Information:

Prime Station Code:	05S/06W-11Q02 M	User ID:	ENG
FRDS Number:	4110011007	County:	San Mateo
District Number:	04	Station Type:	WELL/AMBNT/MUN/INTAKE
Water Type:	Well/Groundwater	Well Status:	Active Raw
Source Lat/Long:	372933.0 1222907.0	Precision:	1,000 Feet (10 Seconds)
Source Name:	DENNISTON WELL 08		

GEOCHECK® - PHYSICAL SETTING SOURCE MAP FINDINGS

System Number: 4110011
System Name: Coastside County Water Dist
Organization That Operates System:
766 Main Street
Hlaf Moon Bay, CA 94019
Pop Served: 12000 Connections: 4351
Area Served: HALF MOON BAY

Sample Collected:	08/30/1999 00:00:00	Findings:	.55 PCI/L
Chemical:	GROSS ALPHA COUNTING ERROR		
Sample Collected:	02/28/2000 00:00:00	Findings:	.34 PCI/L
Chemical:	GROSS ALPHA COUNTING ERROR		
Sample Collected:	02/28/2000 00:00:00	Findings:	58 MG/L
Chemical:	CHLORIDE		
Sample Collected:	02/28/2000 00:00:00	Findings:	.38 MG/L
Chemical:	FLUORIDE (F) (NATURAL-SOURCE)		
Sample Collected:	02/28/2000 00:00:00	Findings:	F .011 UG/L
Chemical:	HEPTACHLOR		
Sample Collected:	06/25/2001 00:00:00	Findings:	43 UG/L
Chemical:	BROMODICHLORMETHANE (THM)		
Sample Collected:	06/25/2001 00:00:00	Findings:	3.8 UG/L
Chemical:	BROMOFORM (THM)		
Sample Collected:	06/25/2001 00:00:00	Findings:	24 UG/L
Chemical:	DIBROMOCHLOROMETHANE (THM)		
Sample Collected:	06/25/2001 00:00:00	Findings:	51 UG/L
Chemical:	CHLOROFORM (THM)		
Sample Collected:	04/11/2005 00:00:00	Findings:	3 MG/L
Chemical:	NITRATE (AS NO3)		
Sample Collected:	04/11/2005 00:00:00	Findings:	.48 PCI/L
Chemical:	GROSS ALPHA COUNTING ERROR		
Sample Collected:	07/11/2005 00:00:00	Findings:	.4 PCI/L
Chemical:	GROSS ALPHA COUNTING ERROR		
Sample Collected:	02/28/2006 00:00:00	Findings:	563 US
Chemical:	SPECIFIC CONDUCTANCE		
Sample Collected:	02/28/2006 00:00:00	Findings:	6.9
Chemical:	PH, LABORATORY		
Sample Collected:	02/28/2006 00:00:00	Findings:	150 MG/L
Chemical:	ALKALINITY (TOTAL) AS CACO3		
Sample Collected:	02/28/2006 00:00:00	Findings:	183 MG/L
Chemical:	BICARBONATE ALKALINITY		
Sample Collected:	02/28/2006 00:00:00	Findings:	164 MG/L
Chemical:	HARDNESS (TOTAL) AS CACO3		
Sample Collected:	02/28/2006 00:00:00	Findings:	31 MG/L
Chemical:	CALCIUM		
Sample Collected:	02/28/2006 00:00:00	Findings:	21 MG/L
Chemical:	MAGNESIUM		

Sample Collected:	02/28/2006 00:00:00	Findings:	55 MG/L
Chemical:	SODIUM		
Sample Collected:	02/28/2006 00:00:00	Findings:	1 MG/L
Chemical:	POTASSIUM		
Sample Collected:	02/28/2006 00:00:00	Findings:	72 MG/L
Chemical:	CHLORIDE		
Sample Collected:	02/28/2006 00:00:00	Findings:	.39 MG/L
Chemical:	FLUORIDE (F) (NATURAL-SOURCE)		
Sample Collected:	02/28/2006 00:00:00	Findings:	61 UG/L
Chemical:	MANGANESE		
Sample Collected:	02/28/2006 00:00:00	Findings:	370 MG/L
Chemical:	TOTAL DISSOLVED SOLIDS		
Sample Collected:	02/28/2006 00:00:00	Findings:	- .34
Chemical:	LANGELIER INDEX @ 60 C		
Sample Collected:	02/28/2006 00:00:00	Findings:	4 MG/L
Chemical:	NITRATE (AS NO3)		
Sample Collected:	02/28/2006 00:00:00	Findings:	.2 NTU
Chemical:	TURBIDITY, LABORATORY		

GEOCHECK® - PHYSICAL SETTING SOURCE MAP FINDINGS
RADON

AREA RADON INFORMATION

State Database: CA Radon

Radon Test Results

Zip	Total Sites	> 4 Pci/L	Pct. > 4 Pci/L
94019	7	0	0.00

Federal EPA Radon Zone for SAN MATEO County: 2

Note: Zone 1 indoor average level > 4 pCi/L.
: Zone 2 indoor average level >= 2 pCi/L and <= 4 pCi/L.
: Zone 3 indoor average level < 2 pCi/L.

Federal Area Radon Information for Zip Code: 94019

Number of sites tested: 1

Area	Average Activity	% <4 pCi/L	% 4-20 pCi/L	% >20 pCi/L
Living Area - 1st Floor	0.300 pCi/L	100%	0%	0%
Living Area - 2nd Floor	Not Reported	Not Reported	Not Reported	Not Reported
Basement	Not Reported	Not Reported	Not Reported	Not Reported

PHYSICAL SETTING SOURCE RECORDS SEARCHED

TOPOGRAPHIC INFORMATION

USGS 7.5' Digital Elevation Model (DEM)
Source: United States Geologic Survey
EDR acquired the USGS 7.5' Digital Elevation Model in 2002 and updated it in 2006. The 7.5 minute DEM corresponds to the USGS 1:24,000- and 1:25,000-scale topographic quadrangle maps. The DEM provides elevation data with consistent elevation units and projection.

Scanned Digital USGS 7.5' Topographic Map (DRG)
Source: United States Geologic Survey
A digital raster graphic (DRG) is a scanned image of a U.S. Geological Survey topographic map. The map images are made by scanning published paper maps on high-resolution scanners. The raster image is georeferenced and fit to the Universal Transverse Mercator (UTM) projection.

HYDROLOGIC INFORMATION

Flood Zone Data: This data, available in select counties across the country, was obtained by EDR in 1999 from the Federal Emergency Management Agency (FEMA). Data depicts 100-year and 500-year flood zones as defined by FEMA.

NWI: National Wetlands Inventory. This data, available in select counties across the country, was obtained by EDR in 2002 and 2005 from the U.S. Fish and Wildlife Service.

HYDROGEOLOGIC INFORMATION

AQUIFLOW^{R} Information System
Source: EDR proprietary database of groundwater flow information
EDR has developed the AQUIFLOW Information System (AIS) to provide data on the general direction of groundwater flow at specific points. EDR has reviewed reports submitted to regulatory authorities at select sites and has extracted the date of the report, hydrogeologically determined groundwater flow direction and depth to water table information.

GEOLOGIC INFORMATION

Geologic Age and Rock Stratigraphic Unit
Source: P.G. Schruben, R.E. Arndt and W.J. Bawiec, Geology of the Conterminous U.S. at 1:2,500,000 Scale - A digital representation of the 1974 P.B. King and H.M. Beikman Map, USGS Digital Data Series DDS - 11 (1994).

STATSGO: State Soil Geographic Database
Source: Department of Agriculture, Natural Resources Conservation Services
The U.S. Department of Agriculture's (USDA) Natural Resources Conservation Service (NRCS) leads the national Conservation Soil Survey (NCSS) and is responsible for collecting, storing, maintaining and distributing soil survey information for privately owned lands in the United States. A soil map in a soil survey is a representation of soil patterns in a landscape. Soil maps for STATSGO are compiled by generalizing more detailed (SSURGO) soil survey maps.

SSURGO: Soil Survey Geographic Database
Source: Department of Agriculture, Natural Resources Conservation Services (NRCS)
Telephone: 800-672-5559
SSURGO is the most detailed level of mapping done by the Natural Resources Conservation Services, mapping scales generally range from 1:12,000 to 1:63,360. Field mapping methods using national standards are used to construct the soil maps in the Soil Survey Geographic (SSURGO) database. SSURGO digitizing duplicates the original soil survey maps. This level of mapping is designed for use by landowners, townships and county natural resource planning and management.

PHYSICAL SETTING SOURCE RECORDS SEARCHED

LOCAL / REGIONAL WATER AGENCY RECORDS

FEDERAL WATER WELLS

PWS: Public Water Systems
Source: EPA/Office of Drinking Water
Telephone: 202-564-3750
Public Water System data from the Federal Reporting Data System. A PWS is any water system which provides water to at least 25 people for at least 60 days annually. PWSs provide water from wells, rivers and other sources.

PWS ENF: Public Water Systems Violation and Enforcement Data
Source: EPA/Office of Drinking Water
Telephone: 202-564-3750
Violation and Enforcement data for Public Water Systems from the Safe Drinking Water Information System (SDWIS) after August 1995. Prior to August 1995, the data came from the Federal Reporting Data System (FRDS).

USGS Water Wells: USGS National Water Inventory System (NWIS)
This database contains descriptive information on sites where the USGS collects or has collected data on surface water and/or groundwater. The groundwater data includes information on wells, springs, and other sources of groundwater.

STATE RECORDS

Water Well Database
Source: Department of Water Resources
Telephone: 916-651-9648

California Drinking Water Quality Database
Source: Department of Health Services
Telephone: 916-324-2319
The database includes all drinking water compliance and special studies monitoring for the state of California since 1984. It consists of over 3,200,000 individual analyses along with well and water system information.

OTHER STATE DATABASE INFORMATION

California Oil and Gas Well Locations
Source: Department of Conservation
Telephone: 916-323-1779

RADON

State Database: CA Radon
Source: Department of Health Services
Telephone: 916-324-2208
Radon Database for California

Area Radon Information
Source: USGS
Telephone: 703-356-4020
The National Radon Database has been developed by the U.S. Environmental Protection Agency (USEPA) and is a compilation of the EPA/State Residential Radon Survey and the National Residential Radon Survey. The study covers the years 1986 - 1992. Where necessary data has been supplemented by information collected at private sources such as universities and research institutions.

EPA Radon Zones
Source: EPA
Telephone: 703-356-4020
Sections 307 & 309 of IRAA directed EPA to list and identify areas of U.S. with the potential for elevated indoor radon levels.

PHYSICAL SETTING SOURCE RECORDS SEARCHED

OTHER

Airport Landing Facilities: Private and public use landing facilities
Source: Federal Aviation Administration, 800-457-6656

Epicenters: World earthquake epicenters, Richter 5 or greater
Source: Department of Commerce, National Oceanic and Atmospheric Administration

California Earthquake Fault Lines: The fault lines displayed on EDR's Topographic map are digitized quaternary fault lines, prepared in 1975 by the United State Geological Survey. Additional information (also from 1975) regarding activity at specific fault lines comes from California's Preliminary Fault Activity Map prepared by the California Division of Mines and Geology.

STREET AND ADDRESS INFORMATION

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"Linking Technology with Tradition"®

Sanborn® Map Report

Ship To: Eric Morita
Treadwell & Rollo Inc.
501 14th Street
Oakland, CA 94612

Order Date: 3/7/2007 **Completion Date:** 3/7/2007
Inquiry #: 1872299.3
P.O. #: NA
Site Name: Big Wave Project
Address: Airport Street/Stanford Avenue
City/State: Half Moon Bay, CA 94019
Cross Streets:

Customer Project: 4602.01
1047659VLA 510-874-4500

This document reports that the largest and most complete collection of Sanborn fire insurance maps has been reviewed based on client supplied information, and fire insurance maps depicting the target property at the specified address were not identified.

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DEFENSE ENVIRONMENTAL RESTORATION PROGRAM
FORMERLY USED DEFENSE SITES
FINDINGS AND DETERMINATION OF ELIGIBILITY

HALF MOON BAY FLIGHT STRIP
SAN MATEO COUNTY, CALIFORNIA
Site No. J09CA082000

FINDINGS OF FACT

1. By authorization dated 15 October 1942, the War Department acquired 217.68 acres by fee, 11.78 by lease, and 110.76 by transfer. The total number of acres was 340.22. In addition, 47 "no area" glide angle permits were obtained under license agreement.

2. The site was known as Half Moon Bay Flight Strip, San Mateo County, CA. The site was used by the Department of the Army as a flight strip and associated glide angle clearance and sewer line right of way. Improvements included a flight strip, barracks, hangers, two underground fuel tanks, seven concrete fuel pump pits and two concrete sumps.

3. The leased acres were terminated from 27 June to 13 July 1944, 110.76 acres were retransferred to Federal Works Agency on 12 April 1946, and 217.68 acres were excessed to the War Assets Administration on 4 February 1947.

DETERMINATION

Based on the foregoing findings of fact, the site has been determined to be formerly used by DOD. It is therefore eligible for the Defense Environmental Restoration Program - Formerly Used Defense Sites established under 10 USC 2701 et seq.

9 July 1992
DATE

Mark W. Foltz, COL, EN
for Roger F. Yankoupe
Brigadier General, U.S. Army
Commanding

DEFENSE ENVIRONMENTAL RESTORATION PROGRAM
FORMERLY USED DEFENSE SITES

INVENTORY PROJECT REPORT

HALF MOON BAY FLIGHT STRIP
SAN MATEO COUNTY, CALIFORNIA

SITE NO. J09CA082000

Prepared for:

SACRAMENTO DISTRICT, CORPS OF ENGINEERS
1325 J Street
Sacramento, CA 95814-2922

Prepared by:

DYNAMAC CORPORATION
10419 Old Placerville Road, Suite 260
Sacramento, CA 95827

January 1992

SITE SURVEY SUMMARY SHEET
FOR
DERP-FUDS SITE NO. J09CA082000
Half Moon Bay Flight Strip

SITE NAME(S): Half Moon Bay Flight Strip.

LOCATION: Adjacent to Highway 1, approximately 4 miles north of the City of Half Moon Bay, San Mateo County. See site map attached.

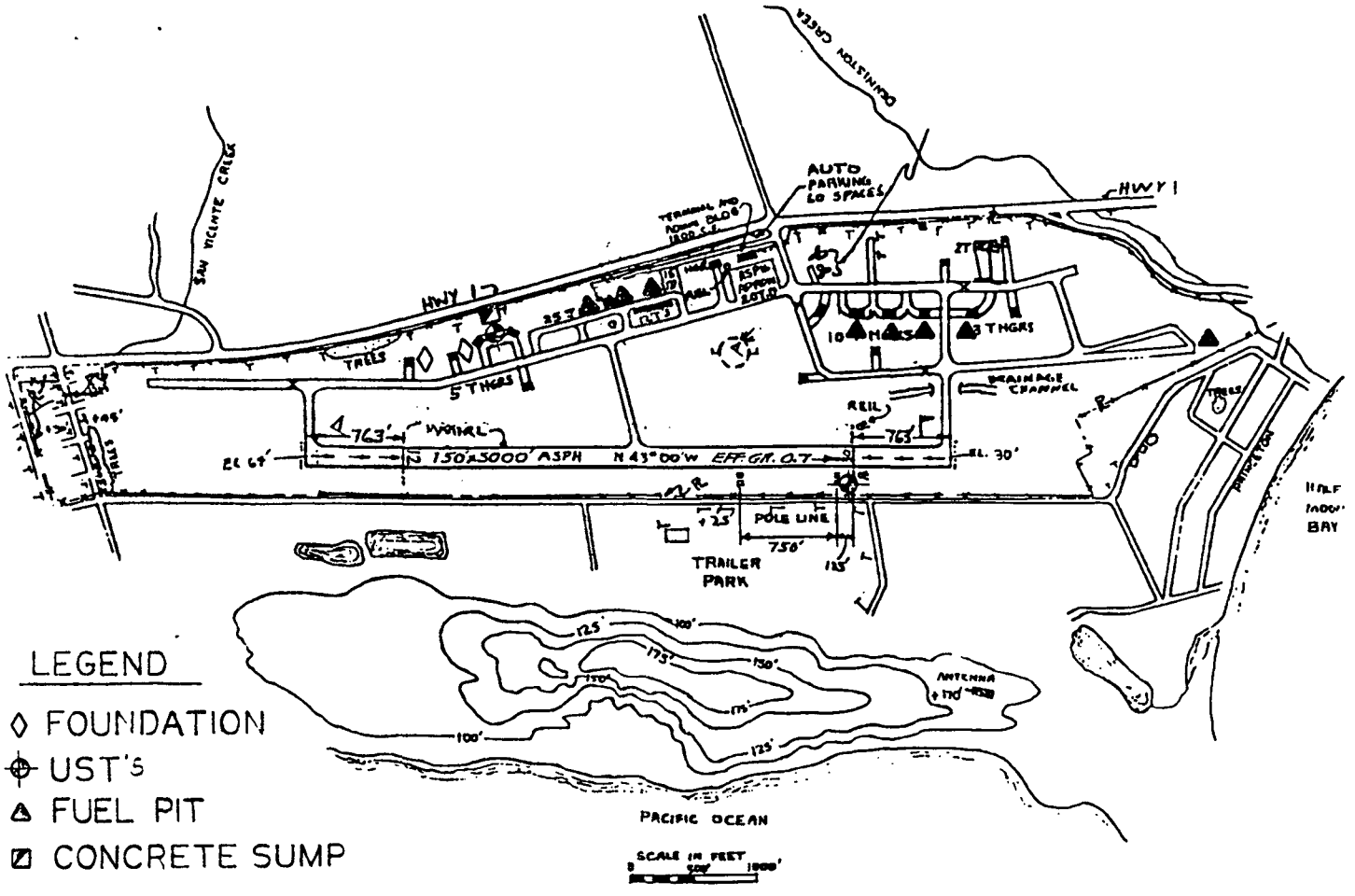
SITE HISTORY: By authorization dated 15 October 1942, the War Department acquired 217.68 acres by fee, 11.78 by lease, and 110.76 by transfer. The total number of acres was 340.22. In addition, 47 "no area" glide angle permits were obtained under license agreement. The leased acres were terminated from 27 June to 13 July 1944, 110.76 acres were retransferred to Federal Works Agency on 12 April 1946, and 217.68 acres were excessed to the War Assets Administration on 4 February 1947.

Improvements include a flight strip, two underground storage tanks, seven concrete underground fuel pump pits, two concrete sumps, and several buildings (barracks and hangers). The flight strip was turned over to the Army Air Corps during World War II, and ownership reverted to the State after the war. San Mateo County is the current owner and operator of the flight strip.

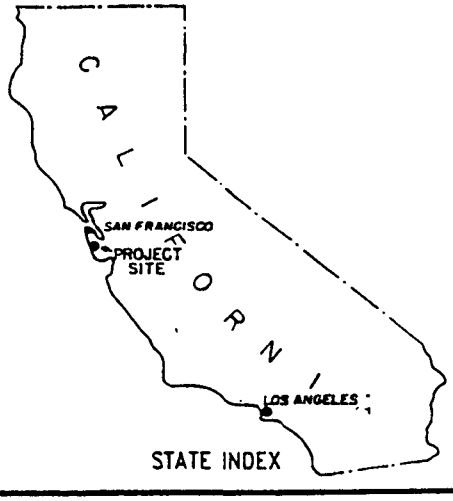
SITE VISIT: A site visit was conducted on 2 April 1991. Ms. Margaret Berry and Mr. Stephen Roe of Dynamac Corporation visited the site. The actual flight strip, currently used by Half Moon Bay Municipal Airport, and the surrounding properties, used as flight path and sewer right-of-ways, were surveyed for evidence of former DOD usage. They met with Mr. Gary Petersen, Manager of Airport Operations for the airport.

The airport, parcel no. 037-292-03, contained a number of improvements left by the Air Force, including two abandoned underground storage tanks of unknown size, seven concrete underground fuel pump pits, two exposed concrete sumps (3.5' x 10'), a concrete support for an above ground tank with associated below ground piping, and several building foundations (See attached diagram). Improvements installed since DOD use or left by DOD but in current use include several hangers, an administration building, two underground jet fuel storage tanks, and the airstrip.

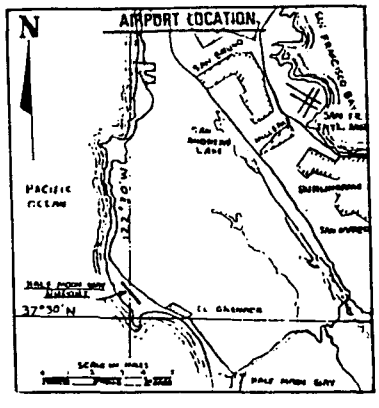
The two abandoned USTs are located north of the airport administration buildings and east of the air strip. The USTs are under a 40' x 80' concrete pad. Mr. Peterson suggested that the tanks were used for vehicle fueling. He also stated that, to the best of his knowledge, the tanks have not been used since DOD use.



AIRPORT LAYOUT



STATE INDEX



VICINITY MAP

NOTES:

1. THE SITE IS CURRENTLY BEING USED BY THE HALF MOON BAY MUNICIPAL AIRPORT.
2. IMPROVEMENTS LEFT BY THE AIR FORCE AT THE SITE INCLUDED TWO USTS, SEVEN UNDERGROUND CONCRETE FUEL BUNKERS, AND TWO EXPOSED CONCRETE SUMPS.
3. NOT TO SCALE

HALF MOON BAY FLIGHT STRIP

DERP–FUDS
INVENTORY PROJECT REPORT

SITE VISIT 2 APRIL 1991

The seven pump pits are located along the taxiways and near the hanger buildings. Surface evidence included seven 3'x 4' concrete accessways, approximately 3' deep, covered with metal doors, flush with the ground. Fuel pumps and hoses were noted inside the accessways. Airport layout drawings obtained from Mr. Peterson indicated underground fuel lines from the pump pits to the underground fuel storage tanks. Locations of the accessways are noted on the attached site location map.

The two concrete sumps are located just east of the abandoned USTs. The two sumps are 4' 10', of unknown depth with open tops. They are partially buried, extending approximately 2 feet above ground. The sumps are filled with water to a depth of approximately 4' below the top. One sump is filled with broken concrete debris. A concrete foundation structure, approximately 3' x 8' x 1' high, located west of the sumps between the USTs and the concrete sumps, has a 12" flanged pipe extending into the ground. It is not known if the pipe is connected to the sumps or tanks.

Foundations for a group of barracks were located approximately 600' west of the USTs. The only possible hazard noted at this area was a concrete above ground tank support. The tanks had been removed, but the support (on a 8' x 14' concrete pad) and associated piping remained.

The parcels outside of the airport property had been primarily used only as glide angle clearance. A visual survey of the area revealed no evidence of DOD use. The area consisted mainly of residential lots.

Mr. Jorge Gomar of the San Mateo County Environmental Health Department was contacted on 12 April 1991 regarding underground storage tanks at the site. He said that he only had record of two 10,000-gallon jet fuel tanks at the airport, currently in use. The California Hazardous Waste and Substances Sites list (CORTESE) was examined for the City of Half Moon Bay, San Mateo County, and by zip code 94019. No records were found for this site.

CATEGORY OF HAZARD: CON/HTW.

PROJECT DESCRIPTION: CON/HTW. The proposed project consists of the removal of two aviation fuel USTs, each approximately 10,000 gallons in size, seven 1000-gallon concrete fuel pump pits, associated underground piping, the testing and removal of soil under the tanks, and backfilling the disturbed areas.

AVAILABLE STUDIES AND REPORTS: None identified.

PA POC: John Hoge, CESPK-ED-M-HTW, 916-557-7421.

PROJECT SUMMARY SHEET
FOR
DERP-FUDS CON/HTW PROJECT NO. J09CA082001
SITE NO. J09CA082000

PROJECT DESCRIPTION: The site contains two underground storage tanks, seven underground concrete fuel pump pits, and two concrete sumps.

PROJECT ELIGIBILITY: The underground storage tanks, pump pits, and sumps were installed by the DOD. They are potential sources of soil and groundwater contamination.

POLICY CONSIDERATIONS: The underground storage tanks have not been used since DOD occupancy.

PROPOSED PROJECT: The project consists of removal of two aviation fuel USTs, seven underground concrete fuel pump pits and associated fueling pumps and piping (approximately 2500 feet), testing the underlying soil to determine the extent and severity of any soil contamination, excavation of contaminated soil, and backfilling the excavation with imported fill.

DD FORM 1391: Attached

DISTRICT POC: Mr. John Hoge, CESPK-ED-M-HTW, 916-557-7421

Angus 4-5223

CEMP-RF

CEMP-RF (200-1a)

MEMORANDUM FOR

COMMANDER, SOUTH PACIFIC DIVISION, ATTN: CESPD-ED
COMMANDER, HUNTSVILLE DIVISION, ATTN: CEHND-ED

SUBJECT: DERP-FUDS CON/HTW Project Number J09CA082001 for Half Moon Bay Flight Strip, CA, Site Number J09CA082000.

1. Reference memorandum, CESPD-ED-G, 10 July 1992, subject as above.

2. This memorandum authorizes the CON/HTW Project Number J09CA082001 recommended in the referenced Inventory Project Report. This project is assigned through CESPD to CESPK for execution. CESPK will execute this project in accordance with the HQUSACE policy guidance for USTs on FUDS dated 31 July 1990.

3. We request that:

a. CESPD, within sixty days of the date of this memorandum, ensure that the landowners are notified of the decision and provide copies of the notification to CEMP-RF and CEHND-PM-EP.

b. CESPD include this project in both the DERP-FUDS fiscal year workplan and the five-year workplan. All contracts should be awarded before the end of the third quarter of any fiscal year.

c. CESPD ensure that CESPK updates the DERP-FUDS database located at CEHND within thirty days of the date of this memorandum. That CEHND ensure that the geographical districts have provided the required update.

4. CEMP-RF POC for this action is Sara G. Angus, (202) 504-5223.

FOR THE DIRECTOR OF MILITARY PROGRAMS:

Encl

MICHAEL H. FELLOWS
Colonel, Corps of Engineers
Chief, Environmental Restoration Division
Directorate of Military Programs

CF: CESPK-ED

DEPARTMENT OF THE ARMY
U.S. Army Corps of Engineers
WASHINGTON, D.C. 20314-1000

REPLY TO
ATTENTION OF:

7 Aug 92

CEMP-RF (200-1a)

MEMORANDUM FOR

COMMANDER, SOUTH PACIFIC DIVISION, ATTN: CESPD-ED
COMMANDER, HUNTSVILLE DIVISION, ATTN: CEHND-ED

SUBJECT: DERP-FUDS CON/HTW Project Number J09CA082001 for Half Moon Bay Flight Strip, CA, Site Number J09CA082000.

1. Reference memorandum, CESPD-ED-G, 10 July 1992, subject as above.

2. This memorandum authorizes the CON/HTW Project Number J09CA082001 recommended in the referenced Inventory Project Report. This project is assigned through CESPD to CESPK for execution. CESPK will execute this project in accordance with the HQUSACE policy guidance for USTs on FUDS dated 31 July 1990.

3. We request that:

a. CESPD, within sixty days of the date of this memorandum, ensure that the landowners are notified of the decision and provide copies of the notification to CEMP-RF and CEHND-PM-EP.

b. CESPD include this project in both the DERP-FUDS fiscal year workplan and the five-year workplan. All contracts should be awarded before the end of the third quarter of any fiscal year.

c. CESPD ensure that CESPK updates the DERP-FUDS database located at CEHND within thirty days of the date of this memorandum. That CEHND ensure that the geographical districts have provided the required update.

4. CEMP-RF POC for this action is Sara G. Angus, (202) 504-5223.

FOR THE DIRECTOR OF MILITARY PROGRAMS:

for LTC, EN

MICHAEL H. FELLOWS
Colonel, Corps of Engineers
Chief, Environmental Restoration Division
Directorate of Military Programs

Encl

CF: CESPK-ED

DEPARTMENT OF THE ARMY
SOUTH PACIFIC DIVISION, CORPS OF ENGINEERS
630 Sansome Street, Room 720
San Francisco, California 94111-2206

REPLY TO
ATTENTION OF:

CESPD-ED-GH (200-1c)

10 JUL 1992

MEMORANDUM FOR

Commander, U.S. Army Corps of Engineers, 20 Massachusetts Avenue, N.W., Washington, DC 20314-1000

Commander, U.S. Army Engineer Division, Huntsville, P.O. Box 1600, Huntsville, Alabama 35807-4301

Commander, U.S. Army Engineer Division, Missouri River, P.O. Box 103, Downtown Station, Omaha, Nebraska 68101-0103

SUBJECT: Defense Environmental Restoration Program For Formerly Used Defense Sites (DERP-FUDS), Inventory Project Report (INPR) for Half Moon Bay Flight Strip, Site No. J09CA082000.

1. I am forwarding the INPR for Half Moon Bay Flight Strip for appropriate action. The site is eligible for DERP-FUDS. The proposed CON/HTW project is also eligible.

2. I recommend that CEMP-R approve the proposed CON/HTW project and assign it through this headquarters to CESPK for RD/RA.

Mark W. Potter, COL, EN
for ROGER F. YANKOUPE
Brigadier General, U.S. Army
Commanding

Encl

CF: CESPK-ED-M (HTW)

DEFENSE ENVIRONMENTAL RESTORATION PROGRAM
FOR FORMERLY USED DEFENSE SITES (DERP-FUDS)

INVENTORY PROJECT REPORT (INPR) REVIEW SHEET

SITE NAME Half Moon Bay Flight Strip

PROJECT NUMBER J09CA0P2000

****

CESPD-RE, REAL ESTATE: The subject site real estate documents have been reviewed for acquisition, use, and disposal of the site. The manner/type
1 of control (fee, lease, permit, etc), the method of disposal and or lease termination were checked. I concur with the report, except as noted below.

signature Dick Brawer

****

CESPD-OC, OFFICE OF COUNSEL: The subject INPR has been reviewed for substance and legal sufficiency. I concur with the report, except as noted
2 below.

signature

****

CESPD-ED, ENGINEERING DIV: The subject INPR has been reviewed for general substance and geotechincal considerations and has been reviewed
3 for a proper cost estimate. (Positive reports only).

signature Walter E. Day

****

CESPD-ED-GH, ENVIRONMENTAL: The subject INPR has been reviewed for
4 format, content, and applicability to current AR's, ER's and USACE DERP -FUDS policy and the recommendations appear to be valid. I concur with the report except as noted below.

signature Brian Starr

****

DEPARTMENT OF THE ARMY
U.S. ARMY ENGINEER DISTRICT, SACRAMENTO
CORPS OF ENGINEERS
1325 J STREET
SACRAMENTO, CALIFORNIA 95814-2922

REPLY TO
ATTENTION OF

CESPK-ED-M (200-1b) 30 December 1991

MEMORANDUM FOR Commander, South Pacific Division

SUBJECT: DERP-FUDS Inventory Project Reports (INPRS)

1. Five copies each of the Half Moon Bay Flight Strip, Quinn River Gap Filler Annex, Little Devil's Slide Military Reservation and two copies of the Fort McDowell FINAL INPR's are enclosed. A site visit was conducted for each site.

a. POSITIVES:

(1) Half Moon Bay Flight Strip
San Mateo County, California J09CA082000

(2) Fort McDowell
Marin County, California J09CA080500

b. NOFA'S:

(1) Quinn River Gap Filler Annex
Humboldt County, California J09CA085400

(2) Little Devil's Slide Military Reservation
San Mateo County, California J09CA085500

2. We have determined that the sites were formerly used by the Army. A Findings and Determination of Eligibility is included for each site.

3. I recommend that you:

a. Sign the FDE for the Half Moon Bay Flight Strip and Fort McDowell sites and forward a copy of the INPR's to CEMP requesting approval for CESPK to accomplish the CON/HTW projects and the BD/DR project when it is funded. Additionally, it is requested that a copy of the Fort McDowell INPR be forwarded to MRD so that they can determine the need for further investigation or action for the HTW and PRP/HTW projects, and a copy be forwarded to HND so that they can determine the need for further action for the OEW project.

b. Sign the FDE for the Little Devil's Slide Military Reservation and Quinn River Gap Filler Annex sites and forward the INPR's to CEMP for removal from the inventory list.

4 Encls

LAURENCE R. SADOFF
COL, EN
Commanding

REPORT

Half Moon Bay Flight Strip (J09CA082000) (Half Moon Bay)

Half Moon Bay , CA 94019
CASE STATUS: OPEN
RETURN TO REPORT MAIN MENU

REGIONAL BOARD
SAN FRANCISCO BAY RWQCB (REGION 2)
CONTACT: - (510) 622-2300
RB RECORD FILE #:

CHOOSE A REPORT TO VIEW

SITE INFO:
- REGULATORY HISTORY
- LOCATIONAL INFORMATION
- ANALYTICAL DATA
- ELECTRONIC ANALYTICAL DATA
- DEPTH TO WATER INFORMATION
- RISK MANAGEMENT
- LAND USE CONTROLS

LEAK INFO:
- DETAILED RELEASE INFORMATION
- REMEDIATION ON SITE

ELECTRONIC SUBMITTALS:
- ANALYTICAL DATA (NONE AVAILABLE)
- LOCATION DATA (NONE AVAILABLE)
- ELEVATION DATA (NONE AVAILABLE)
- DEPTH TO WATER DATA (NONE AVAILABLE)
- GEO MAP DATA (NONE AVAILABLE)
- GEO REPORT / SITE DOCUMENTS (NONE AVAILABLE)
- GEO BORE DATA (NONE AVAILABLE)

CUF REIMBURSEMENT AMOUNT:
$0

ADDITIONAL INFO:
- 0 FIELD POINTS FOR THIS SITE
- 0 PUBLIC WATER WELL(S) ESTIMATED TO BE NEARBY THIS SITE

Geotracker Home | Site/Facility Finder | Case Finder | MTBE/Case Reports

HALF MOON BAY FLIGHT STRIP

5.5 NW OF HALF MOON BAY
HALF MOON BAY, CA 94019
SAN MATEO COUNTY
SITE TYPE: FUDS
ACRES: 340 ACRES
APN: NONE SPECIFIED
NATIONAL PRIORITIES LIST: NO
CLEANUP OVERSIGHT AGENCIES:
DTSC - SITE MITIGATION AND BROWNFIELD REUSE PROGRAM

PROJECT MANAGER:	DONN DIEBERT
SUPERVISOR:	DONN DIEBERT
DIVISION / BRANCH:	OMF - NO (BERKELEY)
ENVIROSTOR ID:	71000039
SITE CODE:	201110
ASSEMBLY DISTRICT:	09
SENATE DISTRICT:	08
SPECIAL PROGRAM:	
FUNDING:	DERA
PRESS CONTACT:	ANGELA BLANCHETTE

COMMUNITY INVOLVEMENT

STATUS

INACTIVE - ACTION REQUIRED AS OF 12/19/2005

REGULATORY PROFILE

PAST USE(S) THAT CAUSED CONTAMINATION
AIRCRAFT MAINTENANCE, AIRFIELD OPERATIONS, FUEL - AIRCRAFT STORAGE/ REFUELING

POTENTIAL CONTAMINANTS OF CONCERN
TPH-DIESEL
TPH-GAS

POTENTIAL MEDIA AFFECTED
SOIL

SITE HISTORY

In 1991, the reported improvements left by the U.S. Air Force included two abandoned underground storage tanks (USTs) of unknown capacity, seven underground concrete pump pits, two exposed concrete sumps (approximately 3.5' x 10'), concrete supports for one aboveground storage tank (AST), and concrete foundations for several buildings. Remaining improvements include several hangars, an office building, two USTs, and the airstrip. The two abandoned USTs are buried beneath a large (approximately 40' x 80') concrete slab. The known potential hazards are the abandoned tanks and the above ground tank supports.

DISCLAIMER PLEASE EMAIL US WITH YOUR SUGGESTIONS AND/OR COMMENTS

PILLAR POINT RESERVATION

HALF MOON BAY, CA
SAN MATEO COUNTY
SITE TYPE: FUDS
ACRES: 49 ACRES
APN: NONE SPECIFIED
NATIONAL PRIORITIES LIST: NO
CLEANUP OVERSIGHT AGENCIES:
DTSC - SITE MITIGATION AND BROWNFIELD REUSE PROGRAM

SUPERVISOR:	DONN DIEBERT
DIVISION / BRANCH:	OMF - NO (SACRAMENTO)
ENVIROSTOR ID:	80000691
SITE CODE:	
ASSEMBLY DISTRICT:	19
SENATE DISTRICT:	08
SPECIAL PROGRAM:	
FUNDING:	DERA
PRESS CONTACT:	CAROL SINGLETON

COMMUNITY INVOLVEMENT

STATUS

INACTIVE - NEEDS EVALUATION AS OF 7/1/2005

REGULATORY PROFILE

PAST USE(S) THAT CAUSED CONTAMINATION
NONE SPECIFIED

POTENTIAL CONTAMINANTS OF CONCERN
NONE SPECIFIED

POTENTIAL MEDIA AFFECTED
NONE SPECIFIED

SITE HISTORY

Pillar Point was developed to serve as a harbor defense post and primary artillery site for San Francisco. Structures added to the site included concrete bunkers and barracks, cyclone fences, and both an overhead and an underground electric system. Site was disposed of a few years after the war, but was reaqcuired in the early 1960s for uses as a radar facility. Access to portion of site now occupied by a missile tracking installation was denied, so detailed inspection of the site was not possible. Visual inspection from a distance shows no evidence of former harbor defense post.

FROM THE CORPS PUBLIC GIS SYSTEM: Property Description - The site is located at Half Moon Bay, 15 miles south of San Francisco in San Mateo County, California. Approximately 7 acres of the site is owned by Vandenberg AFB, and 4 acres are owned by the San Mateo Harbor District (currently being developed into a wetlands habitat).The remaining 3 acres are privately owned and undeveloped. No remaining structures or facilities were observed.

Property History - On 10 October 1940, the U.S. Army purchased 12.68 acres and leased 36.28 acres of undeveloped land. The land was developed to use as a harbor defense post and primary artillery site for San Francisco. Improvements included concrete barracks and bunkers, cyclone fences, and an overhead and underground electric system. In 1970 the USAF acquired all but approximately 7 of the leased acres by condemnation.

EDR Historical Topographic Map Report

Big Wave Project
Airport Street/Stanford Avenue
Half Moon Bay, CA 94019

Inquiry Number: 1872299.4

March 07, 2007

EDR® Environmental Data Resources Inc

The Standard in Environmental Risk Management Information

440 Wheelers Farms Rd
Milford, Connecticut 06461

Nationwide Customer Service

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

EDR Historical Topographic Map Report

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

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Historical Topographic Map

N	TARGET QUAD NAME: SAN MATEO MAP YEAR: 1899 SERIES: 15 SCALE: 1:62500	SITE NAME: Big Wave Project ADDRESS: Airport Street/Stanford Avenue Half Moon Bay, CA 94019 LAT/LONG: 37.5051 / 122.4934	CLIENT: Treadwell & Rollo Inc. CONTACT: Eric Morita INQUIRY#: 1872299.4 RESEARCH DATE: 03/07/2007

Historical Topographic Map

N	TARGET QUAD NAME: SAN MATEO MAP YEAR: 1947 SERIES: 15 SCALE: 1:50000	SITE NAME: Big Wave Project ADDRESS: Airport Street/Stanford Avenue Half Moon Bay, CA 94019 LAT/LONG: 37.5051 / 122.4934	CLIENT: Treadwell & Rollo Inc. CONTACT: Eric Morita INQUIRY#: 1872299.4 RESEARCH DATE: 03/07/2007

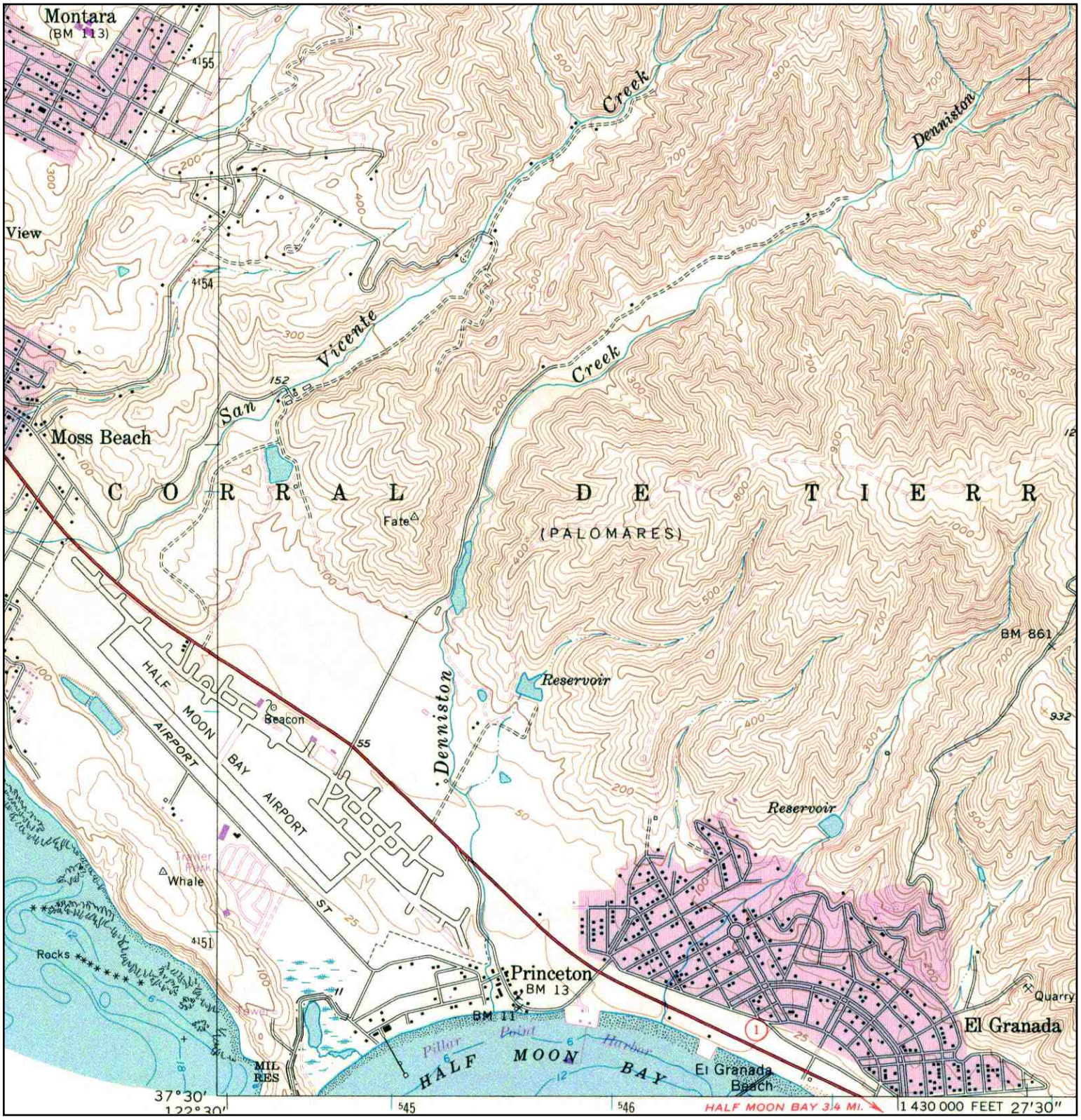
Historical Topographic Map

N	TARGET QUAD NAME: MONTARA MOUNTAIN MAP YEAR: 1949 SERIES: 7.5 SCALE: 1:24000	SITE NAME: Big Wave Project ADDRESS: Airport Street/Stanford Avenue Half Moon Bay, CA 94019 LAT/LONG: 37.5051 / 122.4934	CLIENT: Treadwell & Rollo Inc. CONTACT: Eric Morita INQUIRY#: 1872299.4 RESEARCH DATE: 03/07/2007

Historical Topographic Map

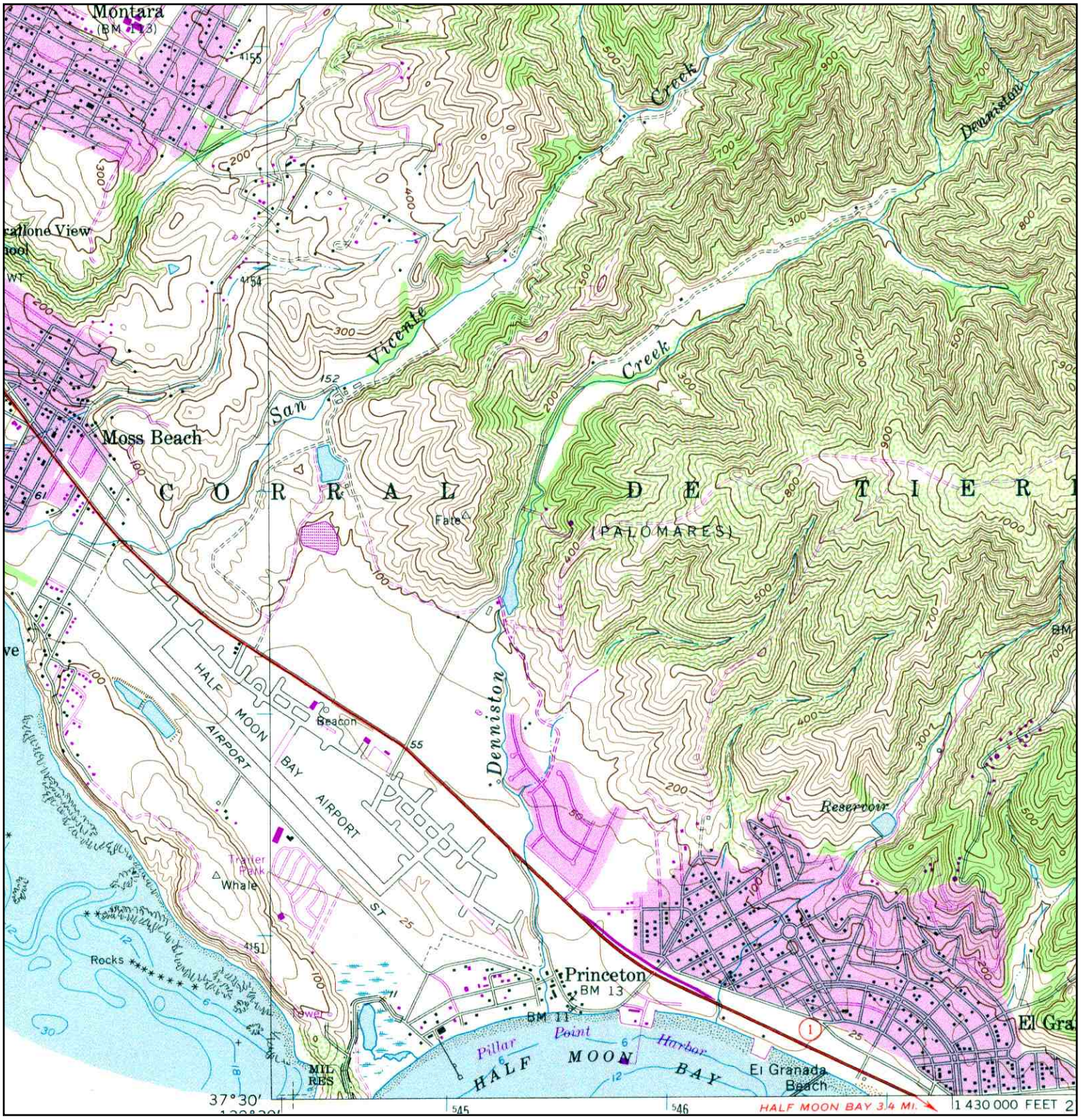
N	TARGET QUAD NAME: MONTARA MOUNTAIN MAP YEAR: 1956 SERIES: 7.5 SCALE: 1:24000	SITE NAME: Big Wave Project ADDRESS: Airport Street/Stanford Avenue Half Moon Bay, CA 94019 LAT/LONG: 37.5051 / 122.4934	CLIENT: Treadwell & Rollo Inc. CONTACT: Eric Morita INQUIRY#: 1872299.4 RESEARCH DATE: 03/07/2007

Historical Topographic Map



N	TARGET QUAD NAME: MONTARA MOUNTAIN MAP YEAR: 1968 PHOTOREVISED FROM:1956 SERIES: 7.5 SCALE: 1:24000	SITE NAME: Big Wave Project ADDRESS: Airport Street/Stanford Avenue Half Moon Bay, CA 94019 LAT/LONG: 37.5051 / 122.4934	CLIENT: Treadwell & Rollo Inc. CONTACT: Eric Morita INQUIRY#: 1872299.4 RESEARCH DATE: 03/07/2007

Historical Topographic Map



N	TARGET QUAD NAME: MONTARA MOUNTAIN MAP YEAR: 1980 PHOTOREVISED FROM:1956 SERIES: 7.5 SCALE: 1:24000	SITE NAME: Big Wave Project ADDRESS: Airport Street/Stanford Avenue Half Moon Bay, CA 94019 LAT/LONG: 37.5051 / 122.4934	CLIENT: Treadwell & Rollo Inc. CONTACT: Eric Morita INQUIRY#: 1872299.4 RESEARCH DATE: 03/07/2007

Historical Topographic Map

N	TARGET QUAD NAME: MONTARA MOUNTAIN MAP YEAR: 1993 SERIES: 7.5 SCALE: 1:24000	SITE NAME: Big Wave Project ADDRESS: Airport Street/Stanford Avenue Half Moon Bay, CA 94019 LAT/LONG: 37.5051 / 122.4934	CLIENT: Treadwell & Rollo Inc. CONTACT: Eric Morita INQUIRY#: 1872299.4 RESEARCH DATE: 03/07/2007

CLEARWATER
GROUP
Environmental Services

SITE CONCEPTUAL MODEL AND UPDATED WORKPLAN AND SCHEDULE

860 Airport Street
Moss Beach, California

Prepared
on Behalf of:

Ms. Lucy Yu
860 Airport Street
Moss Beach, CA

June 30, 2006

Prepared By:
Clearwater Group
229 Tewksbury Avenue
Pt. Richmond, CA 94801
Clearwater Job No. DP004D

CLEARWATER
GROUP, INC.
Environmental Services

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This Site Conceptual Model (SCM) is presented per the request of San Mateo County, Health Department, Groundwater Protection Program (GPP) staff's letter of March 30, 2005. This report also refines former workplans per GPP staff's letter request of January 10, 2006. In addition, this report includes the requested schedule of proposed work.

1.0 SITE DESCRIPTION

1.1 PHYSICAL LOCATION/GEOLOGY/CLIMATE

The subject property is located on the west side of northwest/southeast trending Airport Street in Moss Beach, California (see **Figure 1**). The site is located approximately 32.45 feet above mean sea level. The Pacific Ocean shoreline lies approximately 2,000 feet to the southwest of the site. The property is located on the Montara Mountain section of the USGS 7.5 Minute Topographic Quadrangle Map (year 2000).

Regional Geologic Setting

The site is located within an isolated basin, the Half Moon Bay Terrace, along the coast of California (see **Appendix A, Figure 4.3**). The basin was formed by the transverse fault motion along the San Gregorio Fault.

San Gregorio Fault

The San Gregorio Fault (SGF) is located along the western edge of the site (see **Appendix A, Figure 4.1**). The SGF exhibits approximately 155 km of known right-lateral offset and is the western boundary of the Salinian block. Strands of this fault display Holocene age (within 11,000 years ago) offset.

The exposed strand of the SGF at Half Moon Bay is known as the Seal Cove Fault. The scarp of the Seal Cove Fault forms the linear ridge, trending roughly north 35° west, along the southwest side of the basin. Vertical motion along the Seal Cove Fault has forced Purisima formation upward, forming the scarp and the gradual down-warping of the coastal terrace (Simpson, Lettis, Thompson and Noller, 1994).

Half Moon Bay Terrace

The site and surrounding area is located within a southeast trending groundwater basin referred to as the Half Moon Bay Terrace (Terrace). The Terrace occupies a structural trough (graben or down dropped area) between strands of the SGF. The Terrace has been filled with sediments transported from the adjacent hills. The alluvial material overlying the Purisima bedrock in the Terrace varies in thickness from about 30-50 feet bgs to a maximum of about 150 feet bgs. The alluvial materials consist of sandy clay, clayey and silty sand, and relatively clean coarse to fine sand. The upper 50 to 70 percent of the alluvial section contains more silts and clays, and less clean sands. Generally the sediments thin and become finer grained toward Half Moon Bay to the south. This has forced some groundwater discharge to the surface (along with surface runoff) resulting in marshy conditions at the extreme southwestern corner of the Terrace, forming the Pillar

Point Marsh. The generally silty to clayey nature of the sands, along with their limited extent and thickness, limits the ability of these alluvial fill materials to transmit and store groundwater (ESA/L&S, June 1987 – see **Appendix A, Figure 4.2**).

Luhdorff and Scalmanini, et al. (1991) describes all of the soil lying above the Purisima formation as Quaternary Terrace deposits (see referenced reports). On the cross-sections prepared by Environmental Bio-Systems (EBS) in 2004, (see **Appendix B**) the nearest subsurface layer (to a depth of approximately 7 to 12 feet) is described as Clay, Organics, which correlates to the 'Topsoil?' or 'Marsh' deposits on the Luhdorff and Scalmanini (basin wide) cross sections. On the EBS cross-sections, the silt sand layer, with isolated lenses or channels of clayey sand, and underlying fine sand/sand layers, correlate to the undifferentiated 'Back Beach Sands' of Luhdorff and Scalmanini. The EBS borings do not appear to have been drilled to great enough depth to have reached the underlying Beach Sand or the underlying Purisima formation (expected at depths greater than 30-50 ft. bgs).

Climate

The site vicinity has a Mediterranean climate with distinct wet and dry seasons. Most of the precipitation falls during the months of November through April. Virtually all the measured precipitation occurs as rain, although fog condensate accounts for a small percentage. Precipitation ranges from approximately 18 inches a year at the lowest elevations to 38 inches per year in the headwaters of San Vicente Creek, northeast of the subject property.

1.2 LAND USE

The subject property measures approximately 0.803 acres, a truncated rectangle, with property lines measuring 259.71 feet (NE) by 202.72 feet (SW) by 150 feet (SE) and 160.72 feet (NW) (see Figure 2). Both the subject property and the neighboring property to the northwest, at 850 Airport Street, are zoned M-1, light industrial. The property is currently utilized for a variety of commercial businesses: warehouse, metal fabricator and storage facility businesses. The Assessor's Parcel Number (APN) is 047-300-100.

The property is adjoined on its southwest and southeast borders by a mobile home park. Residential use near the property is limited to this park, the Pillar Ridge Manufactured Home Community (PRMHC), formerly El Granada Mobile Home Park. The property is bounded by commercial use to the northwest and by Airport Street to the northeast. Other significant property uses in the area include the Half Moon Bay Airport, (located on the east side of Airport Street, directly across the street from the subject property), the communication facility due south, the communities of Princeton (SE) and Seal Cove (NW), State Highway Route 1 and agricultural uses.

The early uses of the Moss Beach Terrace were primarily agricultural. Construction of the Half Moon Bay Airport for the U.S. Army started in 1942. The U.S. Navy operated the airport from 1945 to 1947. In 1947 San Mateo County assumed ownership of the

airport. An extensive surface precipitation drainage network was installed during the development of the airfield to drain the runways, fields and other airport facilities. Numerous small feeder ditches drain into a main collector ditch, which flows through a culvert and discharges at Airport Street into the upper marsh.

According to the property owner, the site was open farmed land prior to 1952. The current building was constructed in 1952. The building was expanded in 2004.

Salient details of the site history are taken from the Phase I Environmental Assessment by Clearwater Group (Clearwater) prepared in 2001 and the Workplan Addendum Report, dated July 24, 2003 by Environmental Bio-Systems, Inc. (EBS) of Mill Valley, California. The EBS Workplan Addendum Report included interviews with prior owners, tenants, and employees.

Mr. Mearini bought the property in 1944, prior to the construction of any buildings on the property and used the land for agricultural purposes. He reports to have installed a 12-inch diameter, steel-cased irrigation well which was drilled to a depth of 40 feet below ground surface (bgs). The exact location of the irrigation well is unknown. According to Mr. Mearini, the well was located in the eastern corner of the property. He also constructed an irrigation pond in the northern corner of the property. EBS reviewed regulatory files and permits but did not find documentation regarding the construction or destruction of the well. In November 2003, EBS hired a registered geophysicist with J & R Associates of San Jose, California, who attempted to locate the irrigation well in the street, sidewalk, and driveway in the northeast corner of the property. After applying magnetic induction and ground penetrating radar methods, only one location showed a magnetic anomaly.

In December 2003, EBS probed the subsurface to a depth of four feet in the area of the magnetic anomaly (in the eastern corner of the property) in an attempt to locate the irrigation well. After considerable effort, the well was not located on the subject property and was declared lost and abandoned. No further work is planned to find this well.

Mr. Mearini sold the property to the founders of the Bluegate Candle Company in 1952. He continued to work on the property at the Bluegate Candle factory. According to Mr. Mearini, two concrete-block (one-story) buildings were built for the candle factory in 1952 and one metal-framed building was constructed behind the concrete block buildings in 1960.

In 1986, the property was sold to Ms. Lucy Yu. From 1986 to 1989, the Bluegate Candle Company was a tenant of Ms. Yu. In 1989, another owner bought the Bluegate Candle Company and the company vacated the property facility. Between 1990 and late 1991, the subject property was vacant. Mr. Tony Farias rented the property and used the metal building as a vehicle repair business in late 1991, according to interviews with Mr. Glenn Bell. Mr. Bell joined Mr. Farias as a full-time mechanic in the summer of 1992. Mr.

Farias was in business until late 1993. According to Mr. Bell, Tony Farias' shop was well run, and management was aware of good housekeeping practices. Research of San Mateo County business licenses and hazardous materials business plans supports the descriptions provided by Mr. Bell.

In late 1993, Mr. Bell owned and operated Master Auto Tech in the building formerly operated by Mr. Farias. Mr. Bell operated Master Auto Tech from the time when Tony Farias went out of business in late 1993 until September 1999. According to the Fictitious Business License Bureau of San Mateo County, Glenn Allen Bell was licensed from December 7, 1993 to December 7, 1998 and did business as Master Auto Tech. Waste products included those from chlorinated solvents, motor oils, and radiator fluid were used on site and stored pending proper disposal. According to Simon Yu and Mr. Bell, all the wastes were stored in primary containers within secondary containment. Mr. Yu paid for the proper packaging, transportation, and disposal of all used motor oil and radiator fluid left behind by Master Auto Tech when Mr. Bell left the property. According to Mr. Bell, all hazardous waste laws for proper storage and disposal were followed during the running of Master Auto Tech, while he was operating a business on the premises.

Current users of the subject property are as follows below. The tenants of 860 Airport Street use the building for industrial or commercial purposes. There are no residential uses of the building.

TENANT	UNIT	USE
Briggs and Riley Travelware	A	Luggage Warehouse
Mad Fish Designs	B	Metal Decoration Fabricator
Eco-Pop Designs	C	Trash Can Recycling Containers
Storage Units	D-F	Misc. storage, construction equipment
Coya Enterprises	G	Storage, business equipment and vehicles

1.3 WATER USE

Both 860 and 850 Airport Street obtain potable water and receive sewage treatment services from the publicly owned Montara Water and Sanitary District (MWSD). MWSD provides water to the PRMHC only in times of emergency. For non-emergency water uses, the PRMHC pumps its water from its own three groundwater wells: Corona Well (102 Corona Street), Culebra Well (106 Culebra Street) and the Retiro Well (111 Retiro Street).

The PRMHC, at 164 Culebra Street, Moss Beach, California, has three on-site water supply wells. The locations of these two wells are shown (**Figure 2**) closely adjacent to two of the site's property lines. The Corona and Culebra wells were installed in 1994. The Retiro well was installed on March 5, 1991. Based on the initial sampling of the wells in 1994 the volatile organic compounds, PCE and TCE, were detected. Routine analysis required by the owners of the mobile home park on the water from these two

wells showed a slight impact by Volatile Organic Compounds (VOCs) in the years 2000 and 2001. Year 2004 and 2005 reports on these wells are located in **Appendix C**. See **Appendix D** for well construction information for the Corona and Culebra wells. The two wells at PRMHC impacted by chlorinated solvents are the Corona and Culebra wells. Luhdorff and Scalmanini has conducted yearly drinking water source assessments for the PRMHC drinking water wells. The two most recent drinking water source assessments for 2004 and 2005 are presented in **Appendix C** and were obtained from the PRMHC web site at http://www.pillarridge.com. These reports do not include the quantity of water pumped from the wells.

2.0 CHRONOLOGY OF INVESTIGATION EVENTS

2.1 ENVIRONMENTAL HISTORY OF SITE

Following a 1994 discovery of groundwater contamination of the PRMHC wells (Corona and Culebra), between March 5 and 8, 1999, Henshaw Associates, Inc. of Pleasanton, California, drilled soil borings B1, B2, and B3 on the northeast side of Airport Street (across Airport Street from the subject property). See **Figures 2 and 3** for all soil data points referenced in the following text. See **Appendix D** for all the soil boring logs for all data points discussed. The 1999 Henshaw borings were drilled to a range of depth of 60 to 70 feet bgs. Grab groundwater samples were collected from the borings at a shallow interval of 18 to 20 feet bgs and a deeper interval of 60 to 70 feet bgs. The samples were analyzed for VOCs. The northernmost boring, B2, contained 0.6 µg/L of 1,1,1-Trichloroethane (TCA) from the groundwater sample collected at 18 feet bgs. Target chemicals were not detected in any of the other five samples (one deeper sample from B2 as well as two samples each from B1 and B3). The logs for these borings are attached in **Appendix D**.

On May 3, 2001, Henshaw Associates, Inc., drilled boring B4 in the alley on the southeast property line of the subject property, using a cone penetrometer test (CPT) boring. The boring was drilled to a depth of 67.42 feet bgs. Grab groundwater samples were collected from the boring at a shallow depth of 25 feet bgs and a deeper zone of 60 feet bgs. The samples were analyzed for HVOCs along with TPH diesel. The sample from boring B4, at a depth of 25 feet bgs, contained 16 µg/L of TCE, 3.6 µg/L of PCE, 1.6 µg/L of cis-1, 2-dichloroethene (cis-1, 2-DCE), and 440 µg/L of a chemical that was eluted in the diesel range at a depth of 25 feet bgs. No contaminant was found in the deeper zone from 60 to 67 feet bgs.

Clearwater, representing the owner of 860 Airport Street, prepared a Phase I Environmental Site Assessment (October 2, 2001) for the subject property. In addition to reviewing the history of the subject property and neighboring sites, Clearwater established that abandoned or currently in-use underground fuel tanks (in addition to contaminant sources) possibly still exist in the subsurface near the airplane hangers at the Half Moon Bay Airport.

To further define the contamination identified by Henshaw Associates boring B4, Clearwater drilled eight borings (B-1 to B-8) to a maximum depth of 45 feet bgs on the subject property on January 8 and 9, 2002. Four sets of paired borings were drilled using a direct-push rig. In each of the four boring locations (B1/B2; B3/B4, B5/B6, and B7/B8 a shallow zone (approximately 11 to 15 feet bgs) and a deeper zone (approximately 40 to 44 feet bgs) sample was collected. Soil and grab groundwater samples were collected. Boring logs are named by the first of each holes, i.e. the log of B1/B2 is referred to only as B1.

Clearwater drilled a duplicate boring B-4 to confirm the analytical results of the groundwater samples collected at the Henshaw Associates, Inc. boring B4 in May 2001. The analytical results indicated the presence of TCE and PCE along with other VOCs at soil borings B-5 (11 to 15 feet bgs) and B-6 (40 to 44 feet bgs), both in the southern corner of the subject property. PCE and TCE were detected in groundwater at levels of 790 µg/L and 69 µg/L, respectively, in soil boring B-5. PCE and TCE were detected in groundwater at levels of 21 µg/L and 1.4 µg/L, respectively, in boring B-6. It appeared that higher concentrations of chlorinated solvent compounds in boring B-5 indicated the greater soil impact near the surface, presumably closer to the source of the VOCs. At boring B-8, various hydrocarbon VOCs and Total Petroleum Hydrocarbon as motor oil (TPH-m) were detected in groundwater at a depth of 40 to 44 feet bgs.

Environmental Bio-Systems (EBS) performed a subsurface investigation on November 20, 2003. EBS supervised FAST-TEK Engineering Support Services of Point Richmond, California, which drilled seven borings (B-9 to B-15) for soil sampling and analysis. This investigation focused on the shallow soils generally above the shallow groundwater. Boring B-9 was designed to assess the southeast side of the metal building near or on the concrete driveway. Three soil borings B-10, B-11, and B-12 drilled on the southwest side of the metal building were used to evaluate the shallow soil in the unpaved area in the back of the building. Boring B-13, on the northwest side of the metal building, was drilled near where the auto shop is reported to have stored 55-gallon drums of used oil prior to recycling. Boring B-14 was located south of the former irrigation pond. Boring B-15 was drilled in front of the metal building near the storage area where used oil was stored in secondary containment. The outline of the metal trough that served as a secondary containment for used oil storage was visible on the concrete pad on the southwest side and outside of the building at the time the boring was installed. Boring B-15 was drilled to 10 feet bgs and no subsurface obstacles, such as buried containers, were encountered.

Borings B-9, B-13, B-14 and B-15 were drilled to 12, 10, 10, and 10 feet bgs, respectively, using a Geoprobe 5400 direct-push rig. Soil sampling was conducted using 4-foot long, 2-inch diameter Geoprobe soil samplers with clear PETG plastic soil liners. The soil borings were continuously cored to the total depths described above. Groundwater was encountered in the clay-rich shallow soil in three borings: B-13 at

eight feet bgs, B-14 at ten feet bgs, and B-15 at eight feet bgs. Grab groundwater sample collection was attempted in these three borings, but a minimum amount of water required for a sample was not available after approximately one hour of sampling.

Borings B-10 through B-12 was drilled in the unpaved area behind the metal building. These borings were drilled to a depth of six feet bgs using limited access, hand-held Geoprobe direct-push equipment because the area behind the building was too narrow to permit access of a truck-mounted direct-push probe rig. Soil samples were continuously cored using a 2-foot long, 1.25-inch diameter Geoprobe soil sampler. The drillers attempted to core deeper with the hand-held portable Geoprobe equipment but met refusal at six feet. Groundwater was not encountered in these three shallow borings.

EBS used a Thermo 580B photo-ionization detector (PID) to screen soils. The soils were screened at intervals of approximately every foot. Additional screening was performed based on soil discoloration or staining. No indications of volatile compounds were detected in the soil samples by these screening procedures.

One soil sample from each boring (B-9 to B-15) was collected and sent under standard chain-of-custody procedures to Kiff Analytical, a California State-certified laboratory located in Davis, California. Solvents were not detected in any of the analyzed soil samples; however, TPH as diesel (TPH-d) was detected at concentrations ranging from 1.6 mg/kg to 6.9 mg/kg in B-9 through B-13. The soil boring logs are attached in **Appendix D**. The soil data is attached in **Appendix E**.

2.2 MONITORING WELL INSTALLATION

Because the November 2003 investigation was primarily focused on establishing the extent of contamination in the shallow soils and groundwater, an additional investigation was conducted by Clearwater to monitor those contaminants in the shallow groundwater at the property. On March 11, 2004 HEW Drilling of San Mateo, California advanced four soil borings on the property and installed a 2-inch PVC monitoring well in each of the borings. The borings were drilled to depths of 25 feet bgs, and soil samples were collected from the borings, generally at 5-foot intervals. The four monitoring wells, MW-1, MW-2, MW-3 and MW-5, were located around the perimeter of the property. These monitoring well locations were determined based on the results of previous investigations. The location intended for MW-4 (proposed to be installed within the interior metal-framed building) was not feasible at the time of drilling operations due to construction activity of a building addition to the existing metal structure.

2.3 GROUNDWATER MONITORING

Quarterly groundwater monitoring started with the Second Quarter 2004 (April 19, 2004) monitoring event following the installation and development of four monitoring wells, MW-1, MW-2, MW-3 and MW-5. In order to minimize the influence of groundwater elevation change on the sampling results, a Low-flow Rate Purging (LRP) and sampling method was requested by the Groundwater Protection Program of the Health Services

Agency (San Mateo County) in a letter dated March 30, 2005. At the request of San Mateo County, Clearwater submitted a *Groundwater Monitoring Plan* on April 18, 2005 to present its LRP protocol and the target depth of purging and sampling for each monitoring well. San Mateo County approved the requested LRP method in a letter dated June 6, 2005. The LRP method has since been used for all quarterly monitoring events at the subject property. See Table 1 for site water contaminant and groundwater flow direction data from April, 2004 to April, 2006. Note that since the LRP program has been initiated the levels of the COCs in the site wells have been lower.

3.0 LITHOLOGY AND HYDROGEOLOGY

3.1 LITHOLOGY

Terrace Formation

The top 30 feet of the Terrace Formation at the subject property consists of 'Recent' clays, clayey sands and fine grained sands. The generally low permeable soil overlies a more sand-rich sequence from about 30 to 60 feet below ground surface.

Purisima Formation

The Purisima Formation (Tp) is a Pliocene and upper Miocene formation. Predominantly gray and greenish gray to buff fine grained sandstone, siltstone, and mudstone, it also includes some porcelaneous shale and mudstone, chert, silty mudstone, and volcanic ash. The Purisima Formation was deposited in a shallow marine environment. Oil may be present due to naturally occurring hydrocarbons in the area. Strands of the San Gregorio Fault Zone within the Purisima Formation may provide preferential pathways to migrating contaminants, such as PCE.

Montara Granodiorite

Structurally underlying the Purisima Formation is the Montara Granodiorite which is not exposed in the area. The Montara Granodiorite is considered basement in the area. The Montara Granodiorite is in unconformable contact with the overlying Purisima Formation.

3.2 HYDROLOGY

Basin Hydrogeology

The surface water runoff and groundwater flow are both controlled by the Seal Cove Fault, which constrains groundwater flow through the Half Moon Bay Terrace Formation and overlying alluvium east of the fault. Groundwater elevation contour data for the Terrace Formation from 1974 and 1987 data collection events (Figures 4.1 and 4.2 of the Luhdorff and Scalmanini Report, 1991 attached in **Appendix A**) indicates that groundwater within the Terrace Formation generally flows toward the south-southeast, parallel to the Seal Cove Fault. Site groundwater elevation contour data, generated from data collected from wells on the 860 Airport Street site, indicates that the site's

groundwater flow direction is consistent with the overall Terrace Formation groundwater flow direction (**Figure 7** of their 1991 report, attached in **Appendix A**).

According to an Earth Sciences Associates et. al report, 1987 since at least 1974, water level records have been measured in the marsh area and regional pumping has been monitored. Despite periodic lowering of the groundwater by pumping, rainfall runoff and recharge on the terrace and diversion by local Denniston Creek, sufficient groundwater exists to reverse drawdown effects and inhibit seawater intrusion into the groundwater basin.

The Pillar Point Marsh (south southeast 2,000 feet from the subject property) is a groundwater fed lowland, which is generally 0 to 10 feet above mean sea level (MSL). The lowest portion of the marsh is subject to tidal inflows during high tides.

A substantial quantity of precipitation leaves the watershed and terrace as runoff to the Pacific Ocean via San Vicente Creek, Denniston Creek and the Half Moon Bay Airport and PRMHC drainage networks, which flow either into Denniston Creek or into the Pillar Point Marsh. Water that does not reach the Pacific Ocean serves to recharge the groundwater, to supply agricultural and municipal water uses. The airport infrastructure serves as a primary source of storm water runoff and sediment to the upper freshwater marsh (Earth Science Associates, et. al, 1987).

3.3 SOILS

Subsurface soils on the property and the immediate vicinity are clay-rich soils derived from the hills, which rise sharply to the west. Henshaw Boring B4 contains about 30 feet of clay and clayey-silt with silt. Locally, discontinuous sand or clay-rich sand lenses were observed and shown on the various cross-sections and well logs from previous EBS and Clearwater reports. From 30 to about 60 feet below ground surface, coarser deposits exist, which include sand, silty sands with occasional cemented sand. The Gregg Drilling CPT-log for Henshaw Boring B4 is included in **Appendix D**.

4.0 WELL AND CONDUIT STUDY

4.1 DOMESTIC WATER SUPPLY

No domestic wells exist at 850 or 860 Airport Street. According to the 2005 Consumer Confidence Report issued by Luhdorff and Scalmanini for the PRHMC, site sourced water is supplied to the PRHMC by the three wells referenced prior in the report. The most recent report for 2005 (dated February 2006), states that low levels of cis-1,2 dichloroethylene (cis-1,2-DCE), trans-1,2 dichloroethylene (trans-1,2-DCE), and trichloroethylene (TCE) were detected at levels of 2.50, 0.92 and 7.33 µg/L, respectively in the untreated mixed water from the 3 wells. The laboratory range in detection of these three chemicals is from non-detect (below laboratory reporting levels) to 3.6, 1.10 and 8.10 µg/L, respectively. Only TCE was found to be over the maximum contaminant level

of 5 µg/L and over the Primary Health Goal (PHG; MCLG) of 0.8 µg/L. A water treatment plant on the PRMHC property treats this groundwater so that residents are provided water that meets regulatory standards.

The detailed analysis of groundwater data obtained between 1994 and 2003 indicates that the concentrations of TCE and PCE have been declining steadily from a high of 62 µg/L for TCE and 4.5 µg/L of PCE in the Corona Well from 1994-1998, to a low of 6.9 µg/L of TCE and 0.0 µg/L of PCE in April 14, 2003. The Culebra Well (upgradient from the suspected source near MW-2 and borings B5/B6 area) has shown a steady decline in VOC concentrations, so that analytical data from July 2002 to April 14, 2003 are below laboratory reporting levels. See **Table 2** for a compilation of this data. Pre-treatment mixed well water data has been attached to the end of this table for January, 2006 and March, 2006 events.

4.2 MUNICIPAL WATER SUPPLY

According to the 2005 Consumer Confidence Report issued by Luhdorff and Scalmanini for the PRMHC, emergency non-site sourced water is supplied by the Montara Water and Sanitary District.

4.3 SANITARY SEWER SYSTEM

Storm drain, and water and sewer lateral trenches could be considered preferential pathways for the migration of the contaminants. A map of the sanitary sewer trench location on the subject property is included in **Figure 4**.

4.4 POSSIBLE EXPOSURES

Exposure Pathways

Groundwater: Depth to the most shallow groundwater aquifer ranges from 2.5 to 10 feet below ground surface. There is exposure of the groundwater through human consumption of the impacted water from the Corona and Culebra wells. However, the water from these wells is treated prior to human consumption.

Ecological Pathways: There has been no measurement of exposure to wildlife through outflow of the PCE and TCE impacted shallow groundwater to any nearby surface water or wetland. The Pillar Point Marsh, downstream toward Half Moon Bay, would be the likely endpoint of the migrating PCE and TCE detected in shallow groundwater at 860 Airport Street. However, the volume of water extracted through the Corona and Culebra wells may in fact be drawing any solvent plume towards those wells, effectively preventing the plume from reaching the Pillar Point Marsh and the Pacific Ocean.

Soil Vapor: There is a potential for human exposure to soil vapor through the migration of the vapors into indoor building spaces, most notably, the building at 860 Airport Street. The vapor may contain PCE and TCE. Pending the results of the passive soil vapor survey, Section 6.4 of this report describes the general concept of indoor air sampling, which can be used to evaluate the potential for human exposure to vapors. If

the vapor survey indicates a need for indoor air sampling, a detailed vapor sampling description will be prepared and added to the workplan that will accompany the passive soil vapor survey results.

Fugitive Dust: Currently the site is capped with concrete, asphalt, or small areas along the southwest and southeast borders of the property where vegetation or landscaping is located. There is no erosion on the property that might create routes of exposure to TCE or PCE. There is no known human or wildlife exposure to dust containing contaminants, due to soil tillage, heavy traffic on dirt roads, or construction. If excavation in the area near MW-2 and borings B5/B6 is contemplated, dust control should be performed to minimize the potential for exposure.

Uptake by Plants: A strip of on site vegetation (landscaping) in the southeast or southwest borders of the property, is about 10 to 15 feet wide. No discolored soil or dead vegetation was noted, indicating that although minor PCE and TCE uptake by plants may be occurring in the area near MW-2 and borings B5/B6, the PCE and TCE do not appear to be at concentrations that would be toxic to plants.

Storm Water Runoff: Storm water is collected on site in 2 storm drains which drain to a ditch along Airport Street. Besides the building area, the remaining property is capped with cement or asphalt, with the exception of the landscaped areas along the southwest and southeast borders of the property. Therefore, a low volume of storm water would be expected to infiltrate into the subsurface and no on-site erosion of contaminated soils is expected. Off-site storm water infiltration is likely next door at the PRMHC, in the areas between the homes, and where grass and landscaping exists.

Assessment of Human Exposures

The following assessment of human exposure is based on current limited data collected on site conditions:

Residential Exposure

No adults and children are exposed in an on-site residential setting, as no residences exist at 860 Airport Street. The PRMHC mobile homes are raised above the ground surface about three to four feet with an air space between the ground and the base of the mobile home. Thus, it is unlikely that adults and children at the PRMHC are exposed to PCE or TCE vapors, as any vapors in the crawl space would dissipate. Adults or children are unlikely to be exposed in a recreational setting in the breathing zone at the PRHMC. Pending review of the passive soil vapor survey data, potential exposure at the PRMHC can be evaluated.

Workplace Exposure

Adults (construction workers) could be exposed in an excavation or trench in a construction setting, such as installing a utility pipe in the vicinity of MW-2 and borings B5/B6. Shallow soil disturbance is likely to have possible inhalation exposure of vapors

and dermal exposure if any contaminants are contained in the soil. With deeper excavation projects, contact with impacted groundwater is possible. Ingestion or inhalation of volatiles by construction workers is likely if impacted soil or groundwater is encountered during an excavation project nearby. Proper notification and training of workers should occur prior to any excavation project.

Adults may be exposed in an occupational or industrial setting, either in the subject property building or in adjacent buildings. Vapor intrusion into buildings with subsequent inhalation of indoor air is possible, and will be evaluated using the data from the passive soil vapor survey.

Volatilization into outdoor air with subsequent inhalation is possible, however there is high airflow onsite, minimizing this risk.

5.0 PLUME EXTENT AND MOVEMENT

5.1 GENERAL SITE CONCEPTUAL MODEL

The greatest concentration of PCE, the contaminant of concern, appears in soils near well MW-2 and borings B-5/B-6. Soil samples from boring B5 at 3.5 to 4.0 feet contained 9.4 µg/Kg of PCE. No other soil samples on the subject property contained PCE or TCE at higher concentrations. This concentration of PCE is unlikely to be the source for the levels found in monitoring well MW-2. As the PCE has migrated vertically, the naturally occurring anaerobic processes of dehalogenation have occurred leaving only a minor amount of PCE below 50 feet bgs.

PCE and TCE were first detected in the Corona well at concentrations of 32 µg/L and 2.6 µg/L, respectively on June 24, 1994. PCE and TCE were first detected in the Culebra well at concentrations of 1.1 µg/L and 0.75, respectively also on June 24, 1994. Natural attenuation of the TCE and PCE appears to be happening in the vicinity of the Corona and Culebra wells (see **Table 2** for historic data on the groundwater analytical for these wells). Note that levels in the Corona Well (the most impacted well) diminished by 79% between 1994 and 2003; no current data was furnished individually for that well for the past three years.

The 2006 groundwater data for the three wells (PRMHC) combined (mixed prior to sampling) shows non-detect concentrations for all contaminants of concern (January, 2006) and levels below the MCL for all of the contaminants of concern (March, 2006) (see **Appendix C**). Some analytical data relating to the dissolved mass of total chlorinated solvents (PCE, TCE and DCE combined) in soil and groundwater has been acquired thus far. Additional plume extent data is required to produce any calculations.

5.2 PCE SUBSURFACE MIGRATION

Chlorinated solvents, such as PCE, are denser than water and will disperse laterally as they migrate vertically downward. The working hypothesis is that the contaminants of concern were spilled or leaked on to the ground surface and the PCE continued to spread vertically eventually reaching the groundwater. Direct downward migration of the PCE and TCE contamination may have occurred through the more porous units. Some retardation and delays of vertical migration may have occurred through the thinly interbedded layers of clay and clayey sand of the topsoil/marsh deposits (**Figures 5A and 5B**). The contaminants likely spread laterally along the upper surface of the less porous saturated layers as they migrated through the saturated topsoil/marsh deposits. As this was occurring shallow groundwater flow also transported the contamination toward the southeast. Once the contaminants traveled downward to the more massive back beach sands, the distribution of the contamination became a more horizontal migration and prevailing groundwater flow direction to the southeast (see **Figure 5A and 5B** for a visual on this hypothesis). Pumping of the Corona and Culebra wells created a downward gradient toward these two wells and pulled contamination into the zone of influence of the wells.

Over time, the PCE started to break down into TCE and other breakdown products. These changes from PCE to TCE indicate a naturally occurring anaerobic transformation process, confirmed by generally higher TCE concentrations away from the likely source near MW-2 and borings B5/B6. The only detection of PCE in the soil was at soil boring B-5 between 3.5-4.0 ft bgs at a 9.4 µg/Kg level (January 2002, see **Appendix E**). Therefore significant and elevated concentrations of PCE or TCE have not been detected in any soil samples.

It is possible that the contamination has reached the base of the back beach sand and/or beach sand and is now traveling on top of the Purisima Formation. Shears within the Purisima Formation created by the adjacent Seal Cove Fault may form preferential pathways for contaminant migration within the Purisima Formation.

Interpretation #1

Based on the current groundwater data, the core of the PCE spill in the soil is likely to be near MW-2 (and borings B-5/B-6) and Henshaw boring B4, however soil data has not been sufficient to define the location of the source.

Interpretation #2

An alternative interpretation is that the source of TCE and PCE in the Culebra and Corona wells was a solvent mixture that contained significantly more TCE, with a small amount of PCE. In this alternate interpretation, the PCE and TCE source near MW-2 and borings B5/B6 is not related to the TCE and PCE detected in the Corona and Culebra wells. Refer to **Figure 5B**. With this alternate interpretation, there are two sources of TCE and PCE:

1) A potential surface spill near MW-2 and borings B5/B6; or

2) A deep aquifer at 50-90 feet below ground surface brings in TCE and PCE impacted water from the upgradient Moss Beach Airport area.

If multiple TCE and PCE source locations exist, the proposed Gore Sorber soil vapor survey will provide data to identify and evaluate the source locations. It is possible that contamination is coming from an upgradient, offsite source located near or at the airport. Geologic Cross-Section B-B' (Luhdorff & Scalmanini, 1991) shows a cross sectional view of the Terrace, with Beach Sands overlying Purisima bedrock. The Retiro well is shown on the cross section with its upper screen straddling the Beach Sands/Purisima Formation contact and its lower screen within the Purisima Formation. According to the Preliminary Well Profile for the Corona Well (Luhdorff & Scalmanini, 1994) the upper screen of the well is set with the lowest perforation 2 feet above the possible top of the Purisima Formation, with the lower screen set within a sandstone member of the Purisima Formation. The Corona, Culebra and Retiro wells are all ideally located to intercept PCE and TCE contamination traveling along the contact between the Beach Sands and the top of the Purisima Formation in the direction of groundwater flow.

At this time, the source (core) of the solvents and the location of the spill or leak somewhere near MW-2 and borings B5/B6 has not been established and could be either on the Subject Property, airport, or at the mobile home park.

6.0 PROPOSED WORKPLAN ACTIVITIES

Clearwater Group proposes to investigate the two possible sources for PCE:

1) Possible Source 1: In the close vicinity of MW-2, borings B-5/B-6 Henshaw boring B4 and the Corona well on the Subject Property and the adjacent mobile home park.

2) Possible Source 2: There is a possibility that a distant, off-site source of PCE is the source of some of the deeper contamination detected in the Corona and Culebra wells. One source could be the Half Moon Bay Airport, formerly the site of a military installation.

6.1 PASSIVE SOIL VAPOR SURVEY

In order to establish the extent and distribution of potential PCE/TCE contamination of shallow soil, Clearwater recommends that a "GORE™ Survey" (W. L. Gore & Associates, Inc. of Elkton, MD) passive soil gas survey be performed near MW-2 and borings B-5/B-6.

To maximize the soil gas survey results it is recommended that the soil gas modules be placed in a grid pattern with the maximum spacing between modules equal to or less than 3 times the average depth to water. To avoid possible interference caused by a groundwater monitoring well's capabilities to create a chimney effect for vertical transport of soil gasses, it is recommended that the modules be placed at a minimum of 15 feet from the location of a groundwater monitoring well. Upon reviewing the analytical data for the Corona and Culebra groundwater wells collected on March 20, 2006, the previous soil boring data collected on May 3, 2001 and the groundwater monitoring data collected on April 25, 2006 at the project site, Clearwater recommends that at least 23 soil vapor modules (G1 through G23) be installed along the southeastern, an southwestern boundaries of the project location as well as along the site sanitary sewer trench and storm drain trench (see **Figure 6**).

Based on the data available, the residual concentration of TCE and PCE appears to be distributed near MW-2, boring B-5/B-6 and the Henshaw boring B4. Groundwater flow direction in the vicinity of the project location has been observed to be towards the southeast, which may distribute the southern edge of the hydrocarbon plume towards the Pillar Ridge Manufactured Home Community. The average depth to water observed at the project site during the third and fourth quarters of 2004 to 2005 for groundwater monitoring wells MW-1 and MW-2 is approximately 9.36 feet bgs. The average depth to water in these two monitoring wells during the third quarter of 2005 is approximately 6.42 feet bgs. Due to the increased precipitation experienced during the winter of 2005-2006, Clearwater recommends that the modules be placed no more than 15 feet apart (and approximately 3 x 8 = 24 feet apart) to accommodate possible elevated groundwater levels.

The choice of locations of module placement is as follows (see Figure 6):

GORE™ Module Placement

Module No.	Reason for Location
G1-G3	Delineating contamination around the Corona well
G4, G5 and G8-G12	Delineating contamination between MW-1 and MW-2
G6, G7, G12, G13	Delineating contamination around MW-2
G14-G17	Delineating contamination between MW-2 and the Culebra well
G18-G21	Delineating contamination around the Culebra well
G21-G22	Delineating the sanitary sewer trench
G23	Delineating the storm drain trench

In addition to evaluating the area near MW-2 and borings B-5/B-6, the soil vapor survey will provide data near neighboring trailers, up to the Culebra well and near on-site trenches to evaluate the potential for upwardly migrating vapors, which would affect both ambient air outside and indoor air quality within the warehouse at 860 Airport Street and the trailer crawl spaces. See **Figure 6** for the proposed "GORE™ Survey" locations.

GORE™ Modules are temporary soil gas sampling modules, which would be installed in shallow, hand-driven soil borings at depths of approximately 30-inches bgs (or less depending on the depth to groundwater; the Gore-Sorbers will be placed above the groundwater level as determined from adjacent on site wells). At least 3 days prior to the event the GPP staff will be notified of scheduled work at the site. Organic vapors released from petroleum and chlorinated solvents in the soil and groundwater would then be adsorbed into the modules during the manufacturer recommended 10 to 14-day exposure period. Following retrieval, the modules (the samples) would be logged, labeled, secured, and shipped to the manufacturer under fully documented chain-of-custody procedures. The samples would be analyzed in the Gore laboratory using a combined and modified version of EPA Method 8260 (volatile organics) and 8270 (semi-volatile organics). The work is planned to occur during the dry summer-fall season (mid August) prior to the first rains. Irrigation does not need to be stopped prior to the GORE™ Modules installation because the units are hydrophobic. During the collection period, the boreholes will be capped with a cork, per the Gore procedures. The sorbers will be placed in holes drilled in the grounds and grassy area of the site and the PRMHC. An access agreement and approval by the PRMHC will be required to perform the GORE™ Survey. After the GORE™ Modules are removed and sent to the Gore laboratory, the boreholes will be filled with bentonite pellets and hydrated.

In the GORE™ Survey report, the specific hydrocarbons and chlorinated solvents are speculated to delineate the source zone for the contamination. The analytes will include PCE, TCE, DCE, DCA, VC, TPH-g, TPH-mo, and TPH-d. Clearwater proposes and requests approval from the Health Services Agency to place some of the modules on the PRMHC property. The modules will be placed no closer than 15 feet from the monitoring wells or domestic wells which might act as chimneys. The sorbers can be placed near utility trenches, according to W. L. Gore representatives. Approximately 23 GORE™ modules will be installed. The proposed module locations are shown in **Figure 6**. Following module installation and exposure, a report will be prepared that presents contaminant distribution maps and interpretation of results. A report detailing the investigation and interpretation of the results, including a GORE™ Survey multi-colored COC outline map and a map showing potential preferential pathways in the study area, will be submitted within 60 days of the mailing of the GORE™ Modules to the laboratory (see schedule in section 7 of this report). Details of the GORE™ Survey program and FAQs are provided as **Appendix F**. Pending the results of the soil gas survey, Clearwater will evaluate the data and update the SCM. Pending development of a new SCM, the following described activities may be indicated (see the following sections 6.2, 6.3 and 6.4).

6.2 GROUNDWATER SAMPLING OF THE CORONA WELL

To establish whether the source is shallow and/or deep, the Corona Well should be sampled to collect depth discrete groundwater samples from its upper (55 to 70 foot bgs) and lower (80 to 90 foot bgs) screened intervals to determine whether there is a variation in VOC concentrations between the two zones. The well will be shut down for 24 hours (maximum) prior to sampling in order for the groundwater to stabilize. A low-flow sampling port will be lowered to the center of the lower screen interval just following shut down. The well will be allowed to sit still for 1 to 2 days prior to sampling. The low-flow purge (micro-purge) method will be used to collect the groundwater samples. After collecting the sample from the lower screened interval the sampling port will be slowly pulled up to the lower and upper ends of the upper screened interval and two more samples will be collected.

If the samples from the upper and lower screened intervals show a marked difference in the levels of the contaminant of concern concentrations, the Culebra well should also be sampled by the same method to collect groundwater samples from its separate upper and lower screened intervals.

6.3 IDENTIFY AND SAMPLE UP-GRADIENT WELLS

To determine if up-gradient, off-site TCE and PCE sources exist, a search should be made for all up-gradient off-site wells, including any in the vicinity of the Moss Beach Airport.

The wells will be inspected to determine if groundwater samples can be collected from the wells. The groundwater samples will be collected and analyzed for VOCs. These wells may also be sampled at different screen intervals using the low flow sampling method, as discussed for the Corona Well. Well 62182, shown on the Luhdorff & Scalmanini Geologic Cross Section B-B' appears to be screened across the entire section of Back Beach sands. This well could be sampled at various depths across the Beach sand and at the Beach sand/Purisima formation contact depth. Vertical characterization of contamination could potentially confirm an offsite upgradient source.

The results of the investigation will be reported in a Subsurface Investigation Report within 60 days of obtaining the data.

6.4 INDOOR AIR CONCERNS

Data collected from the GORE™ Survey event will also assist in evaluating the potential of above ground vapor migration into the building at 860 Airport Street as well as into the trailer park homes.

If the GORE™ Survey shows areas around the building at 860 Airport Street or in the vicinity of the trailers at the PRMHC to be impacted by PCE or TCE, an indoor air sampling event will occur. The indoor air sampling event will help to evaluate potential exposures in the air to workers or residents. The sampling would use a 6 liter SUMMA

canister using EPA Method TO-15 analysis for volatile organic compounds, including PCE and TCE. The SUMMA canister would be placed inside the building or inside the trailer, and a controller would be used to collect an 8-hour sample of indoor air.

7.0 DATA GAPS/SCHEDULE

With the addition of the data acquired, as described above, the nature and extent of the contamination should become better defined. The estimated mass of the remaining PCE and TCE has not been determined.

The following data gaps need to be filled in order to improve the SCM.

1) The delineation of the PCE/TCE plume.
2) Determine the location of the source of the PCE and TCE.
3) All on site trenches/conduits.
4) Off site trenches and conduits should be located.
5) Relationship between pumping of the PRMHC wells and on site wells.
6) The vertical transport and contaminant between the deeper aquifer in the two domestic wells (Corona and Culebra) and the shallow zones has not been established. A low flow rate groundwater sampling of the Corona well might show variations in the concentration of contaminant with depth, giving a better understanding to the movement and mixing of the PCE and TCE (see Section 6.2).
7) Department of Water Resources Well Logs for the Culebra and Corona wells.
8) Upgradient direction well data are currently not available, which might help to evaluate the potential for a TCE and PCE source in the Corona and Culebra wells that might exist on the Moss Beach Airport property. Locating deep upgradient wells and sampling them for PCE and TCE might indicate an upgradient source (see Section 6.3).

SCHEDULE

After regulatory approvals are obtained, and written permission is received from the PRMHC to install the 30-inch deep GORE™ Modules, Clearwater estimates that it will take 2 weeks to obtain the modules and schedule the work. The modules are kept in the ground for about 14 days. After the modules are removed and shipped to the laboratory, the laboratory turn-around is about 2 to 3 weeks for Gore to send their report to Clearwater. After reviewing their data, Clearwater requests 3 to 4 weeks to prepare a report with the findings, and update the SCM.

Table of Schedule

Task	Start Date	Estimated Duration	Responsible Agent
Submit Workplan	July 01, 2006		Clearwater
Regulator Review Workplan	July 01, 2006	2 – 4 weeks	San Mateo County
Obtain on and off site trench locations	July 01, 2006	2 weeks	Clearwater
Obtain written access agreement	July 15, 2006	2-4 weeks	PRMHC
Refine workplan per County (GPP) Gore™ Module location change requests 2 weeks			
Schedule for driller and Gore™ Module	August 01, 2006	1-2 weeks	Clearwater
Notify GPP (at least 3 days prior to event)			
Gore™ Module in ground	August 15, 2006	2 weeks	Clearwater
Gore™ Module mailed to Lab	August 30, 2006	2-3 weeks	Clearwater
Lab results back from Lab	September 14, 2006	2-3 weeks	Gore Lab
Review data and prepare report with updated recommendations and interpretations	October 07, 2006	3-4 weeks	Clearwater
Submit report to San Mateo County (GPP)	November 01, 2006		Clearwater

CLEARWATER
GROUP
Environmental Services

8.0 CERTIFICATION

This report was prepared under the supervision of a State of California Professional Geologist at Clearwater Group. All statements, conclusions and recommendations are based solely upon published results from previous consultants, field observations by Clearwater Group and laboratory analysis performed by California DHS-certified laboratories related to the work performed by Clearwater.

Information and interpretation presented herein are for the sole use of the client and regulating agency and should not be relied upon by a third party. The service performed by Clearwater Group has been conducted in a manner consistent with the level of care and skill ordinarily exercised by members of our profession currently practicing under similar conditions in the area of the property. No other warranty, expressed or implied, is made.

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FIGURES

Figure 1 Site Vicinity Map
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Figure 3: VOC map (extent labeled on borings, wells)
Figure 4A/B: Site Plan with Conceptual Cross Section of Plume; Local (4a) and Regional (4b)
Figure 5: Proposed Gore Sorber Data Collection Locations
Figure 6: PCE/TCE Concentration Graph

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Appendix A: Half Moon Bay Terrace Map with Cross Section Locations
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Appendix A: Area Geologic Cross-Section B-B' (Luhdorff & Scalmanini)
Appendix A: Basin Wide Groundwater Contour Map (Luhdorff & Scalmanini)
Appendix B: Site Cross-Section Layout (Environmental Bio-Systems)
Appendix B: Cross Section A-A' (Environmental Bio-Systems)
Appendix B: Cross Section B-B' (Environmental Bio-Systems)
Appendix B: Cross Section C-C' (Environmental Bio-Systems)
Appendix B: Cross Section D-D' (Environmental Bio-Systems)
Appendix B: Cross Section E-E' (Environmental Bio-Systems)
Appendix B: Map of Sanitary Sewer and Storm Drain on Site
Appendix C: 2005, 2004 Consumer Confidence Reports (Luhdorff & Scalmanini)
Appendix D: Preliminary Well Profile (Luhdorff & Scalmanini, 1994, Corona Well)
Appendix D: Soil Boring Logs and Well Construction Logs
Appendix E: Soil and Groundwater Sample Analytical Results and Well Information
Appendix F: GORE™ Survey Protocol

REFERENCES

Clearwater Group, June 4, 2004, *Subsurface Investigation Report*, Ms. Lucy Yu Property, 860 Airport Street, Moss Beach, California.

Clearwater Group, March 21, 2006, *Groundwater Monitoring Report – First Quarter 2006*, Ms. Lucy Yu Property, 860 Airport Street, Moss Beach, California.

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Simpson, Gary D., Lettis, William R., Thompson, Stephen C., and Noller, J. Stratton, 1994, *The Northern San Gregario Fault Zone: Evidence for the Timing of Late Holocene Earthquakes Near Seal Cove, CA*.
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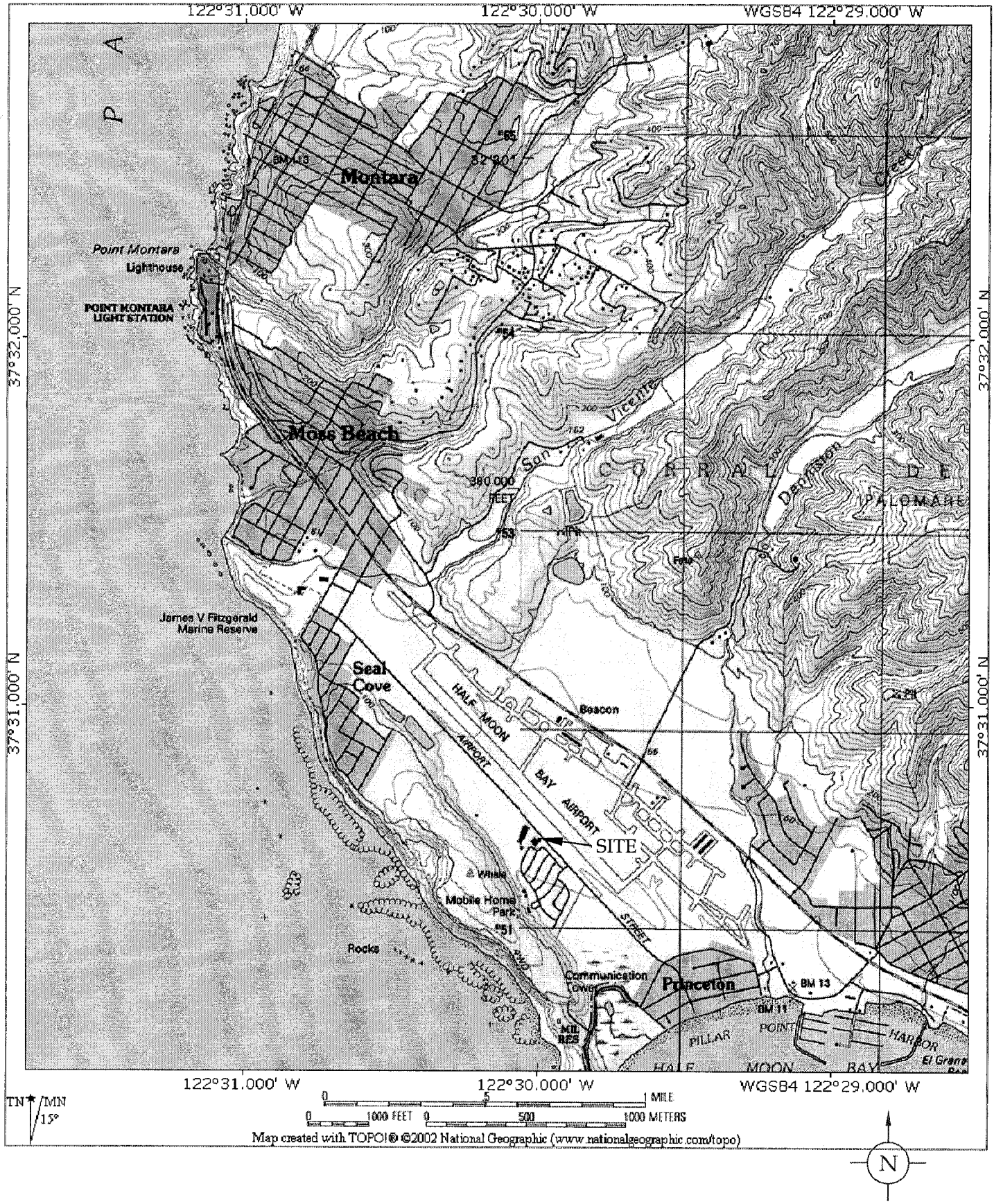
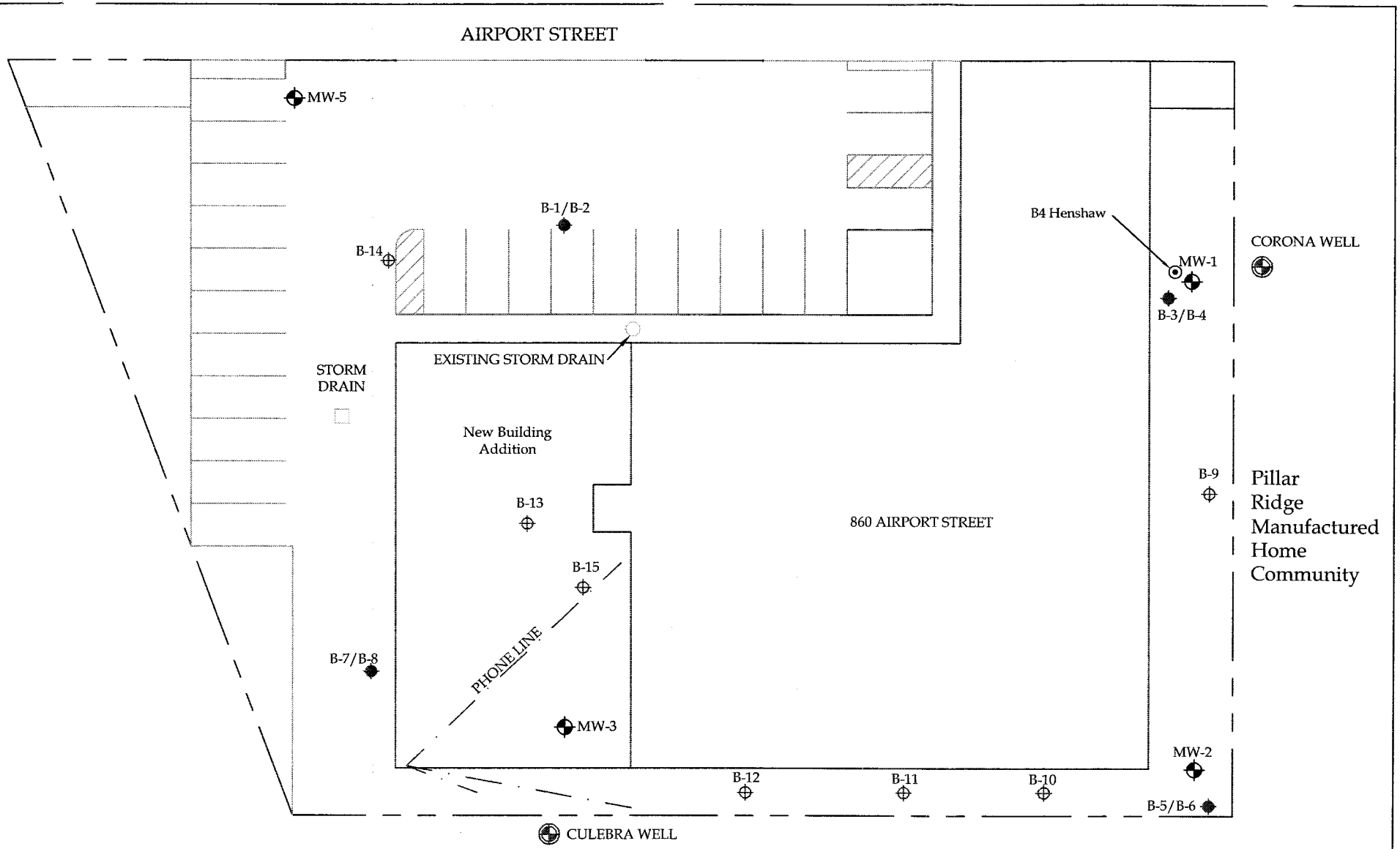
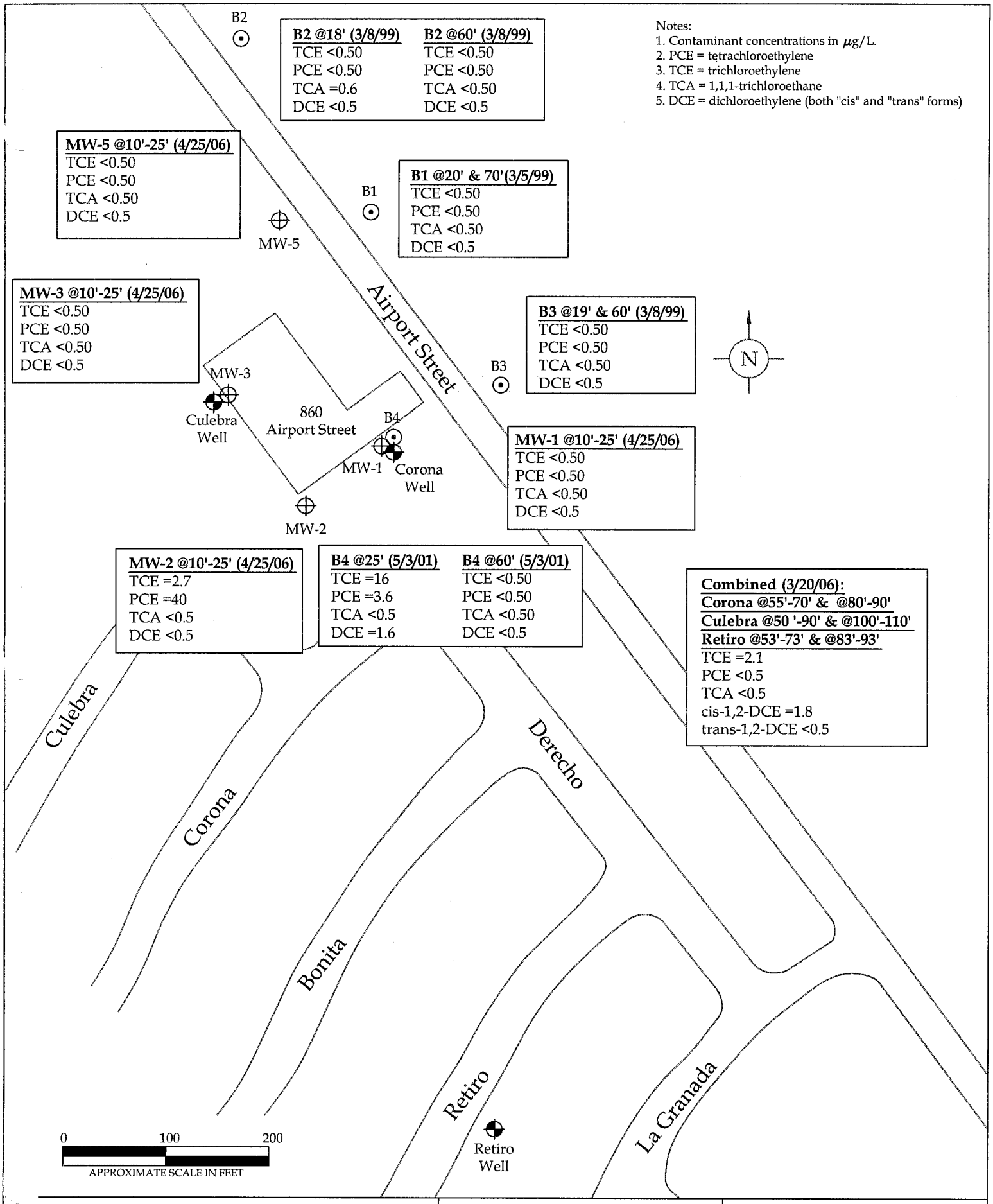
FIGURES



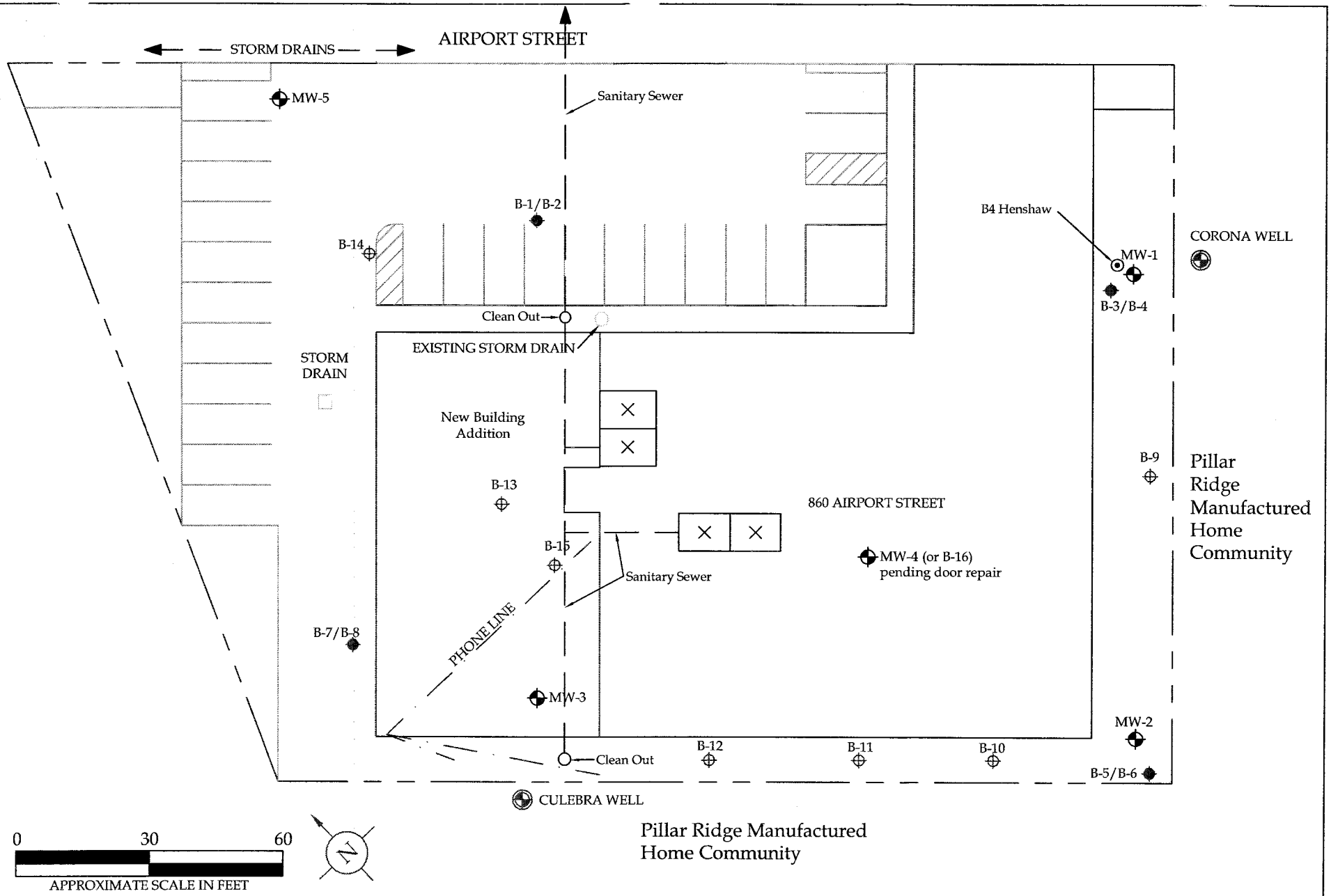
CLEARWATER GROUP			SITE VICINITY MAP
Project No. **DP004**	Figure Date **3/6/06**	Figure **1**	860 Airport Street Moss Beach, California



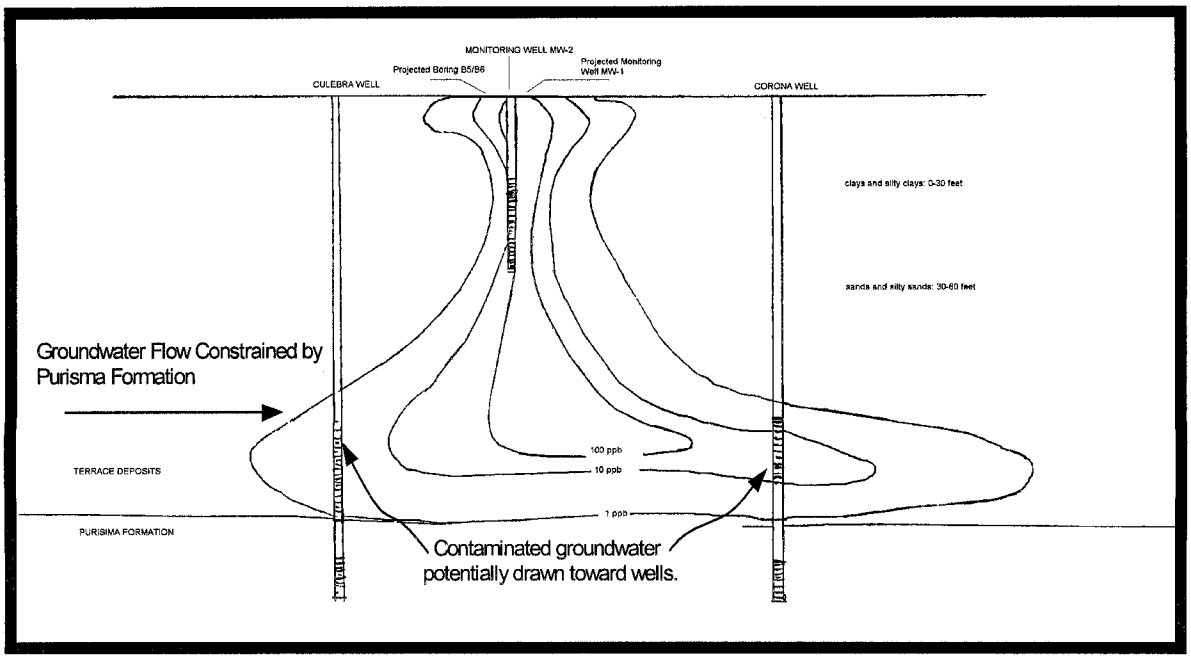
CLEARWATER GROUP			SITE PLAN 860 Airport Street Moss Beach, California
Project No. **DP004**	Figure Date 6/06	Figure **2**	



CLEARWATER GROUP			VOCs in Groundwater 860 Airport Street Moss Beach, California	LEGEND
Project No. **DP004**	Figure Date 6/06	Figure **3**		MW-1 MONITORING WELL WATER SUPPLY WELL B1 HENSHAW SOIL BORINGS



CLEARWATER GROUP			Sanitary Sewer Trenches 860 Airport Street Moss Beach, California	LEGEND
Project No. **DP004**	Figure Date 6/06	Figure **4**		PROPERTY LINE; B-9 SOIL BORING (2003); MW-1 MONITORING WELL; HENSHAW BORING (2001); WATER SUPPLY WELL; Restroom; B-1 SOIL BORING (2002); Sanitary Sewer

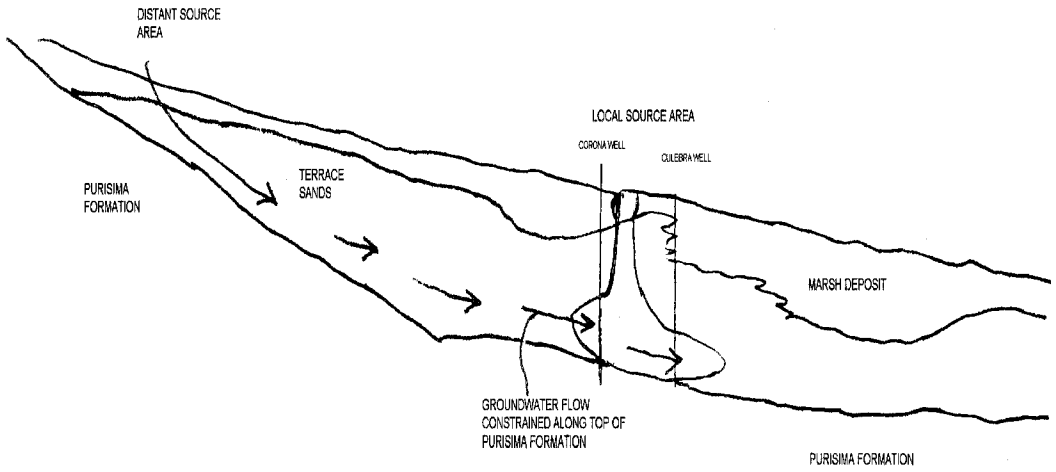


Not to scale.

Local cross section view including monitoring well MW-2 as well as deeper domestic wells Corona and Culebra. The terrace deposits with leaky aquitards contain multiple groundwater restricting layers. The top 30 feet of deposits tends to be more clay-rich, with the underlying 30 feet being more sand-rich.

The Corona well is in the cross gradient direction of shallow groundwater flow coming from the site. The Culebra well is in the upgradient direction from the site. The Corona well has historically had the highest concentrations of TCE and PCE of the two domestic wells. The Corona well is probably closer to the source of the TCE and PCE than the Culebra well. The TCE and PCE was first discovered in both wells in mid June 1994. TCE has always been the main contaminant, with minor amounts of PCE in the domestic wells.

CLEARWATER GROUP	**SITE CONCEPTUAL MODEL FIGURE 5A**
229 Tewksbury Ave. Pt. Richmond, CA 94801 Tel: 510-307-9943	June 19, 2006 Drawn by: Rob Nelson, P.G., C.E.G Project #: DP004



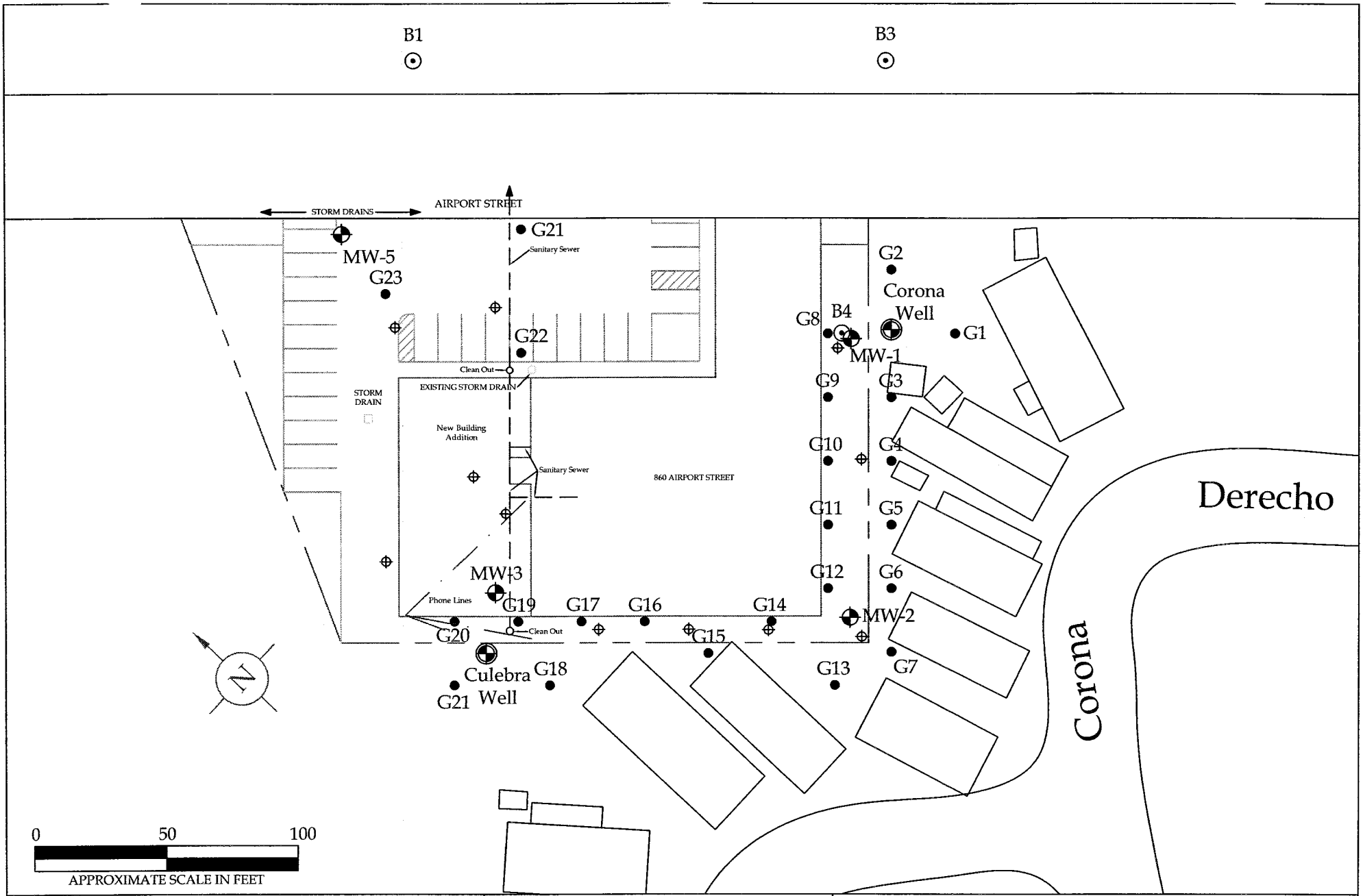
Regional Cross-Sectional View Toward Northeast
Not to Scale

Modified from:
Luhdorff & Scalmanini Engineering Consultants
Phase II Pillar Point
Ground-Water Supply Study, 1991

The conceptual model showing the local source for shallow PCE and TCE, near MW-2 and borings B5/B6, with the potential for a distant source of TCE and PCE at the base of the terrace sands for the Corona and Culebra wells.

Monitoring well MW-2 and borings B5/B6 have historically had mostly PCE with minor amounts of TCE. The variation of the PCE and TCE in the deeper domestic wells compared to the shallow monitoring well (MW-2) indicates either a natural degradation (dehalogenation) of the PCE to TCE, or a different and likely more distant source for the solvents in the Corona and Culebra wells than the monitoring well MW-2 and boring B5/B6 area.

CLEARWATER GROUP	**SITE CONCEPTUAL MODEL FIGURE 5B**
229 Tewksbury Ave. Pt. Richmond, CA 94801 Tel: 510-307-9943	June 20, 2006 Drawn by: Rob Nelson, P.G., C.E.G Project #: DP004



CLEARWATER GROUP		
Project No. **DP004**	Figure Date 6/06	Figure **6**

Proposed Goresorber Locations
860 Airport Street
Moss Beach, California

LEGEND

PROPERTY LINE		B1	HENSHAW SOIL BORINGS
MW-1	MONITORING WELL		CLEARWATER BORINGS
	WATER SUPPLY WELL	G1	PROPOSED GORESORBERS

TABLE

TABLE 1
Cumulative Groundwater Elevation and Analytical Data
860 Airport Street
Moss Beach, California
Clearwater Group Project #DP004

Monitoring Wells	Total Depth Drilled (ft, bgs)	Date Sampled	Depth to Water (ft. TOC)	Well Elevation (ft. msl)	Water Elevation (ft. msl)	Groundwater Flow Direction	BTEX (ug/L)	TPH (ug/L)	1,1,1-TCA (ug/L)	TCE (ug/L)	PCE (ug/L)	cis-1,2-DCE (ug/L)
Analysis Method							EPA 8260B	EPA 8015M	EPA 8260B	EPA 8260B	EPA 8260B	EPA 8260B
MW-1	25	4/19/2004	6.05	31.89	25.84	SE	ND	ND	ND	ND	0.77	ND
	25	7/20/2004	9.55	31.89	22.34	SSE	ND	ND	ND	ND	ND	ND
	25	10/22/2004	12.27	31.89	19.62	SE	ND	ND	ND	4.1	28	ND
	25	1/19/2005	4.11	31.89	27.78	SE	ND	ND	ND	ND	ND	ND
	25	4/20/2005	3.97	31.89	27.92	SE	ND	ND	ND	ND	ND	ND
	25	7/19/2005	6.38	31.89	25.51	SE	ND	ND	ND	ND	0.73	ND
	25	10/19/2005	9.11	31.89	22.78	SE	ND	ND	ND	ND	ND	ND
	25	1/18/2006	2.41	31.89	29.48	SE	ND	ND	ND	ND	ND	ND
	25	**4/25/2006**	**3.28**	**31.89**	**28.61**	**ESE**	**ND**	**ND**	**ND**	**ND**	**ND**	**ND**
MW-2	25	4/19/2004	6.06	31.75	25.69	SE	ND	ND	ND	2.1	78	ND
	25	7/20/2004	9.79	31.75	21.96	SSE	ND	ND	ND	0.65	20	ND
	25	10/22/2004	11.92	31.75	19.83	SE	ND	ND	ND	33	480	1.4
	25	1/19/2005	4.07	31.75	27.68	SE	ND	ND	ND	3.3	120	ND
	25	4/20/2005	3.93	31.75	27.82	SE	ND	ND	ND	1.6	42	ND
	25	7/19/2005	6.46	31.75	25.29	SE	ND	ND	ND	0.93	26	ND
	25	10/19/2005	9.13	31.75	22.62	SE	ND	ND	ND	0.61	17	ND
	25	1/18/2006	2.26	31.75	29.49	SE	ND	ND	ND	0.61	13	ND
	25	**4/25/2006**	**2.49**	**31.75**	**29.26**	**ESE**	**ND**	**ND**	**ND**	**2.7**	**40**	**ND**
MW-3	25	4/19/2004	3.88	31.24	27.36	SE	ND	ND	ND	ND	ND	ND
	25	7/20/2004	6.72	31.24	24.52	SE	ND	ND	ND	ND	ND	ND
	25	10/22/2004	8.28	31.24	22.96	SE	ND	ND	ND	ND	ND	ND
	25	1/19/2005	2.21	31.24	29.03	SE	ND	ND	ND	ND	ND	ND
	25	4/20/2005	2.00	31.24	29.24	SE	ND	ND	ND	ND	ND	ND
	25	7/19/2005	4.38	31.24	26.86	SE	ND	ND	ND	ND	ND	ND
	25	10/19/2005	6.82	31.24	24.42	SE	ND	ND	ND	ND	ND	ND
	25	1/18/2006	1.13	31.24	30.11	SE	ND	ND	ND	ND	ND	ND
	25	**4/25/2006**	**1.00**	**31.24**	**30.24**	**ESE**	**ND**	**ND**	**ND**	**ND**	**ND**	**ND**

TABLE 1
Cumulative Groundwater Elevation and Analytical Data

860 Airport Street
Moss Beach, California
Clearwater Group Project #DP004

Monitoring Wells	Total Depth Drilled (ft, bgs)	Date Sampled	Depth to Water (ft. TOC)	Well Elevation (ft. msl)	Water Elevation (ft. msl)	Groundwater Flow Direction	BTEX (ug/L)	TPH (ug/L)	1,1,1-TCA (ug/L)	TCE (ug/L)	PCE (ug/L)	cis-1,2-DCE (ug/L)
Analysis Method							**EPA 8260B**	**EPA 8015M**	**EPA 8260B**	**EPA 8260B**	**EPA 8260B**	**EPA 8260B**
MW-5	25	4/19/2004	4.29	32.45	28.16	SE	ND	79	ND	ND	ND	ND
	25	7/20/2004	6.69	32.45	25.76	SE	ND	ND	ND	ND	ND	ND
	25	10/22/2004	7.63	32.45	24.82	ESE	ND	ND	ND	ND	3.3**	ND
	25	1/19/2005	2.87	32.45	29.58	SE	ND	ND	ND	ND	ND	ND
	25	4/20/2005	2.99	32.45	29.46	ESE	ND	ND	ND	ND	ND	ND
	25	7/19/2005	5.16	32.45	27.29	SE	ND	ND	ND	ND	ND	ND
	25	10/19/2005	6.91	32.45	25.54	SE	ND	ND	ND	ND	ND	ND
	25	1/18/2006	2.07	32.45	30.38	SE	ND	ND	ND	ND	ND	ND
	25	**4/25/2006**	**2.39**	**32.45**	**30.06**	**ESE**	**ND**	**ND**	**ND**	**ND**	**ND**	**ND**

Notes:

BTEX	benzene, toluene, ethylbenzene and total xylenes
TPH	total petroleum hydrocarbons
1,1,1-TCA	1,1,1-Trichloroethane
TCE	Trichloroethene
PCE	Tetrachloroethene
cis-1,2-DCE	cis-1,2-Dichloroethene

ND = "non-detect" or below the Method Reporting Limits
** Sample on 10/22/2004 for MW-5 had an sampling/analytical error. The well was re-sampled on 12/14/2004. The 12/14/2004 result was "ND".

TABLE 2
SUMMARY OF PCE & TCE IN WELL WATER DATA FROM 1994 TO 2000
Pillar Ridge Manufactured Home Community
(Formerly the El Granada Mobile Home Park)

CORONA, CULEBRA, AND RETIRO WELLS

WELL	DATE OF SAMPLING	TCE (ug/L)	PCE (ug/L)
Corona	6/24/1994	32	2.6
Corona	6/28/1994	62	3.9
Corona	7/18/1994	50	3.6
Corona	8/22/1994	14	0.73
Corona	6/27/1997	8.8	3.2
Corona	1/16/1998	12	4.5
Corona	3/2/1998	13	3.7
Corona	6/1/1998	0	0
Corona	12/14/1998	12	0.81
Corona	3/4/1999	3.95	0
Corona	6/7/1999	14.6	1.57
Corona	12/6/1999	0.78	0.5
Corona	3/6/2000	7.7	0.53
Corona	4/16/2001	7.1	0
Corona	7/16/2001	6.5	0
Corona	1/21/2002	8.7	0.64
Corona	5/13/2002	9.5	0.66
Corona	7/15/2002	6.3	0.65
Corona	10/14/2002	6.7	1.7
Corona	1/27/2003	6.1	0
Corona	4/14/2003	6.9	0
Culebra	6/16/1994	1.1	0.75
Culebra	6/22/1994	1.6	0.73
Culebra	6/28/1994	1.2	0.69
Culebra	8/22/1994	1.7	0.77
Culebra	6/27/1997	0	0
Culebra	12/14/1998	20	2.1
Culebra	1/28/1999	0	0
Culebra	4/16/2001	8.8	0
Culebra	7/16/2001	9	0
Culebra	2/11/2002	6.2	0.5
Culebra	5/13/2002	7.1	0.67
Culebra	7/15/2002	0	0
Culebra	10/14/2002	0	0
Culebra	1/27/2003	0	0
Culebra	4/14/2003	0	0

WELL	DATAE OF SAMPLING	TCE (ug/L)	PCE (ug/L)
Retiro	6/27/1997	1	0
Retiro	1/6/1998	0	0
Retiro	6/1/1998	0	0
Retiro	12/14/1998	0	0
Retiro	3/4/1999	0	0
Retiro	6/7/1999	0	0
Retiro	3/6/2000	0	0
Retiro	4/16/2001	0	0
Retiro	7/16/2001	0	0
Retiro	1/21/2002	0	0
Retiro	5/13/2002	0	0
Retiro	7/15/2002	0	0
Retiro	10/14/2002	0	0
Retiro	1/27/2003	0	0
Retiro	4/14/2003	0	0

Source: Data from 10/19/00, 1/9/01, and 4/16/01 from technical reports available to EBS. All other data from: Geotracker Website at http://geotracker.swrcb.ca.gov/reports

NOTES:
0 or <0.50 ug/L = laboratory reporting limit, commonly referred to a "non-detect" or ND.
Well water: depth 40'+
Retiro Well: MTBE detected in March 2000 at 0.782 µg/L
Retiro Well: TCE detected in 1997
Retiro Well: 1,2-DCE detected in 1999
Maximum Contaminant Level (MCL) for TCE: 5 µg/L
Maximum Contaminant Level Goal (MCLG)
Public Health Goal (PHG)(MCLG) for TCE: 0.89 µg/L

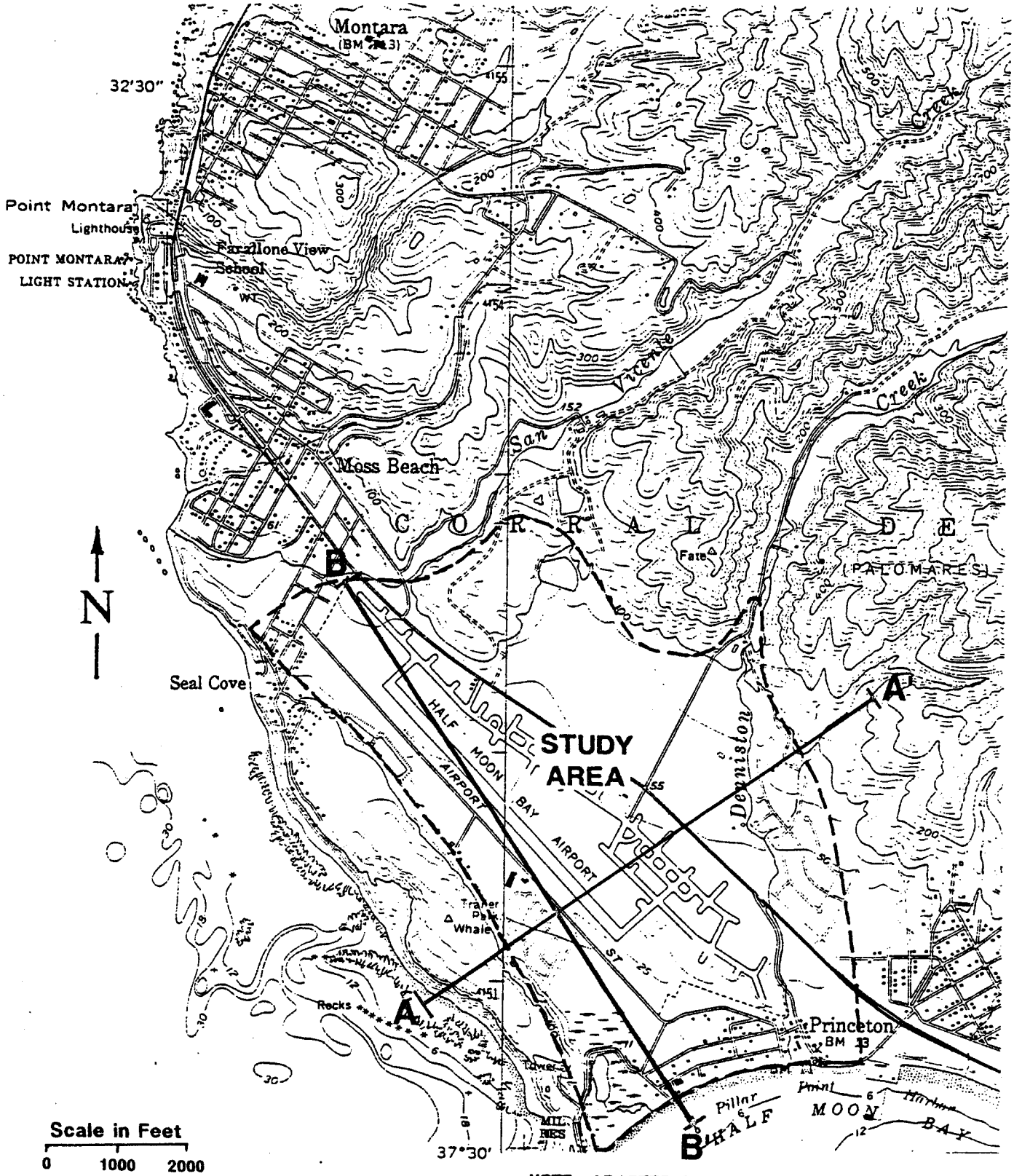
More recent Consumer Confidence Reports describe TCE concentration before treatment (raw water), but do not list specific well concentrations.

See Appendix C
Mixed Untreated Well Water (3 wells: Retiro, Culebra and Corona):

Date	**TCE**	**PCE**	**cis-1,2-DCE**
1/20/06	<0.50 ug/L	<0.50 ug/L	<0.50 ug/L
3/20/06	2.1 ug/L	<0.50 ug/L	1.8 ug/L

<0.50 ug/L = laboratory reporting limit, commonly referred to a "non-detect" or ND.

APPENDIX A



NOTE: ADAPTED FROM USGS 7.5 MINUTE SERIES
MONTARA MOUNTAIN QUADRANGLE

GEOLOGIC CROSS-SECTION LOCATION MAP
HALF MOON BAY AIRPORT/PILLAR POINT MARSH

FIGURE
4.3

Luhdorff & Scalmanini
Consulting Engineers

PHASE II PILLAR POINT GROUND-WATER STUDY
CITIZENS UTILITIES COMPANY/COASTSIDE COUNTY WATER DISTRICT

87-1-074
SEPT 1991

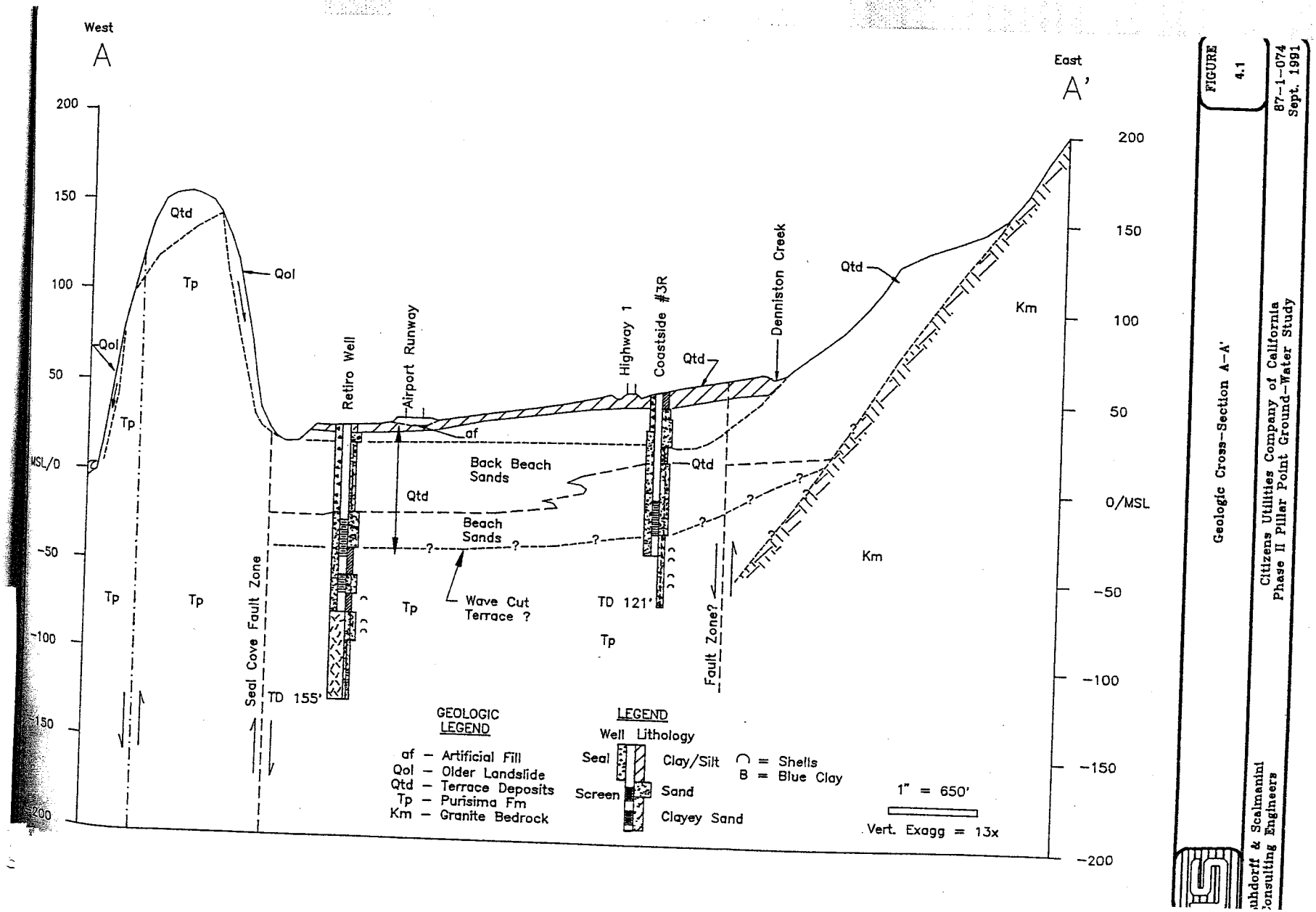


FIGURE 4.1

Geologic Cross-Section A-A'

Citizens Utilities Company of California
Phase II Pillar Point Ground-Water Study

87-1-074
Sept. 1991

Luhdorff & Scalmanini
Consulting Engineers

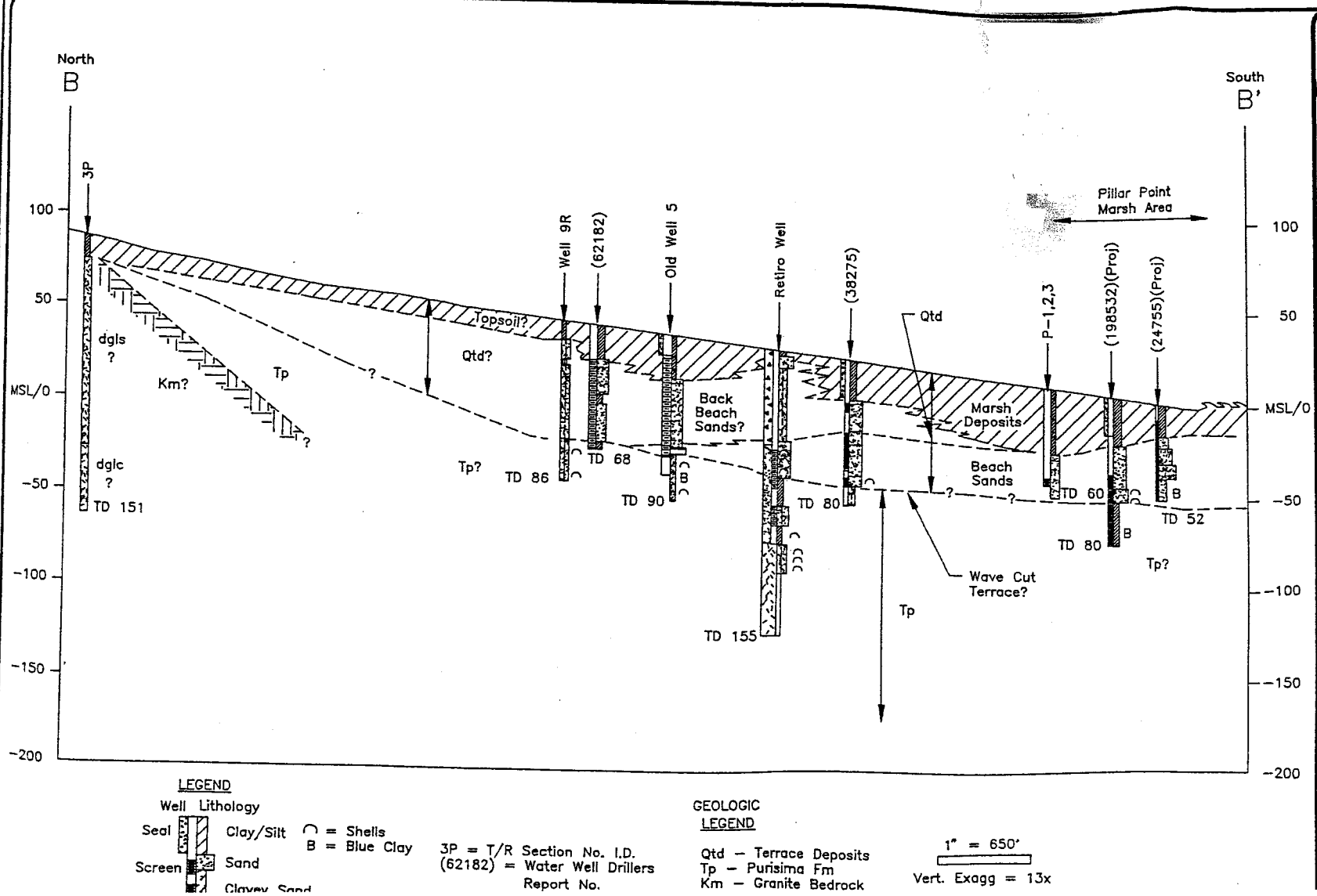


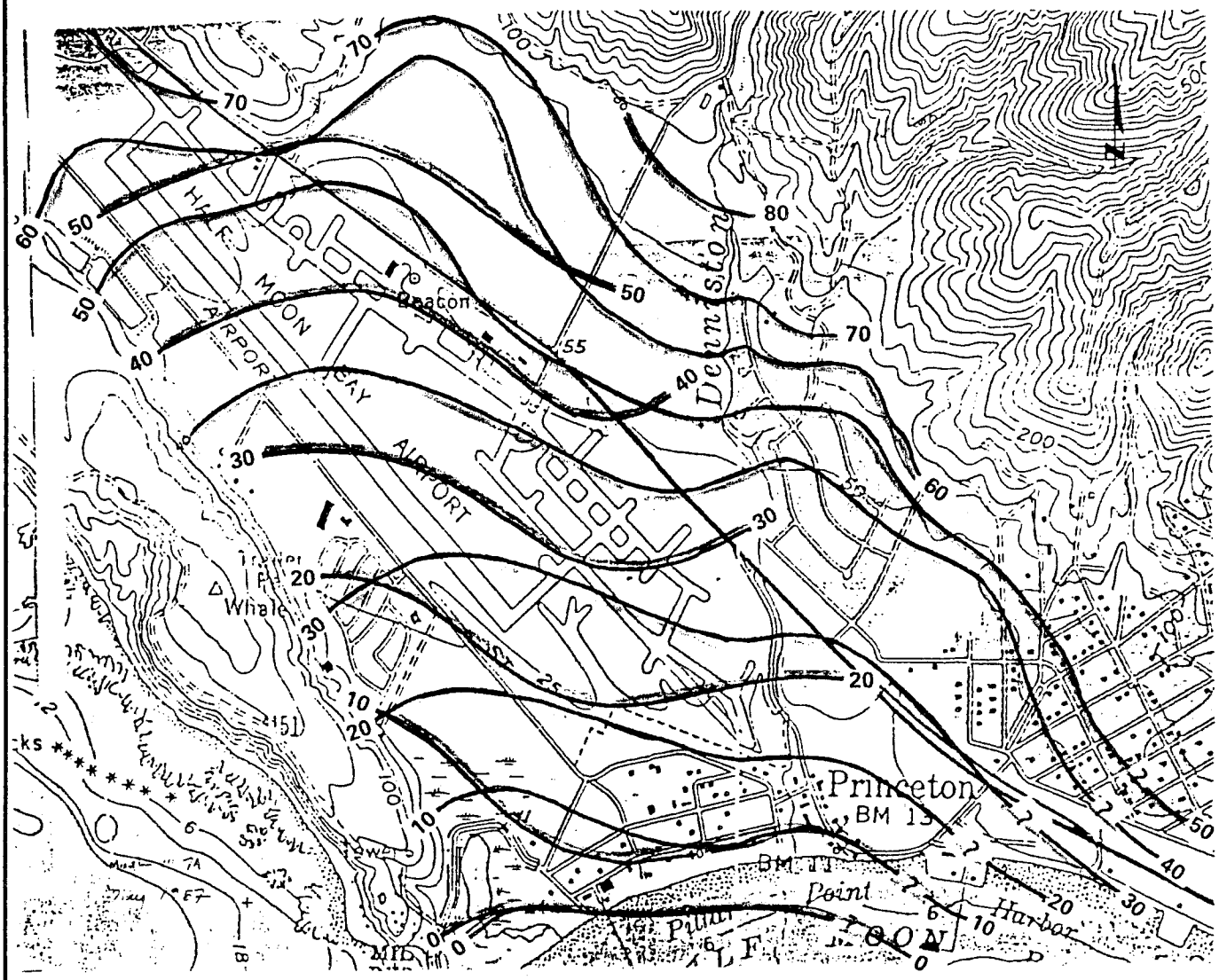
FIGURE 4.2

Geologic Cross-Section B–B'

Citizens Utilities Company of California
Phase II Pillar Point Ground-Water Study

87-1-074
Sept. 1991

dorff & Scalmanini
sulting Engineers



60 ——— Contours of Equal Ground-Water Elevation (March, 1974) from Lowney-Kaldveer Associates, 1974.

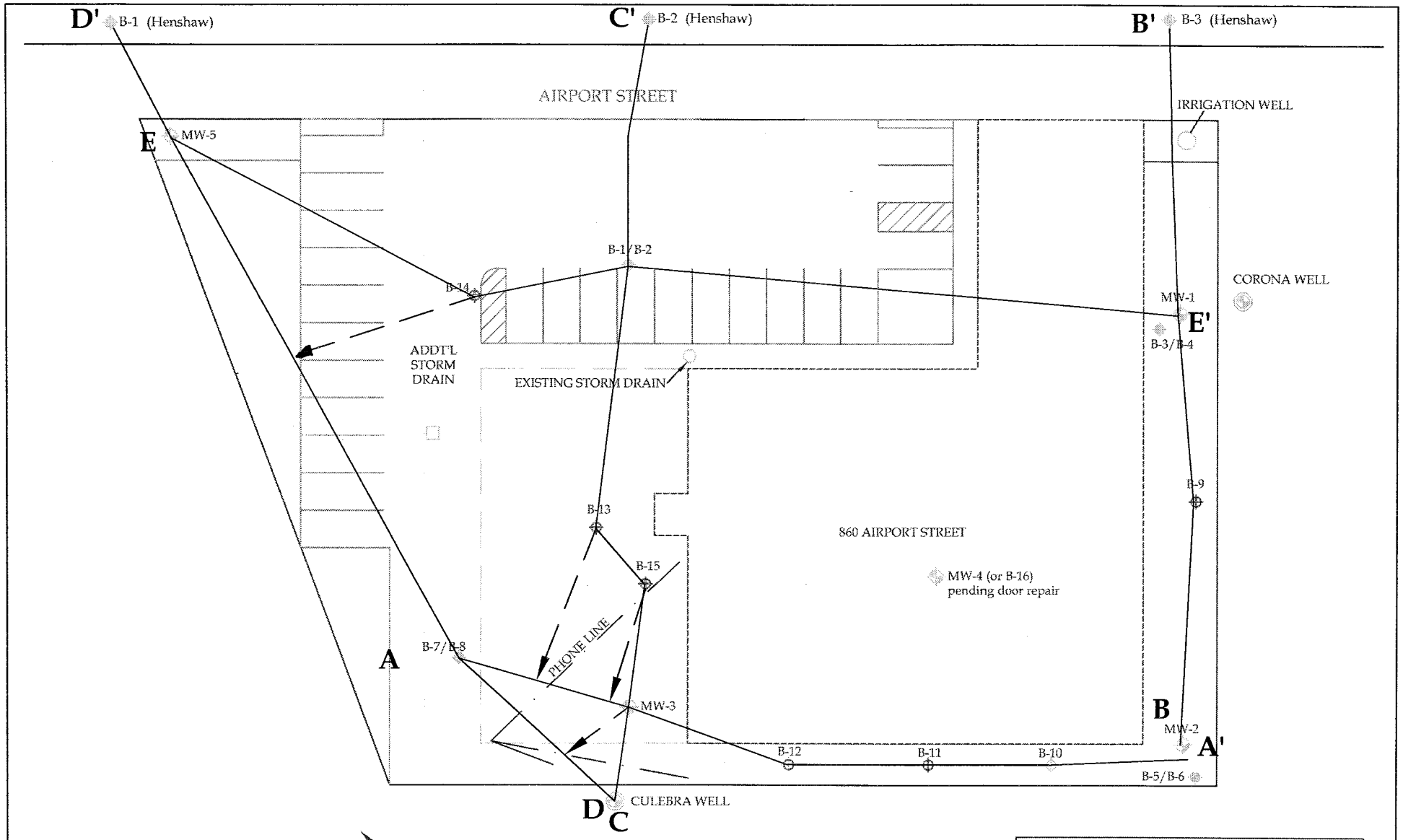
60 ——— Contours of Equal Ground-Water Elevation (May, 1987).

EARTH SCIENCES ASSOCIATES
LUHDORFF AND SCALMANINI

HALF MOON BAY AIRPORT/PILLAR POINT
GROUND-WATER BASIN – PHASE I STUDY
GROUND-WATER CONTOURS – 1974 & 1987

Checked by ____ Date ____	Project No.	Figure No
Approved by ____ Date ____	3272	7

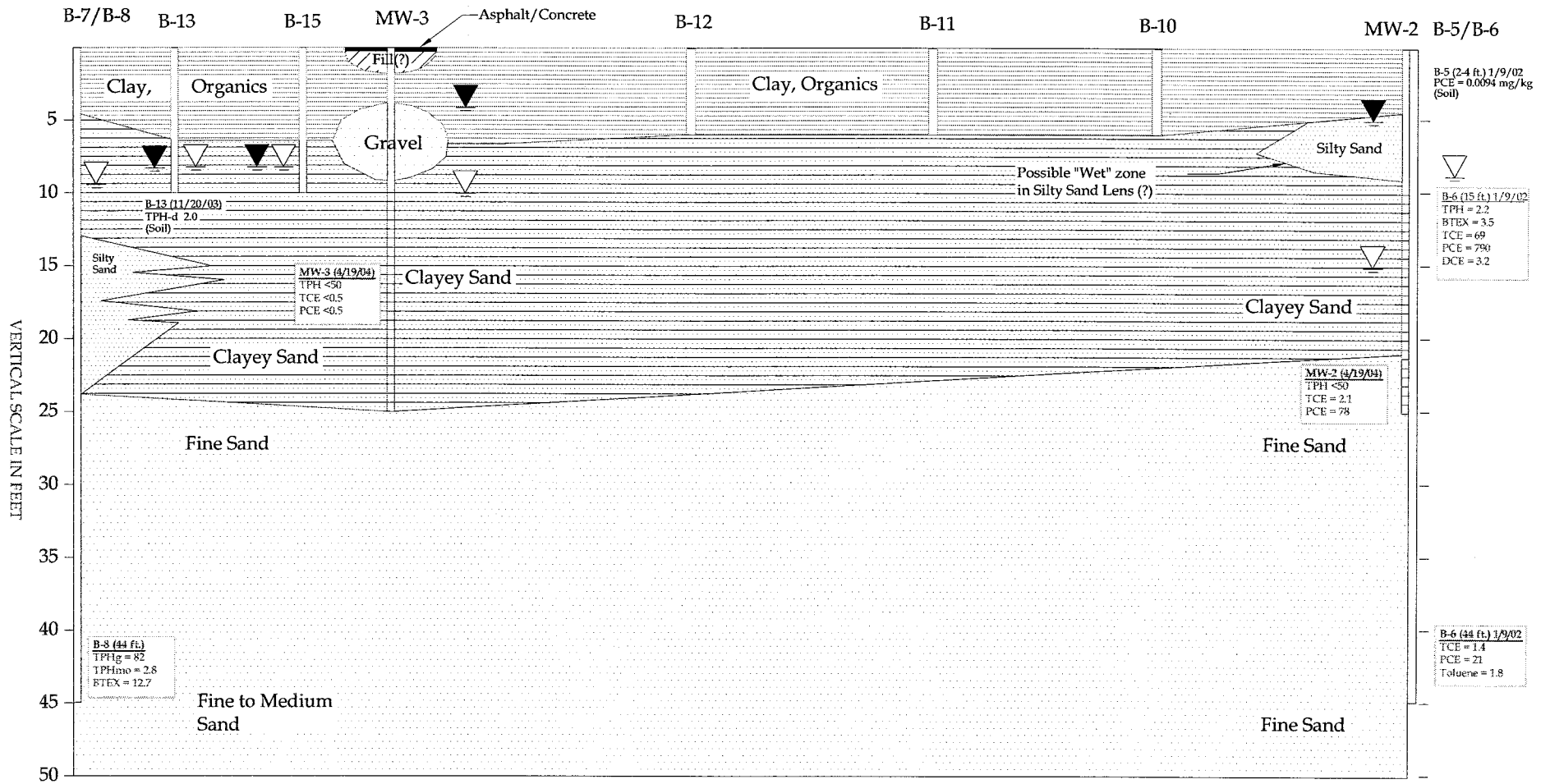
APPENDIX B



ENVIRONMENTAL BIO-SYSTEMS INC.		
Project No.	Figure Date	
BP004C	03/04	

CROSS-SECTION LAYOUT
860 Airport Street
Moss Beach, California

← projected



NOTES: 1. GROUNDWATER DATA SHOWN IN BOXES (ug/L); SOIL DATA SHOWN WITHOUT BOXES (mg/kg).
2. ANALYTICAL DATA REPORTED AS "NON-DETECTED" NOT SHOWN.

0 25 50

APPROXIMATE HORIZONTAL SCALE IN FEET

LEGEND

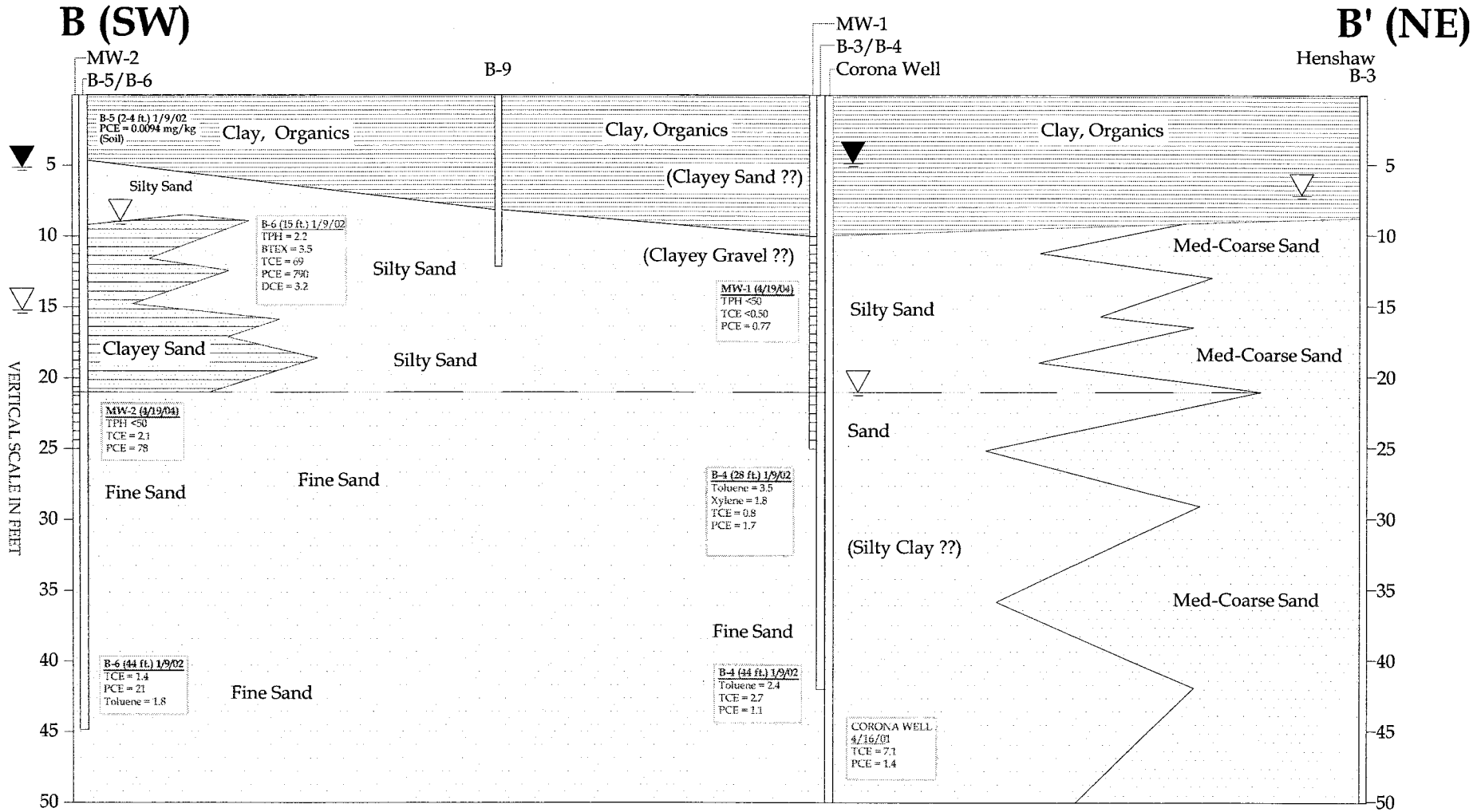
- DEPTH OF "FIRST" OBSERVED WATER
- DEPTH OF "STATIC" WATER
- SOIL BORING/WELL CASING
- WELL SCREEN

ENVIRONMENTAL BIO-SYSTEMS INC.

Project No.	Figure Date
DP004C	7/10/04

CROSS-SECTION A - A'

860 Airport Street
Moss Beach, California



NOTES: 1. GROUNDWATER DATA SHOWN IN BOXES (ug/L); SOIL DATA SHOWN WITHOUT BOXES (mg/kg).
2. ANALYTICAL DATA REPORTED AS "NON-DETECTED" NOT SHOWN.

* Corona Well set @ 100 ft. w/ screen @ 55 to 70 ft. and 80 to 90 ft.

0 25 50
APPROXIMATE HORIZONTAL SCALE IN FEET

LEGEND

- DEPTH OF "FIRST" OBSERVED WATER
- DEPTH OF "STATIC" WATER
- SOIL BORING/WELL CASING
- WELL SCREEN

ENVIRONMENTAL BIO-SYSTEMS INC.

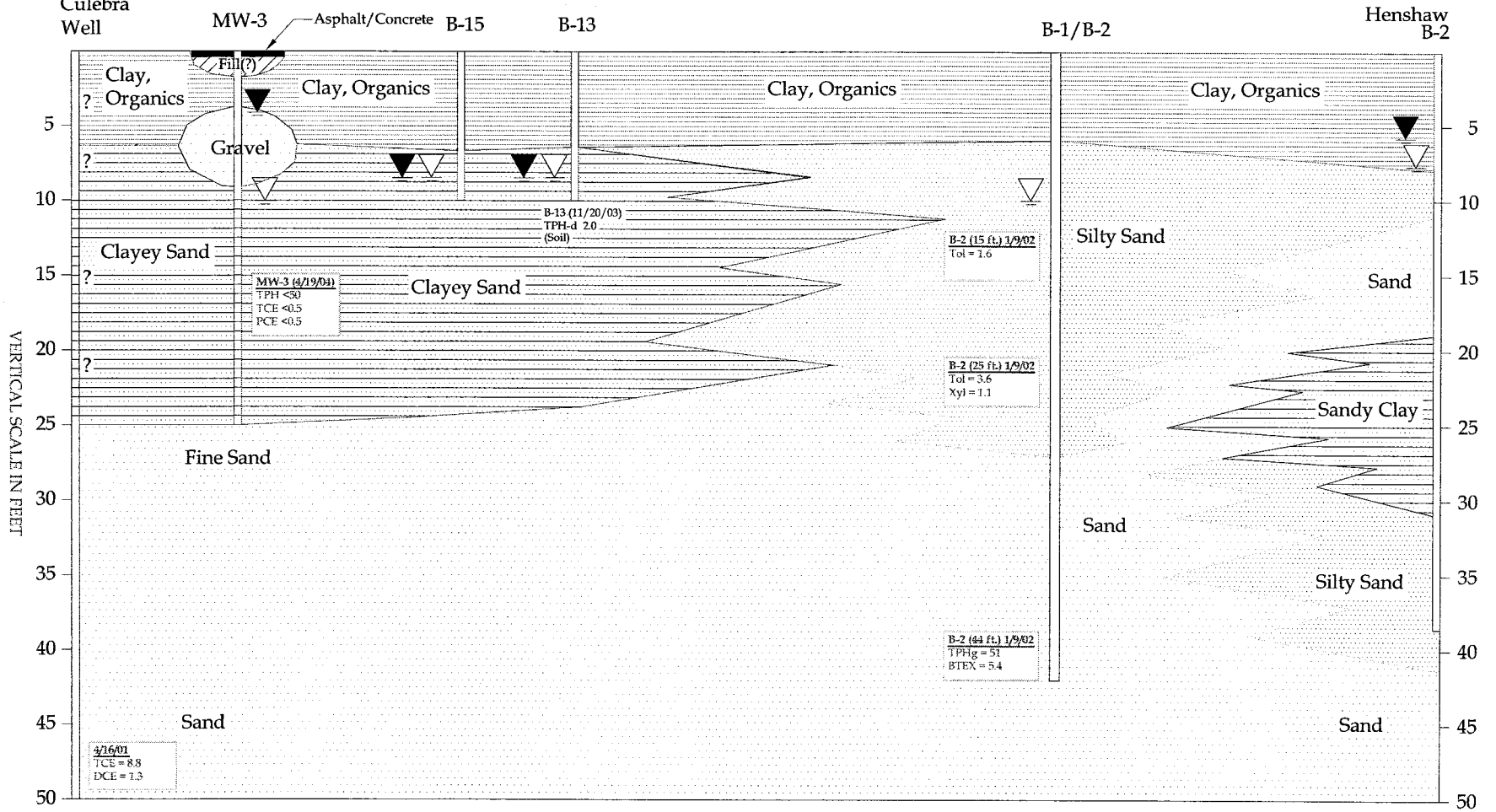
Project No.	Figure Date
DP004C	7/10/04

CROSS-SECTION B - B'

860 Airport Street
Moss Beach, California

C (SW)

C' (NE)



* Culebra Well set @ 110 ft. w/ screen @ 50-90 ft. and 100 to 110 ft.

NOTES: 1. GROUNDWATER DATA SHOWN IN BOXES (ug/L); SOIL DATA SHOWN WITHOUT BOXES (mg/kg).
2. ANALYTICAL DATA REPORTED AS "NON-DETECTED" NOT SHOWN.

0 25 50

APPROXIMATE HORIZONTAL SCALE IN FEET

LEGEND

- DEPTH OF "FIRST" OBSERVED WATER
- DEPTH OF "STATIC" WATER
- SOIL BORING/WELL CASING
- WELL SCREEN

ENVIRONMENTAL BIO-SYSTEMS INC.

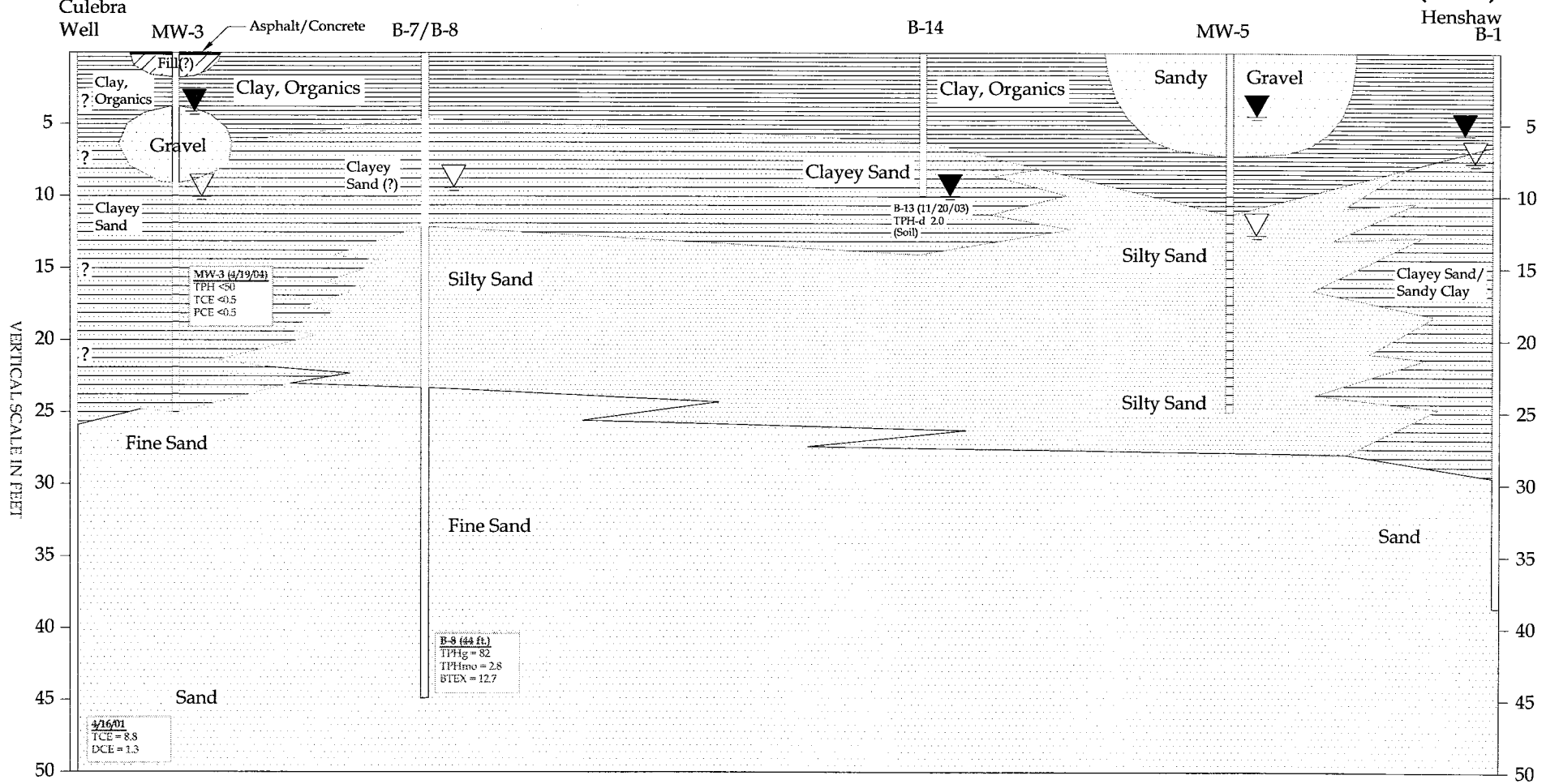
Project No.	Figure Date	
DP004C	**7/10/04**	

CROSS-SECTION C - C'

860 Airport Street
Moss Beach, California

D (SW)

D' (NE)



* Culebra Well set @ 110 ft. w/ screen @ 50-90 ft. and 100 to 110 ft.

NOTES: 1. GROUNDWATER DATA SHOWN IN BOXES (ug/L); SOIL DATA SHOWN WITHOUT BOXES (mg/kg).
2. ANALYTICAL DATA REPORTED AS "NON-DETECTED" NOT SHOWN.

0 25 50

APPROXIMATE HORIZONTAL SCALE IN FEET

LEGEND

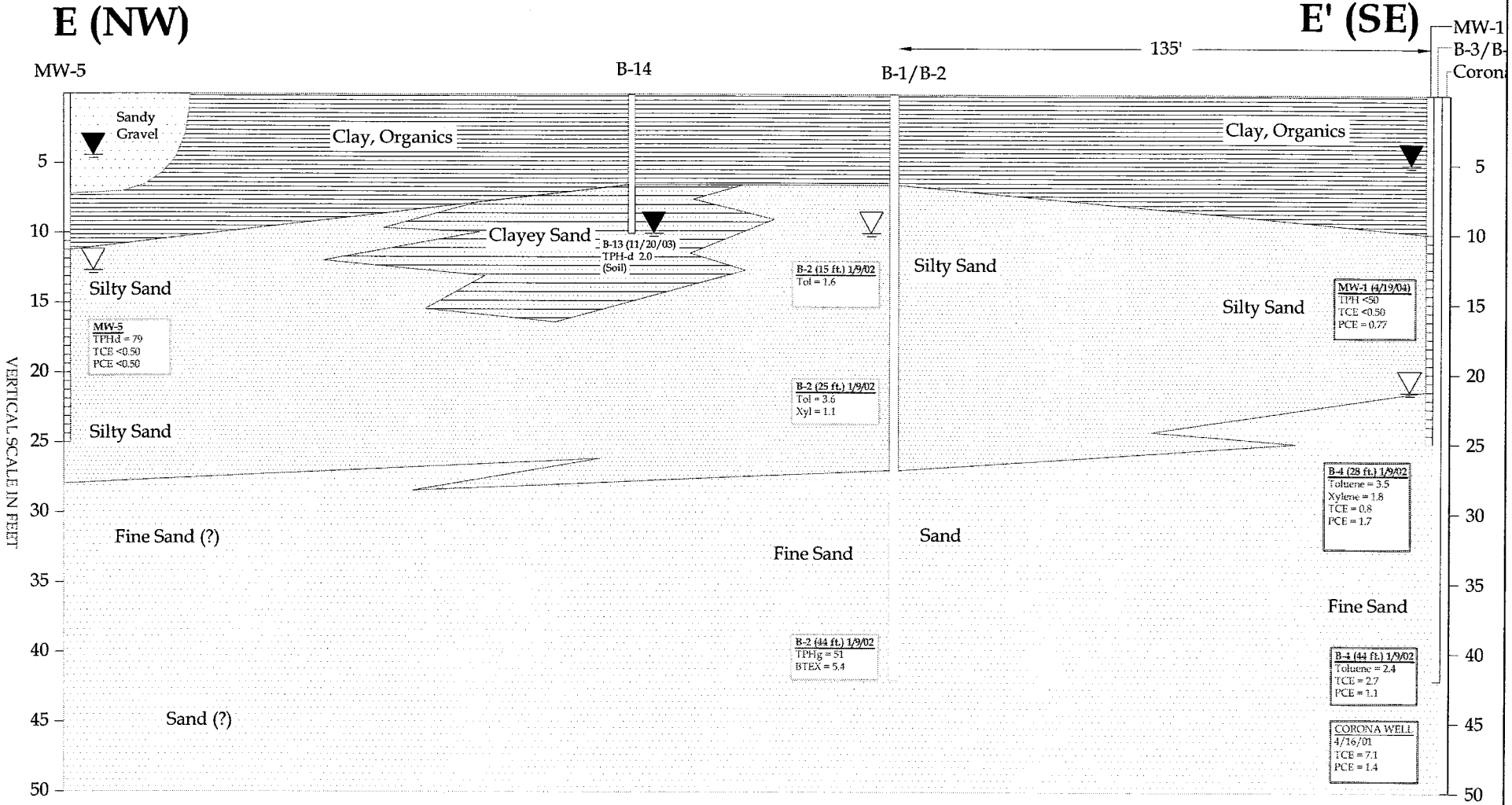
- DEPTH OF "FIRST" OBSERVED WATER
- DEPTH OF "STATIC" WATER
- SOIL BORING/WELL CASING
- WELL SCREEN

ENVIRONMENTAL BIO-SYSTEMS INC.

Project No.	Figure Date	
DP004C	**7/10/04**	

CROSS-SECTION D - D'

860 Airport Street
Moss Beach, California



NOTES: 1. GROUNDWATER DATA SHOWN IN BOXES (ug/L); SOIL DATA SHOWN WITHOUT BOXES (mg/kg).
2. ANALYTICAL DATA REPORTED AS "NON-DETECTED" NOT SHOWN.

* Corona Well set @ 100 ft. w/ screen @ 55 - 70 ft., 80 - 90 ft.

0 25 50

APPROXIMATE HORIZONTAL SCALE IN FEET

LEGEND

- DEPTH OF "FIRST" OBSERVED WATER
- DEPTH OF "STATIC" WATER
- SOIL BORING/WELL CASING
- WELL SCREEN

ENVIRONMENTAL BIO-SYSTEMS INC.

Project No.	Figure Date
DP004C	7/10/04

CROSS-SECTION E - E'

860 Airport Street
Moss Beach, California

APPENDIX C

LUHDORFF & SCALMANINI
CONSULTING ENGINEERS

GROUND-WATER RESOURCES
Hydrology • Development • Management

February 03, 2005
File No. 04-5-004

Ms. Lori Carraway
Coach of San Diego, Inc.
660 Newport Center Drive, Suite 1020
Newport Beach, CA 92660

SUBJECT: EL GRANADA MANUFACTURED HOME COMMUNITY
2004 CONSUMER CONFIDENCE REPORT

Dear Ms. Carraway:

Luhdorff and Scalmanini, Consulting Engineers (LSCE) has completed its review and compilation of the water quality data obtained for the Year 2004 at El Granada Manufactured Home Community (EGMHC). Enclosed, please find five (5) copies of the 2004 Consumer Confidence Report (CCR) for your files and for reproduction and distribution to the Park. Also enclosed is a partially complete *Consumer Confidence Report Certification Form.* Please forward one (1) copy of the CCR and a fully executed *Certification Form* to the California Department of Health Services once the CCR has been distributed to EGMHC residents.

We appreciate the opportunity to assist El Granada in its review of drinking water quality. Please do not hesitate to contact me should you have any questions, or require additional information.

Sincerely,

LUHDORFF AND SCALMANINI
CONSULTING ENGINEERS

Jonathan Keck
Project Engineer

Enclosures

500 First Street Woodland, CA 95695-4026 • 530.661.0109 • Fax 530.661.6806

2004 Consumer Confidence Report
Certification Form

Water System Name: EL GRANADA MANUFACTURED HOME COMMUNITY

Water System Number: 41-10028

The water system named above hereby certifies that its Consumer Confidence Report has been distributed to customers (and appropriate notices of availability have been given). Further, the system certifies that the information contained in the report is correct and consistent with the compliance monitoring data previously submitted to the Department of Health Services.

Certified by: Name JONATHAN KECK

Title PROJECT ENGINEER / LSCE

Phone Number ( ) 530-661-0109 Date FEB. 03, 2005

Water systems are not required to report the following information, but may do so by checking all items that apply:

_____ CCR was distributed by mail or other direct delivery methods. Specify other direct delivery methods used: _____

_____

_____ "Good faith" efforts were used to reach non-bill paying consumers. Those efforts included the following methods:

_____ Posted the CCR on the Internet at www._____

_____ Mailed the CCR to postal patrons within the service area (attach zip codes used)

_____ Advertised the availability of the CCR in news media (attach copy of press release)

_____ Publication of the CCR in a local newspaper of general circulation (attach a copy of the published notice, including name of newspaper and date published)

_____ Posted the CCR in public places (attach a list of locations)

_____ Delivery of multiple copies of CCR to single bill addresses serving several persons, such as apartments, businesses, and schools

_____ Delivery to community organizations (attach a list of organizations)

_____ [*For systems serving at least 100,000 persons*] Posted CCR on a publicly-accessible internet site at the following address: www._____

_____ [*For investor-owned utilities*] Delivered the CCR to the California Public Utilities Commission

State of California

Department of Health Services
Drinking Water Field Operations Branch
2151 Berkeley Way, Room 458
Berkeley, CA 94704-1011

Eugene H. Leung, P.E.
Associate Sanitary Engineer

(510) 540-3589
FAX (510) 540-2152
eleung@dhs.ca.gov

LUHDORFF & SCALMANINI
CONSULTING ENGINEERS

GROUND-WATER RESOURCES
Hydrology • Development • Management

February 03, 2005
File No. 04-5-004

Ms. Lisa Ketcham, Community Manager
Residents of El Granada
164 Culebra Lane
Moss Beach, CA 94038

SUBJECT: EL GRANADA MANUFACTURED HOME COMMUNITY
2004 CONSUMER CONFIDENCE REPORT (CCR)

Dear Ms. Ketcham and Residents of El Granada:

We are pleased to present this Consumer Confidence Report (CCR) for water supplied to El Granada Manufactured Home Community (EGMHC) for the period of January 1 to December 31, 2004. This report is designed to inform the Community about its water system, and about the quality of water delivered to its residents. If you have any questions about El Granada's water system, or this report, please contact Mr. John Davis at (909) 930-9750.

Sincerely,

LUHDORFF AND SCALMANINI
CONSULTING ENGINEERS

Jonathan Keck
Project Engineer

500 First Street Woodland, CA 95695-4026 • 530.661.0109 • Fax 530.661.6806

2004 Consumer Confidence Report

El Granada Manufactured Home Community

Moss Beach, California

Prepared By:

Luhdorff and Scalmanini
Consulting Engineers
File No. 04-5-004

February 2005

2004 Consumer Confidence Report

Water System Name: **El Granada Manufactured Home Community**

Report Date: **February 03, 2005**

We test the drinking water quality for many constituents as required by State and Federal Regulations. This report shows the results of our monitoring for the period of January 1 - December 31, 2004.

Este informe contiene información muy importante sobre su agua beber. Tradúzcalo ó hable con alguien que lo entienda bien.

Para obtener una copia de este reporte en Espanol para el ano 2004 de la systema de aqua en la communidad de el Granada, llamen a la oficina (650) 728-3389 y pregunten por Gabriel Aguilar.

Type of water source(s) in use: Groundwater from three on-site wells
Groundwater from Montara Water and Sanitary District

Name & location of source(s): Corona Well (102 Corona Street), Retiro Well (111 Retiro Street), Culebra Well (106 Culebra Lane), Montara Water and Sanitary District Meter (104 Culebra Lane)

Drinking Water Source Assessment information: A source water assessment was conducted of the drinking water sources, Corona, Retiro, and Culebra Wells, used by the El Granada Mobile Home Park water system. The three wells are considered most vulnerable to the contaminant plume in the area that is associated with the volatile organic compounds detected in the water supply. Air stripping treatment is provided to remove these compounds from the water prior to delivery to the customers. The wells are also considered most vulnerable to the following activities not associated with any detected contaminants: automobile-repair shops, furniture repair, and manufacturing and sewer collection systems. A copy of the complete assessment may be viewed by contacting the water system (164 Culebra Lane, Moss Beach, CA 94038), or by contacting the California Department of Health Services, Santa Clara District Office, 2151 Berkeley Way, Room 458, Berkeley, CA 94704. You may request a summary of the assessment be sent to you by contacting the Santa Clara District Office at (510) 540-2158.

Time and place of regularly scheduled board meetings for public participation:
Currently, there are no regularly scheduled public meetings. However, residents of El Granada are encouraged to contact Mr. John Davis, of Haven Management Services, with water system related questions or concerns. Should a public meeting be deemed necessary on a given subject(s), it will be held at the Community Office (164 Culebra Lane), and residents will be notified of the meeting time by first-class mail and/or door-to-door contact at least 10 business days in advance. Mr. Davis can be reached at (909) 930-9750.

TERMS USED IN THIS REPORT:

Maximum Contaminant Level (MCL): The highest level of a contaminant that is allowed in drinking water. Primary MCLs are set as close to the PHGs (or MCLGs) as is economically and technologically feasible. Secondary MCLs are set to protect the odor, taste, and appearance of drinking water.

Maximum Contaminant Level Goal (MCLG): The level of a contaminant in drinking water below which there is no known or expected risk to health. MCLGs are set by the U.S. Environmental Protection Agency (U.S. EPA).

Maximum Residual Disinfection Level (MRDL): The level of disinfectant added for water treatment that may not be exceeded at the consumer's tap.

Maximum Residual Disinfection Level Goal (MRDLG): The level of disinfectant added for water treatment below which there is no known or expected risk to health. MRDLGs are set by the U.S. Environmental Protection Agency.

ND: not detectable at testing limit.

pCi/L: picocuries per liter (a measure of radiation)
ppb: parts per billion or micrograms per liter (ug/L)
ppm: parts per million or milligrams per liter (mg/L)
ppt: parts per trillion or nanograms per liter (ng/L)

Primary Drinking Water Standards (PDWS): MCLs for contaminants that affect health along with their monitoring and reporting requirements, and water treatment requirements.

Public Health Goal (PHG): The level of a contaminant in drinking water below which there is no known or expected risk to health. PHGs are set by the California Environmental Protection Agency.

Secondary Drinking Water Standards (SDWS): MCLs for contaminants that affect taste, odor, or appearance of the drinking water. Contaminants with SDWSs do not affect the health at the MCL levels.

Regulatory Action Level (AL): The concentration of a contaminant that, if exceeded, triggers treatment or other requirements which a water system must follow.

Treatment Technique (TT): A required process intended to reduce the level of a contaminant in drinking water.

Variances and Exemptions: Department permission to exceed an MCL or not comply with a treatment technique under certain conditions.

General Information On Drinking Water

The sources of drinking water (both tap water and bottled water) include rivers, lakes, streams, ponds, reservoirs, springs, and wells. As water travels over the surface of the land or through the ground, it dissolves naturally-occurring minerals and, in some cases, radioactive material, and can pick up substances resulting from the presence of animals or from human activity. Contaminants that may be present in source water include:

- *Microbial contaminants*, such as viruses and bacteria, that may come from sewage treatment plants, septic systems, agricultural livestock operations, and wildlife.
- *Inorganic contaminants*, such as salts and metals, that can be naturally-occurring or result from urban stormwater runoff, industrial or domestic wastewater discharges, oil and gas production, mining, or farming.
- *Pesticides and herbicides*, which may come from a variety of sources such as agriculture, urban stormwater runoff, and residential uses.
- *Organic chemical contaminants*, including synthetic and volatile organic chemicals, that are byproducts of industrial processes and petroleum production, and can also come from gas stations, urban stormwater runoff, and septic systems.
- *Radioactive contaminants*, which can be naturally-occurring or be the result of oil and gas production and mining activities.

In order to ensure that tap water is safe to drink, USEPA and the state Department of Health Services (Department) prescribe regulations that limit the amount of certain contaminants in water provided by public water systems. Department regulations also establish limits for contaminants in bottled water that must provide the same protection for public health.

Tables 1-8 list all of the drinking water contaminants that were detected during the most recent sampling for the constituent. The presence of these contaminants in the water does not necessarily indicate that the water poses a health risk. The Department requires us to monitor for certain contaminants less than once per year because the concentrations of these contaminants are not expected to vary significantly from year to year. Some of the data, though representative of the water quality, are more than one year old.

*Any violation of an MCL or AL is asterisked. Additional information regarding the violation is provided on Page 8.

Drinking Water Sources and Treatment at El Granada

In 2004, El Granada's primary water source was groundwater withdrawn from three shallow wells located on Community grounds, and from Montara Water and Sanitary District (see Page 1). The three wells are completed in water bearing formations (aquifers) found in the thin valley alluvium that overlies basement bedrock. These groundwater sources are replenished by rainfall and surface water that percolates downward through the ground.

Untreated groundwater is conveyed to EGMHC's water treatment plant through dedicated "raw" water mains. Water quality monitoring indicates that the raw well water contains low levels of aluminum, arsenic, chloride, nitrate, sulfate, and radioactive elements, moderate levels of fluoride and volatile organic compounds (VOCs), and high levels of iron and manganese. Upon reaching the water treatment plant, the raw water is aerated (to remove VOCs), chlorinated (for disinfection and oxidation purposes), and filtered (to remove iron and manganese). Treated water is then sent to two large storage tanks where it is subsequently pumped into the EGMHC distribution system.

Water Quality Monitoring Results at El Granada

EGMHC routinely monitors for contaminants in your drinking water according to Federal and State laws. The monitoring is performed by State-Certified Water Treatment Plant Operators, and a State-Certified laboratory performs all laboratory testing. Tables 1-8 below show the results of our monitoring efforts for January 1st through December 31st, 2004. The tables include test results for both "raw water," (water that has been pumped from the ground but has not gone through the water treatment plant), and "finished water," (water that has gone through the water treatment plant). Water quality testing indicates that all constituents governed by a primary water quality standard occur at levels below the primary MCL in the finished water. In particular, the VOCs detected in the raw water are reduced to non-detectable (ND) levels in the finished water, and thus are not reported in tabular format. **Accordingly, the quality of finished water provided to EGHMC residents meets all of the primary maximum contaminant levels (MCLs) set forth by the Safe Drinking Water Act.**

Table 4 shows water quality information obtained from laboratory testing of iron and manganese concentrations. This information indicates that iron and manganese levels measured after treatment are *generally* below the limits prescribed by the Safe Drinking Water Act. It should be noted that these constituents are covered by *secondary* drinking water standards that have been established for aesthetic reasons. However, due to historical iron and manganese violations, Kingsley Management Corporation (previous owner of EGMHC) purchased and installed additional treatment technology that enhances the iron and manganese removal efficiency of the treatment plant. These improvements were completed in March of 2003, and are currently treating water for EGMHC. The new treatment technology also underwent intensive monitoring this past year to insure that it provides consistent performance relative to iron and manganese removal. Testing to date shows solid performance relative to VOC, iron, and manganese removal, although a single iron violation occurred in October of 2004. This violation is discussed in more detail on Page 8.

TABLE 1 - SAMPLING RESULTS FOR COLIFORM BACTERIA IN TREATED WATER					
Microbiological Contaminants	**Highest No. of detections**	**No. of months in violation**	**MCL**	**MCLG**	**Typical Source of Bacteria**
Total Coliform Bacteria	0	0	More than 1 sample in a month with a detection	0	Naturally present in the environment
Fecal Coliform or *E. coli*	0	0	A routine sample and a repeat sample detect total coliform and either sample also detects fecal coliform or *E. coli*	0	Human and animal fecal waste

TABLE 2 - SAMPLING RESULTS FOR LEAD AND COPPER IN TREATED WATER						
Chemical or Constituent (and reporting units)	**No. of samples collected**	**90th percentile level detected**	**No. Sites exceeding AL**	**AL**	**MCLG**	**Typical Source of Contaminant**
Lead (ppb)	10	< 5	0	15	2	Internal corrosion of household water plumbing systems; discharges from industrial manufacturers; erosion of natural deposits.
Copper (ppb)	10	< 50	0	1300	170	Internal corrosion of household water plumbing systems; erosion of natural deposits; leaching from wood preservatives.

TABLE 3 - CONTAMINANTS WITH A PRIMARY DRINKING WATER STANDARD DETECTED IN TREATED WATER						
Chemical or Constituent (and reporting units)	**Sample Date**	**Level Detected**	**Range of Detections**	**MCL**	**PHG (MCLG)**	**Typical Source of Contaminant**
Total Trihalomethanes (TTHMs) (ppb)	Jan-Dec 2004	30.3	9.0-78.0	80	N.A.	Byproduct of drinking water chlorination
Haloacetic Acids (HAA5) (ppb)	Jan-Dec 2004	4.39	ND-8.0	60	N.A.	Byproduct of drinking water chlorination

TABLE 4 - CONTAMINANTS WITH A SECONDARY DRINKING WATER STANDARD DETECTED IN TREATED WATER						
Chemical or Constituent (and reporting units)	**Sample Date**	**Level Detected**	**Range of Detections**	**MCL**	**PHG (MCLG)**	**Typical Source of Contaminant**
Iron (ppb)	Jan-Dec 2004	540*	ND-540	300	N.A.	Leaching from natural deposits; industrial waste
Manganese (ppb)	Jan-Dec 2004	ND	ND	50	N.A.	Leaching from natural deposits

TABLE 5 - SAMPLING RESULTS FOR SODIUM AND HARDNESS IN RAW WATER						
Chemical or Constituent (and reporting units)	Sample Date	Level Detected	Range of Detections	MCL	PHG (MCLG)	Typical Source of Contaminant
Sodium (ppm)	Dec 08 2003	86	71-99	none	none	Generally found in ground and surface water
Hardness (ppm)	Dec 08 2003	200	160-250	none	none	Generally found in ground and surface water

TABLE 6 - CONTAMINANTS WITH A PRIMARY DRINKING WATER STANDARD DETECTED IN RAW WATER						
Chemical or Constituent (and reporting units)	Sample Date	Level Detected	Range of Detections	MCL	PHG (MCLG)	Typical Source of Contaminant
Aluminum (ppb)	Dec 08 2003	< 50	< 50	1000	N.A.	Erosion of natural deposits; residue from some surface water treatment processes
Arsenic (ppb)	Dec 08 2003	2.35	ND-2.5	50	N.A.	Erosion of natural deposits; runoff from orchards; glass and electronic production wastes
Fluoride (ppm)	Jan-Dec 2004	1.03	0.76-1.20	2	1	Erosion of natural deposits; water additive that promotes strong teeth; discharge from fertilizer and aluminum factories
Nitrate (as NO_3) (ppm)	Jan-Dec 2004	< 0.5	< 0.5	45	45	Erosion of natural deposits; Runoff and leaching from fertilizer use; Leaching from septic tanks
Gross Alpha Activity (pCi/L)	Jan-Dec 2003	< 3.09	< 3.09	15	N.A.	Erosion of natural deposits
Gross Beta Activity (pCi/L)	Jan-Dec 2003	< 4.0	< 4.0	50	N.A.	Erosion of natural deposits
Cis-1,2-Dichloroethylene (ppb)	Jan-Dec 2004	2.50	ND-5.00	6	N.A.	Discharge from industrial chemical factories
Total Trihalomethanes (TTHMs) (ppb)	Jan-Dec 2004	1.60	ND-1.60	80	N.A.	Byproduct of drinking water chlorination
Trans-1,2-Dichloroethylene (ppb)	Jan-Dec 2004	0.90	ND-1.10	10	N.A.	Discharge from industrial chemical factories
Trichloroethylene (ppb)	Jan-Dec 2004	5.52	ND-9.00	5	0.8	Discharge from metal degreasing sites and other factories

TABLE 7 - CONTAMINANTS WITH A SECONDARY DRINKING WATER STANDARD DETECTED IN RAW WATER						
Chemical or Constituent (and reporting units)	Sample Date	Level Detected	Range of Detections	MCL	PHG (MCLG)	Typical Source of Contaminant
Color (Color Units)	Dec 08 2003	60	40-80	15	N.A.	Naturally-occurring organic material
Odor (Odor Units)	Dec 08 2003	< 1	< 1	3	N.A.	Naturally-occurring organic material
Turbidity (NTU)	Dec 08 2003	27.7	20-37	5	N.A.	Soil runoff
Specific Conductance (umhos/cm)	Dec 08 2003	700	590-790	1600	N.A.	Substances that form ions when in water; seawater influence
Iron (ppb)	Dec 08 2003	4600	3500-5200	300	N.A.	Leaching from natural deposits; industrial waste
Manganese (ppb)	Dec 08 2003	313	250-350	50	N.A.	Leaching from natural deposits
Chloride (ppm)	Dec 08 2003	104	92-120	500	N.A.	Runoff and leaching from natural deposits; seawater influence
Sulfate (ppm)	Dec 08 2003	34.3	18-54	500	N.A.	Runoff and leaching from natural deposits; industrial waste
Total Dissolved Solids (ppm)	Dec 08 2003	440	360-510	1000	N.A.	Runoff and leaching from natural deposits

TABLE 8 - UNREGULATED CONTAMINANTS THAT REQUIRE MONITORING DETECTED IN RAW WATER						
Chemical or Constituent (and reporting units)	Sample Date	Level Detected	Range of Detections	AL	PHG (MCLG)	Typical Source of Contaminant
Boron (ppb)	Jan-Dec 2004	212	170-260	1000	N.A.	Runoff and leaching from natural deposits; industrial waste

Additional Information On Drinking Water

All drinking water, including bottled water, may reasonably be expected to contain at least small amounts of some contaminants. The presence of contaminants does not necessarily indicate that the water poses a health risk. More information about contaminants and potential health effects can be obtained by calling the USEPA's Safe Drinking Water Hotline (1-800-426-4791).

Some people may be more vulnerable to contaminants in drinking water than the general population. Immuno-compromised persons such as persons with cancer undergoing chemotherapy, persons who have undergone organ transplants, people with HIV/AIDS or other immune system disorders, some elderly, and infants can be particularly at risk from infections. These people should seek advice about drinking water from their health care providers. USEPA/Centers for Disease Control (CDC) guidelines on appropriate means to lessen the risk of infection by *Cryptosporidium* and other microbial contaminants are available from the Safe Drinking Water Hotline (1-800-426-4791).

Summary Information for Contaminants Exceeding an MCL or AL, or a Violation of any Treatment, Monitoring, or Reporting Requirement

El Granada's water treatment plant failed to achieve **secondary** drinking water quality standards in treated water on one occasion during 2004 (iron). This violation occurred in October of 2004, and was subsequently researched to help understand the basis for its occurrence. This investigation revealed that the sample was taken very early in the filter production run. Since elevated metal levels at the beginning and end of a production run are to be expected from time-to-time, this result was not deemed representative of normal operating conditions. Based on this violation, and in order to insure representative sampling in the future, the water treatment plant operators were instructed to take samples during the middle of the production cycle.

No monthly sampling interruptions or omissions occurred during 2004.

Upcoming Water System Improvements

As cited in Table 3, trihalomethane (THM) compounds were detected in the treated water supply (distribution system) in 2004. These constituents are normal byproducts of drinking water chlorination. The detected levels ranged between 9 ppb and 78 ppb, with a yearly average of 30.3 ppb. THMs are currently regulated compounds at El Granada, with a primary maximum contaminant level (MCL) of 80 ppb. Coach of San Diego is currently monitoring this constituent closely while also exploring new chemical feed compounds and technology that will insure low disinfection byproduct levels detected at El Granada.

2005 Consumer Confidence Report

Pillar Ridge Manufactured Home Community

Moss Beach, California

Prepared By:

Luhdorff and Scalmanini
Consulting Engineers
File No. 05-5-003

February 2006

CALIFORNIA LABORATORY SERVICES

3249 Fitzgerald Road Rancho Cordova, CA 95742

January 31, 2006

CLS Work Order #: CPA0576
COC #: 62508

Lenore Sacco
Pillar Ridge MHP
164 Culebra Street
Moss Beach, CA 94038

Project Name: January Analysis

Enclosed are the results of analyses for samples received by the laboratory on 01/19/06 15:40. Samples were analyzed pursuant to client request utilizing EPA or other ELAP approved methodologies. I certify that the results are in compliance both technically and for completeness.

Analytical results are attached to this letter. Please call if we can provide additional assistance.

Sincerely,

James Liang, Ph.D.
Laboratory Director

CA DOHS ELAP Accreditation/Registration number 1233

March 15, 2006
File No. 05-5-003

Paul Bowman, Community Manager
Residents of Pillar Ridge
164 Culebra Lane
Moss Beach, CA 94038

SUBJECT: PILLAR RIDGE MANUFACTURED HOME COMMUNITY
2005 CONSUMER CONFIDENCE REPORT (CCR)

Dear Mr. Bowman and Residents of Pillar Ridge:

We are pleased to present this Consumer Confidence Report (CCR) for water supplied to Pillar Ridge Manufactured Home Community (PRMHC) for the period of January 1 to December 31, 2005. This report is designed to inform the Community about its water system, and about the quality of water delivered to its residents. If you have any questions about Pillar Ridge's water system, or this report, please contact Mr. John Davis at (909) 930-9750.

Sincerely,

LUHDORFF AND SCALMANINI
CONSULTING ENGINEERS

William A. Gustavson
Principal Project Manager

2005 Consumer Confidence Report

Water System Name: **Pillar Ridge Manufactured Home Community**

Report Date: **February 1, 2006**

We test the drinking water quality for many constituents as required by State and Federal Regulations. This report shows the results of our monitoring for the period of January 1 - December 31, 2005.

Este informe contiene información muy importante sobre su agua beber. Tradúzcalo ó hable con alguien que lo entienda bien.

Para obtener una copia de este reporte en Espanol para el ano 2005 de la systema de aqua en la communidad de el Granada, llamen a la oficina (650) 728-3389 y pregunten por Gabriel Aguilar.

Type of water source(s) in use: Groundwater from three on-site wells
Groundwater from Montara Water and Sanitary District

Name & location of source(s): Corona Well (102 Corona Street), Retiro Well (111 Retiro Street), Culebra Well (106 Culebra Lane), Montara Water and Sanitary District Meter (104 Culebra Lane)

Drinking Water Source Assessment information: A source water assessment was conducted of the Drinking water sources, Corona, Retiro, and Culebra Wells, used by the Pillar Ridge Mobile Home Park water system. Another source of water is the Montara Water District and information regarding their water quality can be accessed from calling (650) 728-3545. The three-onsite wells are considered most vulnerable to the contaminant plume in the area that is associated with the volatile organic compounds detected in the water supply. Air stripping treatment is provided to remove these compounds from the water prior to delivery to the customers. The wells are also considered most vulnerable to the following activities not associated with any detected contaminants: automobile-repair shops, furniture repair, and manufacturing and sewer collection systems. A copy of the complete assessment may be viewed by contacting the water system (164 Culebra Lane, Moss Beach, CA 94038), or by contacting the California Department of Health Services, Santa Clara District Office 850 Marina Bay Parkway, Building P, 2nd Floor, Richmond, CA 94804. You may request a summary of the assessment be sent to you by contacting the Santa Clara District Office at (510) 620-3474

Time and place of regularly scheduled board meetings for public participation:
Currently, there are no regularly scheduled public meetings. However, residents of Pillar Ridge are encouraged to contact Mr. John Davis, of Haven Management Services, with water system related questions or concerns. Should a public meeting be deemed necessary on a given subject(s), it will be held at the Community Office (164 Culebra Lane), and residents will be notified of the meeting time by first-class mail and/or door-to-door contact at least 10 business days in advance. Mr. Davis can be reached at (909) 930-9750.

TERMS USED IN THIS REPORT:

Maximum Contaminant Level (MCL): The highest level of a contaminant that is allowed in drinking water. Primary MCLs are set as close to the PHGs (or MCLGs) as is economically and technologically feasible. Secondary MCLs are set to protect the odor, taste, and appearance of drinking water.

Maximum Contaminant Level Goal (MCLG): The level of a contaminant in drinking water below which there is no known or expected risk to health. MCLGs are set by the U.S. Environmental Protection Agency (USEPA).

Public Health Goal (PHG): The level of a contaminant in drinking water below which there is no known or expected risk to health. PHGs are set by the California Environmental Protection Agency.

Maximum Residual Disinfectant Level (MRDL): The level of a disinfectant added for water treatment that may not be exceeded at the consumer's tap.

Maximum Residual Disinfectant Level Goal (MRDLG): The level of a disinfectant added for water treatment below which there is no known or expected risk to health. MRDLGs are set by the U.S. Environmental Protection Agency.

Primary Drinking Water Standards (PDWS): MCLs for contaminants that affect health along with their monitoring and reporting requirements, and water treatment requirements.

Secondary Drinking Water Standards (SDWS): MCLs for contaminants that affect taste, odor, or appearance of the drinking water. Contaminants with SDWSs do not affect the health at the MCL levels.

Treatment Technique (TT): A required process intended to reduce the level of a contaminant in drinking water.

Regulatory Action Level (AL): The concentration of a contaminant, which, if exceeded, triggers treatment or other requirements which a water system must follow.

Variances and Exemptions: Department permission to exceed an MCL or not comply with a treatment technique under certain conditions.

ND: not detectable at testing limit

ppm: parts per million or milligrams per liter (mg/L)

ppb: parts per billion or micrograms per liter (ug/L)

ppt: parts per trillion or nanograms per liter (ng/L)

pCi/L: picocuries per liter (a measure of radiation)

General Information On Drinking Water

The sources of drinking water (both tap water and bottled water) include rivers, lakes, streams, ponds, reservoirs, springs, and wells. As water travels over the surface of the land or through the ground, it dissolves naturally-occurring minerals and, in some cases, radioactive material, and can pick up substances resulting from the presence of animals or from human activity. Contaminants that may be present in source water include:

- *Microbial contaminants*, such as viruses and bacteria, that may come from sewage treatment plants, septic systems, agricultural livestock operations, and wildlife.
- *Inorganic contaminants*, such as salts and metals, that can be naturally-occurring or result from urban stormwater runoff, industrial or domestic wastewater discharges, oil and gas production, mining, or farming.
- *Pesticides and herbicides*, which may come from a variety of sources such as agriculture, urban stormwater runoff, and residential uses.
- *Organic chemical contaminants*, including synthetic and volatile organic chemicals, that are byproducts of industrial processes and petroleum production, and can also come from gas stations, urban stormwater runoff, and septic systems.
- *Radioactive contaminants*, which can be naturally-occurring or be the result of oil and gas production and mining activities.

In order to ensure that tap water is safe to drink, USEPA and the state Department of Health Services (Department) prescribe regulations that limit the amount of certain contaminants in water provided by public water systems. Department regulations also establish limits for contaminants in bottled water that must provide the same protection for public health.

Tables 1-8 list all of the drinking water contaminants that were detected during the most recent sampling for the constituent. The presence of these contaminants in the water does not necessarily indicate that the water poses a health risk. The Department requires us to monitor for certain contaminants less than once per year because the concentrations of these contaminants are not expected to vary significantly from year to year. Some of the data, though representative of the water quality, are more than one year old.

***Any violation of an MCL or AL is asterisked. Additional information regarding the violation is provided on Page 8.**

Drinking Water Sources and Treatment at Pillar Ridge

In 2005, Pillar Ridge's primary water source was groundwater withdrawn from three shallow wells located on Community grounds, and from Montara Water and Sanitary District (see Page 1). The three wells are completed in water bearing formations (aquifers) found in the thin valley alluvium that overlies basement bedrock. These groundwater sources are replenished by rainfall and surface water that percolates downward through the ground.

Untreated groundwater is conveyed to PRMHC's water treatment plant through dedicated "raw" water mains. Water quality monitoring indicates that the raw well water contains low levels of aluminum, arsenic, chloride, nitrate, sulfate, and radioactive elements, moderate levels of fluoride and volatile organic compounds (VOCs), and high levels of iron and manganese. Upon reaching the water treatment plant, the raw water is aerated (to remove VOCs), chlorinated (for disinfection and oxidation purposes), and filtered (to remove iron and manganese). Treated water is then sent to two large storage tanks where it is subsequently pumped into the PRMHC distribution system.

Water Quality Monitoring Results at Pillar Ridge

PRMHC routinely monitors for contaminants in your drinking water according to Federal and State laws. The monitoring is performed by State-Certified Water Treatment Plant Operators, and a State-Certified laboratory performs all laboratory testing. Tables 1-8 below show the results of our monitoring efforts for January 1st through December 31st, 2005. The tables include test results for both "raw water," (water that has been pumped from the ground but has not gone through the water treatment plant), and "finished water," (water that has gone through the water treatment plant). Water quality testing indicates that all constituents governed by a primary water quality standard occur at levels below the primary MCL in the finished water. In particular, the VOCs detected in the raw water are reduced to non-detectable (ND) levels in the finished water, and thus are not reported in tabular format. **Accordingly, the quality of finished water provided to PRHMC residents meets all of the primary maximum contaminant levels (MCLs) set forth by the Safe Drinking Water Act.**

Table 4 shows water quality information obtained from laboratory testing of iron and manganese concentrations. This information indicates that iron and manganese levels measured after treatment are *generally* below the limits prescribed by the Safe Drinking Water Act. It should be noted that these constituents are covered by *secondary* drinking water standards that have been established for aesthetic reasons. However, due to historical iron and manganese violations, Kingsley Management Corporation (previous owner of PRMHC) purchased and installed additional treatment technology that enhances the iron and manganese removal efficiency of the treatment plant. These improvements were completed in March of 2003, and are currently treating water for PRMHC. The new treatment technology also underwent intensive monitoring this past year to insure that it provides consistent performance relative to iron and manganese removal. Testing to date shows solid performance relative to VOC, iron, and manganese removal, although a single iron violation occurred in May of 2005. This violation is discussed in more detail on Page 8.

TABLE 1 - SAMPLING RESULTS FOR COLIFORM BACTERIA IN TREATED WATER					
Microbiological Contaminants	Highest No. of detections	No. of months in violation	MCL	MCLG	Typical Source of Bacteria
Total Coliform Bacteria	1	0	More than 1 sample in a month with a detection	0	Naturally present in the environment
Fecal Coliform or *E. coli*	0	0	A routine sample and a repeat sample detect total coliform and either sample also detects fecal coliform or *E. coli*	0	Human and animal fecal waste

TABLE 2 - SAMPLING RESULTS FOR LEAD AND COPPER IN TREATED WATER						
Chemical or Constituent (and reporting units)	No. of samples collected	90th percentile level detected	No. Sites exceeding AL	AL	MCLG	Typical Source of Contaminant
Lead* (ppb)	10	< 5	0	15	2	Internal corrosion of household water plumbing systems; discharges from industrial manufacturers; erosion of natural deposits.
Copper* (ppb)	10	< 50	0	1300	170	Internal corrosion of household water plumbing systems; erosion of natural deposits; leaching from wood preservatives.

* Samples collect in 2003, will be collected again in 2006

TABLE 3 - CONTAMINANTS WITH A PRIMARY DRINKING WATER STANDARD DETECTED IN TREATED WATER						
Chemical or Constituent (and reporting units)	Sample Date	Level Detected	Range of Detections	MCL	PHG (MCLG)	Typical Source of Contaminant
Total Trihalomethanes (TTHMs) (ppb)	Jan-Dec 2005	48.08	24-87	80	N.A.	Byproduct of drinking water chlorination
Haloacetic Acids (HAA5) (ppb)	Jan-Dec 2005	6.51	2.0-14.60	60	N.A.	Byproduct of drinking water chlorination

TABLE 4 - CONTAMINANTS WITH A SECONDARY DRINKING WATER STANDARD DETECTED IN TREATED WATER						
Chemical or Constituent (and reporting units)	Sample Date	Level Detected	Range of Detections	MCL	PHG (MCLG)	Typical Source of Contaminant
Iron (ppb)	Jan-Dec 2005	3700*	Nd-3700	300	N.A.	Leaching from natural deposits; industrial waste
Manganese (ppb)	Jan-Dec	320*	Nd-320	50	N.A.	Leaching from natural deposits

	2005					

TABLE 5 - SAMPLING RESULTS FOR SODIUM AND HARDNESS IN RAW WATER

Chemical or Constituent (and reporting units)	Sample Date	Level Detected	Range of Detections	MCL	PHG (MCLG)	Typical Source of Contaminant
Sodium* (ppm)	Dec 08 2003	86	71-99	none	none	Generally found in ground and surface water
Hardness* (ppm)	Dec 08 2003	200	160-250	none	none	Generally found in ground and surface water

*Samples collected in 2003, will be collected again in 2006

TABLE 6 - CONTAMINANTS WITH A PRIMARY DRINKING WATER STANDARD DETECTED IN RAW WATER

Chemical or Constituent (and reporting units)	Sample Date	Level Detected	Range of Detections	MCL	PHG (MCLG)	Typical Source of Contaminant
Aluminum* (ppb)	Dec 08 2003	< 50	< 50	1000	N.A.	Erosion of natural deposits; residue from some surface water treatment processes
Arsenic* (ppb)	Dec 08 2003	2.35	ND-2.5	50	N.A.	Erosion of natural deposits; runoff from orchards; glass and electronic production wastes
Fluoride (ppm)	Jan-Dec 2005	1.04	.71-1.40	2	1	Erosion of natural deposits; water additive that promotes strong teeth; discharge from fertilizer and aluminum factories
Nitrate (as NO_3) (ppm)	Jan-Dec 2005	< 0.5	< 0.5	45	45	Erosion of natural deposits; Runoff and leaching from fertilizer use; Leaching from septic tanks
Gross Alpha Activity* (pCi/L)	Jan-Dec 2003	< 3.09	< 3.09	15	N.A.	Erosion of natural deposits
Gross Beta Activity* (pCi/L)	Jan-Dec 2003	< 4.0	< 4.0	50	N.A.	Erosion of natural deposits
Cis-1,2-Dichloroethylene (ppb)	Jan-Dec 2005	2.50	ND-3.60	6	N.A.	Discharge from industrial chemical factories
Total Trihalomethanes (TTHMs) (ppb)	Jan-Dec 2005	1.60	ND-1.60	80	N.A.	Byproduct of drinking water chlorination
Trans-1,2-Dichloroethylene (ppb)	Jan-Dec 2005	0.92	ND-1.10	10	N.A.	Discharge from industrial chemical factories
Trichloroethylene (ppb)	Jan-Dec 2005	7.33	ND-8.10	5	0.8	Discharge from metal degreasing sites and other factories

*Samples collect in 2003

TABLE 7 - CONTAMINANTS WITH A SECONDARY DRINKING WATER STANDARD DETECTED IN RAW WATER						
Chemical or Constituent (and reporting units)	Sample Date	Level Detected	Range of Detections	MCL	PHG (MCLG)	Typical Source of Contaminant
Color* (Color Units)	Dec 08 2003	60	40-80	15	N.A.	Naturally-occurring organic material
Odor* (Odor Units)	Dec 08 2003	< 1	< 1	3	N.A.	Naturally-occurring organic material
Turbidity* (NTU)	Dec 08 2003	27.7	20-37	5	N.A.	Soil runoff
Specific Conductance* (umhos/cm)	Dec 08 2003	700	590-790	1600	N.A.	Substances that form ions when in water; seawater influence
Iron (ppb)	Dec 19, 2005	3708	1500-5800	300	N.A.	Leaching from natural deposits; industrial waste
Manganese (ppb)	Dec 19 2005	324	310-350	50	N.A.	Leaching from natural deposits
Chloride* (ppm)	Dec 08 2003	104	92-120	500	N.A.	Runoff and leaching from natural deposits; seawater influence
Sulfate* (ppm)	Dec 08 2003	34.3	18-54	500	N.A.	Runoff and leaching from natural deposits; industrial waste
Total Dissolved Solids* (ppm)	Dec 08 2003	440	360-510	1000	N.A.	Runoff and leaching from natural deposits

*Samples collect in 2003

TABLE 8 - UNREGULATED CONTAMINANTS THAT REQUIRE MONITORING DETECTED IN RAW WATER						
Chemical or Constituent (and reporting units)	Sample Date	Level Detected	Range of Detections	AL	PHG (MCLG)	Typical Source of Contaminant
Boron (ppb)	Jan-Dec 2005	190	150-210	1000	N.A.	Runoff and leaching from natural deposits; industrial waste

Additional Information On Drinking Water

All drinking water, including bottled water, may reasonably be expected to contain at least small amounts of some contaminants. The presence of contaminants does not necessarily indicate that the water poses a health risk. More information about contaminants and potential health effects can be obtained by calling the USEPA's Safe Drinking Water Hotline (1-800-426-4791).

Some people may be more vulnerable to contaminants in drinking water than the general population. Immuno-compromised persons such as persons with cancer undergoing chemotherapy, persons who have undergone organ transplants, people with HIV/AIDS or other immune system disorders, some elderly, and infants can be particularly at risk from infections. These people should seek advice about drinking water from their health care providers. USEPA/Centers for Disease Control (CDC) guidelines on appropriate means to lessen the risk of infection by *Cryptosporidium* and other microbial contaminants are available from the Safe Drinking Water Hotline (1-800-426-4791).

Summary Information for Contaminants Exceeding an MCL or AL, or a Violation of any Treatment, Monitoring, or Reporting Requirement

Pillar Ridge's water treatment plant failed to achieve primary and secondary drinking water quality standards in treated water on one occasion during 2005 (coilform bacteria, iron and manganese). The primary drinking water quality violation occurred in Feb 2005 when a coilform sample came up positive. Three additional tests were taken within 24 hrs and they all came up negative for total coilform bacteria. The secondary drinking water quality violation occurred in May of 2005, and was subsequently researched to help understand the basis for its occurrence. This investigation revealed that the sample was taken very early in the filter production run. Since elevated metal levels at the beginning and end of a production run are to be expected from time-to-time, this result was not deemed representative of normal operating conditions. Based on this violation, and in order to insure representative sampling in the future, the water treatment plant operators were instructed to take samples during the middle of the production cycle.

No monthly sampling interruptions or omissions occurred during 2005.

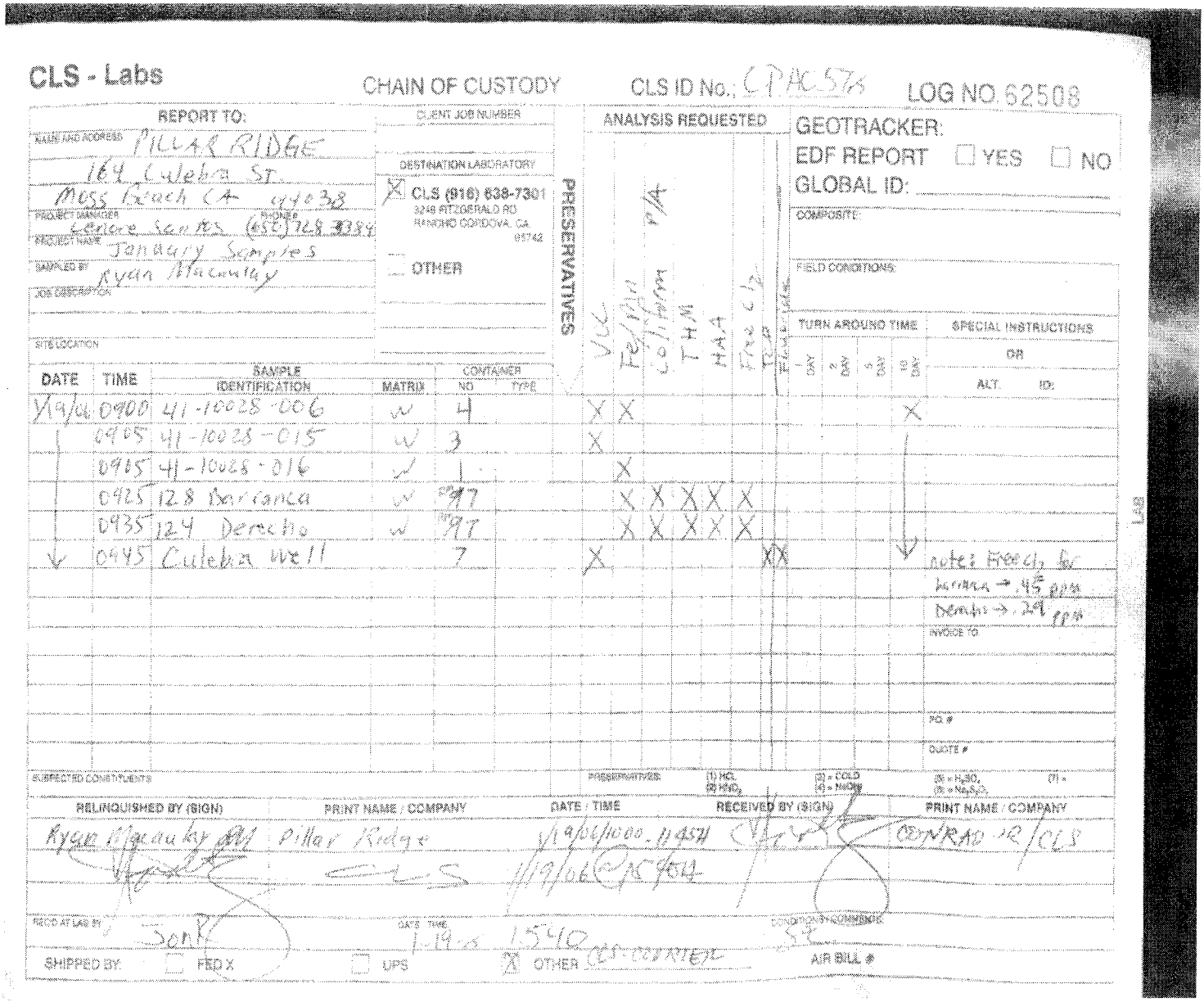
Upcoming Water System Improvements

As cited in Table 3, trihalomethane (THM) compounds were detected in the treated water supply (distribution system) in 2005. These constituents are normal byproducts of drinking water chlorination. The detected levels ranged between 24 ppb and 87 ppb, with a yearly average of 48.08 ppb. THMs are currently regulated compounds at Pillar Ridge, with a primary maximum contaminant level (MCL) of 80 ppb. Coach of San Diego is currently monitoring this constituent closely while also exploring new chemical feed compounds and technology that will insure low disinfection byproduct levels detected at Pillar Ridge.

CALIFORNIA LABORATORY SERVICES

01/31/06 12:17

Pillar Ridge MHP	Project: January Analysis	
164 Culebra Street	Project Number: [none]	**CLS Work Order #: CPA0576**
Moss Beach, CA 94038	Project Manager: Lenore Sacco	COC #: 62508



CLS - Labs

CHAIN OF CUSTODY

CLS ID No.: CPA0576 LOG NO. 62508

REPORT TO:

NAME AND ADDRESS: PILLAR RIDGE
164 Culebra St.
Moss Beach CA 94038

PROJECT MANAGER: Lenore Sacco PHONE: (650) 728 3384

PROJECT NAME: January Samples

SAMPLED BY: Ryan Macaulay

JOB DESCRIPTION:

SITE LOCATION:

CLIENT JOB NUMBER:

DESTINATION LABORATORY:

X CLS (916) 638-7301
3249 FITZGERALD RD
RANCHO CORDOVA, CA
95742

OTHER

PRESERVATIVES: VOC, Perchlorate, Coliform, THM, HAA, Free Cl2, pH

ANALYSIS REQUESTED

GEOTRACKER:

EDF REPORT ☐ YES ☐ NO

GLOBAL ID:

COMPOSITE:

FIELD CONDITIONS:

TURN AROUND TIME: ~24 ~48 ~72 5 Days

SPECIAL INSTRUCTIONS

OR

ALT. ID:

DATE	TIME	SAMPLE IDENTIFICATION	MATRIX	CONTAINER NO	CONTAINER TYPE	VOC	Perchlorate	Coliform	THM	HAA	Free Cl2	pH
1/9/06	0900	41-10028-006	W	4		X	X					X
	0905	41-10028-015	W	3		X						
	0915	41-10028-016	W	1			X					
	0925	12.8 Barranca	W	3	500		X	X	X	X	X	
	0935	12.4 Derecho	W	3	500		X	X	X	X	X	
	0945	Culebra well		7		X					XX	

notes: Free Cl2 for Barranca → .45 ppm
Derecho → .29 ppm

INVOICE TO:

P.O. #:

QUOTE #:

SUSPECTED CONSTITUENTS:

PRESERVATIVES: (1) HCl, (2) MeOH, (3) = COLD, (4) = NaOH, (5) = H_2SO_4, (6) = $Na_2S_2O_3$, (7) =

RELINQUISHED BY (SIGN)	PRINT NAME / COMPANY	DATE / TIME	RECEIVED BY (SIGN)	PRINT NAME / COMPANY
Ryan Macaulay	Pillar Ridge	1/9/06 1100		CONRAD R / CLS
	CLS	1/9/06 @ 1554		

RECD AT LAB BY: Sonk DATE / TIME: 1-19-06 1554 CONDITION / COMMENTS: 5.3

SHIPPED BY: ☐ FED X ☐ UPS X OTHER COURIER AIR BILL #

CALIFORNIA LABORATORY SERVICES

01/31/06 12:17

Pillar Ridge MHP	Project: January Analysis	
164 Culebra Street	Project Number: [none]	**CLS Work Order #: CPA0576**
Moss Beach, CA 94038	Project Manager: Lenore Sacco	COC #: 62508

CHANGE OF STATUS

C.L.S. Lab Job No.: CPA-0576

Project Name: _____

Date Sample(s) Were Received: _____ **Original Date Due:** _____

_____ (Client Contacted) **of** _____ (Company) **called**

on _____ (Date) **at** _____ (Time)

. . . and requested the following

Changed to 5 days.

Turnaround time requested for additional work: 5

_____ (Signature) _____ (Date)

Updated lab job database and file folder by: _____

cc: _____

H:\Alyssam\samprecchangesofstat.DOC

CALIFORNIA LABORATORY SERVICES

01/31/06 12:17

Pillar Ridge MHP	Project: January Analysis	
164 Culebra Street	Project Number: [none]	**CLS Work Order #: CPA0576**
Moss Beach, CA 94038	Project Manager: Lenore Sacco	COC #: 62508

Conventional Chemistry Parameters by APHA/EPA Methods

Analyte	Result	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed	Method	Not
Culebra Well (CPA0576-06) Water	**Sampled: 01/19/06 09:45**		**Received: 01/19/06 15:40**						
Fluoride	**0.86**	0.10	mg/L	1	CP00442	01/20/06	01/20/06	EPA 300.0	

CALIFORNIA LABORATORY SERVICES

01/31/06 12:17

Pillar Ridge MHP	Project: January Analysis	
164 Culebra Street	Project Number: [none]	**CLS Work Order #: CPA0576**
Moss Beach, CA 94038	Project Manager: Lenore Sacco	COC #: 62508

Low-Level 1,2,3-Trichloropropane by Purge & Trap Isotopic Dilution GC/MS

Analyte	Result	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed	Method	Not
Culebra Well (CPA0576-06) Water	**Sampled: 01/19/06 09:45**		**Received: 01/19/06 15:40**						
1,2,3-Trichloropropane	ND	0.0050	µg/L	1	CP00454	01/20/06	01/20/06	CA DHS P&T/ID	

CALIFORNIA LABORATORY SERVICES

Pillar Ridge MHP
164 Culebra Street
Moss Beach, CA 94038

Project: January Analysis
Project Number: [none]
Project Manager: Lenore Sacco

CLS Work Order #: CPA0576
COC #: 62508

Metals (Drinking Water) by EPA 200 Series Methods

Analyte	Result	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed	Method	Not
41-10028-006 (CPA0576-01) Water	**Sampled: 01/19/06 09:00**		**Received: 01/19/06 15:40**						
Iron	**4700**	100	µg/L	1	CP00458	01/20/06	01/20/06	EPA 200.7	
Manganese	**310**	20	"	"	"	"	"	"	
41-10028-016 (CPA0576-03) Water	**Sampled: 01/19/06 09:05**		**Received: 01/19/06 15:40**						
Iron	**270**	100	µg/L	1	CP00458	01/20/06	01/20/06	EPA 200.7	
Manganese	ND	20	"	"	"	"	"	"	
128 Barranca (CPA0576-04) Water	**Sampled: 01/19/06 09:25**		**Received: 01/19/06 15:40**						
Iron	**210**	100	µg/L	1	CP00458	01/20/06	01/20/06	EPA 200.7	
Manganese	**26**	20	"	"	"	"	"	"	
124 Derecho (CPA0576-05) Water	**Sampled: 01/19/06 09:35**		**Received: 01/19/06 15:40**						
Iron	**210**	100	µg/L	1	CP00458	01/20/06	01/20/06	EPA 200.7	
Manganese	**25**	20	"	"	"	"	"	"	

CALIFORNIA LABORATORY SERVICES

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Pillar Ridge MHP
164 Culebra Street
Moss Beach, CA 94038

Project: January Analysis
Project Number: [none]
Project Manager: Lenore Sacco

CLS Work Order #: CPA0576
COC #: 62508

Microbiological Parameters by APHA Standard Methods

Analyte	Result	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed	Method	Not
128 Barranca (CPA0576-04) Water	**Sampled: 01/19/06 09:25**		**Received: 01/19/06 15:40**						
Residual Chlorine	**0.67**	0.10	mg/L	1	CP00443	01/19/06	01/19/06	SM 4500-CL-G	
Total Coliforms	Absent		N/A	"	CP00452	01/19/06	01/20/06	SM 9223	
E. Coli	Absent		"	"	"	"	"	"	
124 Derecho (CPA0576-05) Water	**Sampled: 01/19/06 09:35**		**Received: 01/19/06 15:40**						
Residual Chlorine	**0.53**	0.10	mg/L	1	CP00443	01/19/06	01/19/06	SM 4500-CL-G	
Total Coliforms	Absent		N/A	"	CP00452	01/19/06	01/20/06	SM 9223	
E. Coli	Absent		"	"	"	"	"	"	

CALIFORNIA LABORATORY SERVICES

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Pillar Ridge MHP
164 Culebra Street
Moss Beach, CA 94038

Project: January Analysis
Project Number: [none]
Project Manager: Lenore Sacco

CLS Work Order #: CPA0576
COC #: 62508

Purgeable Organic Compounds by EPA Method 524.2

Analyte	Result	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed	Method	Not
41-10028-006 (CPA0576-01) Water	**Sampled: 01/19/06 09:00**		**Received: 01/19/06 15:40**						
tert-Amyl methyl ether	ND	3.0	µg/L	1	CP00455	01/20/06	01/20/06	EPA 524.2	
Benzene	ND	0.50	"	"	"	"	"	"	
Bis(2-chloroethyl)ether	ND	5.0	"	"	"	"	"	"	
Bromobenzene	ND	0.50	"	"	"	"	"	"	
Bromochloromethane	ND	0.50	"	"	"	"	"	"	
Bromodichloromethane	ND	0.50	"	"	"	"	"	"	
Bromoform	ND	0.50	"	"	"	"	"	"	
Bromomethane	ND	0.50	"	"	"	"	"	"	
n-Butylbenzene	ND	0.50	"	"	"	"	"	"	
sec-Butylbenzene	ND	0.50	"	"	"	"	"	"	
tert-Butylbenzene	ND	0.50	"	"	"	"	"	"	
Tert-butyl alcohol	ND	2.0	"	"	"	"	"	"	
Carbon tetrachloride	ND	0.50	"	"	"	"	"	"	
Chlorobenzene	ND	0.50	"	"	"	"	"	"	
Chloroethane	ND	0.50	"	"	"	"	"	"	
2-Chloroethylvinyl ether	ND	1.0	"	"	"	"	"	"	
Chloroform	ND	0.50	"	"	"	"	"	"	
Chloromethane	ND	0.50	"	"	"	"	"	"	
o-Chlorotoluene	ND	0.50	"	"	"	"	"	"	
p-Chlorotoluene	ND	0.50	"	"	"	"	"	"	
Dibromochloromethane	ND	0.50	"	"	"	"	"	"	
Dibromomethane	ND	0.50	"	"	"	"	"	"	
1,2-Dibromo-3-chloropropane	ND	2.0	"	"	"	"	"	"	
1,2-Dichlorobenzene	ND	0.50	"	"	"	"	"	"	
1,3-Dichlorobenzene	ND	0.50	"	"	"	"	"	"	
1,4-Dichlorobenzene	ND	0.50	"	"	"	"	"	"	
Dichlorodifluoromethane (Freon 12)	ND	0.50	"	"	"	"	"	"	
1,1-Dichloroethane	ND	0.50	"	"	"	"	"	"	
1,2-Dichloroethane	ND	0.50	"	"	"	"	"	"	
1,1-Dichloroethene	ND	0.50	"	"	"	"	"	"	
cis-1,2-Dichloroethene	ND	0.50	"	"	"	"	"	"	
trans-1,2-Dichloroethene	ND	0.50	"	"	"	"	"	"	
1,2-Dichloropropane	ND	0.50	"	"	"	"	"	"	
1,3-Dichloropropane	ND	0.50	"	"	"	"	"	"	
2,2-Dichloropropane	ND	0.50	"	"	"	"	"	"	

Pillar Ridge MHP
164 Culebra Street
Moss Beach, CA 94038

Project: January Analysis
Project Number: [none]
Project Manager: Lenore Sacco

CLS Work Order #: CPA0576
COC #: 62508

Purgeable Organic Compounds by EPA Method 524.2

Analyte	Result	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed	Method	Not
41-10028-006 (CPA0576-01) Water Sampled: 01/19/06 09:00 Received: 01/19/06 15:40									
1,1-Dichloropropene	ND	0.50	µg/L	1	CP00455	01/20/06	01/20/06	EPA 524.2	
cis-1,3-Dichloropropene	ND	0.50	"	"	"	"	"	"	
trans-1,3-Dichloropropene	ND	0.50	"	"	"	"	"	"	
Ethylbenzene	ND	0.50	"	"	"	"	"	"	
Ethyl tert-butyl ether	ND	3.0	"	"	"	"	"	"	
1,2-Dibromoethane (EDB)	ND	0.50	"	"	"	"	"	"	
1,1,2-Tricholoro-1,2,2-trifluoroethane (Freon 113)	ND	10	"	"	"	"	"	"	
Hexachlorobutadiene	ND	0.50	"	"	"	"	"	"	
Isopropylbenzene	ND	0.50	"	"	"	"	"	"	
p-Isopropyltoluene	ND	0.50	"	"	"	"	"	"	
Methyl tert-butyl ether	ND	3.0	"	"	"	"	"	"	
Methyl ethyl ketone	ND	10	"	"	"	"	"	"	
Methyl isobutyl ketone	ND	10	"	"	"	"	"	"	
Methylene chloride	ND	0.50	"	"	"	"	"	"	
Naphthalene	ND	0.50	"	"	"	"	"	"	
n-Propylbenzene	ND	0.50	"	"	"	"	"	"	
Styrene	ND	0.50	"	"	"	"	"	"	
1,1,1,2-Tetrachloroethane	ND	0.50	"	"	"	"	"	"	
1,1,2,2-Tetrachloroethane	ND	0.50	"	"	"	"	"	"	
Tetrachloroethene	ND	0.50	"	"	"	"	"	"	
Toluene	ND	0.50	"	"	"	"	"	"	
1,2,3-Trichlorobenzene	ND	0.50	"	"	"	"	"	"	
1,2,4-Trichlorobenzene	ND	0.50	"	"	"	"	"	"	
1,1,1-Trichloroethane	ND	0.50	"	"	"	"	"	"	
1,1,2-Trichloroethane	ND	0.50	"	"	"	"	"	"	
Trichloroethene	ND	0.50	"	"	"	"	"	"	
Trichlorofluoromethane	ND	5.0	"	"	"	"	"	"	
1,2,3-Trichloropropane	ND	0.50	"	"	"	"	"	"	
1,2,4-Trimethylbenzene	ND	0.50	"	"	"	"	"	"	
1,3,5-Trimethylbenzene	ND	0.50	"	"	"	"	"	"	
Vinyl chloride	ND	0.50	"	"	"	"	"	"	
m,p-Xylene	ND	0.50	"	"	"	"	"	"	
o-Xylene	ND	0.50	"	"	"	"	"	"	
Xylenes (total)	ND	0.50	"	"	"	"	"	"	

Pillar Ridge MHP
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Moss Beach, CA 94038

Project: January Analysis
Project Number: [none]
Project Manager: Lenore Sacco

CLS Work Order #: CPA0576
COC #: 62508

Purgeable Organic Compounds by EPA Method 524.2

Analyte	Result	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed	Method	Not
41-10028-006 (CPA0576-01) Water Sampled: 01/19/06 09:00 Received: 01/19/06 15:40									
Total Trihalomethanes (THM)	ND	0.50	µg/L	1	CP00455	01/20/06	01/20/06	EPA 524.2	
Surrogate: 1,2-Dichloroethane-d4		*100 %*	*66-135*		"	"	"	"	
Surrogate: Toluene-d8		*94.6 %*	*70-130*		"	"	"	"	
Surrogate: 4-Bromofluorobenzene		*96.9 %*	*70-130*		"	"	"	"	
41-10028-015 (CPA0576-02) Water Sampled: 01/19/06 09:05 Received: 01/19/06 15:40									
tert-Amyl methyl ether	ND	3.0	µg/L	1	CP00455	01/20/06	01/20/06	EPA 524.2	
Benzene	ND	0.50	"	"	"	"	"	"	
Bromobenzene	ND	0.50	"	"	"	"	"	"	
Bis(2-chloroethyl)ether	ND	5.0	"	"	"	"	"	"	
Bromochloromethane	ND	0.50	"	"	"	"	"	"	
Bromodichloromethane	ND	0.50	"	"	"	"	"	"	
Bromoform	ND	0.50	"	"	"	"	"	"	
Bromomethane	ND	0.50	"	"	"	"	"	"	
n-Butylbenzene	ND	0.50	"	"	"	"	"	"	
sec-Butylbenzene	ND	0.50	"	"	"	"	"	"	
tert-Butylbenzene	ND	0.50	"	"	"	"	"	"	
Tert-butyl alcohol	ND	2.0	"	"	"	"	"	"	
Carbon tetrachloride	ND	0.50	"	"	"	"	"	"	
Chlorobenzene	ND	0.50	"	"	"	"	"	"	
Chloroethane	ND	0.50	"	"	"	"	"	"	
2-Chloroethylvinyl ether	ND	1.0	"	"	"	"	"	"	
Chloroform	ND	0.50	"	"	"	"	"	"	
Chloromethane	ND	0.50	"	"	"	"	"	"	
o-Chlorotoluene	ND	0.50	"	"	"	"	"	"	
p-Chlorotoluene	ND	0.50	"	"	"	"	"	"	
Dibromochloromethane	ND	0.50	"	"	"	"	"	"	
Dibromomethane	ND	0.50	"	"	"	"	"	"	
1,2-Dibromo-3-chloropropane	ND	2.0	"	"	"	"	"	"	
1,2-Dichlorobenzene	ND	0.50	"	"	"	"	"	"	
1,3-Dichlorobenzene	ND	0.50	"	"	"	"	"	"	
1,4-Dichlorobenzene	ND	0.50	"	"	"	"	"	"	
Dichlorodifluoromethane (Freon 12)	ND	0.50	"	"	"	"	"	"	
1,1-Dichloroethane	ND	0.50	"	"	"	"	"	"	

Pillar Ridge MHP
164 Culebra Street
Moss Beach, CA 94038

Project: January Analysis
Project Number: [none]
Project Manager: Lenore Sacco

CLS Work Order #: CPA0576
COC #: 62508

Purgeable Organic Compounds by EPA Method 524.2

Analyte	Result	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed	Method	Not
41-10028-015 (CPA0576-02) Water Sampled: 01/19/06 09:05 Received: 01/19/06 15:40									
1,2-Dichloroethane	ND	0.50	µg/L	1	CP00455	01/20/06	01/20/06	EPA 524.2	
1,1-Dichloroethene	ND	0.50	"	"	"	"	"	"	
cis-1,2-Dichloroethene	ND	0.50	"	"	"	"	"	"	
trans-1,2-Dichloroethene	ND	0.50	"	"	"	"	"	"	
1,2-Dichloropropane	ND	0.50	"	"	"	"	"	"	
1,3-Dichloropropane	ND	0.50	"	"	"	"	"	"	
2,2-Dichloropropane	ND	0.50	"	"	"	"	"	"	
1,1-Dichloropropene	ND	0.50	"	"	"	"	"	"	
cis-1,3-Dichloropropene	ND	0.50	"	"	"	"	"	"	
trans-1,3-Dichloropropene	ND	0.50	"	"	"	"	"	"	
Ethylbenzene	ND	0.50	"	"	"	"	"	"	
Ethyl tert-butyl ether	ND	3.0	"	"	"	"	"	"	
1,2-Dibromoethane (EDB)	ND	0.50	"	"	"	"	"	"	
1,1,2-Tricholoro-1,2,2-trifluoroethane (Freon 113)	ND	10	"	"	"	"	"	"	
Hexachlorobutadiene	ND	0.50	"	"	"	"	"	"	
Isopropylbenzene	ND	0.50	"	"	"	"	"	"	
p-Isopropyltoluene	ND	0.50	"	"	"	"	"	"	
Methyl tert-butyl ether	ND	3.0	"	"	"	"	"	"	
Methyl ethyl ketone	ND	10	"	"	"	"	"	"	
Methyl isobutyl ketone	ND	10	"	"	"	"	"	"	
Methylene chloride	ND	0.50	"	"	"	"	"	"	
Naphthalene	ND	0.50	"	"	"	"	"	"	
n-Propylbenzene	ND	0.50	"	"	"	"	"	"	
Styrene	ND	0.50	"	"	"	"	"	"	
1,1,1,2-Tetrachloroethane	ND	0.50	"	"	"	"	"	"	
1,1,2,2-Tetrachloroethane	ND	0.50	"	"	"	"	"	"	
Tetrachloroethene	ND	0.50	"	"	"	"	"	"	
Toluene	ND	0.50	"	"	"	"	"	"	
1,2,3-Trichlorobenzene	ND	0.50	"	"	"	"	"	"	
1,2,4-Trichlorobenzene	ND	0.50	"	"	"	"	"	"	
1,1,1-Trichloroethane	ND	0.50	"	"	"	"	"	"	
1,1,2-Trichloroethane	ND	0.50	"	"	"	"	"	"	
Trichloroethene	ND	0.50	"	"	"	"	"	"	
Trichlorofluoromethane	ND	5.0	"	"	"	"	"	"	

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Project: January Analysis
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Purgeable Organic Compounds by EPA Method 524.2

Analyte	Result	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed	Method	Not
41-10028-015 (CPA0576-02) Water Sampled: 01/19/06 09:05 Received: 01/19/06 15:40									
1,2,3-Trichloropropane	ND	0.50	µg/L	1	CP00455	01/20/06	01/20/06	EPA 524.2	
1,2,4-Trimethylbenzene	ND	0.50	"	"	"	"	"	"	
1,3,5-Trimethylbenzene	ND	0.50	"	"	"	"	"	"	
Vinyl chloride	ND	0.50	"	"	"	"	"	"	
m,p-Xylene	ND	0.50	"	"	"	"	"	"	
o-Xylene	ND	0.50	"	"	"	"	"	"	
Xylenes (total)	ND	0.50	"	"	"	"	"	"	
Total Trihalomethanes (THM)	ND	0.50	"	"	"	"	"	"	
Surrogate: 1,2-Dichloroethane-d4		*103 %*		*66-135*	"	"	"	"	
Surrogate: Toluene-d8		*96.4 %*		*70-130*	"	"	"	"	
Surrogate: 4-Bromofluorobenzene		*99.2 %*		*70-130*	"	"	"	"	
Culebra Well (CPA0576-06) Water Sampled: 01/19/06 09:45 Received: 01/19/06 15:40									
tert-Amyl methyl ether	ND	3.0	µg/L	1	CP00455	01/20/06	01/20/06	EPA 524.2	
Benzene	ND	0.50	"	"	"	"	"	"	
Bromobenzene	ND	0.50	"	"	"	"	"	"	
Bis(2-chloroethyl)ether	ND	5.0	"	"	"	"	"	"	
Bromochloromethane	ND	0.50	"	"	"	"	"	"	
Bromodichloromethane	ND	0.50	"	"	"	"	"	"	
Bromoform	ND	0.50	"	"	"	"	"	"	
Bromomethane	ND	0.50	"	"	"	"	"	"	
n-Butylbenzene	ND	0.50	"	"	"	"	"	"	
sec-Butylbenzene	ND	0.50	"	"	"	"	"	"	
tert-Butylbenzene	ND	0.50	"	"	"	"	"	"	
Tert-butyl alcohol	ND	2.0	"	"	"	"	"	"	
Carbon tetrachloride	ND	0.50	"	"	"	"	"	"	
Chlorobenzene	ND	0.50	"	"	"	"	"	"	
Chloroethane	ND	0.50	"	"	"	"	"	"	
2-Chloroethylvinyl ether	ND	1.0	"	"	"	"	"	"	
Chloroform	ND	0.50	"	"	"	"	"	"	
Chloromethane	ND	0.50	"	"	"	"	"	"	
o-Chlorotoluene	ND	0.50	"	"	"	"	"	"	
p-Chlorotoluene	ND	0.50	"	"	"	"	"	"	
Dibromochloromethane	ND	0.50	"	"	"	"	"	"	

Pillar Ridge MHP
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Project: January Analysis
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CLS Work Order #: CPA0576
COC #: 62508

Purgeable Organic Compounds by EPA Method 524.2

Analyte	Result	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed	Method	Not
Culebra Well (CPA0576-06) Water	**Sampled: 01/19/06 09:45**		**Received: 01/19/06 15:40**						
Dibromomethane	ND	0.50	µg/L	1	CP00455	01/20/06	01/20/06	EPA 524.2	
1,2-Dibromo-3-chloropropane	ND	2.0	"	"	"	"	"	"	
1,2-Dichlorobenzene	ND	0.50	"	"	"	"	"	"	
1,3-Dichlorobenzene	ND	0.50	"	"	"	"	"	"	
1,4-Dichlorobenzene	ND	0.50	"	"	"	"	"	"	
Dichlorodifluoromethane (Freon 12)	ND	0.50	"	"	"	"	"	"	
1,1-Dichloroethane	ND	0.50	"	"	"	"	"	"	
1,2-Dichloroethane	ND	0.50	"	"	"	"	"	"	
1,1-Dichloroethene	ND	0.50	"	"	"	"	"	"	
cis-1,2-Dichloroethene	ND	0.50	"	"	"	"	"	"	
trans-1,2-Dichloroethene	ND	0.50	"	"	"	"	"	"	
1,2-Dichloropropane	ND	0.50	"	"	"	"	"	"	
1,3-Dichloropropane	ND	0.50	"	"	"	"	"	"	
2,2-Dichloropropane	ND	0.50	"	"	"	"	"	"	
1,1-Dichloropropene	ND	0.50	"	"	"	"	"	"	
cis-1,3-Dichloropropene	ND	0.50	"	"	"	"	"	"	
trans-1,3-Dichloropropene	ND	0.50	"	"	"	"	"	"	
Ethylbenzene	ND	0.50	"	"	"	"	"	"	
Ethyl tert-butyl ether	ND	3.0	"	"	"	"	"	"	
1,2-Dibromoethane (EDB)	ND	0.50	"	"	"	"	"	"	
1,1,2-Tricholoro-1,2,2-trifluoroethane (Freon 113)	ND	10	"	"	"	"	"	"	
Hexachlorobutadiene	ND	0.50	"	"	"	"	"	"	
Isopropylbenzene	ND	0.50	"	"	"	"	"	"	
p-Isopropyltoluene	ND	0.50	"	"	"	"	"	"	
Methyl tert-butyl ether	ND	3.0	"	"	"	"	"	"	
Methyl ethyl ketone	ND	10	"	"	"	"	"	"	
Methyl isobutyl ketone	ND	10	"	"	"	"	"	"	
Methylene chloride	ND	0.50	"	"	"	"	"	"	
Naphthalene	ND	0.50	"	"	"	"	"	"	
n-Propylbenzene	ND	0.50	"	"	"	"	"	"	
Styrene	ND	0.50	"	"	"	"	"	"	
1,1,1,2-Tetrachloroethane	ND	0.50	"	"	"	"	"	"	
1,1,2,2-Tetrachloroethane	ND	0.50	"	"	"	"	"	"	
Tetrachloroethene	ND	0.50	"	"	"	"	"	"	

Pillar Ridge MHP
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Project: January Analysis
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Project Manager: Lenore Sacco

CLS Work Order #: CPA0576
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Purgeable Organic Compounds by EPA Method 524.2

Analyte	Result	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed	Method	Not
Culebra Well (CPA0576-06) Water Sampled: 01/19/06 09:45 Received: 01/19/06 15:40									
Toluene	ND	0.50	µg/L	1	CP00455	01/20/06	01/20/06	EPA 524.2	
1,2,3-Trichlorobenzene	ND	0.50	"	"	"	"	"	"	
1,2,4-Trichlorobenzene	ND	0.50	"	"	"	"	"	"	
1,1,1-Trichloroethane	ND	0.50	"	"	"	"	"	"	
1,1,2-Trichloroethane	ND	0.50	"	"	"	"	"	"	
Trichloroethene	ND	0.50	"	"	"	"	"	"	
Trichlorofluoromethane	ND	5.0	"	"	"	"	"	"	
1,2,3-Trichloropropane	ND	0.50	"	"	"	"	"	"	
1,2,4-Trimethylbenzene	ND	0.50	"	"	"	"	"	"	
1,3,5-Trimethylbenzene	ND	0.50	"	"	"	"	"	"	
Vinyl chloride	ND	0.50	"	"	"	"	"	"	
m,p-Xylene	ND	0.50	"	"	"	"	"	"	
o-Xylene	ND	0.50	"	"	"	"	"	"	
Xylenes (total)	ND	0.50	"	"	"	"	"	"	
Total Trihalomethanes (THM)	ND	0.50	"	"	"	"	"	"	
Surrogate: 1,2-Dichloroethane-d4		*104 %*	*66-135*		"	"	"	"	
Surrogate: Toluene-d8		*97.0 %*	*70-130*		"	"	"	"	
Surrogate: 4-Bromofluorobenzene		*101 %*	*70-130*		"	"	"	"	

CALIFORNIA LABORATORY SERVICES

3249 Fitzgerald Road Rancho Cordova, CA 95742

March 29, 2006

CLS Work Order #: CPC0695
COC #: 62510

Lenore Sacco
Pillar Ridge MHP
164 Culebra Street
Moss Beach, CA 94038

Project Name: March Analysis

Enclosed are the results of analyses for samples received by the laboratory on 03/20/06 21:35. Samples were analyzed pursuant to client request utilizing EPA or other ELAP approved methodologies. I certify that the results are in compliance both technically and for completeness.

Analytical results are attached to this letter. Please call if we can provide additional assistance.

Sincerely,

James Liang, Ph.D.
Laboratory Director

CA DOHS ELAP Accreditation/Registration number 1233

CALIFORNIA LABORATORY SERVICES

03/29/06 12:12

Pillar Ridge MHP	Project: March Analysis	
164 Culebra Street	Project Number: [none]	**CLS Work Order #: CPC0695**
Moss Beach, CA 94038	Project Manager: Lenore Sacco	COC #: 62510

CLS - Labs

CHAIN OF CUSTODY

CLS ID No.: 1/1/0695

LOG NO. 62510

REPORT TO:

NAME AND ADDRESS: Pillar Ridge
164 Culebra st.
Moss Beach Ca 94038

PROJECT MANAGER: Lenore Sacco PHONE: (650) 728-3589

PROJECT NAME: MARCH SAMPLES

SAMPLED BY: Gabriel Aguilar / P.P.

DESTINATION LABORATORY: X CLS (916) 638-7301, 3249 FITZGERALD RD, RANCHO CORDOVA, CA 95742 — OTHER

PRESERVATIVES: VOC's / Fe/Mn / Coliform / P/A / Free cla / Nitrate (As NO3)

ANALYSIS REQUESTED

GEOTRACKER:
EDF REPORT ☐ YES ☐ NO
GLOBAL ID:

COMPOSITE

FIELD CONDITIONS

TURN AROUND TIME: - 24 HR - 48 HR - 72 HR - 5 DAY

SPECIAL INSTRUCTIONS

OR

ALT. ID:

DATE	TIME	SAMPLE IDENTIFICATION	MATRIX	CONTAINER NO	CONTAINER TYPE	PRESERVATIVES	VOC's	Fe/Mn	Coliform	Free cla	Nitrate (As NO3)	
3-30-06	10:43	RAW WATER 41100-28-006	W	1		HNO3					X	
	10:42	RAW WATER 41100-25-000	W	3		HCL			X			
	10:57	POST DEFAULTION 41100-28-005	W	3		HCL			X			
	11:20	28 Barranca	W	3			X	X	X			Cla Residual = 0.06
	11:45	24 Derecho	W	3			X	X	X			Cla Residual = 0.03
	11:54	Corona well	W	1						X		
	11:32	Retiro well	W	1						X		
	12:00	Culebra well	W	1						X		
	10:56	Post FILTRATION	W	1				X				

INVOICE TO:

PO #:

QUOTE #:

SUSPECTED CONSTITUENTS:

PRESERVATIVES: (1) HCl (2) HNO3 (3) = ZnOAc (4) = NaOH (5) = H_2SO_4 (6) = $Na_2S_2O_3$ (7) =

RELINQUISHED BY (SIGN)	PRINT NAME / COMPANY	DATE / TIME	RECEIVED BY (SIGN)	PRINT NAME / COMPANY
Gabriel Aguilar	Pillar Ridge	3/30/06 12:22		
		3/30/06 @ 1504		
	CLS	3/30/06 @ 2135		CONRAD IR/CLS

RECD AT LAB BY: DATE / TIME: 3-30-06 2135

CONDITIONS COMPLIANT: 2.2

SHIPPED BY: ☐ FED X ☐ UPS ☒ OTHER CLS-COURIER

AIR BILL #

CALIFORNIA LABORATORY SERVICES

03/29/06 12:12

Pillar Ridge MHP
164 Culebra Street
Moss Beach, CA 94038

Project: March Analysis
Project Number: [none]
Project Manager: Lenore Sacco

CLS Work Order #: CPC0695
COC #: 62510

Conventional Chemistry Parameters by APHA/EPA Methods

Analyte	Result	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed	Method	Not
Corona Well (CPC0695-05) Water Sampled: 03/20/06 11:54 Received: 03/20/06 21:35									
Nitrate as NO3	**0.74**	0.50	mg/L	1	CP02093	03/21/06	03/21/06	EPA 300.0	
Retiro Well (CPC0695-06) Water Sampled: 03/20/06 11:32 Received: 03/20/06 21:35									
Nitrate as NO3	ND	0.50	mg/L	1	CP02093	03/21/06	03/21/06	EPA 300.0	
Culebra Well (CPC0695-07) Water Sampled: 03/20/06 10:55 Received: 03/20/06 21:35									
Nitrate as NO3	ND	0.50	mg/L	1	CP02093	03/21/06	03/21/06	EPA 300.0	

Pillar Ridge MHP
164 Culebra Street
Moss Beach, CA 94038

Project: March Analysis
Project Number: [none]
Project Manager: Lenore Sacco

CLS Work Order #: CPC0695
COC #: 62510

Metals (Drinking Water) by EPA 200 Series Methods

Analyte	Result	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed	Method	Not
Raw Water 41100-28-006 (CPC0695-01) Water Sampled: 03/20/06 10:47 Received: 03/20/06 21:35									
Iron	**2100**	100	µg/L	1	CP02223	03/24/06	03/27/06	EPA 200.7	
Manganese	**290**	20	"	"	"	"	"	"	
128 Barranca (CPC0695-03) Water Sampled: 03/20/06 11:20 Received: 03/20/06 21:35									
Iron	ND	100	µg/L	1	CP02223	03/24/06	03/27/06	EPA 200.7	
Manganese	ND	20	"	"	"	"	"	"	
124 Derecho (CPC0695-04) Water Sampled: 03/20/06 11:45 Received: 03/20/06 21:35									
Iron	ND	100	µg/L	1	CP02223	03/24/06	03/27/06	EPA 200.7	
Manganese	ND	20	"	"	"	"	"	"	
Post Filtration (CPC0695-08) Water Sampled: 03/20/06 10:55 Received: 03/20/06 21:35									
Iron	ND	100	µg/L	1	CP02223	03/24/06	03/27/06	EPA 200.7	
Manganese	ND	20	"	"	"	"	"	"	

CALIFORNIA LABORATORY SERVICES

03/29/06 12:12

Pillar Ridge MHP	Project: March Analysis	
164 Culebra Street	Project Number: [none]	**CLS Work Order #: CPC0695**
Moss Beach, CA 94038	Project Manager: Lenore Sacco	COC #: 62510

Microbiological Parameters by APHA Standard Methods

Analyte	Result	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed	Method	Not
128 Barranca (CPC0695-03) Water Sampled: 03/20/06 11:20 Received: 03/20/06 21:35									
Residual Chlorine	ND	0.10	mg/L	1	CP02109	03/21/06	03/21/06	SM 4500-CL-G	
Total Coliforms	Absent		N/A	"	"	"	03/22/06	SM 9223	
E. Coli	Absent		"	"	"	"	"	"	
124 Derecho (CPC0695-04) Water Sampled: 03/20/06 11:45 Received: 03/20/06 21:35									
Residual Chlorine	ND	0.10	mg/L	1	CP02109	03/21/06	03/21/06	SM 4500-CL-G	
Total Coliforms	Absent		N/A	"	"	"	03/22/06	SM 9223	
E. Coli	Absent		"	"	"	"	"	"	

Pillar Ridge MHP
164 Culebra Street
Moss Beach, CA 94038

Project: March Analysis
Project Number: [none]
Project Manager: Lenore Sacco

CLS Work Order #: CPC0695
COC #: 62510

Purgeable Organic Compounds by EPA Method 524.2

Analyte	Result	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed	Method	Not
Raw Water 41100-28-006 (CPC0695-01) Water	**Sampled: 03/20/06 10:47**		**Received: 03/20/06 21:35**						
tert-Amyl methyl ether	ND	3.0	µg/L	1	CP02101	03/21/06	03/21/06	EPA 524.2	
Benzene	ND	0.50	"	"	"	"	"	"	
Bromobenzene	ND	0.50	"	"	"	"	"	"	
Bis(2-chloroethyl)ether	ND	5.0	"	"	"	"	"	"	
Bromochloromethane	ND	0.50	"	"	"	"	"	"	
Bromodichloromethane	ND	0.50	"	"	"	"	"	"	
Bromoform	ND	0.50	"	"	"	"	"	"	
Bromomethane	ND	0.50	"	"	"	"	"	"	
n-Butylbenzene	ND	0.50	"	"	"	"	"	"	
sec-Butylbenzene	ND	0.50	"	"	"	"	"	"	
tert-Butylbenzene	ND	0.50	"	"	"	"	"	"	
Tert-butyl alcohol	ND	2.0	"	"	"	"	"	"	
Carbon tetrachloride	ND	0.50	"	"	"	"	"	"	
Chlorobenzene	ND	0.50	"	"	"	"	"	"	
Chloroethane	ND	0.50	"	"	"	"	"	"	
2-Chloroethylvinyl ether	ND	1.0	"	"	"	"	"	"	
Chloroform	ND	0.50	"	"	"	"	"	"	
Chloromethane	ND	0.50	"	"	"	"	"	"	
o-Chlorotoluene	ND	0.50	"	"	"	"	"	"	
p-Chlorotoluene	ND	0.50	"	"	"	"	"	"	
Dibromochloromethane	ND	0.50	"	"	"	"	"	"	
Dibromomethane	ND	0.50	"	"	"	"	"	"	
1,2-Dibromo-3-chloropropane	ND	2.0	"	"	"	"	"	"	
1,2-Dichlorobenzene	ND	0.50	"	"	"	"	"	"	
1,3-Dichlorobenzene	ND	0.50	"	"	"	"	"	"	
1,4-Dichlorobenzene	ND	0.50	"	"	"	"	"	"	
Dichlorodifluoromethane (Freon 12)	ND	0.50	"	"	"	"	"	"	
1,1-Dichloroethane	ND	0.50	"	"	"	"	"	"	
1,2-Dichloroethane	ND	0.50	"	"	"	"	"	"	
1,1-Dichloroethene	ND	0.50	"	"	"	"	"	"	
cis-1,2-Dichloroethene	**1.8**	0.50	"	"	"	"	"	"	
trans-1,2-Dichloroethene	ND	0.50	"	"	"	"	"	"	
1,2-Dichloropropane	ND	0.50	"	"	"	"	"	"	
1,3-Dichloropropane	ND	0.50	"	"	"	"	"	"	
2,2-Dichloropropane	ND	0.50	"	"	"	"	"	"	

Pillar Ridge MHP
164 Culebra Street
Moss Beach, CA 94038

Project: March Analysis
Project Number: [none]
Project Manager: Lenore Sacco

CLS Work Order #: CPC0695
COC #: 62510

Purgeable Organic Compounds by EPA Method 524.2

Analyte	Result	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed	Method	Not
Raw Water 41100-28-006 (CPC0695-01) Water	**Sampled: 03/20/06 10:47**		**Received: 03/20/06 21:35**						
1,1-Dichloropropene	ND	0.50	µg/L	1	CP02101	03/21/06	03/21/06	EPA 524.2	
cis-1,3-Dichloropropene	ND	0.50	"	"	"	"	"	"	
trans-1,3-Dichloropropene	ND	0.50	"	"	"	"	"	"	
Ethylbenzene	ND	0.50	"	"	"	"	"	"	
Ethyl tert-butyl ether	ND	3.0	"	"	"	"	"	"	
1,2-Dibromoethane (EDB)	ND	0.50	"	"	"	"	"	"	
1,1,2-Trichloro-1,2,2-trifluoroethane (Freon 113)	ND	10	"	"	"	"	"	"	
Hexachlorobutadiene	ND	0.50	"	"	"	"	"	"	
Isopropylbenzene	ND	0.50	"	"	"	"	"	"	
p-Isopropyltoluene	ND	0.50	"	"	"	"	"	"	
Methyl tert-butyl ether	ND	3.0	"	"	"	"	"	"	
Methyl ethyl ketone	ND	10	"	"	"	"	"	"	
Methyl isobutyl ketone	ND	10	"	"	"	"	"	"	
Methylene chloride	ND	0.50	"	"	"	"	"	"	
Naphthalene	ND	0.50	"	"	"	"	"	"	
n-Propylbenzene	ND	0.50	"	"	"	"	"	"	
Styrene	ND	0.50	"	"	"	"	"	"	
1,1,1,2-Tetrachloroethane	ND	0.50	"	"	"	"	"	"	
1,1,2,2-Tetrachloroethane	ND	0.50	"	"	"	"	"	"	
Tetrachloroethene	ND	0.50	"	"	"	"	"	"	
Toluene	ND	0.50	"	"	"	"	"	"	
1,2,3-Trichlorobenzene	ND	0.50	"	"	"	"	"	"	
1,2,4-Trichlorobenzene	ND	0.50	"	"	"	"	"	"	
1,1,1-Trichloroethane	ND	0.50	"	"	"	"	"	"	
1,1,2-Trichloroethane	ND	0.50	"	"	"	"	"	"	
Trichloroethene	**2.1**	0.50	"	"	"	"	"	"	
Trichlorofluoromethane	ND	5.0	"	"	"	"	"	"	
1,2,3-Trichloropropane	ND	0.50	"	"	"	"	"	"	
1,2,4-Trimethylbenzene	ND	0.50	"	"	"	"	"	"	
1,3,5-Trimethylbenzene	ND	0.50	"	"	"	"	"	"	
Vinyl chloride	ND	0.50	"	"	"	"	"	"	
m,p-Xylene	ND	0.50	"	"	"	"	"	"	
o-Xylene	ND	0.50	"	"	"	"	"	"	
Xylenes (total)	ND	0.50	"	"	"	"	"	"	

CALIFORNIA LABORATORY SERVICES

03/29/06 12:12

Pillar Ridge MHP
164 Culebra Street
Moss Beach, CA 94038

Project: March Analysis
Project Number: [none]
Project Manager: Lenore Sacco

CLS Work Order #: CPC0695
COC #: 62510

Purgeable Organic Compounds by EPA Method 524.2

Analyte	Result	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed	Method	Not
Raw Water 41100-28-006 (CPC0695-01) Water Sampled: 03/20/06 10:47 Received: 03/20/06 21:35									
Total Trihalomethanes (THM)	ND	0.50	µg/L	1	CP02101	03/21/06	03/21/06	EPA 524.2	
Surrogate: 1,2-Dichloroethane-d4		*115 %*		*66-135*		"	"	"	"
Surrogate: Toluene-d8		*95.5 %*		*70-130*		"	"	"	"
Surrogate: 4-Bromofluorobenzene		*110 %*		*70-130*		"	"	"	"
Post Aeration 41100-28-015 (CPC0695-02) Water Sampled: 03/20/06 10:57 Received: 03/20/06 21:35									
tert-Amyl methyl ether	ND	3.0	µg/L	1	CP02101	03/21/06	03/21/06	EPA 524.2	
Benzene	ND	0.50	"	"	"	"	"	"	
Bromobenzene	ND	0.50	"	"	"	"	"	"	
Bis(2-chloroethyl)ether	ND	5.0	"	"	"	"	"	"	
Bromochloromethane	ND	0.50	"	"	"	"	"	"	
Bromodichloromethane	ND	0.50	"	"	"	"	"	"	
Bromoform	ND	0.50	"	"	"	"	"	"	
Bromomethane	ND	0.50	"	"	"	"	"	"	
n-Butylbenzene	ND	0.50	"	"	"	"	"	"	
sec-Butylbenzene	ND	0.50	"	"	"	"	"	"	
tert-Butylbenzene	ND	0.50	"	"	"	"	"	"	
Tert-butyl alcohol	ND	2.0	"	"	"	"	"	"	
Carbon tetrachloride	ND	0.50	"	"	"	"	"	"	
Chlorobenzene	ND	0.50	"	"	"	"	"	"	
Chloroethane	ND	0.50	"	"	"	"	"	"	
2-Chloroethylvinyl ether	ND	1.0	"	"	"	"	"	"	
Chloroform	ND	0.50	"	"	"	"	"	"	
Chloromethane	ND	0.50	"	"	"	"	"	"	
o-Chlorotoluene	ND	0.50	"	"	"	"	"	"	
p-Chlorotoluene	ND	0.50	"	"	"	"	"	"	
Dibromochloromethane	ND	0.50	"	"	"	"	"	"	
Dibromomethane	ND	0.50	"	"	"	"	"	"	
1,2-Dibromo-3-chloropropane	ND	2.0	"	"	"	"	"	"	
1,2-Dichlorobenzene	ND	0.50	"	"	"	"	"	"	
1,3-Dichlorobenzene	ND	0.50	"	"	"	"	"	"	
1,4-Dichlorobenzene	ND	0.50	"	"	"	"	"	"	
Dichlorodifluoromethane (Freon 12)	ND	0.50	"	"	"	"	"	"	
1,1-Dichloroethane	ND	0.50	"	"	"	"	"	"	

Pillar Ridge MHP
164 Culebra Street
Moss Beach, CA 94038

Project: March Analysis
Project Number: [none]
Project Manager: Lenore Sacco

CLS Work Order #: CPC0695
COC #: 62510

Purgeable Organic Compounds by EPA Method 524.2

Analyte	Result	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed	Method	Not
Post Aeration 41100-28-015 (CPC0695-02) Water	**Sampled: 03/20/06 10:57**		**Received: 03/20/06 21:35**						
1,2-Dichloroethane	ND	0.50	µg/L	1	CP02101	03/21/06	03/21/06	EPA 524.2	
1,1-Dichloroethene	ND	0.50	"	"	"	"	"	"	
cis-1,2-Dichloroethene	ND	0.50	"	"	"	"	"	"	
trans-1,2-Dichloroethene	ND	0.50	"	"	"	"	"	"	
1,2-Dichloropropane	ND	0.50	"	"	"	"	"	"	
1,3-Dichloropropane	ND	0.50	"	"	"	"	"	"	
2,2-Dichloropropane	ND	0.50	"	"	"	"	"	"	
1,1-Dichloropropene	ND	0.50	"	"	"	"	"	"	
cis-1,3-Dichloropropene	ND	0.50	"	"	"	"	"	"	
trans-1,3-Dichloropropene	ND	0.50	"	"	"	"	"	"	
Ethylbenzene	ND	0.50	"	"	"	"	"	"	
Ethyl tert-butyl ether	ND	3.0	"	"	"	"	"	"	
1,2-Dibromoethane (EDB)	ND	0.50	"	"	"	"	"	"	
1,1,2-Trichloro-1,2,2-trifluoroethane (Freon 113)	ND	10	"	"	"	"	"	"	
Hexachlorobutadiene	ND	0.50	"	"	"	"	"	"	
Isopropylbenzene	ND	0.50	"	"	"	"	"	"	
p-Isopropyltoluene	ND	0.50	"	"	"	"	"	"	
Methyl tert-butyl ether	ND	3.0	"	"	"	"	"	"	
Methyl ethyl ketone	ND	10	"	"	"	"	"	"	
Methyl isobutyl ketone	ND	10	"	"	"	"	"	"	
Methylene chloride	ND	0.50	"	"	"	"	"	"	
Naphthalene	ND	0.50	"	"	"	"	"	"	
n-Propylbenzene	ND	0.50	"	"	"	"	"	"	
Styrene	ND	0.50	"	"	"	"	"	"	
1,1,1,2-Tetrachloroethane	ND	0.50	"	"	"	"	"	"	
1,1,2,2-Tetrachloroethane	ND	0.50	"	"	"	"	"	"	
Tetrachloroethene	ND	0.50	"	"	"	"	"	"	
Toluene	ND	0.50	"	"	"	"	"	"	
1,2,3-Trichlorobenzene	ND	0.50	"	"	"	"	"	"	
1,2,4-Trichlorobenzene	ND	0.50	"	"	"	"	"	"	
1,1,1-Trichloroethane	ND	0.50	"	"	"	"	"	"	
1,1,2-Trichloroethane	ND	0.50	"	"	"	"	"	"	
Trichloroethene	ND	0.50	"	"	"	"	"	"	
Trichlorofluoromethane	ND	5.0	"	"	"	"	"	"	

Pillar Ridge MHP
164 Culebra Street
Moss Beach, CA 94038

Project: March Analysis
Project Number: [none]
Project Manager: Lenore Sacco

CLS Work Order #: CPC0695
COC #: 62510

Purgeable Organic Compounds by EPA Method 524.2

Analyte	Result	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed	Method	Not
Post Aeration 41100-28-015 (CPC0695-02) Water	**Sampled: 03/20/06 10:57**		**Received: 03/20/06 21:35**						
1,2,3-Trichloropropane	ND	0.50	µg/L	1	CP02101	03/21/06	03/21/06	EPA 524.2	
1,2,4-Trimethylbenzene	ND	0.50	"	"	"	"	"	"	
1,3,5-Trimethylbenzene	ND	0.50	"	"	"	"	"	"	
Vinyl chloride	ND	0.50	"	"	"	"	"	"	
m,p-Xylene	ND	0.50	"	"	"	"	"	"	
o-Xylene	ND	0.50	"	"	"	"	"	"	
Xylenes (total)	ND	0.50	"	"	"	"	"	"	
Total Trihalomethanes (THM)	ND	0.50	"	"	"	"	"	"	
Surrogate: 1,2-Dichloroethane-d4		*114 %*	*66-135*		"	"	"	"	
Surrogate: Toluene-d8		*93.6 %*	*70-130*		"	"	"	"	
Surrogate: 4-Bromofluorobenzene		*110 %*	*70-130*		"	"	"	"	

APPENDIX D

Appendix D
INDEX
Boring Logs and Well Construction Detail

Well Name	Date Installed	Source Document
Retiro	03/06/91	DWR
Corona	May-94	Preliminary Well Profile
Culebra	01/30/02	Repair Diagram
B1-Henshaw	Mar-99	Boring Log
B2-Henshaw	Mar-99	Boring Log
B3-Henshaw	Mar-99	Boring Log
B4-Henshaw	Mar-99	CPT
Figure 7 CGI	Feb-02	N/A
B-1 CGI	01/08/02	Boring Log
B-2 CGI	01/08/02	Boring Log
B-3 CGI	01/08/02	Boring Log
B-4 CGI	01/08/02	Boring Log
B-5 CGI	01/08/02	Boring Log
B-6 CGI	01/08/02	Boring Log
B-7 CGI	01/08/02	Boring Log
B-8 CGI	01/08/02	Boring Log
MW-1	03/11/04	Boring Log
MW-2	03/11/04	Boring Log
MW-3	03/11/04	Boring Log
MW-5	03/11/04	Boring Log
B-9	11/20/03	Boring Log
B-10	11/20/03	Boring Log
B-11	11/20/03	Boring Log
B-12	11/20/03	Boring Log
B-13	11/20/03	Boring Log
B-14	11/20/03	Boring Log
B-15	11/20/03	Boring Log

COPY
ORIGINAL
File with DWR

STATE OF CALIFORNIA
THE RESOURCES AGENCY
DEPARTMENT OF WATER RESOURCES

WATER WELL DRILLERS REPORT

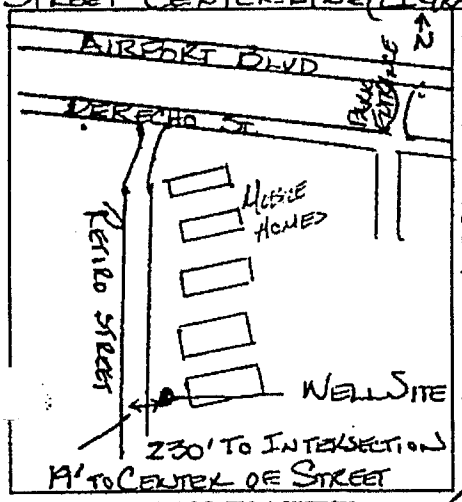
Do not fill in
No. 371363

ce of Intent No. _____
Local Permit No. or Date W-39-91

State Well No. _____
Other Well No. _____

(1) OWNER: Name ROSE TRAILER PARK
Address P.O. BOX 1848
City PROVO, UT ZIP 84603

(2) LOCATION OF WELL (See instructions):
County SAN MATEO Owner's Well Number RETIRO
Well address if different from above RETIRO RD, MOSS BEACH, CA
Township 5S Range 6W Section 11 (Z)
Distance from cities, roads, railroads, fences, etc. APPROX 230' SOUTH OF INTERSECTION OF DERECHO STREET & RETIRO ST AND 19 FEET EAST OF RETIRO STREET CENTERLINE (EL GRANADA MOBILE HOME PARK)



WELL LOCATION SKETCH

(3) TYPE OF WORK:
New Well ☒ Deepening ☐
Reconstruction ☐
Reconditioning ☐
Horizontal Well ☐
Destruction ☐ (Describe destruction materials and procedures in Item 12)

(4) PROPOSED USE:
Domestic ☐
Irrigation ☐
Industrial ☐
Test Well ☐
Municipal ☒
Other ☐
(Describe)

(5) EQUIPMENT:
Rotary ☒ Reverse ☐
Cable ☐ Air ☐
Other ☐ Bucket ☐

(6) GRAVEL PACK:
Yes ☒ No ☐ Size #8
Diameter of bore 15"
Packed from _____ to _____

(7) CASING INSTALLED:
Steel ☐ Plastic ☒ Concrete ☐

From ft.	To ft.	Dia. in.	Gage or Wall
+2'	53	6	SCH 40
73	83		
93	103		

(8) PERFORATIONS:
Type of perforation or size of screen

From ft.	To ft.	Slot size
53	73	.050
83	93	

(9) WELL SEAL:
Was surface sanitary seal provided? Yes ☒ No ☐ If yes, to depth 50' ft.
Were strata sealed against pollution? Yes ☒ No ☐ Interval 50-52' ft.
Method of sealing HOLEPLUG

(10) WATER LEVELS:
Depth of first water, if known _____ ft.
Standing level after well completion 6' ft.

(11) WELL TESTS:
Was well test made? Yes ☐ No ☐ If yes, by whom? DRILLER
Type of test Pump ☐ Bailer ☒ Air lift ☒
Depth to water at start of test _____ ft. At end of test _____ ft.
Discharge _____ gal/min after _____ hours Water temperature _____
Chemical analysis made? Yes ☐ No ☒ If yes, by whom? _____
Was electric log made Yes ☒ No ☐ If yes, attach copy to this report

(12) WELL LOG: Total depth 155 ft. Completed depth 103 ft.

from ft.	to ft.	Formation (Describe by color, character, size or material)
0	10	TOP SOIL
10	35	COARSE SAND/SML GRAVEL
35	50	GREY SANDY CLAY
50	68	SML GRAVEL / COARSE SAND W/SOME GREY CLAY
68	85	GREY CLAY W/ STREAKS OF FINE SAND
85	95	COARSE SAND
95	110	GREY CLAY W/ SAND TO SAND
110	115	DARK GREY CLAY W/ MARINE FOSSELS
115	125	OLD SHALE
125	135	DARK GREY SANDY CLAY W/ STREAKS OF CEMENTED SAND.
135	155	

TP

Work started 2-25 19 91 Completed 3-5 19 91

WELL DRILLER'S STATEMENT:
This well was drilled under my jurisdiction and this report is true to the best of my knowledge and belief.
Signed Kyle Stephens (Well Driller)
NAME CAVE CREEK DRILLING, INC. (Person, firm or corporation) (Typed or printed)
Address P.O. BOX 999
City WOODLAND CA ZIP 95695
License No. 590363 Date of this report 3-6-91

VOID PUBLIC UTILITIES SEC. 13752 WATER CODE

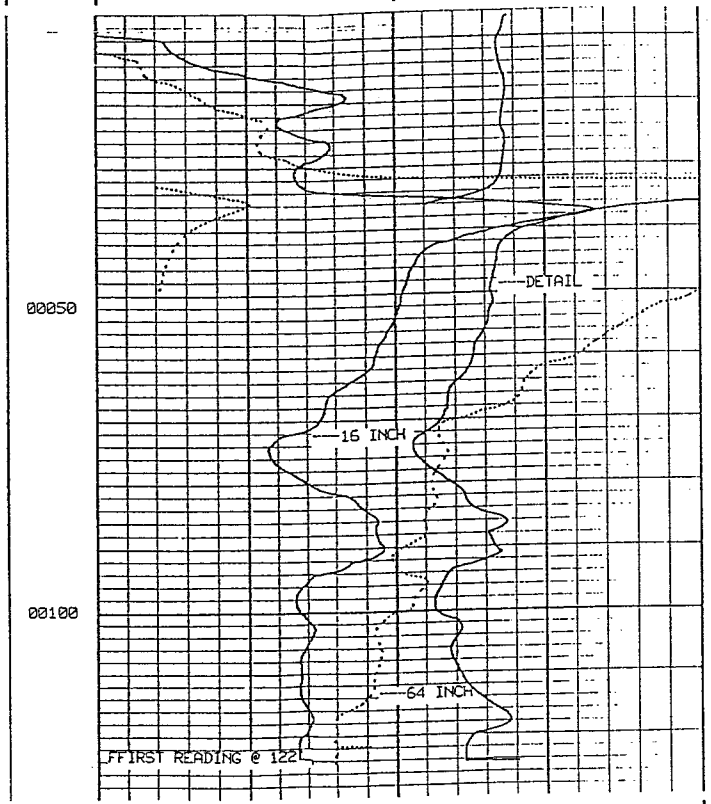
IF ADDITIONAL SPACE IS NEEDED, USE NEXT CONSECUTIVELY NUMBERED FORM

DWR 188 (REV. 12-86) 86 96355

LITHOLOGY

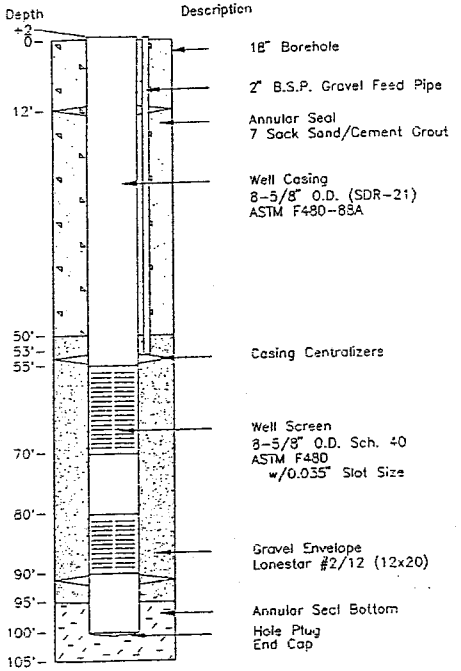
Depth	Description
0–	Sandy Clay – yellowish; some arkosic sand; low plastic; sticky; dark gray, soil clay in upper 2'.
6'–	Clayey Sand – yellowish; medium to coarse arkosic sand; subangular–subrounded; some gravel at base.
10'–	Clay – yellowish brown; sticky; medium plastic.
14'–	
22'–	Sand – brown; medium to coarse arkosic sand; some gravel in lower half; thin layers of bluish silty clay.
24'–	
29'–	Silty Clay – bluish gray; medium plastic.
34'–	
	Sand – bluish gray; fine to medium w/some coarse; quartz, feldspars, mica, lithic fragments; some peaty organic debris & shell fragments.
72'–	
	Clay – gray; soft; medium plastic; abundant fresh shells & fragments.
80'–	
	Sandstone – dark gray; fine sand; lithics, quartz; some siltstone layers; fossilized shells; hard drilling.
93'–	
	Sandy Claystone – dark gray; low plastic; some shells; fine to very fine sand; ranges up to sand & clay; oily sheen below 100'.
120'–	

DEPTHS	RESISTIVITY ohmmeters2 /meter		RESISTANCE ohms
	0 SHORT NORMAL 16 Inch	50	
	0 BACKUP X 10	500	
	0 LONG NORMAL 64 Inch	50	SINGLE POINT Detail Curve
	0 BACKUP X 10	500	



0	BACKUP X 10	500	
	64 Inch		Detail Curve SINGLE POINT
0	LONG NORMAL	50	

WELL PROFILE



Corona

PRELIMINARY WELL PROFILE
KINGSLEY MANAGEMENT
EL GRANADA MOBILE HOME PARK
MOSS BEACH, CALIFORNIA

LUHDORFF & SCALMANINI
Consulting Engineers 95695
Woodland, California

REVISIONS		
NO.	DATE	REVISION

DATE	MAY 1994
JOB NO.	93-2-081
DESIGN BY:	MWU
DRAWN BY:	LDC
CHECKED BY:	MWS
FILE:	MMP1CC22

SHEET: 2
OF: 12

LUHDORFF & SCALMANINI
CONSULTING ENGINEERS

PROJECT NO. 00-5-112

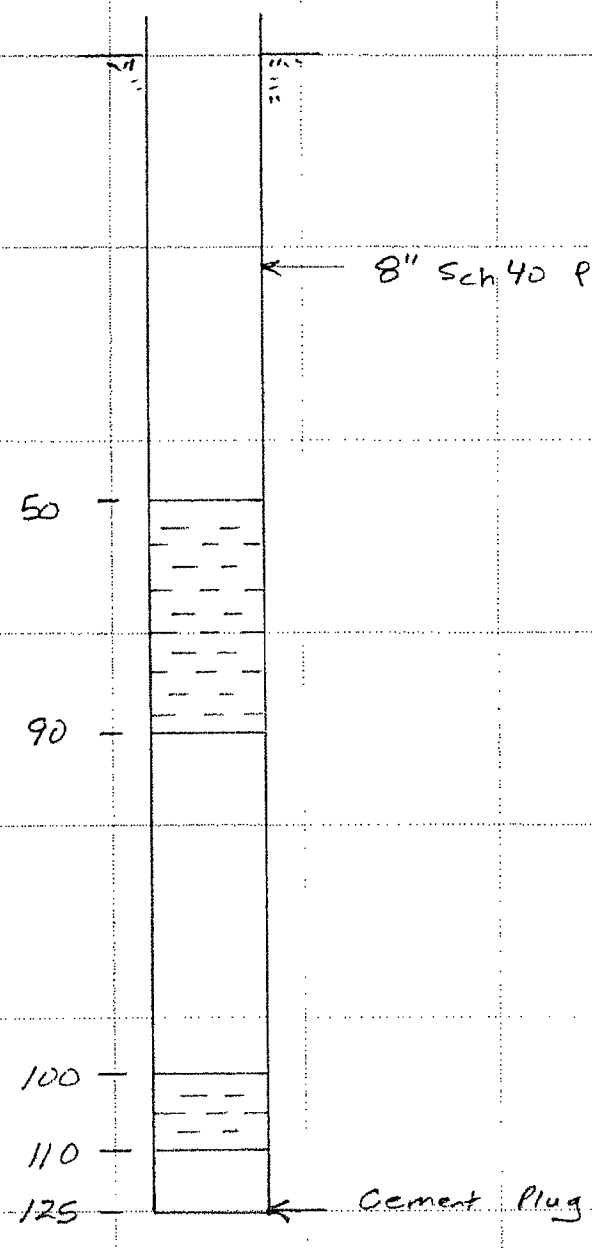
CLIENT/PROJECT El Granada

DATE 1-30-02

SUBJECT Culebra Well

BY

SHEET NO. _____ OF _____



Note: PVC End cap was damaged during the last rehab. and a cement plug was placed.

SWL 75
PWL 58
PSD 115

Henshaw Associates, Inc.
Environmental Engineering Services

Boring Log

Project Number: 144.B.02	**Boring No.: B1**
Project Name: El Granada Mobile Home Park	Location: Central boring along Airport Street
Drilling Contractor: Gregg Drilling & Testing	Logged by: Bielskis, Doug
Drilling Method: Hollow Stem Auger; Date Started: 3/5/1999	Total Depth (ft bgs): 75; Depth to Water (ft bgs): 9.7
Borehole Dia. (in): 7; Date Completed: 3/8/1999	Surface Elevation (ft MSL):

Remarks: Groundwater initially encountered at approx. 7 feet bgs, groundwater level at 9.7 feet approx. 100 minutes after boring completion (augers set at 75 feet bgs)

Depth (ft)	Sample No.	Sample Type	Blows/ft	Graphic Log	USCS Code	Material Description	Water Level	Vapor Reading (ppm)	Backfill
1					Fill	Fill, sand and clay with gravel, light brown, moist, no odor			
2					CL	Clay with sand (CL), dark brown, medium to coarse subangular sand, moist, no odor			
3									
4									
5	B1-5		20		SC	Clayey sand (SC), light brown, medium to coarse subangular sand, medium dense, moist, no odor, some caliche and rust mottling, trace black staining		N/A	
6							▽		
7					SC	Clayey sand (SC), gray, medium to coarse subangular sand, some fine gravel, moist to wet, no odor, some rust mottling and decaying vegetation			
8							▼		
9									
10	B1-10		25		CL	Sandy clay (CL), blueish-green, medium to coarse subangular sand, very stiff, moist, no odor, some caliche mottling and decaying vegetation			
11									
12					SC	Clayey sand (SC), light brown, medium to coarse subangular sand, some fine gravel, moist to wet, no odor, some rust mottling			
13									
14									
15	B1-15		58		SC	Clayey sand (SC), grayish-green, medium to coarse subrounded to subangular sand, dense, moist to wet, no odor, some rust mottling			
16									
17									
18									
19									
20	B1-20		55		CL	Sandy clay (CL), reddish orange, medium to coarse subangular sand, some fine gravel, hard, moist, no odor			
21									
22									
23					CL	Sandy clay (CL), grayish-green, medium to coarse subrounded to subangular sand, trace fine gravel, wet, no odor, trace decaying vegetation			
24									
25	B1-25		75		SC	Clayey sand (SC), grayish-green, medium to coarse subrounded to subangular sand, very dense, wet, no odor			
26									
27									
28						Poorly graded sand (SP), grayish-green, fine rounded sand, very dense, wet, no odor (heaving sands noted at approximately 34 feet bgs, sampling discontinued)			
29									
30	B1-30		80						
31									
32									
33									
34					SP			N/A	
35	B1-35								
36									
37									
38									
39								N/A	
40	B1-40								
41					SC				

BORING_LOG 6250-99.GPJ HENSHAW.GDT 3/10/99

Henshaw Associates, Inc.
Environmental Engineering Services

Boring Log

Boring No.: B1

Project Number: 144.B.02

Project Name: El Granada Mobile Home Park

Location: Central boring along Airport Street

Depth (ft)	Sample No.	Sample Type	Blows/ft	Graphic Log	USCS Code	Material Description	Water Level	Vapor Reading (ppm)	Backfill
43–44					SC	Clayey sand (SC), grayish-green, fine to medium subangular sand, some fine subangular gravel, saturated, no odor (heaving sands, no sample collected, logged from auger cuttings)		N/A	
45	B1-45								
46–49								N/A	
50	B1-50								
51–54								N/A	
55	B1-55								
56–59					SW	Well graded sand (SW), dark gray, fine to medium subangular to subrounded sand, saturated, no odor (heaving sands, no sample collected, logged from auger cuttings)		N/A	
60	B1-60								
61–64					SP	Poorly graded sand (SP), dark gray, fine subrounded sand, saturated, no odor (heaving sands, no sample collected, logged from auger cuttings)		N/A	
65	B1-65								
66–69					GW	Well graded sandy gravel (GW), dark gray to light brown, fine to coarse subrounded to subangular gravel, fine subrounded sand, saturated, no odor (hydropunch refusal noted at 75 feet bgs)		N/A	
70	B1-70								
71–74									
75						Total Depth 75 feet			
76–89									

BORING LOG 6250-99.GPJ HENSHAW.GDT 3/10/99

Henshaw Associates, Inc.
Environmental Engineering Services

Boring Log

Project Number: 144.B.02	**Boring No.: B2**
Project Name: El Granada Mobile Home Park	Location: Northern boring along Airport Street
Drilling Contractor: Gregg Drilling & Testing	Logged by: Bielskis, Doug
Drilling Method: Hollow Stem Auger; Date Started: 3/5/1999	Total Depth (ft bgs): 60.5; Depth to Water (ft bgs): 3.5
Borehole Dia. (in): 7; Date Completed: 3/8/1999	Surface Elevation (ft MSL):

Remarks: Groundwater initially encountered at approx. 7 feet bgs, groundwater level at 3.5 feet approx. 20 minutes after partial boring completion at 20 feet bgs (augers set at 18 feet bgs)

Depth (ft)	Sample No.	Sample Type	Blows/ft	Graphic Log	USCS Code	Material Description	Water Level	Vapor Reading (ppm)	Backfill
1–4					CL	Clay with sand (CL), dark brown, medium to coarse subangular to subrounded sand, moist, no odor	▼	N/A	
5–7	B2-5		18		CL	Sandy clay (CL), light gray to reddish brown, medium to coarse subangular sand, stiff, moist, no odor, some black staining and decaying vegetation	▽		
8–13	B2-10		58		SW	Well graded sand (SW), dark gray, medium to coarse subangular to subrounded sand, some fine gravel, dense, wet, no odor			
14–19	B2-15		N/A		CL	Sandy clay with silt (CL), greenish-gray, medium to coarse subangular sand, moist, no odor			
20–24	B2-20		63		SM	Silty sand (SM), greenish-gray, medium to coarse subangular sand, dense, wet, no odor			
25–34	B2-25		N/A		SW	Well graded sand (SW), greenish-gray, medium to coarse subangular to subrounded sand, saturated, no odor (heaving sands, no sample collected, logged from auger cuttings)			
	B2-30		N/A						

BORING_LOG 6250-99.GPJ HENSHAW.GDT 3/10/99

Henshaw Associates, Inc.
Environmental Engineering Services

Boring Log

Project Number: 144.B.02

Boring No.: B2

Project Name: El Granada Mobile Home Park

Location: Northern boring along Airport Street

Depth (ft)	Sample No.	Sample Type	Blows/ft	Graphic Log	USCS Code	Material Description	Water Level	Vapor Reading (ppm)	Backfill
36	B2-35		N/A			Well graded sand (SW), greenish-gray, medium to coarse subangular to subrounded sand, saturated, no odor (heaving sands, no sample collected, logged from auger cuttings)			
37									
38									
39									
40	B2-40		N/A		SW				
41									
42									
43									
44									
45	B2-45		N/A			Well graded sand (SW), greenish-gray, fine to medium subangular to subrounded sand, saturated, no odor (heaving sands, no sample collected, logged from auger cuttings, hydropunch to 60.5 feet bgs)			
46									
47									
48									
49									
50	B2-50		N/A						
51									
52					SW				
53									
54									
55	B2-55		N/A						
56									
57									
58									
59	B2-59		N/A						
60						Hydropunch to 60.5 feet bgs (refusal noted), no soil recovery			
61						Total Depth 60.5 feet			
62									
63									
64									
65									
66									
67									
68									
69									
70									
71									
72									
73									
74									

BORING_LOG 6250-99.GPJ HENSHAW.GDT 3/10/99

Henshaw Associates, Inc.
Environmental Engineering Services

Boring Log

Project Number: 144.B.02		**Boring No.: B3**	
Project Name: El Granada Mobile Home Park		Location: Southern boring along Airport Street	
Drilling Contractor: Gregg Drilling & Testing		Logged by: Bielskis, Doug	
Drilling Method: Hollow Stem Auger	Date Started: 3/8/1999	Total Depth (ft bgs): 62	Depth to Water (ft bgs): 7
Borehole Dia. (in): 7	Date Completed: 3/8/1999	Surface Elevation (ft MSL):	

Remarks: Groundwater initially encountered at approx. 7 feet bgs, no stabilized groundwater level measured

Depth (ft)	Sample No.	Sample Type	Blows/ft	Graphic Log	USCS Code	Material Description	Water Level	Vapor Reading (ppm)	Backfill
1–4					Fill	Fill, sand and clay with gravel, light brown, moist, no odor			
1–4					CL	Clay with sand (CL), dark brown, medium to coarse subangular to subrounded sand, moist, no odor (no sample collected, logged from auger cuttings)			
5–8	B3-5		N/A		CL	Clay with sand (CL), light brown, medium to coarse subangular to subrounded sand, moist to wet, no odor (no sample collected, logged from auger cuttings)	▽	N/A	
9–14	B3-10		45		SW	Well graded sand, light brown, medium to coarse subangular to subrounded sand, dense, wet, no odor (heaving sands noted at approximately 14 feet bgs, sampling discontinued)			
15–19	B3-15		N/A		SW				
20–24	B3-20		N/A		SW				
25–29	B3-25		N/A		SW	Well graded sand, light brown, medium to coarse subangular to subrounded sand, some fine gravel, saturated, no odor (heaving sands, no sample collected, logged from auger cuttings)			
30–34	B3-30		N/A		SW				

BORING_LOG 6250-99.GPJ HENSHAW.GDT 3/19/99

Henshaw Associates, Inc.
Environmental Engineering Services

Boring Log

Project Number: 144.B.02

Boring No.: B3

Project Name: El Granada Mobile Home Park

Location: Southern boring along Airport Street

Depth (ft)	Sample No.	Sample Type	Blows/ft	Graphic Log	USCS Code	Material Description	Water Level	Vapor Reading (ppm)	Backfill
36	B3-35		N/A			Well graded sand, light brown, medium to coarse subangular to subrounded sand, some fine gravel, saturated, no odor (heaving sands, no sample collected, logged from auger cuttings)			
37									
38									
39									
40	B3-40		N/A		SW				
41									
42									
43									
44									
45	B3-45		N/A						
46									
47						Well graded sand, greenish-gray, medium to coarse subangular to subrounded sand, some fine gravel, saturated, no odor (heaving sands, no sample collected, logged from auger cuttings)			
48									
49									
50	B3-50		N/A						
51									
52									
53					SW				
54									
55	B3-55		N/A						
56									
57									
58									
59	B3-59		N/A						
60						Hydropunch to 62 feet bgs, no soil recovery			
61									
62						Total Depth 62 feet			
63									
64									
65									
66									
67									
68									
69									
70									
71									
72									
73									
74									

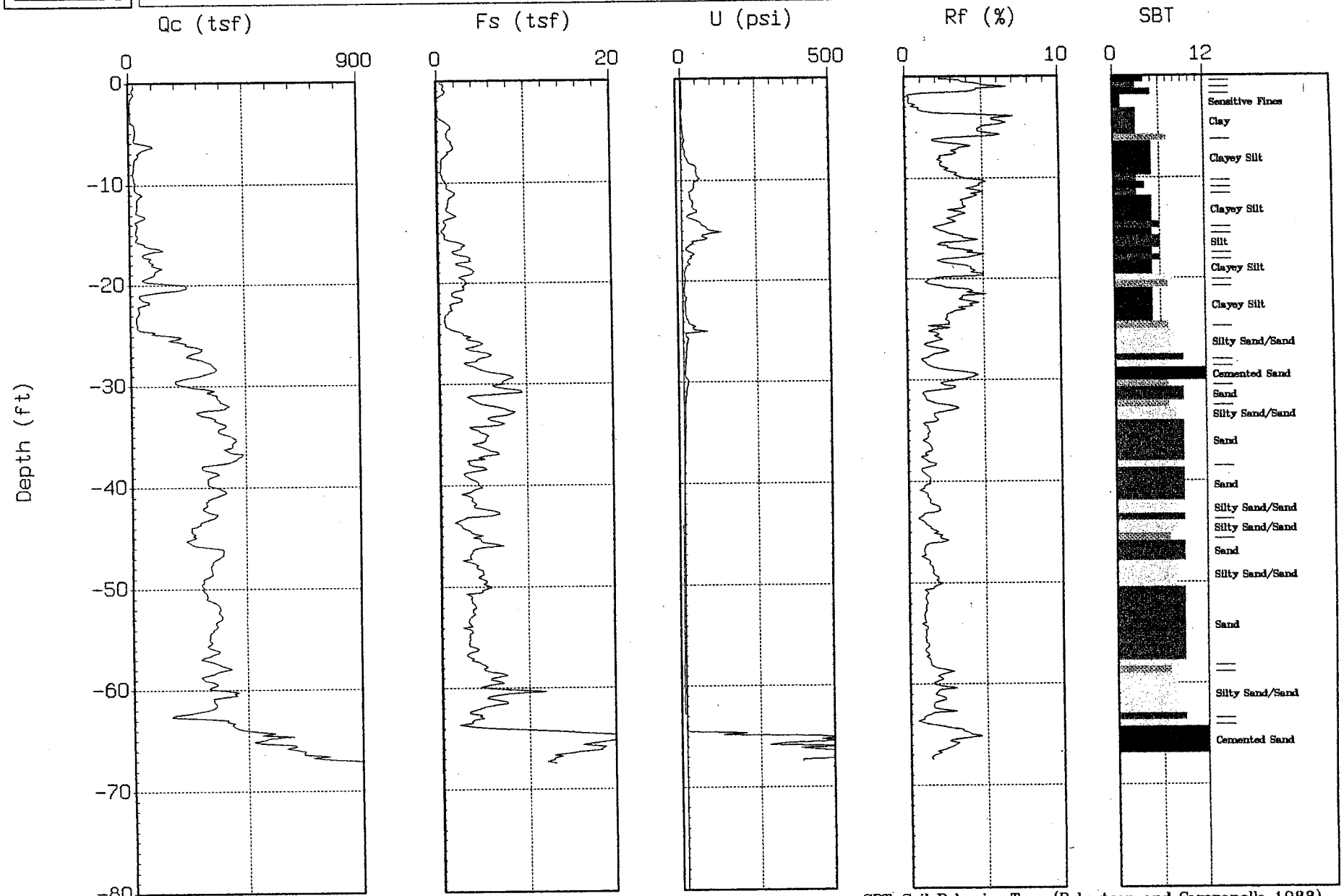
BORING_LOG 6250-99.GPJ HENSHAW.GDT 3/19/99

GREGG

HENSHAW B4

Site: El Granada M.H.
Location : CPT-01

Geologist: C. Ice
Date : 05:03:01 08:13

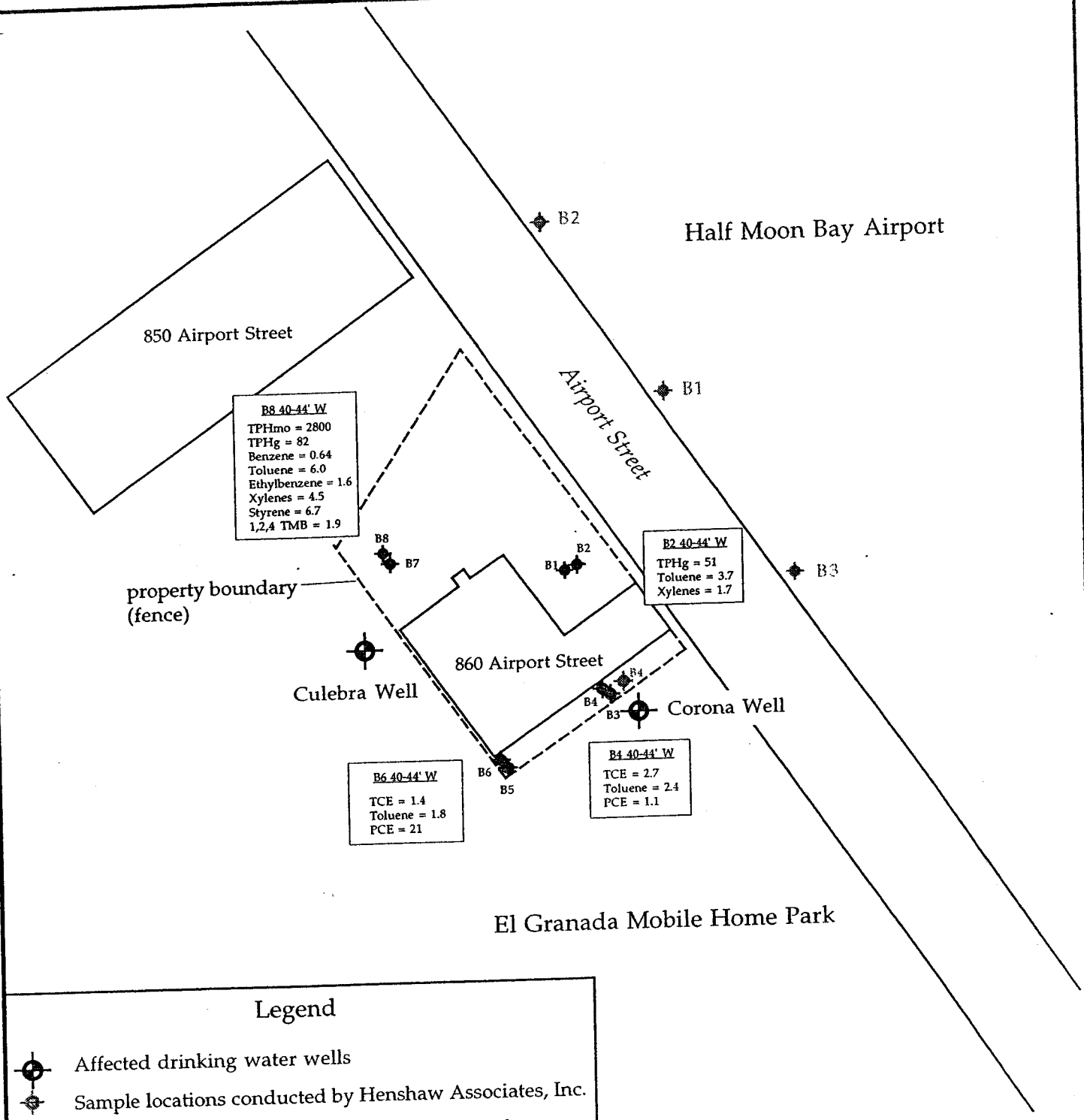


Max. Depth: 67.42 (ft)

Depth Inc.: 0.164 (ft)

SBT: Soil Behavior Type (Robertson and Campanella 1988)

DRAFT



Legend

- Affected drinking water wells
- Sample locations conducted by Henshaw Associates, Inc.
- Soil boring locations (B1, B3, B5, B7 - soil sample borings / B2, B4, B6, B8 - groundwater sample borings)

PCE Tetrachloroethylene
TCE Trichloroethylene
TPHg TPH as gasoline
TPHmo TPH as motor oil
cis-1,2-DCE Trichloroethylene
1,2,4 TMB 1,2,4 Trimethylbenzene
All values are in micrograms/liter

0 100 200

APPROXIMATE SCALE IN FEET

N

GROUNDWATER SAMPLE ANALYTICAL RESULTS SUMMARY (40-44 FT DEPTH)

860 Airport Street
Moss Beach, California

CLEARWATER GROUP

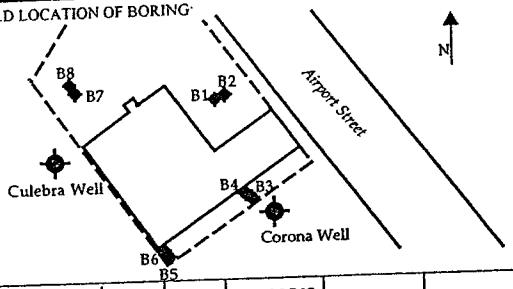
Project No.	Figure Date	Figure
BP004C	2/02	7

SOIL BORING LOG: B1

Project: BP004C

CLEARWATER GROUP

FIELD LOCATION OF BORING



DRILLING CONTRACTOR: Fast-Tek	BORING DIAMETER: 2 inches	CLIENT/LOCATION: 860 Airport Street, Moss Beach, CA	
DRILL RIG OPERATOR: AH/AB	BORING DEPTH: 42 feet	SCREEN SLOT SIZE: N/A	DRILLING DATE: 01/08/02
DRILL RIG TYPE: Direct Push	WELL DEPTH: N/A	WELL MATERIAL: N/A	FILTER PACK: N/A
WELL SEAL: N/A		PLANNED USE: Soil sampling	LOGGED BY: Adam Newman
SAMPLING METHOD: PETG liners		MONITORING INST: Photovac 2020	APPROVED BY: Brian Gwinn, RG
FIRST ENCOUNTERED WATER DEPTH: 10 feet (approximate)		STATIC WATER DEPTH - DATE: N/A	

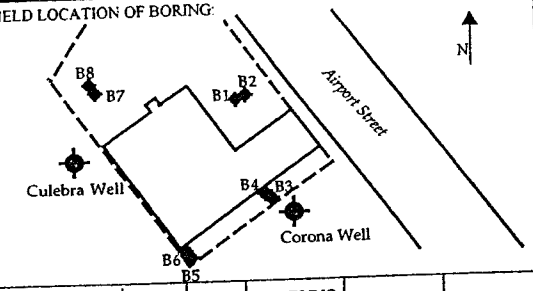
WELL CONSTRUCTION DETAIL	WATER LEVEL	DEPTH (FEET)	SAMPLING: INTERVAL	SAMPLING: RECOVERY	OVM READING (PPM)	GRAPHIC LOG OR USCS CODE	
							Asphalt and baserock.
		1					
		2			0.0	OH	CLAY (OH); dark brown / black; organic
		3					Silty CLAY (OH); grey / brown mottled; trace of white medium sand: little moisture
		4					
		5					
		6			0.0	SM	Silty SAND (SM); orange light brown; rounded, med. to coarse sand: with some clay; very moist.
		7					
		8					
		9					
	▽	10					
		11					
		12					
		13					
		14					
		15				SM	SIlty SAND (SM); yellow-light brown; rounded , medium to coarse sand: some clay content; wet.
		16					
		17					
		18					
		19					
		20					
		21					
		22					
		23					
		24					
		25					
		26				SM	SAND (SM); grey; fine grained; wet; thin layers of soft silty grey clay
		27					
		28					
		29					
		30					

SOIL BORING LOG: B1

Project: BP004C

CLEARWATER GROUP

FIELD LOCATION OF BORING:



DRILLING CONTRACTOR:	BORING DIAMETER:	CLIENT/LOCATION	
Fast-Tek	2 inches	860 Airport Street. Moss Beach. CA	
DRILL RIG OPERATOR:	BORING DEPTH:	SCREEN SLOT SIZE:	DRILLING DATE
AH/AB	42 feet	N/A	01/08/02
DRILL RIG TYPE:	WELL DEPTH:	WELL MATERIAL:	FILTER PACK
Direct Push	N/A	N/A	N/A
WELL SEAL:		PLANNED USE:	LOGGED BY:
N/A		Soil sampling	Adam Newman
SAMPLING METHOD:		MONITORING INST:	APPROVED BY
PETG liners		Photovac 2020	Brian Gwinn. RG
FIRST ENCOUNTERED WATER DEPTH:		STATIC WATER DEPTH - DATE	
10 feet (approximate)		N/A	

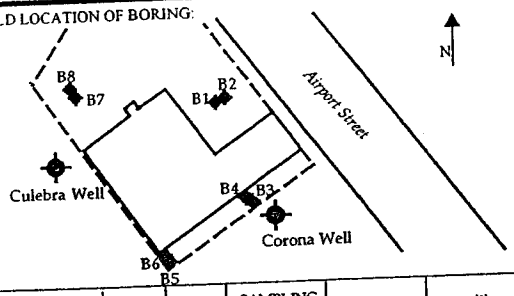
WELL CONSTRUCTION DETAIL	WATER LEVEL	DEPTH (FEET)	SAMPLING: INTERVAL	SAMPLING: RECOVERY	OVM READING (PPM)	GRAPHIC LOG OR USCS CODE	
		31–42				SM	SAND (SM); dark grey; fine; wet.
		40–42				SM	SAND (SM); dark grey; fine; little silt; wet.
		42					Boring completion depth.

SOIL BORING LOG: B3

Project: BP004C

CLEARWATER GROUP

FIELD LOCATION OF BORING:



DRILLING CONTRACTOR: Fast-Tek	BORING DIAMETER: 2 inches	CLIENT/LOCATION: 860 Airport Street, Moss Beach. CA	
DRILL RIG OPERATOR: AH/AB	BORING DEPTH: 42 feet	SCREEN SLOT SIZE: N/A	DRILLING DATE: 01/09/02
DRILL RIG TYPE: Direct Push	WELL DEPTH: N/A	WELL MATERIAL: N/A	FILTER PACK: N/A
WELL SEAL: N/A		PLANNED USE: Soil sampling	LOGGED BY: Adam Newman
SAMPLING METHOD: PETG liners		MONITORING INST: Photovac 2020	APPROVED BY: Brian Gwinn. RG
FIRST ENCOUNTERED WATER DEPTH: 9 feet (approximate)		STATIC WATER DEPTH - DATE: N/A	

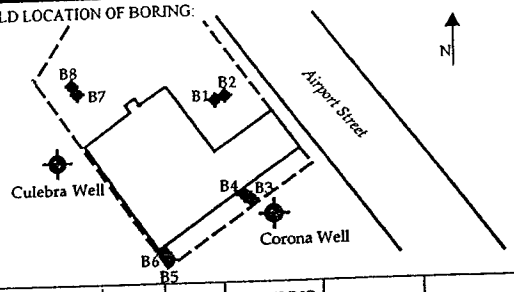
WELL CONSTRUCTION DETAIL	WATER LEVEL	DEPTH (FEET)	SAMPLING: INTERVAL	SAMPLING: RECOVERY	OVM READING (PPM)	GRAPHIC LOG OR USCS CODE	
							Concrete
		1					
		2			0.0	OH	SIlty CLAY (OH); dark brown w/ reddish brown silty mottles; soft; some moisture
		3					
		4					
		5			0.0	SM	Silty SAND (SM); light brown / reddish brown mottles; medium sand; moist.
		6					
		7					
	▽	8					
		9					
		10					
		11					
		12					
		13					
		14					
		15					
		16					
		17					
		18					
		19					
		20					
		21					
		22					
		23					
		24					
		25				SM	SAND (SM); dark grey; fine grained; wet; thin layers of soft silty grey clay; wet
		26					
		27					
		28					
		29					
		30					

SOIL BORING LOG: B3

CLEARWATER GROUP

Project: BP004C

FIELD LOCATION OF BORING:



DRILLING CONTRACTOR: Fast-Tek	BORING DIAMETER: 2 inches	CLIENT/LOCATION: 860 Airport Street, Moss Beach, CA	
DRILL RIG OPERATOR: AH/AB	BORING DEPTH: 42 feet	SCREEN SLOT SIZE: N/A	DRILLING DATE: 01/09/02
DRILL RIG TYPE: Direct Push	WELL DEPTH: N/A	WELL MATERIAL: N/A	FILTER PACK: N/A
WELL SEAL: N/A		PLANNED USE: Soil sampling	LOGGED BY: Adam Newman
SAMPLING METHOD: PETG liners		MONITORING INST: Photovac 2020	APPROVED BY: Brian Gwinn, RG
FIRST ENCOUNTERED WATER DEPTH: 9 feet (approximate)		STATIC WATER DEPTH - DATE: N/A	

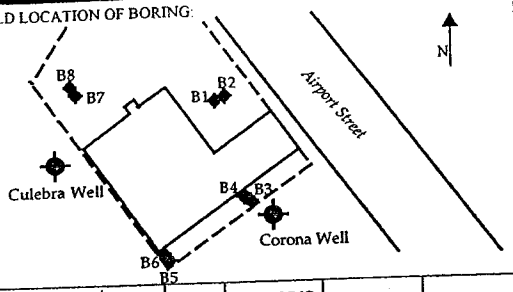
WELL CONSTRUCTION DETAIL	WATER LEVEL	DEPTH (FEET)	SAMPLING: INTERVAL	SAMPLING: RECOVERY	OVM READING (PPM)	GRAPHIC LOG OR USCS CODE	
		31–41					
		40–41	↓	↓		SM	SAND (SM); dark grey; fine; little silt; wet.
		42					Boring completion depth.
		43–60					

SOIL BORING LOG: B5

CLEARWATER GROUP

Project: BP004C

FIELD LOCATION OF BORING:



DRILLING CONTRACTOR: Fast-Tek	BORING DIAMETER: 2 inches	CLIENT/LOCATION: 860 Airport Street, Moss Beach, CA	
DRILL RIG OPERATOR: AH/AB	BORING DEPTH: 45 feet	SCREEN SLOT SIZE: N/A	DRILLING DATE: 01/09/02
DRILL RIG TYPE: Direct Push	WELL DEPTH: N/A	WELL MATERIAL: N/A	FILTER PACK: N/A
WELL SEAL: N/A		PLANNED USE: Soil sampling	LOGGED BY: Adam Newman
SAMPLING METHOD: PETG liners		MONITORING INST: Photovac 2020	APPROVED BY: Brian Gwinn, RG
FIRST ENCOUNTERED WATER DEPTH: 8 to 9 feet (approximate)		STATIC WATER DEPTH - DATE: N/A	

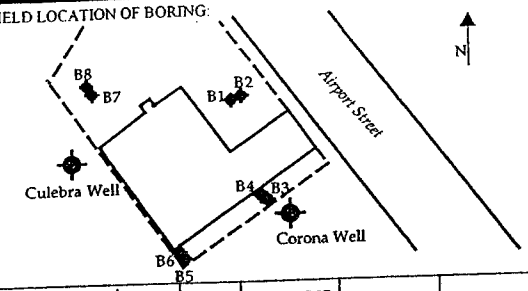
WELL CONSTRUCTION DETAIL	WATER LEVEL	DEPTH (FEET)	SAMPLING: INTERVAL	SAMPLING: RECOVERY	OVM READING (PPM)	GRAPHIC LOG OR USCS CODE	
							Concrete
		1					
		2			0.0	OH	Silty CLAY (OH); greyish brown; soft; some medium sand; some moisture
		3					
		4					
		5					
		6			0.0	SM	Silty SAND (SM); light brown; medium sand; moist to wet.
	▽	7					
		8					
		9					
		10					
		11					
		12					
		13					
		14					
		15					
		16					
		17					
		18					
		19					
		20					
		21					
		22					
		23					
		24					
		25				SM	SAND (SM); dark grey; fine grained; wet; thin layers of soft silty grey clay; wet.
		26					
		27					
		28					
		29					
		30					

SOIL BORING LOG: B5

Project: BP004C

CLEARWATER GROUP

FIELD LOCATION OF BORING:



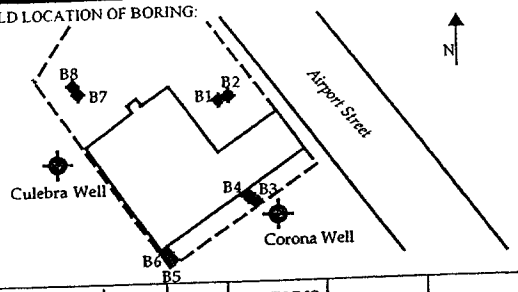
DRILLING CONTRACTOR: Fast-Tek	BORING DIAMETER: 2 inches	CLIENT/LOCATION: 860 Airport Street, Moss Beach, CA	
DRILL RIG OPERATOR: AH/AB	BORING DEPTH: 45 feet	SCREEN SLOT SIZE: N/A	DRILLING DATE: 01/09/02
DRILL RIG TYPE: Direct Push	WELL DEPTH: N/A	WELL MATERIAL: N/A	FILTER PACK: N/A
WELL SEAL: N/A		PLANNED USE: Soil sampling	LOGGED BY: Adam Newman
SAMPLING METHOD: PETG liners		MONITORING INST: Photovac 2020	APPROVED BY: Brian Gwinn, RG
FIRST ENCOUNTERED WATER DEPTH: 8 to 9 feet (approximate)		STATIC WATER DEPTH - DATE: N/A	

WELL CONSTRUCTION DETAIL	WATER LEVEL	DEPTH (FEET)	SAMPLING: INTERVAL	SAMPLING: RECOVERY	OVM READING (PPM)	GRAPHIC LOG OR USCS CODE	
		31–60					
		44				SM	SAND (SM); dark grey; fine; little silt; wet.
		45					Boring completion depth.

SOIL BORING LOG: B7

CLEARWATER GROUP

FIELD LOCATION OF BORING:



DRILLING CONTRACTOR: Fast-Tek	BORING DIAMETER: 2 inches	CLIENT/LOCATION: 860 Airport Street. Moss Beach. CA	
DRILL RIG OPERATOR: AH/AB	BORING DEPTH: 45 feet	SCREEN SLOT SIZE: N/A	DRILLING DATE: 01/10/02
DRILL RIG TYPE: Direct Push	WELL DEPTH: N/A	WELL MATERIAL: N/A	FILTER PACK: N/A
WELL SEAL: N/A		PLANNED USE: Soil sampling	LOGGED BY: Adam Newman
SAMPLING METHOD: PETG liners		MONITORING INST: Photovac 2020	APPROVED BY: Brian Gwinn. RG
FIRST ENCOUNTERED WATER DEPTH: 9 feet (approximate)		STATIC WATER DEPTH - DATE: N/A	

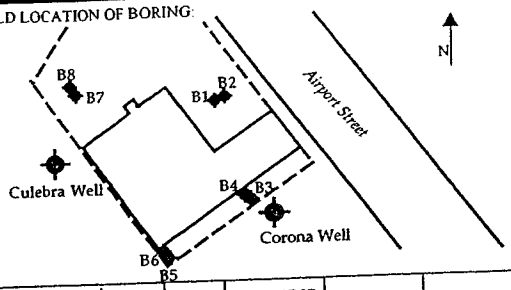
WELL CONSTRUCTION DETAIL	WATER LEVEL	DEPTH (FEET)	SAMPLING: INTERVAL	SAMPLING: RECOVERY	OVM READING (PPM)	GRAPHIC LOG OR USCS CODE	
							Asphalt
		1					
		2			0.0	CL	SIlty CLAY (CL); grey; soft; light brown silty mottles; some medium sand: some moisture
		3					
		4					
		5					
		6			0.0	SM	Silty SAND (SM); orange/light brown; medium sand; moist to wet.
		7					
		8					
	▽	9					
		10					
		11					
		12					
		13					
		14					
		15					
		16					
		17					
		18					
		19					
		20					
		21					
		22					
		23				SM	SAND (SM); dark grey; fine grained; wet; thin layers of soft sandy grey clay: wet.
		24					
		25					
		26					
		27					
		28					
		29					
		30					

SOIL BORING LOG: B7

Project: BP004C

CLEARWATER GROUP

FIELD LOCATION OF BORING:



DRILLING CONTRACTOR: Fast-Tek	BORING DIAMETER: 2 inches	CLIENT/LOCATION: 860 Airport Street. Moss Beach. CA	
DRILL RIG OPERATOR: AH/AB	BORING DEPTH: 45 feet	SCREEN SLOT SIZE: N/A	DRILLING DATE: 01/09/02
DRILL RIG TYPE: Direct Push	WELL DEPTH: N/A	WELL MATERIAL: N/A	FILTER PACK: N/A
WELL SEAL: N/A		PLANNED USE: Soil sampling	LOGGED BY: Adam Newman
SAMPLING METHOD: PETG liners		MONITORING INST: Photovac 2020	APPROVED BY: Brian Gwinn. RG
FIRST ENCOUNTERED WATER DEPTH: 9 feet (approximate)		STATIC WATER DEPTH - DATE: N/A	

WELL CONSTRUCTION DETAIL	WATER LEVEL	DEPTH (FEET)	SAMPLING: INTERVAL	SAMPLING: RECOVERY	OVM READING (PPM)	GRAPHIC LOG OR USCS CODE	
		31–60					
		43–44	▼	▼		SM	SAND (SM); dark grey; fine to medium grained; wet.
		45					Boring completion depth.

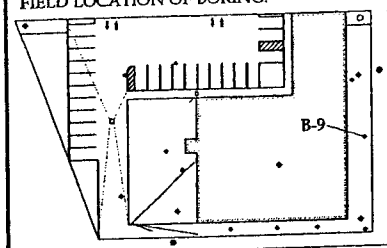
SOIL BORING AND WELL CONSTRUCTION LOG:

ENVIRONMENTAL BIO-SYSTEMS INC.

Project No. BP004C

Sheet 1 of 1

FIELD LOCATION OF BORING:



CLIENT/LOCATION: LUCY YU, 860 AIRPORT ST., MOSS BEACH, CA	PLANNED USE: ENVIRONMENTAL	BORING DEPTH: 12'-0"	BORING/WELL NO.: B-9
DRILLING CONTRACTOR: FAST-TEK	DRILL RIG TYPE: DPT PORTABLE	WELL DEPTH: N/A	BORING DIAMETER: 1.0"
DRILL RIG OPERATOR: ERIC AUSTIN	WELL MATERIAL: N/A	SCREEN SLOT SIZE: N/A	FILTER PACK: N/A
WET SEAL: PORTLAND #2 CEMENT			DRILLING DATE: 11-20-03

SAMPLING METHOD: 2' DPT SAMPLER (GEOPROBE)

MONITORING INSTRUMENT: PID GASTECH

FIRST ENCOUNTERED WATER DEPTH: NOT ENCOUNTERED

STATIC WATER DEPTH - DATE: NOT ENCOUNTERED

COMPLETION	SAMPLING INTERVAL	SAMPLING ANALYTICAL	WATER LEVEL	DEPTH (FEET)	OVM READING (PPM)	SAMPLING INTERVAL	GRAPHIC LOG
GROUT				1	0.0		
				2	0.0		
				3	0.0		
				4	0.0		
				5	0.0		
				6	0.0		
				7	0.0		
				8	0.0		
				9	0.0		
				10	0.0		
				11	0.0		
				12	0.0		
				13			
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				29			
				30			

0-1.0' HUMAS (OH) - DARK BROWN TO BLACK, ORGANIC- MOIST, NO OBVIOUS ODOR

1.0' - 1.5' GRAVEL (GP), FILL?

1.5'-4.0' HUMAS (OH) - DARK BROWN TO BLACK, ORGANIC- MOIST, NO OBVIOUS ODOR

4.0'-8.0' CLAY (OH) - DARK BROWN TO BLACK, ORGANIC- MOIST, NO OBVIOUS ODOR WITH OCCASIONAL CALICHE GRAINS

8.0'-12.0' SILTY SAND (SM)- MEDIUM BROWN, MEDIUM GRAINED, MOIST, MOTTLED, NO OBVIOUS ODOR

SAMPLE B-9 @ 10.0' - 10.5' ANALYZED

COMMENTS:
70% RECOVERY ESTIMATED

SAMPLE B-9 @ 11.5' - 12.0' NOT ANALYZED

CHG #: 88

LOGGED BY: JIM JACOBS

APPROVED BY: JJ

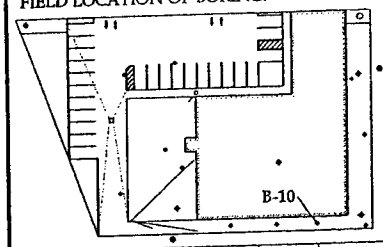
SOIL BORING AND WELL CONSTRUCTION LOG:

Project No. BP004C

Sheet 1 of 1

ENVIRONMENTAL BIO-SYSTEMS INC.

FIELD LOCATION OF BORING:



CLIENT/LOCATION: LUCY YU, 860 AIRPORT ST., MOSS BEACH, CA	PLANNED USE: ENVIRONMENTAL	BORING DEPTH: 6'-0"	BORING/WELL NO.: B-10
DRILLING CONTRACTOR: FAST-TEK	DRILL RIG TYPE: DPT PORTABLE	WELL DEPTH: N/A	BORING DIAMETER: 1.0"
DRILL RIG OPERATOR: ERIC AUSTIN	WELL MATERIAL: N/A	SCREEN SLOT SIZE: N/A	FILTER PACK: N/A
WET SEAL: PORTLAND #2 CEMENT			DRILLING DATE: 11-20-03

SAMPLING METHOD: 2' DPT SAMPLER (GEOPROBE)

MONITORING INSTRUMENT: PID GASTECH

FIRST ENCOUNTERED WATER DEPTH: NOT ENCOUNTERED

STATIC WATER DEPTH - DATE: NOT ENCOUNTERED

COMPLETION	SAMPLING INTERVAL	SAMPLING ANALYTICAL	WATER LEVEL	DEPTH (FEET)	OVM READING (PPM)	SAMPLING INTERVAL	GRAPHIC LOG
GROUT				1	0.0		
				2	0.0		
				3	0.0		
				4	0.0		
				5	0.0		
				6	0.0		
				7			
				8			
				9			
				10			
				11			
				12			
				13			
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				23			
				24			
				25			
				26			
				27			
				28			
				29			
				30			

0-1.0' HUMAS (OH)- DARK BROWN TO BLACK
ORGANIC- MOIST

1.0' - 3.5' ORGANIC CLAY (OH) - BLACK
SLIGHTLY MOIST, PLASTIC, NO OBVIOUS ODOR

3.5' - 6.0' MOTTLED SANDY CLAY (CL) - LIGHT BROWN GREEN
MOIST, CALICHE FROM 4.0'-6.0' - NO OBVOIUS ODOR

COMMENTS:
90% RECOVERY

SAMPLE B-10 @ 5.5'-6.0'

CHG #: 88

LOGGED BY: JIM JACOBS

APPROVED BY: JJ

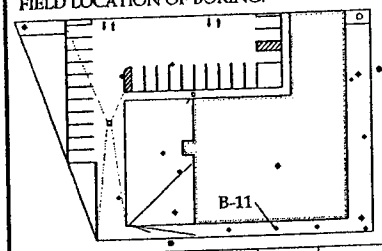
SOIL BORING AND WELL CONSTRUCTION LOG:

Project No. BP004C

Sheet 1 of 1

ENVIRONMENTAL BIO-SYSTEMS INC.

FIELD LOCATION OF BORING:



CLIENT/LOCATION: LUCY YU, 860 AIRPORT ST., MOSS BEACH, CA	PLANNED USE: ENVIRONMENTAL	BORING DEPTH: 6'-0"	BORING/WELL NO.: B-11
DRILLING CONTRACTOR: FAST-TEK	DRILL RIG TYPE: DPT PORTABLE	WELL DEPTH: N/A	BORING DIAMETER: 1.0"
DRILL RIG OPERATOR: ERIC AUSTIN	WELL MATERIAL: N/A	SCREEN SLOT SIZE: N/A	FILTER PACK: N/A
WET SEAL: PORTLAND #2 CEMENT			DRILLING DATE: 11-20-03

SAMPLING METHOD: 2' DPT SAMPLER (GEOPROBE)

MONITORING INSTRUMENT: PID GASTECH

FIRST ENCOUNTERED WATER DEPTH: NOT ENCOUNTERED

STATIC WATER DEPTH - DATE: NOT ENCOUNTERED

COMPLETION	SAMPLING INTERVAL	SAMPLING ANALYTICAL	WATER LEVEL	DEPTH (FEET)	OVM READING (PPM)	SAMPLING INTERVAL	GRAPHIC LOG
GROUT				1	0.0		
				2	0.0		
				3	0.0		
				4	0.0		
				5	0.0		
				6	0.0		
				7			
				8			
				9			
				10			
				11			
				12			
				13			
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				24			
				25			
				26			
				27			
				28			
				29			
				30			

0- 1.5' HUMAS (OH) - LOOSE SAND, LIGHT BROWN PEBBLES

1.5' - 6.0' DARK TO MEDIUM BROWN CLAY WITH OCCASIONAL SAND GRAINS (CL), CALICHE (WHITE) FROM 4.0'- 6.0', SLIGHTLY MOIST, NO OBVIOUS ODOR

COMMENTS:
90% RECOVERY

SAMPLE B-11 @ 5.5'-6.0'

CHG #: 88

LOGGED BY: JIM JACOBS

APPROVED BY: JJ

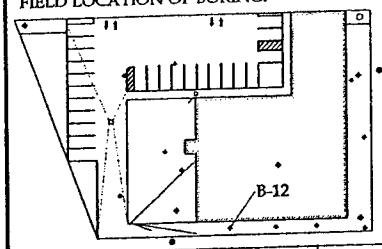
SOIL BORING AND WELL CONSTRUCTION LOG:

ENVIRONMENTAL BIO-SYSTEMS INC.

Project No. BP004C

Sheet 1 of 1

FIELD LOCATION OF BORING:



CLIENT/LOCATION: LUCY YU, 860 AIRPORT ST., MOSS BEACH, CA	PLANNED USE: ENVIRONMENTAL	BORING DEPTH: 6'-0"	BORING/WELL NO.: B-12
DRILLING CONTRACTOR: FAST-TEK	DRILL RIG TYPE: DPT PORTABLE	WELL DEPTH: N/A	BORING DIAMETER: 1.0"
DRILL RIG OPERATOR: ERIC AUSTIN	WELL MATERIAL: N/A	SCREEN SLOT SIZE: N/A	FILTER PACK: N/A
WET SEAL: PORTLAND #2 CEMENT			DRILLING DATE: 11-20-03

SAMPLING METHOD: 2' DPT SAMPLER (GEOPROBE)

MONITORING INSTRUMENT: PID GASTECH

FIRST ENCOUNTERED WATER DEPTH: NOT ENCOUNTERED

STATIC WATER DEPTH - DATE: NOT ENCOUNTERED

COMPLETION	SAMPLING INTERVAL	SAMPLING ANALYTICAL	WATER LEVEL	DEPTH (FEET)	OVM READING (PPM)	SAMPLING INTERVAL	GRAPHIC LOG
GROUT				1	0.0		
				2	0.0		
				3	0.0		
				4	0.0		
				5	0.0		
				6	0.0		
				7			
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				29			
				30			

0-0.5' HUMAS (OH) - DARK BROWN TO LIGHT BROWN, SANDY CLAY, MOIST

0.5' - 2.0' CLAYEY SAND (SC) - LIGHT BROWN, MOIST, NO OBVIOUS ODOR

2.0' - 4.0' DARK TO MEDIUM BROWN CLAY WITH SAND (CL) SOME CALICHE (WHITE), SLIGHTLY MOIST, NO OBVIOUS ODOR

4.0'-6.0' MEDIUM BROWN SANDY CLAY (CL), MOIST, NO OBVIOUS ODOR

COMMENTS:
90% RECOVERY

SAMPLE B-12 @ 5.5'-6.0'

CHG #: 88

LOGGED BY: JIM JACOBS

APPROVED BY: JJ

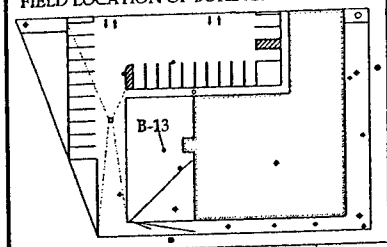
SOIL BORING AND WELL CONSTRUCTION LOG:

ENVIRONMENTAL BIO-SYSTEMS INC.

Project No. BP004C

Sheet 1 of 1

FIELD LOCATION OF BORING:



CLIENT/LOCATION: LUCY YU, 860 AIRPORT ST., MOSS BEACH, CA	PLANNED USE: ENVIRONMENTAL	BORING DEPTH: 10'-0"	BORING/WELL NO.: B-13
DRILLING CONTRACTOR: FAST-TEK	DRILL RIG TYPE: DPT PORTABLE	WELL DEPTH: N/A	BORING DIAMETER: 2.0"
DRILL RIG OPERATOR: ERIC AUSTIN	WELL MATERIAL: N/A	SCREEN SLOT SIZE: N/A	FILTER PACK: N/A
WET SEAL: PORTLAND #2 CEMENT			DRILLING DATE: 11-20-03

SAMPLING METHOD: 2' DPT SAMPLER (GEOPROBE)

MONITORING INSTRUMENT: PID GASTECH

FIRST ENCOUNTERED WATER DEPTH: 8.0'

STATIC WATER DEPTH - DATE: 8.0' @ 11-20-03

COMPLETION	SAMPLING INTERVAL	SAMPLING ANALYTICAL	WATER LEVEL	DEPTH (FEET)	OVM READING (PPM)	SAMPLING INTERVAL	GRAPHIC LOG
GROUT				1	0.0		
				2	0.0		
				3	0.0		
				4	0.0		
				5	0.0		
				6	0.0		
				7	0.0		
				8	0.0		
				9	0.0		
				10	0.0		
				11			
				12			
				13			
				14			
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				27			
				28			
				29			
				30			

0.5' ASPHALT

0.5'- 5.0' SILTY CLAY (CL)- BLACK TO BROWN, SLIGHTLY PLASTIC, NO OBVIOUS ODOR, SLIGHTLY MOIST. SANDY AT 4-5 FEET.

5.0'- 6.5' CLAY (CL) - GREEN BROWN, MOTTLED, NO OBVIOUS ODOR, SLIGHTLY MOIST. WITH OCCASIONAL MEDIUM TO COARSE SAND. WHITE CALICHE GRAINS COMMON.

6.5'- 8.0' CLAYEY SAND (SC) WITH GREEN-BROWN, MOTTLED, NO OBVIOUS ODOR. - MOIST

8.0'-10.0' CLAYEY SAND (SC) WITH GREEN-BROWN, MOTTLED, NO OBVIOUS ODOR. - WET. BAILER ATTEMPTED BUT NO WATER SAMPLE OBTAINED.

COMMENTS:
80% RECOVERY ESTIMATED

SAMPLE B-13 @ 9.5'- 10.0'

CHG #: 88

LOGGED BY: JIM JACOBS

APPROVED BY: J.J.

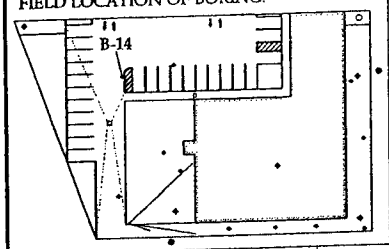
SOIL BORING AND WELL CONSTRUCTION LOG:

ENVIRONMENTAL BIO-SYSTEMS INC.

Project No. BP004C

Sheet 1 of 1

FIELD LOCATION OF BORING:



CLIENT/LOCATION: LUCY YU, 860 AIRPORT ST., MOSS BEACH, CA	PLANNED USE: ENVIRONMENTAL	BORING DEPTH: 10'-0"	BORING/WELL NO.: B-14
DRILLING CONTRACTOR: FAST-TEK	DRILL RIG TYPE: DPT PORTABLE	WELL DEPTH: N/A	BORING DIAMETER: 2.0"
DRILL RIG OPERATOR: ERIC AUSTIN	WELL MATERIAL: N/A	SCREEN SLOT SIZE: N/A	FILTER PACK: N/A
WET SEAL: PORTLAND #2 CEMENT			DRILLING DATE: 11-20-03

SAMPLING METHOD: 2' DPT SAMPLER (GEOPROBE)

MONITORING INSTRUMENT: PID GASTECH

FIRST ENCOUNTERED WATER DEPTH:

STATIC WATER DEPTH - DATE: 10.0' @ 11-20-03

COMPLETION	SAMPLING INTERVAL	SAMPLING ANALYTICAL	WATER LEVEL	DEPTH (FEET)	OVM READING (PPM)	SAMPLING INTERVAL	GRAPHIC LOG
GROUT				1	0.0		
				2	0.0		
				3	0.0		
				4	0.0		
				5	0.0		
				6	0.0		
				7	0.0		
				8	0.0		
				9	0.0		
				10	0.0		
				11			
				12			
				13			
				14			
				15			
				16			
				17			
				18			
				19			
				20			
				21			
				22			
				23			
				24			
				25			
				26			
				27			
				28			
				29			
				30			

0.5' ASPHALT

0.5'- 4.0' CLAY (CH)- DARK BROWN TO BLACK, PLASTIC, NO OBVIOUS ODOR, - MOIST. MEDIUM SAND AT 3.5-4 FEET.

5.0'- 6.5' CLAY (CL) - GREEN BROWN, MOTTLED, NO OBVIOUS ODOR, SLIGHTLY MOIST. WITH OCCASIONAL MEDIUM TO COARSE SAND. WHITE CALICHE GRAINS COMMON.

6.5'- 10.0' BROWN CLAYEY SAND (SC) WITH MEDIUM SAND GRAINS, MOTTLED, NO OBVIOUS ODOR-MOIST.

COMMENTS:
90% RECOVERY ESTIMATED
WATER AT 10.0 FEET. WATER SAMPLE ATTEMPTED, BUT COULD NOT BE OBTAINED.

SAMPLE B-14 @ 9.5'- 10.0'

CHG #: 88

LOGGED BY: JIM JACOBS

APPROVED BY: JJ.

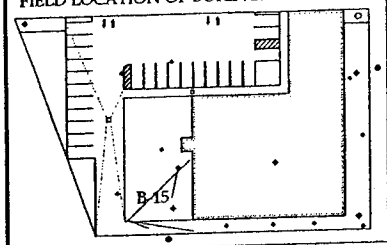
SOIL BORING AND WELL CONSTRUCTION LOG:

ENVIRONMENTAL BIO-SYSTEMS INC.

Project No. BP004C

Sheet 1 of 1

FIELD LOCATION OF BORING:



CLIENT/LOCATION: LUCY YU, 860 AIRPORT ST., MOSS BEACH, CA	PLANNED USE: ENVIRONMENTAL	BORING DEPTH: 10'-0"	BORING/WELL NO.: B-15
DRILLING CONTRACTOR: FAST-TEK	DRILL RIG TYPE: DPT PORTABLE	WELL DEPTH: N/A	BORING DIAMETER: 2.0"
DRILL RIG OPERATOR: ERIC AUSTIN	WELL MATERIAL: N/A	SCREEN SLOT SIZE: N/A	FILTER PACK: N/A
WET SEAL: PORTLAND #2 CEMENT			DRILLING DATE: 11-20-03

SAMPLING METHOD: 2' DPT SAMPLER (GEOPROBE)

MONITORING INSTRUMENT: PID GASTECH

FIRST ENCOUNTERED WATER DEPTH: 8.0'

STATIC WATER DEPTH - DATE: 8.0' @ 11-20-03

COMPLETION	SAMPLING INTERVAL	SAMPLING ANALYTICAL	WATER LEVEL	DEPTH (FEET)	OVM READING (PPM)	SAMPLING INTERVAL	GRAPHIC LOG
GROUT				1	0.0		
				2	0.0		
				3	0.0		
				4	0.0		
				5	0.0		
				6	0.0		
				7	0.0		
			▼ ▽	8	0.0		
				9	0.0		
				10	0.0		
				11			
				12			
				13			
				14			
				15			
				16			
				17			
				18			
				19			
				20			
				21			
				22			
				23			
				24			
				25			
				26			
				27			
				28			
				29			
				30			

0.5' ASPHALT

0.5'- 4.0' SILTY CLAY (CL), BLACK TO BROWN, SLIGHTLY PLASTIC, NO OBVIOUS ODOR, SLIGHTLY MOIST. OCCASIONAL PEBBLES

4.0'-7.5' BROWN-GREEN MEDIUM SAND (SM) MOTTLED, WITH MINOR CLAY, NO OBVIOUS ODOR- MOIST. WHITE CALICHE GRAINS COMMON.

7.5'-8.0' BROWN MEDIUM SAND (SM) WITH GREEN-BROWN CLAY MATRIX, MOTTLED, NO OBVIOUS ODOR. MOIST TO WET.

8.0' - 10.0' MEDIUM SAND (SM) WITH GREEN-BROWN CLAY MATRIX, MOTTLED, NO OBVIOUS ODOR. - WET. WATER SAMPLE ATTEMPTED, BUT COULD NOT BE OBTAINED.

COMMENTS:
90% RECOVERY ESTIMATED

SAMPLE B-15 @ 9.5'- 10.0'

CHG #: 88

LOGGED BY: JIM JACOBS

APPROVED BY: J.J.

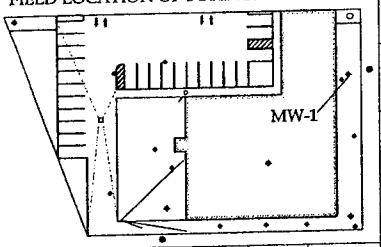
SOIL BORING AND WELL CONSTRUCTION LOG:

ENVIRONMENTAL BIO-SYSTEMS INC.

Project No. BP004C

Sheet 1 of 1

FIELD LOCATION OF BORING:



CLIENT/LOCATION: LUCY YU 860 AIRPORT ST., MOSS BEACH, CA	PLANNED USE: ENVIRONMENTAL	BORING DEPTH: 25'-0"	BORING/WELL NO.: MW-1
DRILLING CONTRACTOR: HEW	DRILL RIG TYPE: HSA	WELL DEPTH: 25'-0"	BORING DIAMETER: 8"
DRILL RIG OPERATOR: JORGE FERRARI	WELL MATERIAL: 2" PVC	SCREEN SLOT SIZE: 0.020	FILTER PACK: 2/12
WET SEAL: BENTONITE			DRILLING DATE: 3-11-04

SAMPLING METHOD:

MONITORING INSTRUMENT: PID

FIRST ENCOUNTERED WATER DEPTH: 21'-0"

STATIC WATER DEPTH - DATE: 5.2'

WELL CONSTRUCTION DETAIL	SAMPLING: BLOWS/6" INTERVAL	SAMPLING: INTERVAL	SAMPLING: RECOVERY	SAMPLING: ANALYTICAL	WATER LEVEL	DEPTH (FEET)	OVM READING (PPM)	SAMPLING INTERVAL: GRAVEL	SAMPLING INTERVAL: SAND	SAMPLING INTERVAL: FINES	GRAPHIC LOG
	6				▼	5	0.0				
	5					6					
	6					7					
						8					
						9					
	3					10	0.0				
	5					11					
	9					12					
						13					
						14					
	6					15	0.0				
	8					16					
	8					17					
						18					
						19					
	8				▽	20	0.0				
	6					21					
	3					22					
						23					
						24					
	10					25	0.0				
	18					26					
	19					27					
						28					
						29					
						30					

4" CONCRETE

4"-10.0' CLAYEY SAND (SC) -YELLOW BROWN (10YR 5/8)- DRY, MEDIUM STIFF

10.0'-20.0' CLAYEY GRAVEL (GC) - GRAY (2.5YR N4) - MOIST, POORLY GRADED, LOOSE

20.0'-25.0' SILTY SAND (SM) - YELLOW BROWN (10YR 5/8) - MOIST, POORLY GRADED, MEDIUM DENSE

25.0'- SILTY SAND (SM) - GRAY BROWN (5Y 5/2) - WET, POORLY GRADED, MEDIUM DENSE

CHG #:

LOGGED BY: Chandra Bell

APPROVED BY:

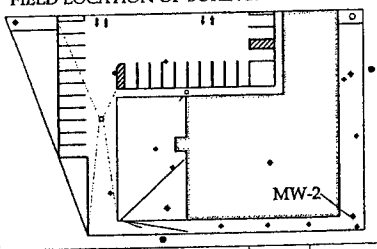
SOIL BORING AND WELL CONSTRUCTION LOG:

ENVIRONMENTAL BIO-SYSTEMS INC.

Project No. BP004C

Sheet 1 of 1

FIELD LOCATION OF BORING:



CLIENT/LOCATION: LUCY YU, 860 AIRPORT ST., MOSS BEACH, CA	PLANNED USE: ENVIRONMENTAL	BORING DEPTH: 25'-0"	BORING/WELL NO.: MW-2
DRILLING CONTRACTOR: HEW	DRILL RIG TYPE: HSA	WELL DEPTH: 25'-0"	BORING DIAMETER: 8"
DRILL RIG OPERATOR: JORGE FERRARI	WELL MATERIAL: 2" PVC	SCREEN SLOT SIZE: 0.020	FILTER PACK: 2/12
WET SEAL: BENTONITE			DRILLING DATE: 3-11-04

SAMPLING METHOD:

MONITORING INSTRUMENT: PID

FIRST ENCOUNTERED WATER DEPTH: 21'-0"

STATIC WATER DEPTH - DATE: 5.2'

WELL CONSTRUCTION DETAIL	SAMPLING: BLOWS/6" INTERVAL	SAMPLING: INTERVAL	SAMPLING: RECOVERY	SAMPLING: ANALYTICAL	WATER LEVEL	DEPTH (FEET)	OVM READING (PPM)	SAMPLING INTERVAL: GRAVEL	SAMPLING INTERVAL: SAND	SAMPLING INTERVAL: FINES	GRAPHIC LOG
						1					
						2					
						3					
						4					
	4		3			5	15				
	4		3			6					
	7		6			7					
						8					
						9					
						10					
						11					
						12					
						13					
						14					
	7		6			15	0.0				
	10		6			16					
	9		6			17					
						18					
						19					
	11		6			20	0.0				
	8		6			21					
	16		6			22					
						23					
						24					
	12		6			25	0.0				
	6		6			26					
	8		6			27					
						28					
						29					
						30					

4" CONCRETE

4"-5.0' CLAYEY SAND (SC) -DARK BROWN (7.5YR 3/2)- MOIST, MEDIUM STIFF

5.0'-9.0' SILTY SAND (SW) -RED BROWN (2.5YR 4/4)- WET, MEDIUM DENSE, WELL GRADED

9.0'-20.0' CLAYEY SAND (SC) - GRAY (2.5YR N4) - MOIST, MEDIUM STIFF

20.0'-26.5' WELL GRADED SAND (SW) - RED BROWN (2.5YR 4/4) - WET, MEDIUM DENSE

26.5'- CLAY (CL) - DARK BROWN (7.5Y 3/2) - WET, MEDIUM STIFF

CHG #:

LOGGED BY: Chandra Bell

APPROVED BY:

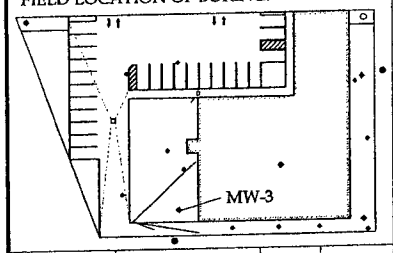
SOIL BORING AND WELL CONSTRUCTION LOG:

ENVIRONMENTAL BIO-SYSTEMS INC.

Project No. BP004C

Sheet 1 of 1

FIELD LOCATION OF BORING:



CLIENT/LOCATION: LUCY YU 860 AIRPORT ST., MOSS BEACH, CA	PLANNED USE: ENVIRONMENTAL	BORING DEPTH:	BORING/WELL NO.: MW-3
DRILLING CONTRACTOR: HEW	DRILL RIG TYPE: HSA	WELL DEPTH: 25'-0"	BORING DIAMETER: 8"
DRILL RIG OPERATOR: JORGE FERRARI	WELL MATERIAL: 2" PVC	SCREEN SLOT SIZE: 0.020	FILTER PACK: 2/12
WET SEAL: BENTONITE			DRILLING DATE: 3-12-04

SAMPLING METHOD:

MONITORING INSTRUMENT: PID

FIRST ENCOUNTERED WATER DEPTH: 10'-0"

STATIC WATER DEPTH - DATE: 3.7'

WELL CONSTRUCTION DETAIL	SAMPLING: BLOWS/6" INTERVAL	SAMPLING: INTERVAL	SAMPLING: RECOVERY	SAMPLING: ANALYTICAL	WATER LEVEL	DEPTH (FEET)	OVM READING (PPM)	SAMPLING INTERVAL: GRAVEL	SAMPLING INTERVAL: SAND	SAMPLING INTERVAL: FINES	GRAPHIC LOG
						1					
						2					
						3					
					▼	4					
	3		6			5	0				
	7		6			6					
	11		6			7					
						8					
						9					
					▽	10	0.0				
	1		0			11					
	3		3			12					
	5		6			13					
						14					
						15					
						16					
						17					
						18					
						19					
						20					
						21					
						22					
						23					
						24					
						25					
						26					
						27					
						28					
						29					
						30					

FILL MATERIAL

4.0'-10.0' SANDY GRAVEL (GP) -YELLOW BROWN (10YR 5/8)- MOIST, LOOSE

10.0'-25.5' CLAYEY SAND (SC) - DARK BROWN (7.5YR 3/2) - WET, LOOSE

CHG #:

LOGGED BY: Chandra Bell

APPROVED BY:

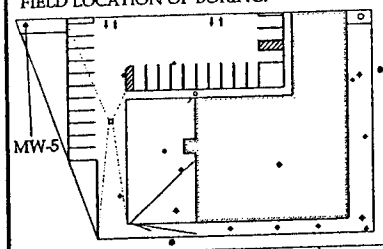
SOIL BORING AND WELL CONSTRUCTION LOG:

ENVIRONMENTAL BIO-SYSTEMS INC.

Project No. BP004C

Sheet 1 of 1

FIELD LOCATION OF BORING:



CLIENT/LOCATION: LUCY YU 860 AIRPORT ST., MOSS BEACH, CA	PLANNED USE: ENVIRONMENTAL	BORING DEPTH: 25'-0"	BORING/WELL NO.: MW-5
DRILLING CONTRACTOR: HEW	DRILL RIG TYPE: HSA	WELL DEPTH: 25'-0"	BORING DIAMETER: 8"
DRILL RIG OPERATOR: JORGE FERRARI	WELL MATERIAL: 2" PVC	SCREEN SLOT SIZE: 0.020	FILTER PACK: 2/12
WET SEAL: BENTONITE			DRILLING DATE: 3-11-04

SAMPLING METHOD:

MONITORING INSTRUMENT: PID

FIRST ENCOUNTERED WATER DEPTH: 12'-0"

STATIC WATER DEPTH - DATE: 4.4'

WELL CONSTRUCTION DETAIL	SAMPLING: BLOWS/6" INTERVAL	SAMPLING: INTERVAL	SAMPLING: RECOVERY	SAMPLING: ANALYTICAL	WATER LEVEL	DEPTH (FEET)	OVM READING (PPM)	SAMPLING INTERVAL: GRAVEL	SAMPLING INTERVAL: SAND	SAMPLING INTERVAL: FINES	GRAPHIC LOG	
						1						
						2						
						3						
						4						
			1			5						
	3		0									
	4		0									
	6					6						
						7	0.0					SANDY GRAVEL (GP) RED GRAY- MOIST, LOOSE, W/COBBLES. 1" RECOVERY FILL
						8						
						9						SILTY CLAY (CL) -YELLOW BROWN (210YR 5/8)- MOIST, MEDIUM STIFF, TRACE SAND
						10	0.0					
	1		6			11						
	3		6									
	6		6			12						SILTY SAND (SW) - YELLOW BROWN (10YR 5/8) - MOIST, MEDIUM DENSE, TRACE GRAVELS, FINE TO COURSE SAND
						13						
						14						
						15						
	10		6			16	11					
	15		6									
	16		6			17						WELL GRADED SAND (SW) - YELLOW BROWN (10YR 5/8) - WET, MEDIUM DENSE
						18						
						19						
						20						
						21						
	7		3			22	21					SILTY SAND (SW) - YELLOW BROWN (10YR 5/8) -WET, MEDIUM DENSE, FINE-MEDIUM GROUND, WELL GRADED, TRACE GRAVELS
	12		6									
	16		6			23						
						24						SILTY SAND (SW) - GRAY (2.5YR N4) -WET, MEDIUM DENSE, FINE- GRAINED, POORLY GRADED
						25						
	4		6			26	336					
	7		6									
	10		6			27						
						28						
						29						
						30						

CHG #:

LOGGED BY: Chandra Bell

APPROVED BY:

APPENDIX E

SUMMARY OF GROUNDWATER LABORATORY ANALYTICAL DATA
In vicinity of 860 Airport Street
Moss Beach, California

TABLE 1
AIRPORT PROPERTY
Henshaw & Assoc. report: 3 borings (B-1 to B-3) on Airport St., & B-4 on 860 Airport St.

Sample ID #	Date Sampled	Depth ft. BGS	111 TCA (µg/L)	TCE (µg/L)	PCE (µg/L)	cis-1,2-DCE (µg/L)	fuel range (µg/L)
B1	3/8/1999	20	ND	ND	ND	ND	ND
B1	3/8/1999	70	ND	ND	ND	ND	ND
B2	3/8/1999	18	0.6	ND	ND	ND	ND
B2	3/8/1999	60	ND	ND	ND	ND	ND
B3	3/8/1999	19	ND	ND	ND	ND	ND
B3	3/8/1999	60	ND	ND	ND	ND	ND
B4	5/3/2001	25	ND	16	3.6	1.6	440
B4	5/3/2001	60	ND	ND	ND	ND	ND

TABLE 2
Summary of soil sample analytical results (mg/kg)
Clearwater borings B1, B3, B5 and B5; January 2002

Sample	**B1 2-4'**	**B1 5.5-7.5'**	**B3 2-4'**	**B3 5-7'**	**B5 2-4'**	**B5 6-8'**	**B7 2-4'**	**B7 6-8'**
Date Sampled	1/8/2002	1/8/2002	1/9/2002	1/9/2002	1/9/2002	1/9/2002	1/10/2002	1/10/2002
Depth	3.5-4.0'	7.0-7.5'	3.5-4.0'	6.5-7.0'	3.5-4.0'	7.5-8.0'	3.5-4.0'	7.5-8.0'
TPH-gasoline	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0
TPH-diesel	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0
TPH-motor oil	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0
TPH-jet fuel	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0
PCE	<0.0050	<0.0050	<0.0050	<0.0050	0.0094	<0.0050	<0.0050	<0.0050

PCE Tetrachloroethene

TABLE 3
SUMMARY OF GROUNDWATER LABORATORY ANALYTICAL DATA
from Clearwater Group report on 860 Airport Street

Sample ID #	Date Sampled	Depth ft. BGS	111 TCA (µg/L)	TCE (µg/L)	PCE (µg/L)	cis-1,2-DCE (µg/L)	fuel range (µg/L)
B-2	1/9/2002	15	ND	ND	ND	ND	1.6 ug/L toluene
B-2	1/9/2002	25	ND	ND	ND	ND	3.6 ug/L toluene; 1.1 ug/L xylenes
B-2	1/9/2002	44	ND	ND	ND	ND	51 ug/L TPH-g; 3.7 ug/L toluene; 1.7 ug/L xylenes
B-4	1/9/2002	28	ND	0.80	1.7	ND	3.5 ug/L toluene; 1.8 ug/L xylenes
B-4	1/9/2002	44	ND	2.70	1.1	ND	2.4 ug/L toluene
B-6	1/9/2002	15	ND	69	790	3.2	1 mg/L TPHmo; 1.2 mg/L TPH-g; 0.91 ug/L toluene; 2.5 ug/L xylenes
B-6	1/9/2002	44	ND	1.4	21	ND	1.8 ug/L toluene
B-8	1/9/2002	13	ND	ND	ND	ND	0.76 ug/L toluene
B-8	1/9/2002	27	ND	ND	ND	ND	1.1 ug/L toluene
B-8	1/9/2002	44	ND	ND	ND	ND	2.8 mg/L TPHmo; 82 ug/L TPH-g; 0.64 ug/L benzene; 6.0 ug/L toluene; 1.6 ug/L ethylbenzene; 4.5 ug/L xylenes; 6.7 ug/L styrene; 1.9 ug/L 1,2,4 TMB

TABLE 4 - SUMMARY OF LABORATORY ANALYTICAL FOR SOIL:TPH ANALYSIS

Lucy Yu Property
860 Airport Street
Moss Beach, California

Sample		Date	TPH-Diesel	TPH-Motor Oil	TPH-Jet Fuel	TPH-Kerosene
Soil Samples	Total Depth Drilled	Sampled	mg/Kg	mg/Kg	mg/Kg	mg/Kg
B9@10.0-10.5'	12.0'	11/20/2003	6.9	15	ND	ND
B10@5.5-6.0'	6.0'	11/20/2003	1.6	ND	ND	ND
B11@5.5-6.0'	6.0'	11/20/2003	3.8	ND	ND	ND
B12@5.5-6.0'	6.0'	11/20/2003	2.5	ND	ND	ND
B13@9.5-10.0'	10.0'	11/20/2003	2.0	ND	ND	ND
B14@9.5-10.0'	10.0'	11/20/2003	ND	ND	ND	ND
B15@8.0-8.5'	10.0'	11/20/2003	ND	ND	ND	ND
MW-5@21.5'	25	3/12/2004	ND	ND	ND	ND
		Method	EPA 8260B	EPA 418.1	EPA 8015M	EPA 8260B

Notes:

TPH-d = total petroleum hydrocarbons as diesel
Hydrocarbons reported as "jet fuel" and "kerosene" were quantitated against a diesel standard.
Hydrocarbons reported as TPH-d do not exhibit a typical diesel chromatographic pattern for samples from borings B9, B10,l B11, B12 and B13 (all the samples that contained TPH-d).
These hydrocarbons are higher boiling than typcial diesel fuel. (From Kiff Case Narrative).
ND = "non-detect" or below the laboratory reporting levels

TABLE 5 - SUMMARY OF LABORATORY ANALYTICAL FOR SOIL: ALL OTHER ANALYTES

Lucy Yu Property
860 Airport Street
Moss Beach, California

Sample		Date	BTEX	Solvents: 1,1,1 TCA	Solvents: TCE	Solvents: PCE	Solvents: cis-1,2-DCE
Soil Samples	**Total Depth Drilled**	**Sampled**	mg/Kg	mg/Kg	mg/Kg	mg/Kg	mg/Kg
B9@10.0-10.5'	12.0'	11/20/2003	ND	ND	ND	ND	ND
B10@5.5-6.0'	6.0'	11/20/2003	ND	ND	ND	ND	ND
B11@5.5-6.0'	6.0'	11/20/2003	ND	ND	ND	ND	ND
B12@5.5-6.0'	6.0'	11/20/2003	ND	ND	ND	ND	ND
B13@9.5-10.0'	10.0'	11/20/2003	ND	ND	ND	ND	ND
B14@9.5-10.0'	10.0'	11/20/2003	ND	ND	ND	ND	ND
B15@8.0-8.5'	10.0'	11/20/2003	ND	ND	ND	ND	ND
MW-5@21.5'	25[i]	3/12/2004	ND	ND	ND	ND	ND
		Method	EPA 8260B	EPA 8260B	EPA 8260B	EPA 8260B	EPA 8260B

Notes:

BTEX	benzene, toluene, ethylbenzene and total xylenes
111 TCA	1,1,1 Trichloroethane
TCE	Trichloroethene
PCE	Tetrachloroethene
cis-1,2-DCE	cis-1,2-Dichloroethene

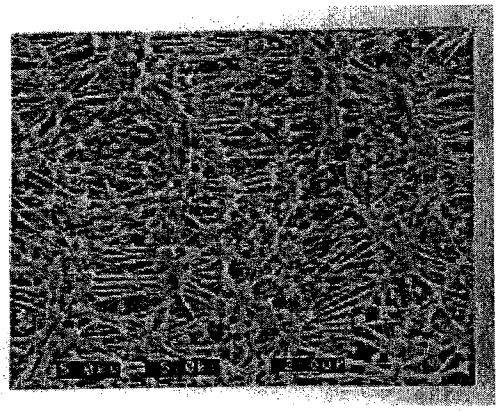
ND = "non-detect" or below the laboratory reporting levels

APPENDIX F

STATEMENT OF PROCEDURES
Clearwater Group

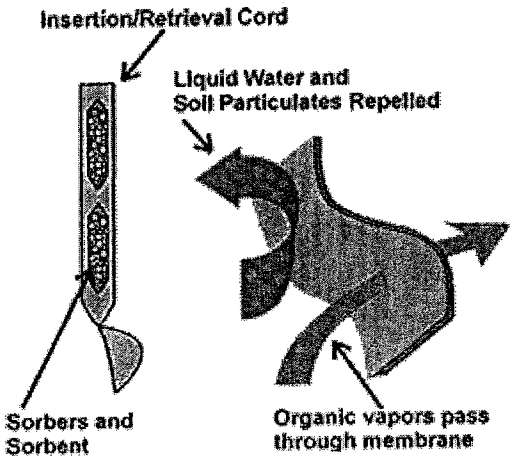
PASSIVE GORE-SORBER® SOIL GAS SURVEY

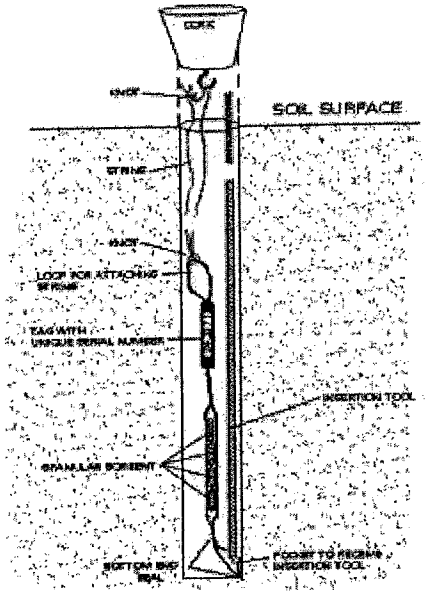
The GORE-SORBER® Module is a patented, passive soil gas sampler, is used to evaluate soil gas for contaminant source identification in environmental projects. The temporary survey process involves planting a dozen or more Gore-sorber modules in a sampling grid designed to meet the project objectives.



The module is constructed entirely of GORE-TEX® membrane. This membrane is an expanded polytetrafluoroethylene (ePTFE) which is a chemically inert, microporous (vapor permeable), and hydrophobic (waterproof). Much of the node and fibril structure is void space available for vapor transfer. Pore spaces are designed to be orders of magnitude smaller than a liquid drop of water.

The module is constructed of a hollow ePTFE insertion/retrieval cord that contains smaller ePTFE tubes (sorbers). The sorbers contain various polymeric and carbonaceous adsorbents selected for their affinity to a wide variety of volatile and semi-volatile organic compounds, while minimizing the uptake of water vapor.





The membrane facilitates vapor transfer across the entire surface area while providing strength for retrieval from the subsurface. Organic vapors present in the soil gas migrate unimpeded through the membrane to the adsorbent housed in the sorbers. This design prevents soil particles and liquid water from impacting sample integrity.

The module itself is approximately one foot in length and contains enough sorbers for two samples. This allows for duplicate analyses, if required, or a back up analyses in the event of an instrument malfunction. Additional sorbers can be placed in the module if a greater number of samples are required. Each module is stored in individual containers and is uniquely numbered and tracked throughout the project.

Trip Blanks

Additional modules are provided with each project to document impact to the modules during transit, storage and installation/retrieval away from Gore's facility. Trip blanks are identical to the field-installed modules. The client selects which modules are to be trip blanks and leaves them unopened during all phases of the passive soil gas survey.

Module Installation for GORE-SORBER® Screening Surveys

In general, the installation and retrieval of the modules is simple. A narrow diameter hole (three-quarter inch) is drilled into the subsurface to a maximum depth of three feet, the recommended depth for soil gas sampling in environmental sampling applications (1, 2). The hole can be created using hand tools such as a slide hammer and tile probe, a Geoprobe-type or similar direct push probe rig or a rotary hammer drill with a 36-inch carbide-tipped drill bit attached. Once the hole is created, a length of cord is tied to the loop end of the module, and a cork is tied to the surface end of the cord. A stainless steel insertion rod (supplied by Gore) is placed in the pocket at the opposite end of the module, and the unit is inserted down the hole. The insertion rod is removed and the cork tamped flush into the ground at the surface. The site map is marked with the location of the module and its serial number, and the Chain of Custody undated. Global positioning systems (GPS) are now being used to record actual coordinate information in the field.

Following the recommended exposure period, each module is retrieved, the cord and cork discarded properly and the module is returned to its respective container. The serial number and location are verified, and the modules are returned to Gore's laboratory for analysis. The Chain of Custody is updated and returned with the modules.

DETAILS OF THE MODULE INSTALLATION

To facilitate the installation of the modules, it is recommended that the cord and corks be prepared prior to going to the field. For the installation of each module, cut a piece of the supplied polypropylene cord to a length of approximately 7.0 feet or 2.25 meters. Tie the ends of the cord together using a non-slip knot (square knot is suggested - see below). This loop should be long enough to allow for an installation of three feet (one meter) into the subsurface. Pass the looped cord through the eyelet in the cork and pull it back through itself. This will attach the cord to the cork. Wrap the remainder of the cord around the cork and secure the cord/cork combination with a rubber band. The cork and cord are now ready to attach to the module after the pilot hole is created at the installation location.

STATEMENT OF PROCEDURES

Clearwater Group

Square knot instructions (see Figure 1)

1. Take an end of the cord in each hand.
2. Pass the left-hand cord over the right-hand cord and wrap it around the right-hand cord.
3. Take the cord end that is now in your right hand, place it over the cord end in your left hand and wrap it around that cord.
4. Pull the cord carefully to tighten the knot.

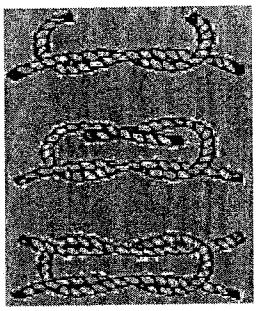


Figure 1.Square Knot

- Always obtain utility clearance before digging or probing.
- We do not recommend installation of modules within 15 feet of monitoring wells, utility trenches or other conduits, which may act as a preferential pathway for soil vapor migration.
- Drive/drill narrow pilot hole at desired pre-marked location. In sandy soils, occasionally the pilot hole will collapse after the drill or tile probe is removed. Adding deionized water to the sandy soil will temporarily compact the soil and keep the hole open for module insertion.
- Wearing clean surgical gloves, remove module from numbered container and re-seal the jar (this numbered container should correspond to the numbered module ID tag - please verify this).
- Attach the cord and cork to the module by passing the looped cord through the loop on the module and pull the cord/cork back through itself.
- Place insertion rod into the pre-cut pocket at the base of the module and lower it into the hole. If you encounter resistance remove the module and ream the hole and re-insert the module.
- Once deployed to the desired depth, press the insertion rod against the side of the hole and twist slightly to release the module. Remove the rod and push any excess cord into the pilot hole and plug it with the cork. (See Figure 2 for schematic of completed module installation.)
- Indicate the module number, date and time of installation and any pertinent comments on the installation/retrieval log. Write the module serial number on the site map adjacent to the appropriate map location.
- To minimize sample location errors, it is preferable to record the GORE-SORBER Module location on the field map. However, if another sample numbering system is used, information relating the sample number system to the GORE-SORBER Module serial numbers must be provided either on the Installation and Retrieval Log, or in a separate table.

- Clean the tile probes or drill bits and the insertion rod prior to use at the next location. Replace the surgical gloves as necessary before handling any modules.
- Following module installation, the modules selected as trip blanks should be kept in the sample box provided and stored as described above in "STORAGE" until sample retrieval.

DETAILS OF THE MODULE RETRIEVAL

- Following the module exposure period (usually 10 - 14 days) identify and check each module location in the field using the site map.
- Remove the cork with a penknife or corkscrew. Grasp the cord and pull the module from the ground; verify the module ID number. Cut off and discard the cork and cord. Place the entire module in its labeled container and tightly secure the lid.
- Use caution when screwing down the lid on the sample jars. Be sure the seal is tight and that no part of module or any dirt/ debris is pinched in the jar threads. Over-tightening may cause breakage.
- Replace the sample container in the box. Where possible, please attempt to keep modules in numbered sequence to expedite sample check-in and processing.
- Complete the module retrieval date/time on the installation/retrieval log.
- Do not use Styrofoam "peanuts" as packing material. Bubble packing is acceptable. Water ice can be added if desired, but cooling in general is not necessary. If shipping with ice, please take precautions to keep boxes dry (perhaps shipping in a cooler).
- Return the samples with insertion rod and paperwork (preferably by overnight courier) to:

Screening Modules Laboratory
W.L. Gore & Associates, Inc.
100 Chesapeake Blvd.
Elkton, MD 21921
Phone: (410) 392-7600

Attn: NOTIFY LAB IMMEDIATELY UPON DELIVERY!!

IMPORTANT: Samples should not be shipped for weekend or holiday delivery at GORE.

Module Installation for the GORE-SORBER® Exploration Surveys

Installation and retrieval of the module in this application is similar to the screening surveys. However, these surveys tend to be carried out in remote locations over large areas necessitating portable hand tools. A narrow diameter hole (1 cm) is created to

depths of 24 inches (60cm) below grade by hammering a narrow steel tool, such as a long screwdriver, into the ground.

After the pilot hole is completed, modules are tied to a section of cord and inserted into the completed hole using the stainless steel insertion rod. The cord is secured at the surface by collapsing the hole. The location is marked on a map and location coordinates are secured where possible with a GPS having file download capabilities.

Module retrieval requires that field personnel locate the retrieval cord and manually pull the module from each location. The cord is separated from the module and discarded properly. The exposed modules are resealed in their respective containers and returned to Gore for analysis. The appropriate paperwork including the Chain of Custody is returned with the modules. Additional installation and retreival information can be found by clicking here.

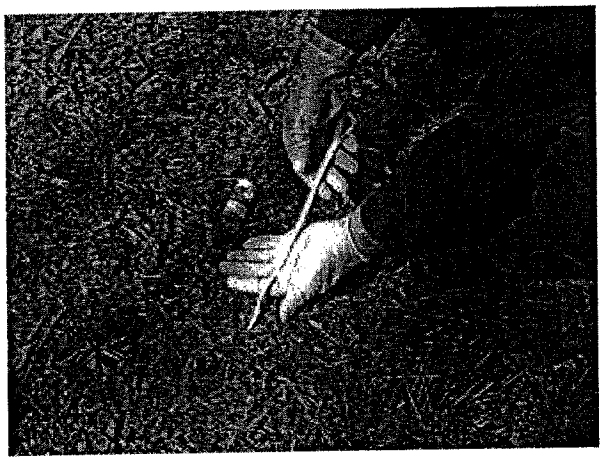
Creating the Installation Hole

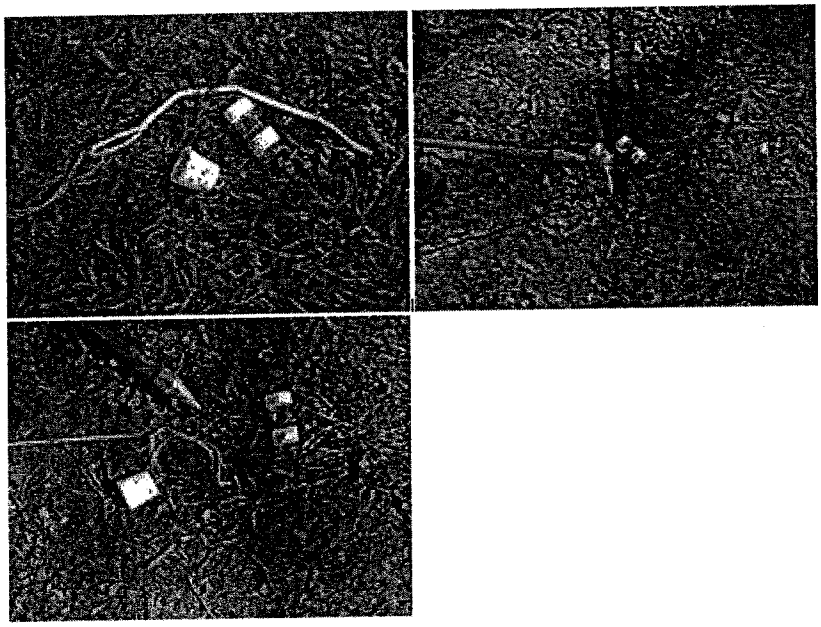
Narrow diameter, uncased installation holes are easily prepared using a slide hammer and long tile probe (left), a rotary hammer drill with a long carbide tipped bit (typically used to create the installation hole through impermeable layers such as asphalt; middle), or with a handheld hammer and steel rod (right).

Installing a Module

The photo at left illustrates a module, its container, and a length of string tied to the loop of the module. String is cut to the appropriate length in the field and attached to each module loop during the installation process. The insertion rod is placed in the pocket at the opposite end of the module, and a cork it tied to the string. The entire unit is slid down into the installation hole (middle photo). The insertion rod is pulled out of the hole, decontaminated, and is ready for use at the next sample location. A quick twist of the rod while in the hole, or placing the unit against the side of the hole while pulling the rod out of the ground, will cause the module to slip off of the insertion rod and remain at the required installation depth. The installation hole is plugged with a cork at the surface. The field map and installation notes are updated.

FIELD PHOTOS: Using the Gore-Sorber Modules





String, an insertion rod, and corks (as needed) are supplied by Gore.
NOTE: For the exploration surveys, corks are not required to seal the installation hole. The cord is secured at the surface by collapsing the hole.

INTERPRETATION

Soil Gas Data Interpretation

In general, the detection of VOCs and SVOCs in field-exposed modules indicates that potential sources (i.e. soil adsorbed-, dissolved- and separate-phase organics) of the detected compound(s) may exist in proximity to the module location. The module will adsorb migrating gases present in the adjacent media (soil or water). The processes that govern the movement of gases in the subsurface are complex, involving interactions between the soil, soil moisture, pore gasses, ground water, natural and human made barriers, and the volatile contaminant. Chemical and microbiological processes can further influence the presence of soil gases, by reacting with or metabolizing these compounds.

Vapor pressure, water solubility, molecular weight, and the Henry's Law partitioning coefficient, are important chemical parameters to consider when interpreting soil gas data. The Henry's Law coefficient reflects a compound's behavior when partitioned into air and water, which aids in understanding an organic chemical's likely state in the subsurface. An understanding of the site geology (geologic structure, geochemistry), hydrogeolology and operational history are also important when interpreting the distribution of soil gases.

A strong relative correlation is often observed between the soil gas mass levels and the compound concentrations in the subsurface.

Contour Maps

Graphic presentation of the data extracted from GORE-SORBER® Modules is normally presented by overlaying the contamination patterns detected during analysis onto CAD maps supplied by the customer. Either minimum surface curvature or kriging models are employed. Standard "B-sized" (11" x 17") color contour plots are included with each project, however up to "E-size" (24" x 36") plots are available, if requested. The site plan base map(s) provided by the customer must include a scaled drawing with relevant site features, and a layer containing the sample locations and module serial numbers for the survey.

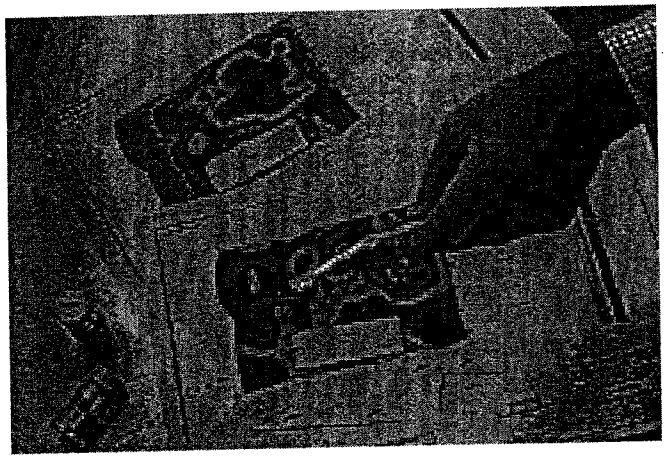
Tentatively Identified Compounds (TICs)

Some of the modules may contain non-target analytes (compounds not on GORE's target list). GORE can provide tentative identification of prominent non-target compound peaks

(TICs). These compounds can include non-target soil gas analytes, and contaminants introduced during sample transport and installation/retrieval activities.

Final Reporting

The results of the GORE-SORBER® Screening Survey will be summarized in a brief report, which will include the chain of custody, analytical data summary table, sample chromatograms, and color contour maps. A laboratory analytical data deliverables package incorporating results of samples, standards and blanks, and mass spectra compared to standards for all detects can be provided as an option.



References:

1 – Field Sampling Procedures Manual, ed. J.R. Schoenleber and P.S. Morton, New Jersey Department of Environmental Protection and Energy, 364pp., 1992

2 – Devitt, D. A., Evans, R.B., Jury, W. A., and Starks, T.H., Soil Gas Sensing for Detection and Mapping of Volatile Organics, National Groundwater Association, Dublin, OH

NOTES: This statement of procedures was compiled from materials provided by Gore. http://www.gore.com/surveys/

GENERAL

1. What is a GORE™ Survey?
The GORE™ Survey (formerly known as the GORE-SORBER® Screening Survey) is the most accurate, comprehensive, and proven passive sampling technology, which allows environmental consultants to identify and map volatile and semi-volatile organic compounds in air, soil and water. The survey is used for site assessment, optimizing remediation programs and monitoring, vapor intrusion investigations, and surface and ground water sampling and monitoring. The survey includes GORETM Modules, analysis, data reporting in spreadsheet format, contaminant contour mapping, and a final report, in paper and electronic formats.

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2. Where can GORETM Modules be deployed?
The unique construction of the GORETM Module allows it to be placed in unsaturated and saturated soils, sediments, groundwater and other aqueous environments, beneath building slabs and other paved areas, and in outdoor and indoor air environments. No further modification or calibration to the module is necessary to sample any of these environments, making the GORETM Module a universal sampler.

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3. Can the GORE™ Survey be used in vapor intrusion investigations?
Yes, the survey is well-suited for vapor intrusion investigations. The high sensitivity, minimal data variability and accuracy of a passive, time-integrated, sorbent-based sampler, combined with the simple and unobtrusive installation in soils, beneath slabs, and in air, makes the GORE™ Survey a viable and effective sampling alternative to active vapor sampling methods.

The GORE™ Survey is an effective initial site characterization tool for vapor intrusion investigations. With the ability to report data in vapor concentration units, risk assessments can also be ascertained.

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4. Can the GORETM Module be used to monitor concentration trends of compounds in groundwater?
Yes! The US EPA ETV program verified this application claim. The modules can be deployed easily in wells as small as one-half inch in diameter. Uptake of compounds dissolved in water is rapid, (typically one hour) and the data can be reported in units of mass and/or concentration. In general, there is a strong correlation between the groundwater data collected passively and with conventional methods. The associated low field costs, non-purge requirements, and unobtrusive sampling make this a viable, effective groundwater sampling alternative.

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5. How well has the GORE™ Survey been received?
The feedback continues to be extremely positive, and there has been an overwhelming response to its acceptance by environmental consultants, end-users, and regulators. Users are continually impressed with the versatility of the collector, the quality of the data, and the level of technical support. With the concentration reporting capability, the survey is more versatile.

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6. How long has the GORE™ Survey been available?
The GORE™ Survey was introduced in late 1992. Since that time, over 3,000 surveys have been completed worldwide, for virtually all site types and geological and climatological conditions - in air, soil and water.

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7. What soil gas survey design issue impacts results?
Undersampling! In an effort to save money, undersampling during the site characterization part of the environmental investigation may occur. In other words, not enough samples are collected to characterize the site properly. Questions pertaining to the subsurface impact are inadequately answered, leading to uncertainty, an unhappy client, and additional regulator scrutiny. The next phase is to expand the soil gas survey, which increases the overall project cost, and adds significant time to the site investigation for all parties involved. Undersampling should be avoided.

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8. For soil gas sampling, what sample spacing do you recommend?
The size of the area under investigation, the objective of the survey, and the funds available largely dictate sample spacing. For soil gas sampling, we recommend a sample spacing of 25 to 70 feet, with many surveys utilizing a 50-foot sample spacing. If the objective is to pinpoint the locations of likely sources of contamination, or define a fracture in bedrock for example, then smaller sample spacing is recommended. Larger sample spacing can be employed in areas not believed to be contaminated or if the objective is a broad screening of a large area. If contamination is encountered in these areas, subsequent high-resolution soil gas sampling can be completed later and combined onto one set of maps, resolving the subsurface impact accurately.

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9. What is the typical time frame to complete a GORE™ Survey?
A Final Report is issued approximately two to four weeks following the receipt of the modules at Gore's laboratory. This time includes the seven to ten business day analysis period, along with the subsequent data table generation, contour mapping, and final report preparation. If a shorter turn around time is required, please call.

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10. How does the GORETM Module collect chemical compounds?
The GORETM Module (formerly known as the GORE-SORBER® Screening Module) is constructed of a GORE-TEX® membrane tube, a chemically-inert, waterproof, yet vapor-permeable polymer, which houses engineered adsorbents. Volatile and semi-volatile compounds present in air, soil gas or water diffuse unimpeded through the membrane to the adsorbent material, while liquid water and soil particles are prevented from contacting the adsorbent. The membrane has over 80% open area and pore sizes that are 1,000 times larger than the largest SVOC molecule, thus offering essentially no resistance to vapor migration to the adsorbent. Compounds moving to the inside of the membrane are immediately collected by the adsorbents.

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11. Can the GORETM Modules be placed in saturated soils, sediment and water?
Yes! The waterproof, vapor permeable membrane construction of the module allows it to be placed in virtually any aqueous or saturated soil environment. Dissolved contaminants present partition to vapor, move across the membrane and onto the adsorbent. Modules can be used to monitor trends in groundwater quality by placing the module in the screened intervals of monitoring wells. The hydrophobic nature of the standard membrane and the small pore size, prevent liquid water from penetrating the membrane to depths of 30 feet of water.

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12. Is the GORE™ Survey an accepted approach to sampling volatile and semivolatile compounds in air, soil, and water?
The GORE™ Survey has been approved and accepted for use in numerous workplans by state and federal regulators, and is widely known and used by environmental consultants and regulators alike.

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13. With a fixed amount of adsorbent in each GORETM Module, is saturation an issue?
Ample amounts of adsorbent, and therefore, large numbers of receptor sites for organic molecules are present in the module, and should be suitable for most vapor sampling programs. However, sites known to have high concentrations could saturate the adsorbent during the sampling interval. Similarly, long exposure times could lead to saturation. In the absence of site knowledge, a seven to 14 day exposure period is recommended to identify the most contaminated area.

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INSTALLATION and RETRIEVAL

1. How should the field installation progress?
For soil gas and subslab sampling, we recommend laying out your sampling grid first before installing the modules into the subsurface. This will allow you to determine the proper sample locations in the field, identify underground utilities, and overcome field obstacles. Once the

sample locations are marked (i.e., using pin flags or other non-volatile marking methods), the module installation can begin.

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2. What types of tools are required for drilling the narrow-diameter, holes for soil gas and subslab sampling?
Unobtrusive hand tools are usually all that are required to drill a narrow (¾ inch diameter) hole three feet into the subsurface. The installation hole usually does not require any casing. Slide hammers equipped with tile probes, and rotary hammer drills equipped with carbide tipped drill bits will suffice for most GORETM Module installations. These tools can be purchased from a variety of field equipment vendors or rented from industrial tool rental centers. "Geo-Probe" type tools can be used to create a hole for deeper installations.

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3. What is your recommended sampling depth for passive soil gas sampling?
There are no limitations on depth for sampling soil gas using the GORE™ Module. Sampling depths are somewhat dependent on the investigation objectives and/or site restrictions (e.g., unexploded ordnance).

Soil gas sampling should be collected at a depth to minimize surface and near-surface variables that may influence the soil gas signal. The typical installation of the GORE™ Module is three feet below ground surface. This drilling depth is achievable with simple hand tools. The results of more than 3,000 surveys demonstrate there is no adverse impact on sampling the soil gas at this depth. In addition, successful GORE™ Surveys have been conducted with shallower and deeper module installations.

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4. How are the GORE™ Modules inserted into the subsurface installation holes?
A stainless steel insertion rod is supplied with each GORE™ Survey order. One end of the rod fits into a small pocket cut in the GORE™ Module. The opposite end of the module is tied to a strong cord, which is then tied to a cork (cord and cork supplied by Gore). The assembly is slid into the hole to depth, and the rod extracted. The module will slide off the end of the insertion rod with a quick twist, or by pressing the assembly against the side of the hole when extracting the rod. The hole is sealed with the cork. The module serial number and sample location are noted on the field map, and the Installation and Retrieval Log is updated as the installation progresses to the next sample location. For best results, the insertion rod (and the installation hole drilling equipment) should be cleaned to remove soil, between sample locations.

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5. How are the GORE™ Modules deployed for subslab vapor sampling?
If the objective is to delineate the contaminant impact at depth, then the GORETM Modules should be inserted into narrow-diameter installation holes that extend to at least three feet below

the slab and beneath any pooling of vapors under the slab. As with soil gas sampling, the module is secured by a string and cork. The hole can be covered with a bentonite patch for added safety and sample integrity in high traffic areas.

If the sampling is part of a vapor intrusion investigation, the GORETM Modules can be inserted into holes extending immediately beneath the bottom of the slab, and secured as above. For vapor concentration data, exposure times should be one to three days.

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6. How many GORE™ Modules can be installed in a typical day for soil gas sampling?
Under ideal conditions, two (or three) experienced field technicians can install 50 to 70 or more GORETM Modules during a regular workday (this assumes the sample grid has been established prior to the installation, and no significant obstacles are encountered in the field). Typically, one person drills the installation holes, while the second person installs the modules and maintains the field notes, maps, and installation log.

a) For sampling beneath interior building slabs?
The average number installed will depend on drilling time through the slab, and other obstacles encountered, if any.

b) For sampling beneath other impermeable surfaces (e.g., parking lots)?
An experienced field crew can install 50 GORETM Modules on average, assuming no significant field obstacles are encountered.

c) For sampling indoor and outdoor air?
Deploying the GORETM Module in air is quick and easy. For example, simply suspend the module from an interior ceiling by string at the required height. Numerous modules could be deployed in an hour's time.

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7. How long does it take to retrieve the GORE™ modules following their exposure?
If the sample locations remain marked in the field, also with minimal or no vandalism, the retrieval process takes a fraction of the time it took to install the samples. Two experienced field technicians can retrieve more than 120 modules in a half-day for soil gas investigations. Similar numbers are achievable with subslab and air sampling retrieval events. Field costs may be lowered further by having one technician retrieve the modules.

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8. What is the recommended exposure period for the GORE™ Modules?
For site screening using soil gas or subslab vapor sampling, a 10 to 14-day period will most likely allow the samplers to reach a state of equilibrium with the surrounding environment, and provide a representative site distribution. Longer exposure periods do not appear to be beneficial except at sites where depth to contaminated groundwater is great, the contaminant levels are very

low, or the contaminants of concern have high molecular weights such as PAHs. GORE™ Surveys have been successful with exposure periods of a few hours to a few days.

For vapor concentration data reporting, shorter time periods of three days in air and one to seven hours in water, are preferred at sites known or suspected to have high concentrations of contaminants in vapor. This exposure period minimizes the potential for adsorbent saturation.

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9. Do you recommend shipping the GORE™ Modules on ice?
Validation studies were conducted involving module shipping and storage under extreme and varying temperature conditions. The module and sample jar design eliminate any need for refrigerated storage or shipment on ice. This lowers the shipping and handling costs, and increases the flexibility in clients' return shipping schedules.

Gore recommends that steps are taken to ensure a tight seal on the glass container: Remove all visible soil from the jar threads and check to see that the module tubing is not pinched between the jar lid and jar. Over tightening will crack the jar lid.

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SAMPLE ANALYSIS

1. What types of adsorbents do you use?
Engineered polymeric and carbonaceous adsorbents are used. These adsorbents have a strong affinity for a broad range of compounds (VOCs, SVOCs, and PAHs) present in fuels, chlorinated solvents, and other chemical mixtures, but are hydrophobic (water repellent).

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2. What types of target compounds do you routinely report?
Several target analyte lists are available depending on the compounds of interest, and include petroleum-related and chlorinated compounds. The analytical options include the most commonly requested compounds for environmental investigations, and include compounds in the C2 to C20 range. Non-target compounds that have favorable properties for detection in soil gas can be reported per request.

In addition, explosive breakdown compounds, PCBs, pesticides, herbicides, elemental mercury, sulfur compounds, and chemical warfare breakdown compounds have been successfully reported using the GORETM Module.

If there are compounds of concern that are not part of Gore's analytical options, call us, and our staff of experienced chemists will provide an informed answer as to whether the survey can report those compounds with confidence.

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3. What classes of compounds are not well suited for vapor detection?
The GORE™ Survey has reported compounds as "light" as vinyl chloride through "heavy" compounds up to and including pyrene in the vapor state. Compounds that have very low volatility are generally not good candidates for vapor sampling. Compounds that are highly soluble in water, for example, ketones and alcohols, are typically not available in moist vapor environments, and may not be good candidates for vapor sampling technology. Experience in the field, combined with benchtop experiments, demonstrate compounds should have vapor pressures that exceed ~1.5 x 10-6 mm Hg and a Henry's law constant exceeding ~1.5 x 10-9 atm m3/mole are needed to be detectable in vapor.

If there are compounds of interest that are questionable candidates for detection in vapor, please send your list to Gore, and our staff of experienced chemists will provide feedback regarding the probability of detection.

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4. When the GORE™ Module is placed in water, will it detect and report water soluble compounds?
Yes! Water soluble compounds such as 1,4-dioxane, TBA, and MtBE were detected and reported by the GORETM Module when placed directly in water.

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5. Can the GORE™ Survey report methane?
The GORE™ Survey has reported methane. However, Gore is not satisfied with the reproducibility of the results, and has chosen not to offer methane as a target analyte at this time. However, the survey is capable of collecting alkanes and mercaptans (odorants) to delineate the impact of natural gas and propane.

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6. What analytical methods do you utilize? How confident are you in your abilities to discriminate false results from true contaminant data?
A modified US EPA 8260/8270 analytical method, using gas chromatography (GC) and mass selective detection (MS), following thermal desorption, is used to analyze all GORETM Modules (field deployed, trip blanks, and QA/QC samples). Calibration standards (five point) containing the target compounds are introduced in the analytical sequence. Field sample results are compared against the calibration standards. If the compound in question satisfies the identification criteria, and it is present in quantities that exceed the method detection limit, we consider it a true result. Compound levels reported from the field installed modules that exceed the method detection limit and any levels observed in the QA blanks, are considered derived from the field. Field samples, trip blanks, and other QA blanks, are subject to the same analytical methods and are analyzed concurrently.

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7. What QA practices do you have in place?
The GORETM Modules are constructed in a clean room. Before the modules are shipped to the field, they must pass internal QA criteria for cleanliness and "fitness-for-use." Modules shipped to the field are accompanied by trip blanks. Trip blanks are selected, by the consultant, from the shipment of modules slated for installation. They are left unopened and travel from Gore to the client, to the field during the installation and retrieval, and then returned to Gore with the rest of the modules. Trip blanks document any ambient contamination that may have occurred during the travel and storage of the modules away from Gore.

Each module is stored in individual glass jars, uniquely labeled with its own serial number. The jar lids have excellent sealing capabilities, and custody seals are affixed to the lid and jar. Completed modules are stored in zero-contamination cabinets until an order is received. All modules are tracked internally by their serial number. All module lots are tested for ambient contamination present during their construction. Module lots that do not meet QA criteria are destroyed.

Analytical QA includes the use of instrument blanks and method blanks to purge the instrument of residual organic vapors, and document ambient impact that may have occurred during the analytical sequence, respectively. These blanks are distributed throughout the analytical sequence.

Mass spectrometer tuning standards are analyzed and must meet QA criteria before a sequence can advance.

The module serial number serves as the Chain of Custody sample ID from the manufacturing through analysis, mapping and reporting.

We do not subcontract any part of our module manufacturing, standard analyses, or reporting to outside contractors.

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8. After GORE™ Module retrieval, will the compounds desorb from the module and be lost before analysis?
Under ambient temperatures, minor desorption of very light compounds may occur naturally from the sorbent. However, the adsorbents are quite tenacious, and hold onto the vapor molecules strongly. The thermal desorption during the analytical process are at temperatures far greater than those experienced during sampling, shipping, and storage of the module. The sample containers are small and have tight, well-sealed lids, minimizing vapor loss during shipping and storage.

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9. What is your typical turn around time after you receive the modules from the field? Can I get the data sooner?
Normal turn around time (TAT) is seven to ten business days to produce a data table after the

modules are received at Gore's laboratory. The table is then faxed or emailed to the client. The size of the project will dictate the actual delivery of the results, large projects will require longer TATs. GORETM Modules are analyzed on a "first-in first-out" basis. Expediting services are available for all projects for an extra fee. When requested, a 50% surcharge is added to guarantee a five-business day TAT, a 25% surcharge for a guaranteed ten-business day turn around time, to produce a data table.

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10. How can I gather samples for QA duplicate purposes?
Each module contains a minimum of two samples of adsorbent available for analysis. One sample is analyzed, while the second sample is stored for a period of at least 15 days following the original analytical sequence. This provides a backup sample in the event of an instrument malfunction or if additional QA is required.

In almost all cases, the duplicate results have compared extremely well with the original results. Duplicate values within the same order of magnitude are directly comparable. Often the absolute values between samples and their duplicates are very close.

In the field, additional GORETM Modules can be co-located at each sample location, and also provide data for QA duplicate analyses.

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11. Has your laboratory received any sort of certification from the US EPA, state regulators, or other similar regulatory or governmental agencies?
At present no certifications exist for the analysis of passive vapor samplers. However, Gore has a Quality Assurance Manual, Operating Procedures and Methods, which prescribes and documents all standard operating procedures and QA/QC, from module manufacturing to final reporting, and follows accepted methods of analysis and reporting. The quality assurance program is consistent with Good Laboratory Practices (GLP), ISO Guide 25, "General Requirements for the Competence of Calibration and Testing Laboratories," third edition, 1990, and NELAP. We are routinely audited internally, and have been audited by external parties. The GORE™ Survey usually meets EPA Level 1 and Level 2 Data Quality Objectives (DQOs) to assist in determining the presence and distribution of organic compounds.

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DATA REPORTING

1. How can I tie two or more GORE™ Surveys together?
In some cases, when an initial site characterization indicates the extent of the subsurface impact extends beyond the sampled area, an additional soil gas survey(s) is implemented. Gore recommends that GORETM Modules be deployed as soon as practical, and that several new modules be placed at locations of prior modules (co-located). Gore suggests co-locating the modules at locations covering the range of the mass levels reported, from non-detects to

maximum levels, from the original survey. This will provide duplicity in the data, and tie the surveys together. By holding variables such as exposure time, installation depth, and analytical procedures constant from one survey to the next, Gore is confident the results from two or more surveys are comparable. The results can be combined onto one set of maps providing a comprehensive, accurate view of the subsurface impact.

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2. How well do your soil gas results correlate with groundwater and soil data?
In general, the results have a strong positive relative correlation between the soil gas data and what is observed during subsequent matrix sampling. In other words, at locations where the soil gas levels are high, there is a corresponding high probability that the compound is present in the subsurface. With lower soil gas levels, the probability of finding the compound decreases.

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3. How can I relate your soil gas levels to subsurface contamination?
The GORE™ Survey delineates overall contamination from the soil and groundwater. However, by placing the GORETM Module directly in the aquifer, via a piezometer or monitoring well, a groundwater concentration result can be reported.

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4. What is the best way to interpret your soil gas data?
In most site characterization programs, the soil gas data delineates the nature and extent of the subsurface impact by volatile and semi-volatile organic compounds. The soil gas data at a sample location can be compared relative to the soil gas data reported from the other sample locations across the site. Even if the soil gas mass levels are fairly low, patterns in the spatial distribution will appear indicating the area(s) of greatest subsurface impact. It is in these areas, that subsequent matrix sampling should occur.

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5. Are your data reported in units of concentration?
On a standard basis, Gore reports air, soil gas, subslab vapor and water data, by target compound desorbed from the GORETM Module, in units of micrograms (mass). However, upon your request, concentration data can be reported for modules deployed in any of these sampling environments. An accurate recording of the exposure period is required. For soil gas, you will also need to provide soil porosity and percent water saturation values.

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6. What method(s) are used to generate concentration data in vapor from the GORETM Module?
Several methods exist in the literature (e.g., ASTM, MDHS, NIOSH, and others) which document clearly the procedure to calculate vapor concentration data from a passive, sorbent-

based sampler such as the GORETM Module. These methods describe the requirements to determine the uptake rate of the sampler over time (volume of vapor), and correction factors for the sampler, sorbent and analytical method. Combined with the mass desorbed from the sampler, the concentration is readily calculated. The body of literature in general on passive sampling and concentration data reporting is quite large, and stems from decades of research in the industrial hygiene arena.

For soil gas sampling, including a correction factor that accounts for soil porosity and moisture content is necessary.

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7. Can you monitor contaminant changes, in soil gas over time, as a result of natural or stimulated soil and groundwater remediation?

Yes! One application of the GORE™ Survey is to track the changes in contaminant levels over time in the subsurface. By placing the collectors in the same locations during each sampling event, holding the exposure time constant from sample event to sample event, applying an identical analytical process to every module, and holding the color contour interval scheme constant, changes in soil gas contaminant levels are readily observed. With this technique, you can monitor the affects of your natural or stimulated remediation program. Similarly, you can monitor changes in contamination following a property transfer.

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APPENDIX C

Site Reconnaissance and Interview Documentation

REPORT HALF MOON BAY FLIGHT STRIP (J09CA082000)

Half Moon Bay Flight Strip (J09CA082000) (Half Moon Bay)

Half Moon Bay , CA 94019
CASE STATUS: OPEN
RETURN TO REPORT MAIN MENU

REGIONAL BOARD
SAN FRANCISCO BAY RWQCB (REGION 2)
CONTACT: - (510) 622-2300
RB RECORD FILE #:

CHOOSE A REPORT TO VIEW

SITE INFO:
- REGULATORY HISTORY
- LOCATIONAL INFORMATION
- ANALYTICAL DATA
- ELECTRONIC ANALYTICAL DATA
- DEPTH TO WATER INFORMATION
- RISK MANAGEMENT
- LAND USE CONTROLS

LEAK INFO:
- DETAILED RELEASE INFORMATION
- REMEDIATION ON SITE

ELECTRONIC SUBMITTALS:
- ANALYTICAL DATA (NONE AVAILABLE)
- LOCATION DATA (NONE AVAILABLE)
- ELEVATION DATA (NONE AVAILABLE)
- DEPTH TO WATER DATA (NONE AVAILABLE)
- GEO MAP DATA (NONE AVAILABLE)
- GEO REPORT / SITE DOCUMENTS (NONE AVAILABLE)
- GEO BORE DATA (NONE AVAILABLE)

CUF REIMBURSEMENT AMOUNT:
$0

ADDITIONAL INFO:
- 0 FIELD POINTS FOR THIS SITE
- 0 PUBLIC WATER WELL(S) ESTIMATED TO BE NEARBY THIS SITE

Geotracker Home | Site/Facility Finder | Case Finder | MTBE/Case Reports

Geotracker Database

There were no files within the submenus.

Phone log w/ San Mateo County: the lead agency.
J09CA" Means: former DOD case.

Called Greg Smith of San Mateo County (3/22/07) @ 10:50Am.
This case is only listed here in Geotracker because it is a former
D.O.D. Case, which I already spoke to the Army Corps of
Engineers on 3/16/07; see email w/ Lance McMahan.
" This addess in the LUFT database, does not indicate a leak!"
" There is no groundwater affected at this address."
∴ Half Moon Bay Flight Strip is not an issue for
the Site.

Farmer on-site. Mike Iacopi cell: 650-867-2962

Treadwell&Rollo

Phase I ESA Facility Interview Form

Project: BIG WAVE PROJECT: P1 for EIR Project No: 4602.01

T&R Staff: ERIC MORITA Date: 8 MARCH 07

Person Interviewed JEFF PECK OFFICE 415 541 7837

Position OWNER (OTHER OWNERS: Steve Barber)

Company

Relation to Site OWNER

Duration (How Long?) 7 years bought 1997

Questions are generally to be asked in the form of "Do you have any knowledge of…", Are you aware of …", unless otherwise stated. Implied in this form are requests for copies of relevant documents when answers indicate their presence.

General Site Information

What are the site uses? Farming: beans; celery. No pesticids to his knowledge

Farmer onsite is Mike Iacopi (650-867-2962)

For how long? 1930's

Previous uses? No knowledge < 1930's. ~~STATE~~

Building Summary (Site Plan?)

Name/Number	Use	Square Feet	When Built
	No Buildings at the site.		
~~Live-work spaces~~ ~~Storage Facility~~	Adjoining to the SE are a strip of live-work spaces and storage (off-site - Fronts Stanford Ave)		

Well - Ag well, permitted. It's in NE corner

Above Tanks Water Storage, ~4500 gal 3 of them

General Site Information (continued)

Are there water wells on the site? 1 water well for Ag use.
What is water supply? Water well
What is power supply? None
Is there an alternative power supply? None
If so, fueled by what? —
What is sewage disposal system (Sanitary, Storm, Combined System)?
None

Hazardous Substances/Petroleum Products

What Hazardous substances or petroleum products are used? By what equipment/processes? Can we get copies of Material Safety Data Sheets?
None

Does the facility have Hazardous materials business/management permits? With what agencies?
No permits

Does the facility have other environmental permits (water treatment permits, wastewater discharge permits, air emmissions permits)? With what agencies?
No

Are hazardous wastes generated? By what processes? None

Hazardous Wastes (continued)

Does the facility have an EPA ID No.? No

Generator? TSD?

RCRA Permit?

Where are Hazardous Wastes accumulated (location plan)? Not Accumulated

How are hazardous wastes disposed?

What other wastes are generated?

Where are other wastes accumulated (location plan)?

How are other wastes disposed (where) Illegal Dumping ... Tires, trees, no chemicals, boat, but no hazardous materials. No spills evident. Location of past dumping is not a single location but generally along NE & SE edges

Are liquid waste or wastewater generated (Processes, composition, volumes, locations) ? NO

How are liquid wastes or wastewater managed (Where stored, treatment)? Not Applicable

Are there floor drains, sumps, or an industrial drainage system (locations)? NO

How are liquid wastes or wastewater disposed (discharge points, to WWTP?)? NO

Are there AST's or USTs (numbers, locations, sizes, contents)? 3-ASTs, for water storage, ~4,500 gallons

Were there previously AST's or UST's (numbers, locations, sizes, contents)? No, unaware if there were

Is waste oil accumulated on the site (locations, volumes, containers, secondary containment)? NO

How is waste oil disposed (volume, by whom)? No

Was oil ever used to control dust on site? No

Are there hydraulic lifts on site (locations, numbers)? No

Are there transformers on site (other than light fixtures) (locations, PCBs, who owns)?
No, not to his knowledge

Fluorescent lights? How are ballasts disposed? No

Are pesticides/herbicides used/stored? Was not aware of use.

Contamination

Have there been chemical or petroleum product spills (when, where, what)?
No

Has there been illegal dumping on the site (when, where, what)?
Refer to pg 3

Is there soil or groundwater contamination on the site (nature, since when)?
No, does not know

Is it due to on-site or off-site causes (documents)?

Are there monitoring wells on the site (locations, monitoring reports)?
No, only ag-well.

3/2/07 phone call 10:45 Am
PE: Well construction?
Depth ~ 120' ; Screened ~ 20' down. Permitted in 1987 when installed. Depth of well is an estimate based on dropping a weighted rope down.

Environmental Documents

Note: These are to be asked if interviewee has NOT been sent or given the list in the Information Request Transmittal.

Are you aware of the existence of any of the following documents with respect to the site?

Environmental site assessment reports N. Parcel in 2001 [Wetlands] - A wetlands report
Environmental audit reports No
Environmental permits No
Registrations for ASTs or USTs 3-ASTs
Material safety data sheets None
Environmental or safety plans None
Geologic, hydrogeologic, or geotechnical reports? 1, by BAGG on May 7, 2002

Notices or correspondence from any government agency relating to past or current violations of environmental laws relating to the property

No

Are you aware of:

Any pending, threatened, or past litigation or agency administrative proceedings regarding the management, use, or disposal of hazardous substances or petroleum products on the property?

Not aware of any of the above or below

- Environmental Cleanup Liens
- Activity and Land Use Limitations (AULs)
- No discounted # for property
- No addresses for the site

Treadwell&Rollo, Inc.
Environmental and Geotechnical Consultants

SHEET 1 OF 1
JOB NO. 4602.01
DATE 3/13/07
COMPUTED BY ETM
CHECKED BY

PROJECT BIG WAVE PROJECT P1 for EIR
SUBJECT INTERVIEW: SITE REP

Call Mike Iacopi - Site Operator, Since 2003.
650-867-2962.

Pesticides Used: No, working at site & for 4 years, NO Pesticides

Grown now: Swiss chard, cauliflower broccoli,

Illegal Dumping: No

1-well only, for Agriculture. Pumped through 4" dia PVC along Airport Street to irrigate lands.

Sample GW? No

Sample Soil? No

Environmental Concerns at adjoining properties? No

What about the lady mowing the lawn on the Southern edge of the site?
- She is on the site
- She is using it as her backyard, though not her property
- Does not store hazardous substances

Any spills, leaks, or other known contamination at the site? No

Treadwell&Rollo, *Environmental and Geotechnical Consultants*

SHEET 1 OF 2
JOB NO. 4602.01
DATE 3/8/07
COMPUTED BY EM
CHECKED BY

PROJECT BIG WAVE P1
SUBJECT local, state, county departments

Phone Inquiries: Do you handle environmental records. Regulators?

- City of Half Moon Bay Public Works
  Left message: Nancy Kyser (650) 726-8260
  Not aware of any, not the overseeing agency

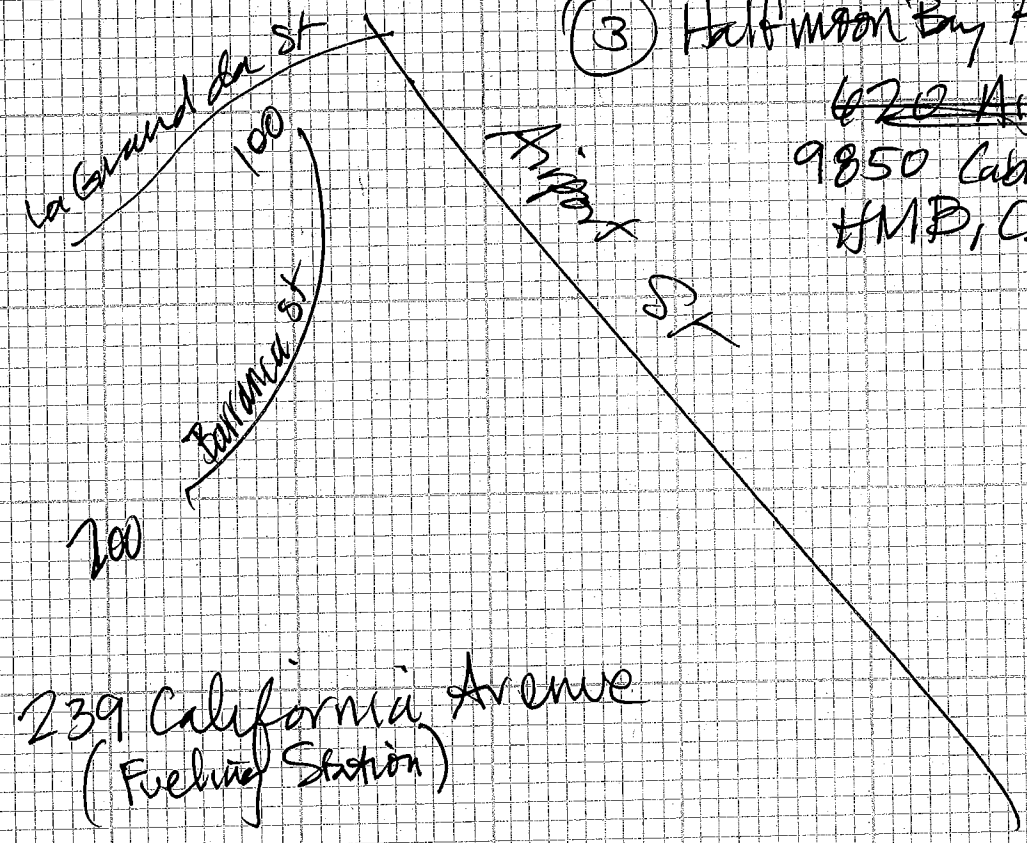
- Half Moon Bay Fire Protection District – could not find a working #
  650-726-5213
  Not the overseeing agency

- San Mateo County – The Main Oversight
  – Paresh Khatri (650-599-1079)
  An open case exists in the vicinity:
  ⊗ 239 California Avenue – MTBE & Fuel oxygenates, details of soil/GW matrix not revealed during call. This is a county fueling station.
  GW flow is toward the ocean.
  – Melissa Allotta (sp?) – 650 599 7265 for a list of cases for HMB
  – File Review (650) 363 4305 → ANN TANYA
  (650) 363 7882 fax

(1) Coastside Self Storage, ~~Half Moon Bay~~ - 110 Stanford Ave

(2) El Granada Mobile Home - 164 Culebra Ln, Moss Beach CA

(3) Half Moon Bay Airport (HAF)
~~6210 Airport Drive~~
9850 Cabrillo Hwy North
HMB, CA 94019



(4) 239 California Avenue
(Fueling Station)

Treadwell&Rollo, Inc.
Environmental and Geotechnical Consultants

SHEET 1 OF 2
JOB NO. 416Q2.01
DATE 3/9/07
COMPUTED BY ETM
CHECKED BY

PROJECT Big Wave Project
SUBJECT Phone Interview: Greg Smith of San Mateo County

Greg Smith, Program specialist of the GW Protection Program San Mateo County Health Department - 650-599-1679

Q. Any environmental issues at my site (open cases? leaks, spills etc)

No.

Q. Adjoining or nearby properties? YES

~~(1) 164 Cutler~~

(1) 860 Airport St ← North of site. - A chlorinated solvent plume emanates from this location, above MCLs, and travels to the south toward the site. Not excessive concentrations but a concern because it has affected one drinking water well at the mobile home park. County Job # 019040

Q. What business activity leads you to suspect this is the source? Past military base release?

A. No, not military base related. Thought to be from (Speculating) A) Parts cleaning of marine engines (boats); or B) a possible Candle Factory, which uses solvents to extract the candle wax from the molds

(2) 164 Culebra St (north of site) (Mobile Home Park), Victim of migrating chlorinated solvent plume. Detected in water wells. County Job # 019034

(3) 239 California (East of Sale) (County Fueling Station)
Petroleum Hydrocarbon release. Benzene detected

Phone log: RE: "Half Moon Bay Flight Strip" a FUDS database listing. Oversight ⇒ Army Corp of Engineers
Monday March 12, 07 : 916:557-7461
spoke to Dave Killam of Public affairs. The contact person for this project is Carol Ward (916)573-
at (916)557-5379. Left her a message

Treadwell&Rollo, Inc.
Environmental and Geotechnical Consultants

SHEET 3 OF 3
JOB NO.
DATE 3/9/07
COMPUTED BY
CHECKED BY

PROJECT Phone Notes (scratch) Rewritten
SUBJECT Greg Smith

Chlorinated Solvents
West side along airport blvd (164 california)
- started at mobile home park #019034
- tracked to north of mobile (860 Airport) #019040

- Chlorinated solvents, ↑ MCLs, currently being treated.
- Why: ① Cleaning of marine engines or ② Candle Factory (wax out of molds) ③ County Fueling Station (239 California)
  * Speculative

GW to Harbor to South, toward the site.

Treadwell&Rollo, c.
Environmental and Geotechnical Consultants

SHEET 1 OF 1
JOB NO. A(60).01
DATE 3/21/07
COMPUTED BY ETM
CHECKED BY

PROJECT BIGWAVE P1 for EIR
SUBJECT 2nd Phone Conversation : Greg Smith

Phone log : Regarding additional info on sites North of the Site.

Mr. Smith indicated the two cases north of the site, namely the "Yu Property" at 860 Airport Street (county id: 019040) and the "El Granada Mobile Home Park" at 164 Culebra St, are related. Initially low levels of PCE/TCE were found in the drinking water wells at the mobile home park. There are 3 wells at the mobile home park: 2 on the 860 Airport street property (monitoring) which are named Culebra well and Corona well, and a third along Retiro Street called the "Retiro well" at the mobile home park (south part). Detections generally only at Corona well at ½ MCLs, no detections in Culebra well, and Retiro well only 1 detection of TCE @ 1ppb ("basically at reporting limit") in 1997. Monitored Quarterly. Since Retiro well is generally not affected and closest to the site, it does not suggest a likely migration onto the site.

~~A Septor~~ The 860 Airport street case was opened in addition to the 164 Culebra to keep the Mobile home park "on the hook". No remediation yet, only monitoring.

Refer to Geotracker #019040, "Site Conceptual Model" 6/30/06.

Site Recon

Site is split into 2 parcels, divided by a (man-made?) drainage swale. Not fenced off! Possible dumping?

Northernmost Parcel (APN: 047-311-060): See sketch

- A water well enclosed within a fence, along with;
- 3 - 500 gallon (green) ASTs, likely to contain water, within the fence
- Actively farmed leafy vegetables on northern 1/4 of this parcel, southern ~~field~~ 3/4 of this parcel was ~~left~~ fallow not actively being farmed.
- overhead electrical line
- Dirt Road
- No illegal dumping observed
- No staining, no chemicals
- Piping running along the Airport street side, likely for an irrigation conveyance

Southern Parcel (APN 047-311-040)

- Evidence of past farming, though no current farming
- A gardened area, currently being mowed by a lady, on the ~~southern~~ southeastern edge of this parcel. Likely used by the Live-work lofts at the adjoining property of 1669 Stanford. Squatters, using the site?
- overhead electrical line

Adjoining Property Usage

NW of Site: • Mobile Home
• 20,000 gallon Propane Tank, AST enclosed in a fence. Could not see ground surface to inspect possible leaks

NE of Site: Airport St, and Half Moon Bay Airport

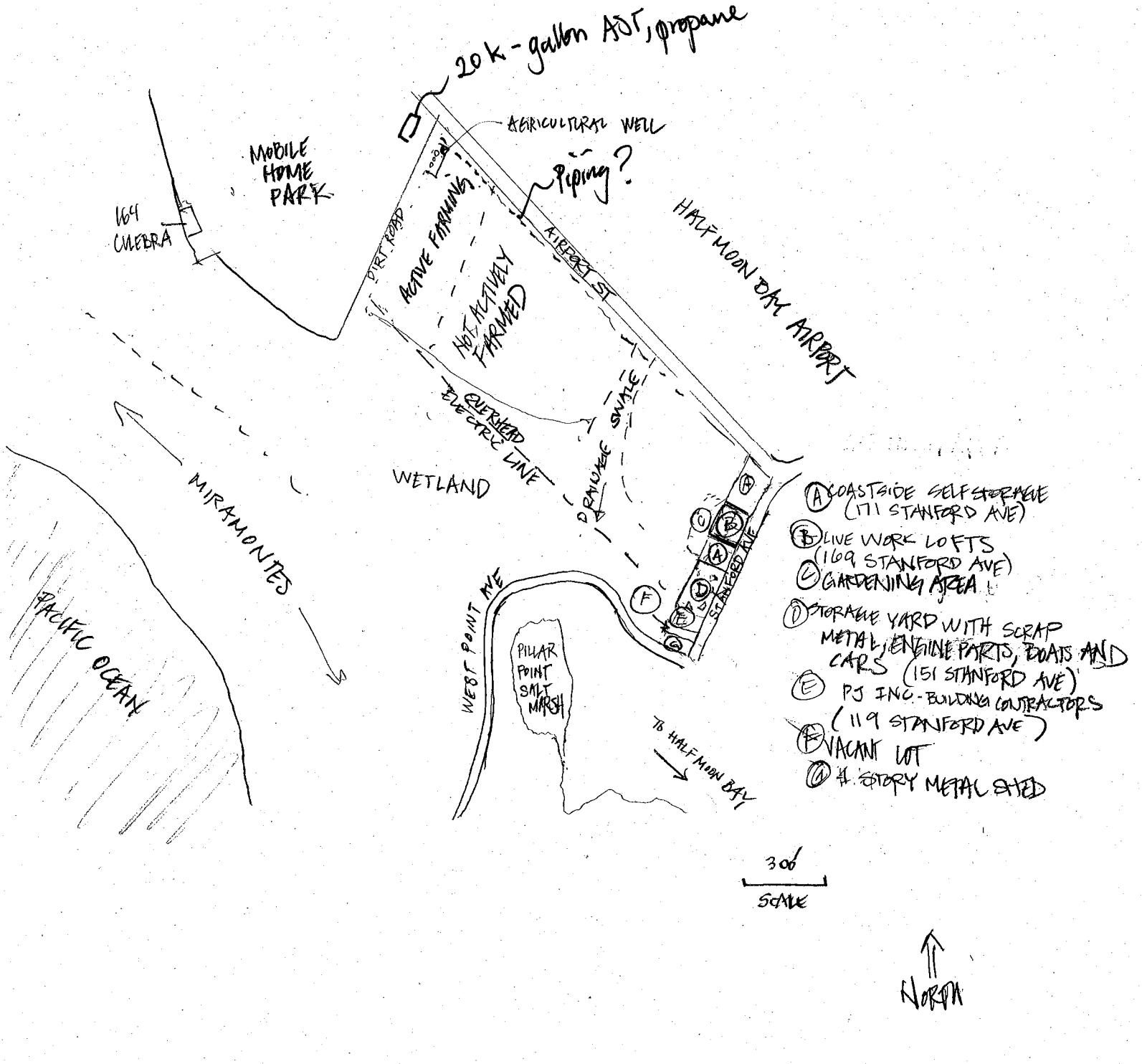
SE of Site

☆ SEE SKETCH FOR LISTING OF BUSINESS NAMES

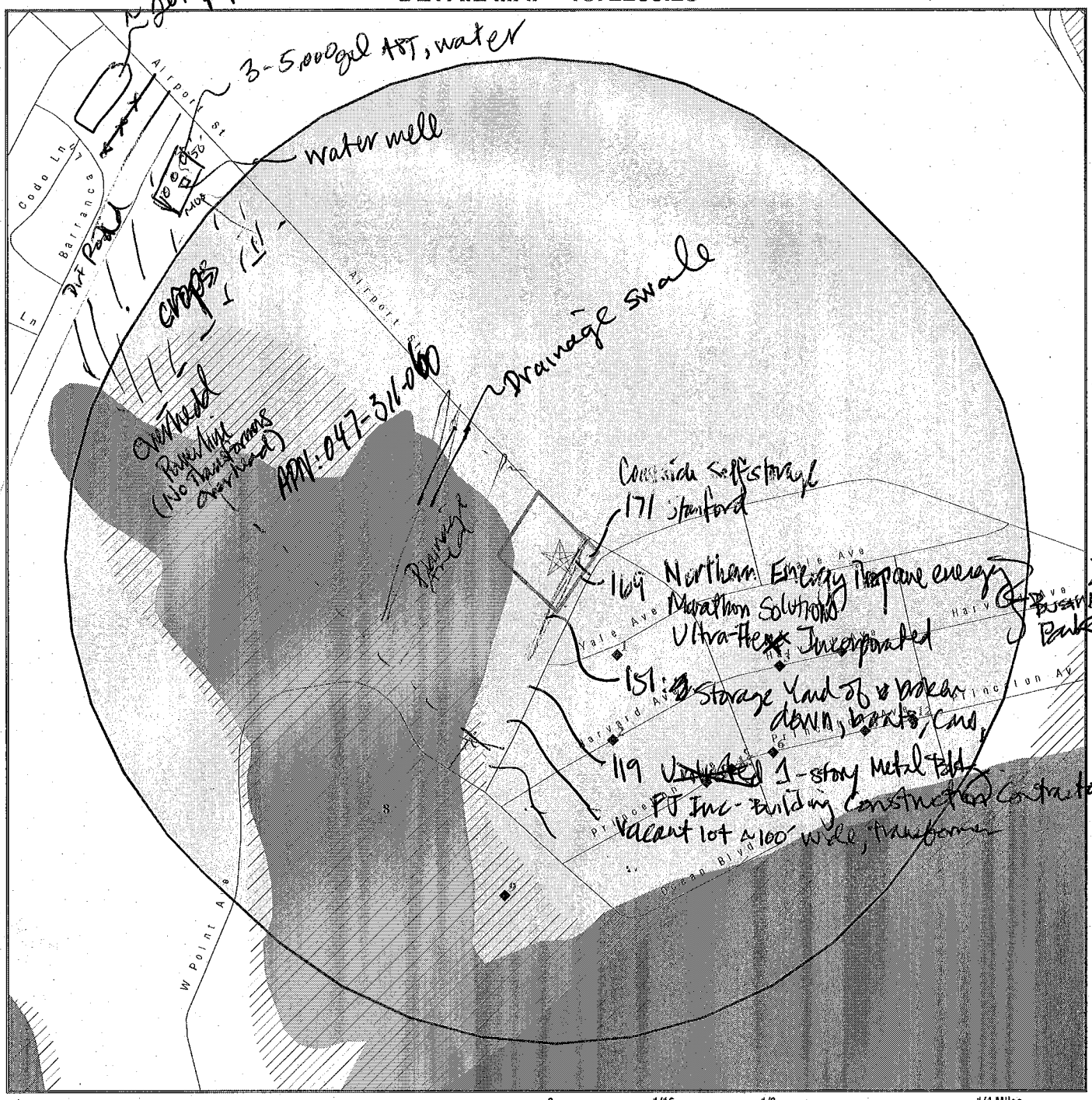
Generally; ~~storage~~
- Self storage facility
- Live-work lofts
- Commercial bldgs
- A JUNK/STORAGE YARD w/ scrap metal, engine parts, old cars; ~~ex~~ possible REC?

SW of Site

Wetlands


20k-gallon AST, propane
AGRICULTURAL WELL
Piping?
MOBILE HOME PARK
1664 CULEBRA
DIRT ROAD
ACTIVE FARMING
NOT ACTIVELY FARMED
AIRPORT ST
HALF MOON BAY AIRPORT
EUCALYPTUS
ELECTRIC LINE
WETLAND
DRAINAGE SWALE
MIRAMONTES
PACIFIC OCEAN
WEST POINT AVE
PILLAR POINT SALT MARSH
STANFORD AVE
TO HALF MOON BAY
A COASTSIDE SELF STORAGE (171 STANFORD AVE)
B LIVE WORK LOFTS (169 STANFORD AVE)
C GARDENING AREA
D STORAGE YARD WITH SCRAP METAL, ENGINE PARTS, BOATS AND CARS (151 STANFORD AVE)
E PJ INC. - BUILDING CONTRACTORS (119 STANFORD AVE)
F VACANT LOT
G 1 STORY METAL SHED
300
SCALE
NORTH

DETAIL MAP - 1872299.2s



0 1/16 1/8 1/4 Miles

- Target Property
- Sites at elevations higher than or equal to the target property
- Sites at elevations lower than the target property
- Manufactured Gas Plants
- Sensitive Receptors
- National Priority List Sites
- Landfill Sites
- Dept. Defense Sites
- Indian Reservations BIA
- Oil & Gas pipelines
- 100-year flood zone
- 500-year flood zone
- National Wetland Inventory
- Areas of Concern

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

SITE NAME: Big Wave Project	CLIENT: Treadwell & Rollo Inc.
ADDRESS: Airport Street/Stanford Avenue Half Moon Bay CA 94019	CONTACT: Eric Morita
LAT/LONG: 37.5051 / 122.4934	INQUIRY #: 1872299.2s DATE: March 07, 2007 2:01 pm

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APPENDIX H

HYDROLOGY/WATER QUALITY DATA

Schaaf & Wheeler
CONSULTING CIVIL ENGINEERS

100 N. Winchester Blvd., Suite 200
Santa Clara, CA 95050
(408) 246-4848
FAX (408) 246-5624
canderson@swsv.com

MEMORANDUM

TO:	Shannon Lucas Christopher A. Joseph & Associates	DATE:	September 17, 2007
FROM:	Charles D. Anderson, P.E.	JOB #:	CAJA.04.06
SUBJECT:	Review of Wetland Hydrology Indicators for Big Wave Jurisdictional Delineation Including Site Visit Commentary		

This memorandum, which discusses wetland hydrology indicators at the Big Wave site in Half Moon Bay, has been revised to reflect observations made during a site visit with staff from Christopher A. Joseph & Associates, San Mateo County, and representatives of the Applicant.

Issue

The Applicant is concerned that the wetland boundary resulting from the Christopher A. Joseph & Associates (CAJA) study encompasses a larger area than it should, primarily due to the presence of "furrows" created by agricultural tilling at the site. One of the indicators used in the CAJA delineation is wetland hydrology. This memorandum discusses the possible implications of agricultural tilling on that indicator.

Wetland Hydrology Indicators

CAJA has delineated jurisdictional wetlands using indicators for hydrophytic vegetation, hydric soils and wetland hydrology. This evaluation is limited to the potential impact of agricultural tilling on wetland hydrology.

Wetland hydrology indictors include periodic inundation (flooding or ponding), standing water, high water tables and saturated soils. Many of these indicators were observed on-site during observations made in December 2006, January 2007 and February 2007. In particular, the observations of January 10 and 11, 2007 were made roughly a week after the cessation of precipitation, and the delineation relies most heavily on the data collected during the January site visit.

A suggestion was made by the Applicant to perform a hydrologic evaluation based on topography with the site in a dry condition. While this memo has been revised to incorporate additional topographic information, it is difficult to evaluate parameters such as soil saturation during the dry season. Consequently any additional delineation should be made during the upcoming wet season with the site disturbed as little as possible.

Agricultural Practices at Big Wave Site

At the time of observation for wetland delineation described previously, the site was tilled so that furrows generally ran perpendicular to topographic contours; that is, the furrows were parallel to natural drainage. (Reference: Christopher A. Joseph & Associates, *Wetland Delineation Study: Big Wave Office Park and Wellness Center — Southern Parcel; San Mateo County, California; July 26, 2007*, Figure 2a, Appendix B, and personal communication with Shannon Lucas.)

A photograph from the wetland delineation report (Figure 1) shows site conditions at Sample Point 5 on January 10, 2007. The photograph shows standing water near the downhill extent of the cleared field along the western boundary of the site, one week after rain. It is not inherently clear how deep the furrows at the site are relative to the original unplowed ground. Estimates from various sources range from 8 inches to 18 inches, measured from the furrow to ridge as defined in Figure 2. According to the person farming the site, deeper furrows and a berm were created to help manage sediment runoff during the winter.

Fig. 1: Ponding at Sample Point 5 on 1/10/07 one week after rain.

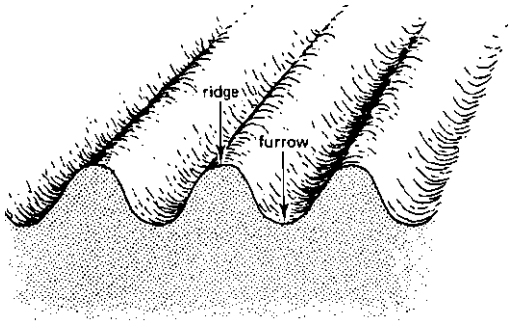

Fig. 2: Furrow and ridge definition.

Potential Impacts to Wetland Hydrology Indicators

The question is: Would wetland hydrology indicators have been different had these furrows not been made? Evaluating what observed wetland hydrology would have been absent the furrows is speculative at best, so generalized comments are offered for consideration; with more specific comment to the January 10, 2007 observations at Sample Point 5.

The drainage of furrowed soil should generally be no worse than that for non-furrowed soil, all else equal, since improving drainage is a primary reason to till soil, particularly for winter cover crops. Furrows will, however, allow for a greater extent of standing water than would be present otherwise since the water will seek its level within the furrows, and the excavated furrows are lower than the original undisturbed grade.

Standing water was observed at several locations including Sample Point 5 (Figure 1). During the recent site visit, the Applicant's representatives indicated that runoff generated on-site and storm water flowing through the culvert beneath Airport Street ponds at the southwest corner of the site before finding a natural release toward the Pillar Point Marsh at an approximate elevation of 9 feet, which matches previously flown topography. This ponding is the result of a topographic bowl near this location and a relatively thick layer of low permeability clay soil that underlies the shallow tilled and amended soil used for planting. During the winter, nearly all of the runoff generated on- or off-site will find its way to this ponding area. Some hydraulic gradient is required to move the water across the heavily vegetated release point, so one might expect the maximum normal limit of ponded water on site to follow the 9.5-foot or at most the 10-foot contour. The actual release elevation with winter furrows and berming is not directly documented, but the extent of observed standing water due to furrowing can be inferred from CAJA data as described below.

Sample Point 5 is on the ten-foot contour, and 2 inches of standing water was observed in the furrow on February 22, 2007 after flowing runoff had ceased. If the furrows were made at grade (a 1.6 percent slope according to available one foot contours), the "daylight" location of standing water would be about 10 feet "upslope" from Sample Point 5.

The extent of standing water also affects ***soil saturation*** due to the associated capillary fringe. Wetland delineators from Christopher A. Joseph & Associates observed a demarcation between saturated soil and unsaturated soil, based on data taken at Sample Points 6b and 6c, about 100 feet upslope from Sample Point 5. I find it unlikely that daylighted standing water in the furrow 10 feet upslope from Sample Point 5 would affect soil saturation 100 feet upslope, which corresponds to a change in elevation of 2.5 feet. It appears most likely that despite the drainage benefit of furrowing, site soils remained saturated for more than a week after the cessation of rainfall due to the inability of surface water to percolate through the thick clay "hardpan" that underlies the site. While this clay layer prevents groundwater saturation from below, it probably tends to promote surface saturation wherever natural drainage is relatively poor.

This assertion is supported by Figure 3, which shows adjacent non-furrowed site soil on January 10, 2007. It may also be noted that soils even farther upslope (e.g. Sample Point 10) were not saturated that day, lending credence to the theory that the practice of furrowing does not cause soil saturation by itself.

Fig. 3: Saturation of Site Soils One Week after Rain.

Opinion of Potential Impacts Agricultural Practice has on Jurisdictional Delineation
It is not clear that the absence of agricultural tillage on the property would have resulted in substantially different wetland delineation from the perspective of wetland hydrology indicators. Figure 2a, Table 1 and Table 2 of the CAJA report indicate that with respect to wetland hydrology, the margins of the Big Wave jurisdictional boundaries are delineated primarily on the basis of saturated soil observed after the cessation of rainfall. So the question of furrow impact to wetland hydrology is largely whether the furrowing encouraged a broader extent of saturated soil at the surface due to capillary action from adjacent standing water.

There is no question that the furrowing encouraged a broader extent of standing water, and an associated capillary fringe, than would have been present without furrowing. However, the observed upslope extent of observed saturated soil far exceeds the potential for standing water to spread upslope in furrowed ditches. Surface soil saturation rather than furrowing appears to be the key determinant with respect to jurisdictional wetland delineation at Big Wave Office Park and Wellness Center.

I would recommend additional wetland delineation during the upcoming rainy season, with the site left in as undisturbed a condition as practical. There should be no significant grading and furrowing should be minimized. If erosion control is needed, perhaps alfalfa could be planted.

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TECHNICAL MEMORANDUM #1 (TM#1)

TO:	Jennie Anderson, Project Manager, Christopher A. Joseph & Associates	DATE:	May 15, 2009
FROM:	Charles Hardy, PE	JOB #:	CAJA.04.07
SUBJECT:	Hydrologic Analysis of Big Wave Project		

INTRODUCTION

The Big Wave Project is planned for two parcels near Half Moon Bay in unincorporated San Mateo County. Schaaf & Wheeler has been tasked as part of the Environment Impact Review ("EIR") team with lead consultant Christopher A. Joseph & Associates to assess potential Hydrology and Water Quality impacts of the project. The assessment requires a relatively detailed hydrologic analysis. This memo details our analysis, including an estimate of project effects on groundwater recharge and stormwater runoff. Summaries of the various parts of the analysis will be in the Hydrology and Water Quality section of the EIR, where appropriate.

Specific impacts discussed here and summarized in the EIR include whether the project would:

#1 Substantially deplete groundwater supplies or interfere substantially with groundwater recharge such that there would be a net deficit in aquifer volume or a lowering of the local groundwater table level (e.g., the production rate of preexisting nearby wells would drop to a level which would not support existing land uses or planned uses for which permits have been granted);

#2 Substantially alter the existing drainage pattern of the site or area, including through the alteration of the course of a stream or river, in a manner which would result in substantial erosion or siltation on- or off-site;

#3 Substantially alter the existing drainage pattern of the site or area, including through the alteration of the course of a stream or river, or substantially increase the rate or amount of surface runoff in a manner which would result in flooding on- or off-site;

#4 Create or contribute runoff water which would exceed the capacity of existing or planned stormwater drainage systems or provide substantial additional sources of polluted runoff.

To analyze the **project impacts on groundwater depletion and recharge (Item #1)**, the applicant's Water Balance calculations have been reviewed, including examining assumptions and verifying results.

Runoff from the undeveloped and developed project site has been estimated to gauge the **project impacts on stormwater runoff (Items #2, 3, and 4)**. San Mateo County has no drainage manual or specific drainage standards for estimating stormwater runoff due to development. However, both the Town of Atherton in San Mateo County and the neighboring Santa Clara County have significant drainage standards, which are applicable to and similar enough for the current analysis. Therefore, we have used the comprehensive Santa Clara County Drainage Manual as our main guidance document.

OVERVIEW OF PROJECT

The project plans call for development of both parcels. The larger 14.25-acre parcel to the west of the drainage channel will be developed as the Office Park (OP). The other 5.28-acre parcel to the east will be developed as the Wellness Center (WC). The hydrologic impacts of both parcels will be mitigated somewhat by installing permeable surfaces where typically impermeable surfaces are used. In particular, the parking lots for the project will consist of a surface layer of permeable concrete, underlain by a layer of large-grained gravel. Walkways along the perimeter of the parcels in between buildings are also planned to consist of permeable surfaces. The project information indicates that the permeable concrete setup has a 3 inch per hour permeability at the surface and a ½ to 1 inch per hour permeability at the bottom. For purposes of hydrologic estimates, then, *these surfaces will be considered pervious*.

Another important design parameter of the project is that much of the wastewater will be recycled, either for flushing toilets or irrigating landscaped areas. Details of the recycling system are discussed with the Water Balance calculations below.

ITEM #1 - IMPACTS ON GROUNDWATER RECHARGE (WATER BALANCE)

Two aspects of the project are relevant to determine impacts to groundwater recharge – the balance of water entering and leaving the site and effects of net withdrawals on regional aquifers.

Overview of Water Balance

Since the project includes a recycled water system that could further reduce any net withdrawals on the aquifer, it is useful to analyze the project applicant's submitted water balance. The water balance takes into account how much water will be drawn from the underlying aquifer, how it is used onsite, and how it is returned, if at all, to the underlying groundwater aquifer.

There are several important aspects of the project that affect the water balance:

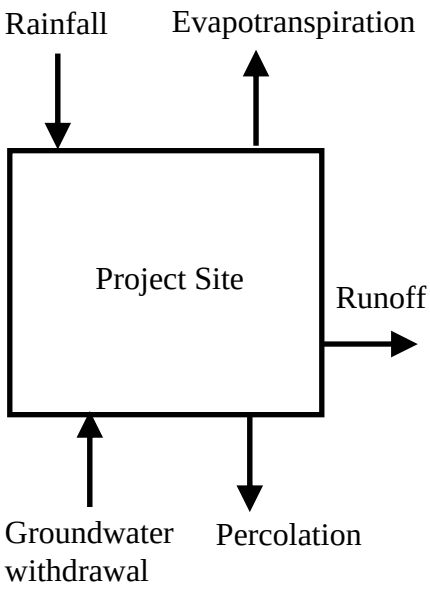
- Rainfall and stormwater runoff could contribute to groundwater recharge given the plan for rain gardens and permeable pavement.
- It is our understanding that the project site currently uses groundwater to irrigate the onsite agricultural crops, and rainfall can percolate back to the groundwater over the entire site, although some of it is estimated to runoff as discussed later.
- The project plans include an onsite wastewater recycling plant that will minimize the amount of groundwater required to meet the project's water demands.

Table 1 presents the water balance from the submitted project information, with the value in most of the rows following from the one or ones before it. The Chart 1.10 from the applicant's Facilities Plan can also be referred to. Values are in gallons per day (gpd). Balances for both "normal" rainfall years and drought years are given. These categories and values for the normal year are then discussed in the sections that follow. To analyze a mass balance for accuracy, it is important to "draw a box" around the processes and area (the system) being analyzed. We can thus draw a box around the project parcels (above the groundwater level) to analyze the net withdrawals or contributions. Figure 1 presents a graphic of this analysis. Groundwater supply and rainwater are the external inputs. Evapotranspiration, stormwater runoff, stormwater percolation, and recycled water percolation are the outputs. There are other potential inputs, including imported water, and potential outputs, including consumptive use.

Table 1 - Water Balance

		Normal	Drought	Units
Inputs	Parking lot Infiltration	10,000	5,000	gpd
	Rainwater gardens	2,700	1,350	gpd
	Well or Desalination	10,000	5,000	gpd
Internal	RO/Trtmnt	10,000	5,000	gpd
	Potable water	10,000	5,000	gpd
	Wastewater	26,000	21,000	gpd
	MBR/Recycling	26,000	21,000	gpd
	Recycled Water	10,000	16,000	gpd
	Ag/Irrigation	10,000	2,000	gpd
Output	(Evap)	9,500	9,500	gpd
	(Remaining for recharge)	500	-7,500	gpd
Output	GW Recharge	0	3,000	gpd
	Total infiltration	13,200	6,850	gpd

Figure 1 - Water Balance



Rainwater Infiltration (Input)

Rainwater infiltration is not particularly relevant in the water balance for our analysis. The existing site receives the same rainfall that the project site will receive. Both existing and project conditions allow for infiltration of received stormwater with some runoff. Given the design of the porous pavements onsite, their may be additional storage capacity, thus reducing stormwater runoff for a given storm event and even increasing site percolation for certain area's of the site. Overall, however, as detailed below, net runoff is estimated to increase. The applicant's indication that stormwater infiltration will contribute additional water for groundwater recharge is not, therefore, consistent with our calculations.

Water Demands (Input)

The 10,000 gpd estimate of water demands is being evaluated in the Utilities Section of the EIR. For the present analysis, we will assume the submitted numbers are accurate. This value will be used as the main input to the system and for a comparison with the outputs to the groundwater.

Internal Water Use and Discharge

All used potable water (i.e., wastewater) will be sent to an onsite wastewater treatment plant. This plant will have the capability to recycle wastewater. The Water Balance assumes no losses throughout the water and wastewater distribution systems. A few comments can be made on this assumption:

- Some losses are inevitable over time in piped systems, generally as much as 5%, although these will tend to recharge the underlying groundwater.
- Consumptive use (i.e., human consumption, cooking, etc.) will reduce the amount of received potable water that is returned as wastewater. Since toilet flushing will be done with recycled water, consumptive water uses may account for a significant percentage of all water usage. Consumptive use, however, is generally considered to be small.
- The MBR plant, itself, uses aeration, which tends to evaporate water from the plant.
- The MBR plant also has some consumptive use due to bacterial demand, which is then taken out of the system as sludge.

It is difficult to precisely estimate the quantities of water that would be consumed or taken out of the system by these various processes. Nevertheless, it can be noted that a perfectly closed water recycling loop does not seem reasonable and may be somewhat optimistic. If these consumptive uses were estimated to account for 10% of the water demand, then only 9,000 gpd would be available for recycling versus the entire 10,000 gpd. For the present analysis, these discrepancies have been ignored. As mentioned above, any internal recycling within the system is not relevant to a groundwater recharge analysis.

Of the remaining wastewater available for recycled water usage, the project plans call for discharge for flushing toilets and irrigating landscaped areas. The recycled water for toilet flushing, once an initial volume of water is put into the system, would operate mostly as a closed loop, and essentially draw very little additional water from the recycled water system. As an "internal" process to the system, the toilet flushing demands can be ignored in the present analysis.

Recycled water applied to the landscaping would disappear from the system, as it is projected to percolate into the groundwater. Although disappearing from the system, any irrigation water remaining after evapotranspiration would serve to recharge the aquifer from which potable water has been drawn.

Evaporation (Output)

Most of the water planned for agricultural irrigation will be lost through evapotranspiration. The Facilities Plan and Water Balance numbers indicate that only 5% of the applied irrigation will be utilized for groundwater recharge. Given the small contribution of this source, the irrigation demands can essentially be ignored in the present analysis.

Overall Balance

Given the discussions above, an overall mass balance of the water system can be performed. What happens inside the box without losing water mass – i.e., internal recycling for toilet flushing - is irrelevant to the overall mass balance. The critical parameter for a stable, no-impact balance is that inputs must match outputs.

Due to consumptive uses, the volume of discharged (waste)water that will recharge the underlying aquifer should always be less than the volume of pumped source water. The input will always exceed the output, and a closed-loop system is not possible. Precise estimates of the difference in input and output are difficult to make without a much more detailed analysis of expected water consumption patterns.

The most significant source of groundwater recharge from the project site is the stormwater percolation. Stormwater percolation occurs on the existing site, however, and will not necessarily be enhanced (or reduced) by the project.

Overall, since evaporation as an output is estimated to consume most of the applied 10,000 gpd, which is equivalent to the main groundwater input, the system will effectively be taking 10,000 gpd from the groundwater. In other words, a net withdrawal of almost 10,000 gpd is expected.

Effect on Regional Aquifers

One approach to evaluating the effects of the project's pumping on local and regional aquifers is to: (a) compare the projected demand and recharge with existing local demand and recharge; (b) evaluate how projected demand may affect off-site uses; then (c) consider effects during prolonged droughts. It is customary to use round numbers when conducting such evaluations.

(a) Existing recharge on this 20-acre site is approximately 20 acre feet per year (AFY), based on mean annual recharge of 11.5 to 12 inches (a discussion of how this number is calculated is given in Table IV.G-1 of the EIR section). Due to the alluvial deposits that form the groundwater basin, recharge also occurs throughout the basin. Significant areas that have low recharge include the Half Moon Bay Airport and the existing residential developments in the watershed. Projected recharge should be similar to the existing recharge since even the impervious areas of the site will be drained to pervious swales or detention areas that percolate to the groundwater basin.

The project site currently has an operating well that may be used for irrigation. It is possible to estimate existing irrigation (i.e., well water) demands from some knowledge of the crop's being irrigated. Based on site visits and available aerial photography, the entire area of both parcels (i.e., 19.5 acres) is essentially being irrigated. To avoid crop water stress, rainfall and irrigation must be sufficient to meet the crop's water needs,

accounting for evapotranspiration (ET). At a minimum, the calculated annual ET needs to delivered via rainfall or irrigation. As detailed in Table IV.G-1 in the early part of this section, the total average evaporation for the project area is 40.81 inches versus a total average rainfall of 26.40 inches, leaving an average annual deficit of 14.41 inches or 1.2 feet. An approximation of irrigation needs for coastal parts of the Bay Area is 2.5 acre-feet per year (AFY) per acre (acre-feet per acre is equivalent to feet). For the entire project area, a range from 1.2 to 2.5 AFY per acre would equal 23 to 49 AFY or 21,000 to 44,000 gpd. If the onsite well is used to meet these demands, then 21,000 to 44,000 gpd is a rough estimate of the amount currently pumped.

The applicant has estimated the proposed water demand as 10,000 gpd or 11 AFY, which is about equal to the mean annual on-site recharge. This is less water than is currently used on site. Some of the existing water used will recharge the aquifer, but most of it is lost to evapotranspiration. Still, the project demands would still be less than the net demands from the existing site.

(b) The Coastside County Water District (CCWD) is a potential water supplier for the project. About 4% of the CCWD water supply is provided directly from wells in the airport aquifer, and is legally limited to 130 million gallons per year (MGY), which is equivalent to 400 AFY. The average annual amount pumped, however, is about 160 AFY, and is even projected to decrease further to less than 100 AFY by 2010 due to increased reliance on other sources. Another 17% of the CCWD's water supply is provided from surface diversions of Denniston Creek, which is indirectly influenced by the airport aquifer. Overall, only a quarter of the CCWD's water supply is related to the local groundwater. Most of the remainder is purchased from the San Francisco Public Utilities Commission (SFPUC) and originates from the Hetch Hetchy Reservoir. If water were provided from CCWD, the project demand of 11 AFY could add 7% more demand on the airport aquifer. However, total groundwater withdrawals from the site, as discussed above, are expected to decrease, so the project's groundwater usage will not discernibly affect the ground water supply in the regional aquifer and existing ground water users who draw from it.

(c) The CCWD has prepared an Urban Water Management Plan (UWMP) in 2005 that analyzes the effects of pumping during multiple consecutive years of drought. Groundwater would still supply about 300 AFY during three consecutive dry years, although the proportion from the airport aquifer is unclear. Nevertheless, the UWMP does not indicate that excessive groundwater pumping would be required during drought years. Therefore, groundwater availability during drought is not expected to limit community water-supply availability as projected. The project, during a drought, is actually estimated to increase groundwater recharge.

Projected ground water pumpage volumes are expected to fall well below the threshold of significance for either normal or drought-year conditions. Therefore, impacts would be less than significant.

ITEMS #2, 3, AND 4 – IMPACTS ON STORMWATER RUNOFF (HYDROLOGY)

As recommended in the Drainage Manual for small watersheds, the Rational Method (Q = CiA) has been used to estimate peak stormwater runoff flows ("Q_n") for various return periods ("n"). The Rational Method requires the following inputs:

- Drainage coefficient ("C" or "C-value"), based on amount of impervious development;
- Intensity of rainfall ("i"), for appropriate duration and return period;
- Drainage area ("A").

These inputs can be estimated from the applicant's submitted project plans and other available information as detailed below.

Drainage Coefficients

For the wellness center, the existing (Pre-project) condition is essentially undeveloped, so a C-value of 0.30 is appropriate. Once developed, the parcel is estimated to have a total imperviousness of about 22%, similar to low-density single-family housing in terms of stormwater runoff. Therefore, a slightly larger C-value of 0.40 is appropriate for the Post-project site.

The estimated C-values are valid for most storm events, particularly those lower than a 100-year storm event. For a 100-year event, however, the Drainage Manual recommends raising the C-values by 10% to account for typically soaked soil conditions prior to and during a 100-year event. For the marsh, based on the presence of some dispersed but highly impervious developments, a C-value of 0.40 should be appropriate. Given the scale of the project to the entire watershed (2.5%), the project development should not affect this value significantly. Table 2 summarizes the Drainage Coefficients used in the present analysis.

Table 2 - Drainage Coefficients

	2-yr/10-yr	100-yr
Project Site (Pre)	0.30	0.38
Project Site (Post)	0.40	0.50
Marsh Watershed	0.40	0.50

Times of Concentration and Intensity

The rainfall intensity for the Rational Method depends on both the duration and return period of the storm event. The duration used in calculations is generally equivalent to the time of concentration, since that is the time when all of the drainage area's flow reaches the discharge point.

Times of concentration have been estimated based on the submitted grading and drainage plans and suggested methods in Santa Clara County Drainage Manual's. These methods are equivalent to the Atherton Drainage Standards.

For the undeveloped drainage areas, the Kirpich formula, TC (min) = $10 + 0.0078*(L^2/S)^{0.385}$, where:

- TC is the time of concentration in minutes,
- the 10 accounts for an initial time of rainfall concentration,
- L is the overland flow length in feet,
- S is the average slope over the drainage area.

For the developed drainage areas (i.e., onsite Post-project area), times-of-concentration were estimated based on the length and slope of flow at different points in the drainage system. The longest flow paths were estimated to be from the parking lots on the north end of the sites, which drain eventually through catch basins (T_{CB}), storm drain pipes (T_{SD}), and drainage swales or rain gardens (T_{Swale}) offsite to the marsh. The basic formula for TC for the developed areas is thus:

$TC = T_i + T_{CB} + T_{SD} + T_{Swale}$, with T_i an initial time-of-concentration. T_i was set to 5 minutes, which is typical for parking lots.

Table 3 summarizes the calculated TC and intensity values for the Pre- and Post-project scenarios for both parcels. As these numbers indicate, the development alters the times-of-concentration for both sites, most significantly for the OP site.

Table 3 - Estimated Times of Concentration and Rainfall Intensities

Watershed	Scenario	TC (min)	2-yr Intensity (in/hr)	10-yr Intensity (in/hr)	100-yr Intensity (in/hr)
OP	Pre	20.47	0.96	1.61	2.51
	Post	10.83	1.32	2.22	3.45
WC	Pre	14.23	1.15	1.93	3.01
	Post	9.13	1.43	2.41	3.75

Drainage Areas

Currently, the marsh is estimated to occupy between 40 and 60 acres of area and have a total drainage area (watershed) of 785 acres. Drainage areas for the project parcels, and an estimate of the developed (i.e., impervious) project areas are summarized in Table 4.

Table 4 - Project Drainage Areas and Imperviousness

Watershed	Scenario	Drainage Area (acres)	Developed Area (acre)	Impervious (%)
OP	Pre	14.3	0.0	0.0
	Post		1.8	12.9
WC	Pre	5.3	0.0	0.0
	Post		1.2	22.2

Project Site Flowrates

Pre-project and (Post) project flowrates for the storm events of interest are calculated based on the drainage areas, drainage coefficients, and rainfall intensities described above. Table 5 summarizes these flowrates. Also in the table is the calculated ratio of Post-project flows to Pre-project flows. Post-project flows are estimated to be 1.8 times the Pre-project flows; in other words, the project is estimated to increase flowrates by about 80%, regardless of the storm event.

Table 5 - Estimated Project Site Flowrates

Watershed	Scenario	2-yr (cfs)	10-yr (cfs)	100-yr (cfs)
OP	Pre	4.1	6.9	13.4
	Post	7.5	12.6	24.6
WC	Pre	1.8	3.1	5.9
	Post	3.0	5.1	9.9
TOTAL	Pre	5.9	9.9	19.3
	Post	10.5	17.7	34.4
	Ratio	1.8	1.8	1.8

Entire Watershed Flowrates

The estimated flows to the entire 785-acre watershed of the Pillar Point Marsh are listed in Table 6 for various storm events. The percentage of flows represented by the Big Wave project site Pre-project and Post-project are also given. These percentages indicate that drainage from the project site currently represents about 3% of the stormwater flows to the marsh. After the project is completed, flows from the project site would about double but still represent only about 6% of the stormwater flows to the marsh.

Table 6 - Pillar Point Marsh Flowrates and Project Impacts

	2-yr	10-yr	100-yr
Marsh Watershed Flows (cfs)	219	369	716
Project Site Flows % (Pre)	2.9%	2.9%	2.9%
Project Site Flows % (Post)	5.8%	5.8%	5.8%

It is interesting to note that the section of the Facilities Plan regarding hydrology includes an estimate of the 100-year flow from the Marsh watershed. The estimate is 60 cfs from the western part of the watershed (listed as 320 acres) and 80 cfs from the eastern part (listed as 420 acres). The total 100-year flow to the marsh estimated by the project proponents is thus 140 cfs, substantially below even our estimate for the 2-year event. Assuming a C-value of 0.4 and given the 740 acres, the rainfall intensity is estimated as 0.47 inches, requiring an approximately 8 hour time of concentration based on the SCCDM.

Impacts on Siltation/Erosion

Since the site currently has no impervious development, the increase in imperviousness could increase runoff from the site. Increased velocities and durations of stormwater runoff could lead to erosion of onsite and offsite areas, as well as siltation of the downstream marsh. The site includes soils with a low erosion potential (see the EIR), but the relatively steep parts of the site at the edges of the development will require attention during and after construction to avoid erosion.

Erosion and siltation are typically of greatest concern during project construction. The project plans include erosion and sedimentation control and dust control plans for both project parcels. A project-specific Stormwater Pollution Prevention Plan (SWPPP) will also need to be developed for the project to minimize construction impacts on erosion and sedimentation and to be in compliance with stormwater regulations. With these erosion and sedimentation control plans in place, construction impacts should then be less-than-significant.

Project design can include various Best Management Practices (BMPs) to help the post-project site mimic pre-project conditions in terms of hydrology. These BMPs can also affect the water quality of stormwater runoff, by filtering and detaining pollutant-laden runoff onsite. Since sediment is a main carrier of pollutants and often considered a pollutant itself, these BMPs help prevent sedimentation downstream of the project site.

Stormwater BMPs, as discussed in the EIR, are planned and should help mitigate for project impacts on siltation and erosion. Further details of appropriate mitigations for siltation and erosion impacts of the project are included in the EIR.

Impacts on Flooding

Placing fill or other structures in such a way as to block existing drainage paths could result in increased onsite or offsite flooding, particularly if there is significant offsite drainage that flows through the site. Offsite runon from upstream of the project site is unlikely given that Airport Street is at the upstream border of the site. Existing stormwater drainage from upstream travels through a culvert under Airport Street and through the drainage swale between the two portions of the site into the Pillar Point Marsh.

In general, the planned rain gardens, porous pavements, and other stormwater recharge features serve to limit any increase in stormwater runoff, even during large storm events that could cause substantial flooding. However, since no drainage report was provided by the applicant, it is unknown if there are substantial stormwater discharges that would travel onto the site from neighboring areas, particularly the residential development to the northwest.

One way to gauge the impact of the project on flooding is estimating how any increased site runoff would impact the water levels in the downstream marsh. Any increase in water levels of the marsh could exacerbate existing flooding. It is possible to estimate the difference in volume of site runoff based on the standard 100-year, 24-hour storm. The difference in volume is proportional to the difference in runoff coefficient, which is equal to 0.10 (i.e., 0.40-0.30), and the 100-year total precipitation. For a site with mean annual precipitation of 26.4 inches, the Drainage Manual gives a total 100-year depth for of 7.24 inches. Thus, the project site's 19.5 acres would produce an increase of volume as follows:

Volume = 7.24 inches * 19.53 acres * (0.50-0.38) = 16.97 acre-inches.

If this 17 acre-inches of water were added to the approximately 23.5 acres of freshwater marsh upstream of West Point Avenue, it would raise the marsh at most by about seven-tenths (0.7) of an inch over the existing level under a 100-year event. The raised level could even be lower given that the marsh culvert at West Points Avenue would have increased flow under an increased water level and serve to pass some of the excess runoff faster than is done previously.

The increase in offsite flood levels thus appears to be minimal. On the other hand, without further information on the onsite drainage, we cannot fully assess the impacts on onsite flooding. The EIR details the recommended mitigation of preparing a project drainage report.

Impacts to Storm Drainage Systems

The project itself will include onsite storm drainage systems to convey stormwater runoff from the site. Upstream stormwater runoff will continue to be conveyed via the shallow drainage swale between the parcels. Downstream of the project site is the Pillar Point Marsh, which, as discussed above, will see a minimal impact from the project drainage. The marsh does drain

through some culverts at West Point Avenue on its way to Pillar Point Harbor. The capacity of these culverts is not known from available information. However, since the project will minimally impact the entire marsh drainage, even under a 100-year storm event, there should be minimal if any impact on the capacity of these downstream culverts.

Addition of Polluted Runoff

Existing surface and ground water quality in the project area is discussed in the EIR. Potential pollutants from the developed project are also discussed. These pollutants include general urban stormwater pollutants, such as oil, grease, trash and debris. Sediment, as discussed above, is also considered a pollutant, mainly because of its capacity to carry other pollutants.

Since the site is currently only used for agricultural production without significant urban usage, the project is considered to have the potential to add substantial sources of polluted stormwater runoff. Planned BMPs, which serve also to mitigate peak flows, as discussed above, are considered helpful in mitigating the pollutant effects of urban stormwater runoff.

CONCLUSIONS

Several conclusions can be drawn from our hydrologic analysis and will be referenced where appropriate in the project EIR.

1. The planned water and wastewater system will produce a net withdrawal of groundwater.
2. The groundwater withdrawals for the project, however, will be less than existing withdrawals, reducing the amount of net groundwater withdrawals.
3. Project conditions are estimated to increase site stormwater discharges by 80% for various return periods.
4. Hydrologic impacts to the Pillar Point Marsh based on conditions in the entire marsh watershed appear to be minor. Although the project would increase stormwater flows from the site, these flows would still only represent 6% of the total flows to the marsh.
5. Planned stormwater Best Management Practices should serve several hydrologic and water quality functions, including maximizing groundwater recharge, minimizing quantities of stormwater runoff, and reducing pollutant loadings in stormwater runoff.

REFERENCES

Big Wave Project, 2009, Facilities Plan: Draft #2, January 2009, provided by the applicant.

Coastside County Water District (CCWD), 2005, 2005 Urban Water Management Plan, Prepared for CCWD Board of Directors, Prepared by Amanda Cox.

CCWD, 2006, Water Supply Evaluation Report, Prepared for the CCWD Board of Directors, Prepared by the CCWD Staff

MacLeod & Associates, 2009, Preliminary Grading/Drainage & Utility Plan With Permanent Storm Drainage Controls, Big Wave Office Park, Drawing No. 1584-00, April 2009, provided by the applicant.

MacLeod & Associates, 2009, Preliminary Grading/Drainage & Utility Plan With Permanent Storm Drainage Controls, Big Wave Wellness Center, Drawing No. 1608-00, April 2009, provided by the applicant.

Santa Clara County, Drainage Manual, 2007.

APPENDIX I

NOISE DATA

ON-SITE TRAFFIC NOISE LEVELS

Project Name: Big Wave Wellness Center

Background Information

Model Description:	FHWA Highway Noise Prediction Model (FHWA-RD-77-108) with California Vehicle Noise (CALVENO) Emission Levels.
Analysis Scenario(s):	Future Without Project
Source of Traffic Volumes:	Hexagon Traffic Study
Community Noise Descriptor:	L_{dn}: ____ CNEL: X

Assumed 24-Hour Traffic Distribution:	Day	Evening	Night
Total ADT Volumes	77.70%	12.70%	9.60%
Medium-Duty Trucks	87.43%	5.05%	7.52%
Heavy-Duty Trucks	89.10%	2.84%	8.06%

Traffic Noise Levels

Analysis Condition Roadway Name Roadway Segment	Land Use	Lanes	Median Width	Peak Hour Volume	ADT Volume	Design Speed (mph)	Dist. from Center to Receptor[1]	Alpha Factor	Barrier Attn. dB(A)	Vehicle Mix: Medium Trucks	Vehicle Mix: Heavy Trucks	Peak Hour dB(A) L_{eq}	24-Hour dB(A) CNEL
Existing Conditions													
Airport Street													
La Granada to Stanford	Residential	2	0	439	3,680	35	150	0	0	1.8%	0.7%	57.2	55.6
	Office	2	0	439	3,680	35	175	0	0	1.8%	0.7%	56.5	55.0

[1] Distance is from the centerline of the roadway segment to the receptor location.

OFF-SITE TRAFFIC NOISE LEVELS

Project Name: Big Wave Wellness Center

Background Information

Model Description:	FHWA Highway Noise Prediction Model (FHWA-RD-77-108) with California Vehicle Noise (CALVENO) Emission Levels.
Analysis Scenario(s):	Existing Conditions
Source of Traffic Volumes:	Hexagon Traffic Study
Community Noise Descriptor:	L_{dn}: ____ CNEL: X

Assumed 24-Hour Traffic Distribution:	Day	Evening	Night
Total ADT Volumes	77.70%	12.70%	9.60%
Medium-Duty Trucks	87.43%	5.05%	7.52%
Heavy-Duty Trucks	89.10%	2.84%	8.06%

Traffic Noise Levels

Analysis Condition Roadway Name Roadway Segment	Land Use	Lanes	Median Width	Peak Hour Volume	ADT Volume	Design Speed (mph)	Dist. from Center to Receptor[1]	Alpha Factor	Barrier Attn. dB(A)	Vehicle Mix: Medium Trucks	Vehicle Mix: Heavy Trucks	Peak Hour dB(A) L_{eq}	24-Hour dB(A) CNEL
Existing Conditions													
Cabrillo Highway (Hwy 1)													
Cypress to Capistrano N	Residential/Airport	2	0	1,303	11,930	50	50	0	0	1.8%	0.7%	70.6	69.5
Capistrano S to Cap N	Residential	2	0	1,306	11,585	50	50	0	0	1.8%	0.7%	70.6	69.3
North of Cypress Ave	Residential	2	0	1,305	12,105	50	50	0	0	1.8%	0.7%	70.6	69.5
South of Capistrano S	Residential/Commercial	2	0	1,474	12,920	50	50	0	0	1.8%	0.7%	71.1	69.8
Airport Street													
Los Banos to La Granada	Residential/Airport	2	0	129	1,075	35	50	0	0	1.8%	0.7%	56.6	55.1
La Granada to Stanford	Residential/Commercial	2	0	186	1,745	35	50	0	0	1.8%	0.7%	58.2	57.2
North of Los Banos	Residential	2	0	170	1,515	35	50	0	0	1.8%	0.7%	57.8	56.6

[1] Distance is from the centerline of the roadway segment to the receptor location.

OFF-SITE TRAFFIC NOISE LEVELS

Project Name: Big Wave Wellness Center

Background Information

Model Description:	FHWA Highway Noise Prediction Model (FHWA-RD-77-108) with California Vehicle Noise (CALVENO) Emission Levels.
Analysis Scenario(s):	Future Without Project
Source of Traffic Volumes:	Hexagon Traffic Study
Community Noise Descriptor:	L_{dn}: ____ CNEL: X

Assumed 24-Hour Traffic Distribution:	Day	Evening	Night
Total ADT Volumes	77.70%	12.70%	9.60%
Medium-Duty Trucks	87.43%	5.05%	7.52%
Heavy-Duty Trucks	89.10%	2.84%	8.06%

Traffic Noise Levels

Analysis Condition Roadway Name Roadway Segment	Land Use	Lanes	Median Width	Peak Hour Volume	ADT Volume	Design Speed (mph)	Dist. from Center to Receptor[1]	Alpha Factor	Barrier Attn. dB(A)	Vehicle Mix: Medium Trucks	Vehicle Mix: Heavy Trucks	Peak Hour dB(A) L_{eq}	24-Hour dB(A) CNEL
Existing Conditions													
Cabrillo Highway (Hwy 1)													
Cypress to Capistrano N	Residential/Airport	2	0	1,585	14,460	50	50	0	0	1.8%	0.7%	71.5	70.3
Capistrano S to Cap N	Residential	2	0	1,621	14,680	50	50	0	0	1.8%	0.7%	71.6	70.4
North of Cypress Ave	Residential	2	0	1,652	15,405	50	50	0	0	1.8%	0.7%	71.6	70.6
South of Capistrano S	Residential/Commercial	2	0	2,049	17,820	50	50	0	0	1.8%	0.7%	72.6	71.2
Airport Street													
Los Banos to La Granada	Residential/Airport	2	0	281	2,600	35	50	0	0	1.8%	0.7%	60.0	58.9
La Granada to Stanford	Residential/Commercial	2	0	439	3,680	35	50	0	0	1.8%	0.7%	62.0	60.4
North of Los Banos	Residential	2	0	306	2,690	35	50	0	0	1.8%	0.7%	60.4	59.1

[1] Distance is from the centerline of the roadway segment to the receptor location.

OFF-SITE TRAFFIC NOISE LEVELS

Project Name: Big Wave Wellness Center

Background Information

Model Description:	FHWA Highway Noise Prediction Model (FHWA-RD-77-108) with California Vehicle Noise (CALVENO) Emission Levels.
Analysis Scenario(s):	Future Without Project
Source of Traffic Volumes:	Hexagon Traffic Study
Community Noise Descriptor:	L_{dn}: ____ CNEL: X

Assumed 24-Hour Traffic Distribution:	Day	Evening	Night
Total ADT Volumes	77.70%	12.70%	9.60%
Medium-Duty Trucks	87.43%	5.05%	7.52%
Heavy-Duty Trucks	89.10%	2.84%	8.06%

Traffic Noise Levels

Analysis Condition Roadway Name Roadway Segment	Land Use	Lanes	Median Width	Peak Hour Volume	ADT Volume	Design Speed (mph)	Dist. from Center to Receptor[1]	Alpha Factor	Barrier Attn. dB(A)	Vehicle Mix: Medium Trucks	Vehicle Mix: Heavy Trucks	Peak Hour dB(A) L_{eq}	24-Hour dB(A) CNEL
Existing Conditions													
Cabrillo Highway (Hwy 1)													
Cypress to Capistrano N	Residential/Airport	2	0	1,585	14,460	50	50	0	0	1.8%	0.7%	71.5	70.3
Capistrano S to Cap N	Residential	2	0	1,621	14,680	50	50	0	0	1.8%	0.7%	71.6	70.4
North of Cypress Ave	Residential	2	0	1,566	14,525	50	50	0	0	1.8%	0.7%	71.4	70.3
South of Capistrano S	Residential/Commercial	2	0	1,948	16,780	50	50	0	0	1.8%	0.7%	72.4	71.0
Airport Street													
Los Banos to La Granada	Residential/Airport	2	0	165	1,385	35	50	0	0	1.8%	0.7%	57.7	56.2
La Granada to Stanford	Residential/Commercial	2	0	236	2,215	35	50	0	0	1.8%	0.7%	59.3	58.2
North of Los Banos	Residential	2	0	205	1,650	35	50	0	0	1.8%	0.7%	58.6	56.9

[1] Distance is from the centerline of the roadway segment to the receptor location.

Site 1: Corner near Stanford Ave and Airport St

Sunny, birds, sparse vehicular traffic, 3 airplanes overhead

Lmin: 49.2 dBA

Lmax: 83.3 dBA

Leq: 64.6 dBA

Run time: 15 min, 0 sec

Site 2: Near airport, along Airport Street

Sunny, sparse vehicular traffic, sprinklers

Lmin: 50.2 dBA

Lmax: 78.3 dBA

Leq: 61.9 dBA

Run time: 15 min, 0 sec

Site 3: Corner of Mobile Park and Airport Street

Sunny, sparse vehicular traffic, 2 overhead planes

Lmin: 54.1 dBA

Lmax: 86.7 dBA

Leq: 64.5 dBA

Run time: 15 min, 0 sec

Site 5: Corner of Barranca Lane and Codo Lane

Sunny, sparse vehicular traffic, dogs barking, birds

Lmin: 46.4 dBA

Lmax: 72.4 dBA

Leq: 57.1 dBA

Run time: 15 min, 0 sec

Site 4: Where Barranca Lane curves

Sunny, sparse vehicular traffic, dogs barking, birds

Lmin: 45.8 dBA

Lmax: 70.5 dBA

Leq: 57.4 dBA

Run time: 15 min, 0 sec

APPENDIX J

TRAFFIC DATA

Traffic Counts

AM Peak-Hour Volume Count Worksheet

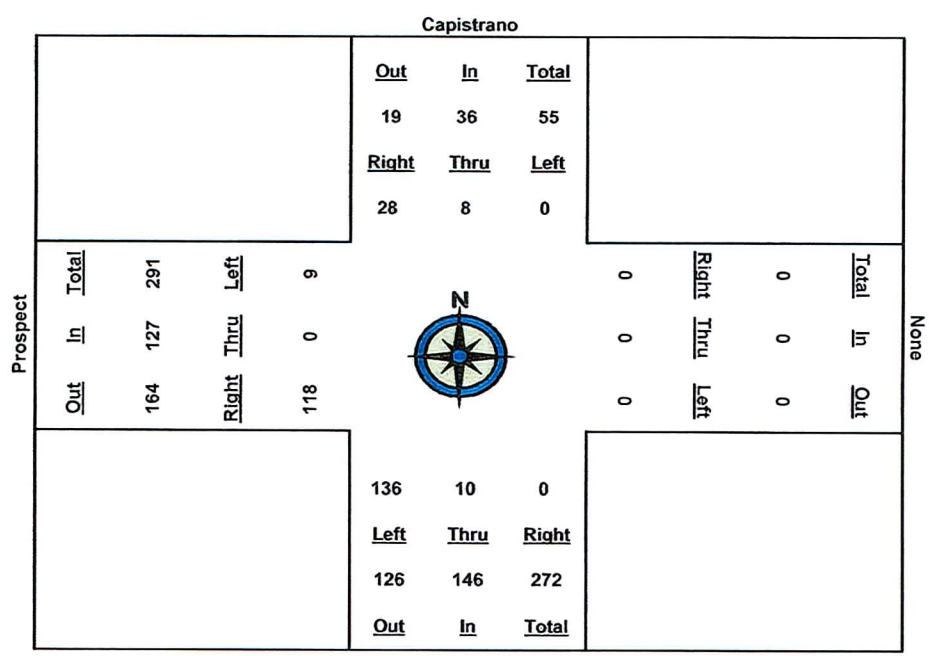
Date: 1/18/06
Counter: Patti and Robert
Intersection Name: Capistrano and Prospect
Weather: Clear

AUTO-CENSUS
Traffic Monitoring and Analysis
19222 Vineyard Ln.
Saratoga, CA 95070
Phone 408-826-9673 Fax 408-877-162

	Capistrano				None				Capistrano				Prospect			
	North Approach				East Approach				South Approach				West Approach			
Start Time	Right	Thru	Left	Total	Right	Thru	Left	Total	Right	Thru	Left	Total	Right	Thru	Left	Total
7:00	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
7:15	1	0	0	1	0	0	0	0	0	0	18	18	37	0	2	39
7:30	5	0	0	5	0	0	0	0	0	1	32	33	69	0	5	74
7:45	11	2	0	13	0	0	0	0	0	3	54	57	96	0	7	103
8:00	14	2	0	16	0	0	0	0	0	3	87	90	139	0	8	147
8:15	21	6	0	27	0	0	0	0	0	5	131	136	168	0	9	177
8:30	31	9	0	40	0	0	0	0	0	8	166	174	190	0	13	203
8:45	39	10	0	49	0	0	0	0	0	13	190	203	214	0	16	230
9:00	40	11	0	51	0	0	0	0	0	16	212	228	235	0	17	252

Peak Hour	Right	Thru	Left	Total	Right	Thru	Left	Total	Right	Thru	Left	Total	Right	Thru	Left	Total	PK Hour
7:00 - 8:00	14	2	0	16	0	0	0	0	0	3	87	90	139	0	8	147	253
7:15 - 8:15	20	6	0	26	0	0	0	0	0	5	113	118	131	0	7	138	282
7:30 - 8:30	26	9	0	35	0	0	0	0	0	7	134	141	121	0	8	129	305
7:45 - 8:45	28	8	0	36	0	0	0	0	0	10	136	146	118	0	9	127	309
8:00 - 9:00	26	9	0	35	0	0	0	0	0	13	125	138	96	0	9	105	278
Peak Volumes:	**28**	**8**	**0**	**36**	**0**	**0**	**0**	**0**	**0**	**10**	**136**	**146**	**118**	**0**	**9**	**127**	**309**

Cut and Paste	NR	NT	NL		ER	ET	EL		SR	ST	SL		WR	WT	WL
	28	8	0		0	0	0		0	10	136		118	0	9



AM Peak-Hour Volume Count Worksheet

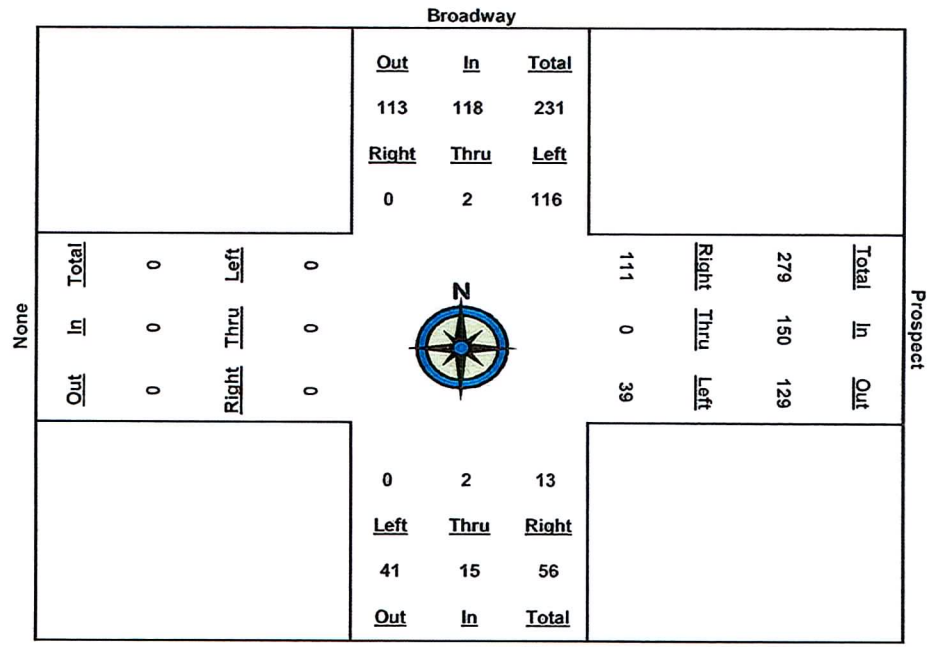
Date: 1/18/06
Counter: Kevin and Keith
Intersection Name: Prospect and Broadway
Weather: Clear

AUTO-CENSUS
Traffic Monitoring and Analysis
19222 Vineyard Ln.
Saratoga, CA 95070
Phone 408-826-9673 Fax 408-877-162

	Broadway				Prospect				Broadway				None			
	North Approach				East Approach				South Approach				West Approach			
Start Time	Right	Thru	Left	Total	Right	Thru	Left	Total	Right	Thru	Left	Total	Right	Thru	Left	Total
7:00	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
7:15	0	0	21	21	5	0	3	8	0	0	0	0	0	0	0	0
7:30	0	0	49	49	21	0	8	29	7	0	0	7	0	0	0	0
7:45	0	0	81	81	44	0	13	57	9	1	0	10	0	0	0	0
8:00	0	0	123	123	77	0	23	100	13	1	0	14	0	0	0	0
8:15	0	0	144	144	104	0	35	139	16	1	0	17	0	0	0	0
8:30	0	2	165	167	132	0	47	179	20	2	0	22	0	0	0	0
8:45	0	3	186	189	159	0	56	215	25	2	0	27	0	0	0	0
9:00	0	3	201	204	177	0	61	238	31	2	0	33	0	0	0	0

Peak Hour	Right	Thru	Left	Total	Right	Thru	Left	Total	Right	Thru	Left	Total	Right	Thru	Left	Total	PK Hour
7:00 - 8:00	0	0	123	123	77	0	23	100	13	1	0	14	0	0	0	0	237
7:15 - 8:15	0	0	123	123	99	0	32	131	16	1	0	17	0	0	0	0	271
7:30 - 8:30	0	2	116	118	111	0	39	150	13	2	0	15	0	0	0	0	283
7:45 - 8:45	0	3	105	108	115	0	43	158	16	1	0	17	0	0	0	0	283
8:00 - 9:00	0	3	78	81	100	0	38	138	18	1	0	19	0	0	0	0	238
Peak Volumes:	**0**	**2**	**116**	**118**	**111**	**0**	**39**	**150**	**13**	**2**	**0**	**15**	**0**	**0**	**0**	**0**	**283**

Cut and Paste	NR	NT	NL		ER	ET	EL		SR	ST	SL		WR	WT	WL
	0	2	116		111	0	39		13	2	0		0	0	0



AM Peak-Hour Volume Count Worksheet

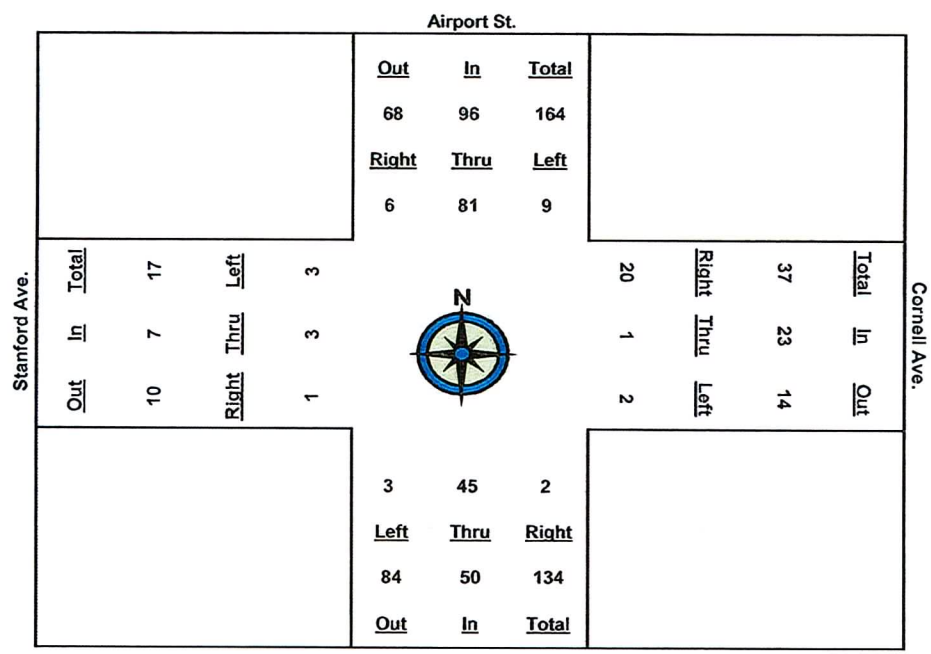
Date: 1/17/07
Counter: Kevin and Kushal
Intersection Name: Airport St. and Cornell/Stanford Ave
Weather: Clear

AUTO-CENSUS
Traffic Monitoring and Analysis
870 Castlewood Dr. #1
Los Gatos, CA 95032
Phone 408-826-9673 Fax 408-877-162

	Airport St.				Cornell Ave.				Airport St.				Stanford Ave.			
	North Approach				East Approach				South Approach				West Approach			
Start Time	Right	Thru	Left	Total	Right	Thru	Left	Total	Right	Thru	Left	Total	Right	Thru	Left	Total
7:00	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
7:15	0	27	2	29	1	0	0	1	0	1	0	1	0	0	1	1
7:30	0	43	4	47	3	0	0	3	0	4	0	4	1	0	3	4
7:45	1	61	8	70	7	1	0	8	0	12	2	14	1	0	4	5
8:00	1	97	11	109	13	1	0	14	0	19	2	21	1	0	5	6
8:15	3	115	11	129	19	1	1	21	1	38	2	41	1	2	5	8
8:30	6	124	13	143	23	1	2	26	2	49	3	54	2	3	6	11
8:45	7	133	17	157	24	1	2	27	2	55	6	63	2	3	9	14
9:00	7	139	17	163	26	2	2	30	2	56	6	64	4	3	10	17

Peak Hour	Right	Thru	Left	Total	Right	Thru	Left	Total	Right	Thru	Left	Total	Right	Thru	Left	Total	PK Hour
7:00 - 8:00	1	97	11	109	13	1	0	14	0	19	2	21	1	0	5	6	150
7:15 - 8:15	3	88	9	100	18	1	1	20	1	37	2	40	1	2	4	7	167
7:30 - 8:30	6	81	9	96	20	1	2	23	2	45	3	50	1	3	3	7	176
7:45 - 8:45	6	72	9	87	17	0	2	19	2	43	4	49	1	3	5	9	164
8:00 - 9:00	6	42	6	54	13	1	2	16	2	37	4	43	3	3	5	11	124
Peak Volumes:	**6**	**81**	**9**	**96**	**20**	**1**	**2**	**23**	**2**	**45**	**3**	**50**	**1**	**3**	**3**	**7**	**176**

Cut and Paste	NR	NT	NL		ER	ET	EL		SR	ST	SL		WR	WT	WL
	6	81	9		20	1	2		2	45	3		1	3	3



AM Peak-Hour Volume Count Worksheet

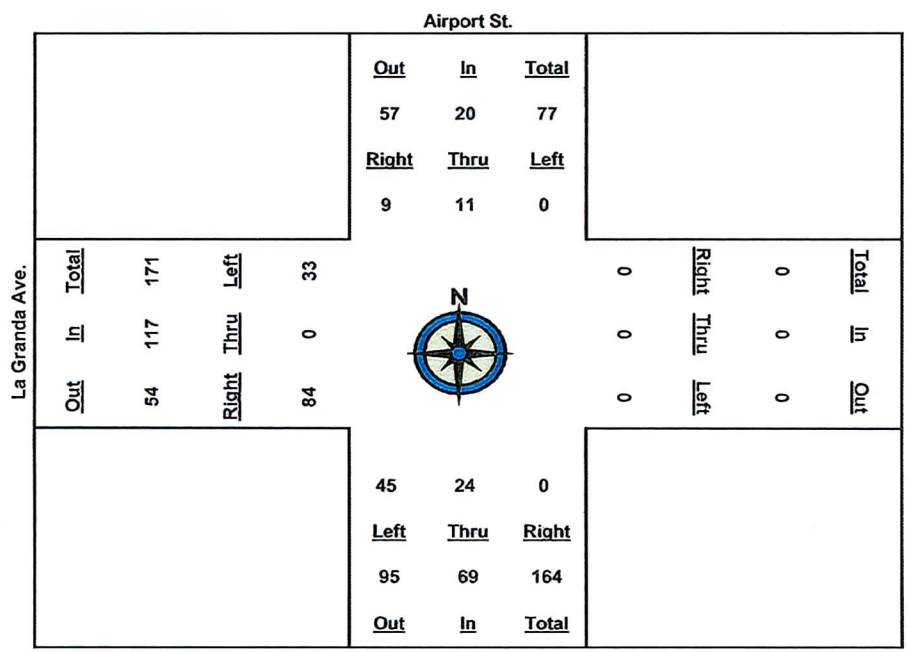
Date: 1/17/07
Counter: Alvan and Ngoc
Intersection Name: Airport St. and La Granada Avenue
Weather: Clear

AUTO-CENSUS
Traffic Monitoring and Analysis
870 Castlewood Dr. #1
Los Gatos, CA 95032
Phone 408-826-9673 Fax 408-877-162

	Airport St.				None				Airport St.				La Granda Ave.			
	North Approach				East Approach				South Approach				West Approach			
Start Time	Right	Thru	Left	Total	Right	Thru	Left	Total	Right	Thru	Left	Total	Right	Thru	Left	Total
7:00	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
7:15	1	2	0	3	0	0	0	0	0	2	3	5	32	0	3	35
7:30	2	4	0	6	0	0	0	0	0	4	8	12	48	0	10	58
7:45	3	7	0	10	0	0	0	0	0	7	16	23	72	0	17	89
8:00	6	9	0	15	0	0	0	0	0	14	24	38	112	0	24	136
8:15	10	11	0	21	0	0	0	0	0	20	45	65	122	0	32	154
8:30	11	15	0	26	0	0	0	0	0	28	53	81	132	0	43	175
8:45	14	21	0	35	0	0	0	0	0	32	57	89	137	0	46	183
9:00	16	26	0	42	0	0	0	0	0	34	59	93	140	0	47	187

Peak Hour	Right	Thru	Left	Total	Right	Thru	Left	Total	Right	Thru	Left	Total	Right	Thru	Left	Total	PK Hour
7:00 - 8:00	6	9	0	15	0	0	0	0	0	14	24	38	112	0	24	136	189
7:15 - 8:15	9	9	0	18	0	0	0	0	0	18	42	60	90	0	29	119	197
7:30 - 8:30	9	11	0	20	0	0	0	0	0	24	45	69	84	0	33	117	206
7:45 - 8:45	11	14	0	25	0	0	0	0	0	25	41	66	65	0	29	94	185
8:00 - 9:00	10	17	0	27	0	0	0	0	0	20	35	55	28	0	23	51	133
Peak Volumes:	9	11	0	20	0	0	0	0	0	24	45	69	84	0	33	117	206

Cut and Paste	NR	NT	NL		ER	ET	EL		SR	ST	SL		WR	WT	WL
	9	11	0		0	0	0		0	24	45		84	0	33



AM Peak-Hour Volume Count Worksheet

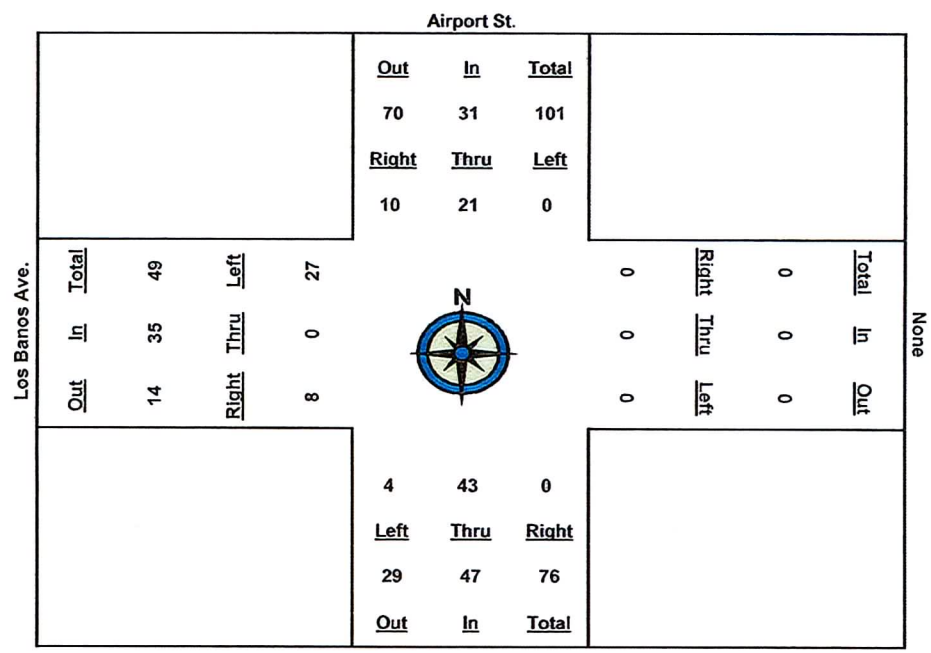
Date: 1/17/07
Counter: Patti and Ryan
Intersection Name: Airport St. and Los Banos Ave.
Weather: Clear

AUTO-CENSUS
Traffic Monitoring and Analysis
870 Castlewood Dr. #1
Los Gatos, CA 95032
Phone 408-826-9673 Fax 408-877-162

	Airport St.				None				Airport St.				Los Banos Ave.			
	North Approach				East Approach				South Approach				West Approach			
Start Time	Right	Thru	Left	Total	Right	Thru	Left	Total	Right	Thru	Left	Total	Right	Thru	Left	Total
7:00	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
7:15	1	3	0	4	0	0	0	0	0	6	0	6	0	0	5	5
7:30	1	5	0	6	0	0	0	0	0	12	0	12	0	0	6	6
7:45	1	9	0	10	0	0	0	0	0	21	0	21	1	0	13	14
8:00	4	12	0	16	0	0	0	0	0	32	1	33	2	0	19	21
8:15	5	20	0	25	0	0	0	0	0	41	2	43	4	0	29	33
8:30	8	24	0	32	0	0	0	0	0	56	3	59	5	0	36	41
8:45	11	30	0	41	0	0	0	0	0	64	4	68	9	0	40	49
9:00	11	34	0	45	0	0	0	0	0	69	5	74	10	0	41	51

Peak Hour	Right	Thru	Left	Total	Right	Thru	Left	Total	Right	Thru	Left	Total	Right	Thru	Left	Total	PK Hour
7:00 - 8:00	4	12	0	16	0	0	0	0	0	32	1	33	2	0	19	21	70
7:15 - 8:15	4	17	0	21	0	0	0	0	0	35	2	37	4	0	24	28	86
7:30 - 8:30	7	19	0	26	0	0	0	0	0	44	3	47	5	0	30	35	108
7:45 - 8:45	10	21	0	31	0	0	0	0	0	43	4	47	8	0	27	35	113
8:00 - 9:00	7	22	0	29	0	0	0	0	0	37	4	41	8	0	22	30	100
Peak Volumes:	**10**	**21**	**0**	**31**	**0**	**0**	**0**	**0**	**0**	**43**	**4**	**47**	**8**	**0**	**27**	**35**	**113**

Cut and Paste	NR	NT	NL		ER	ET	EL		SR	ST	SL		WR	WT	WL
	10	21	0		0	0	0		0	43	4		8	0	27



AM Peak-Hour Volume Count Worksheet

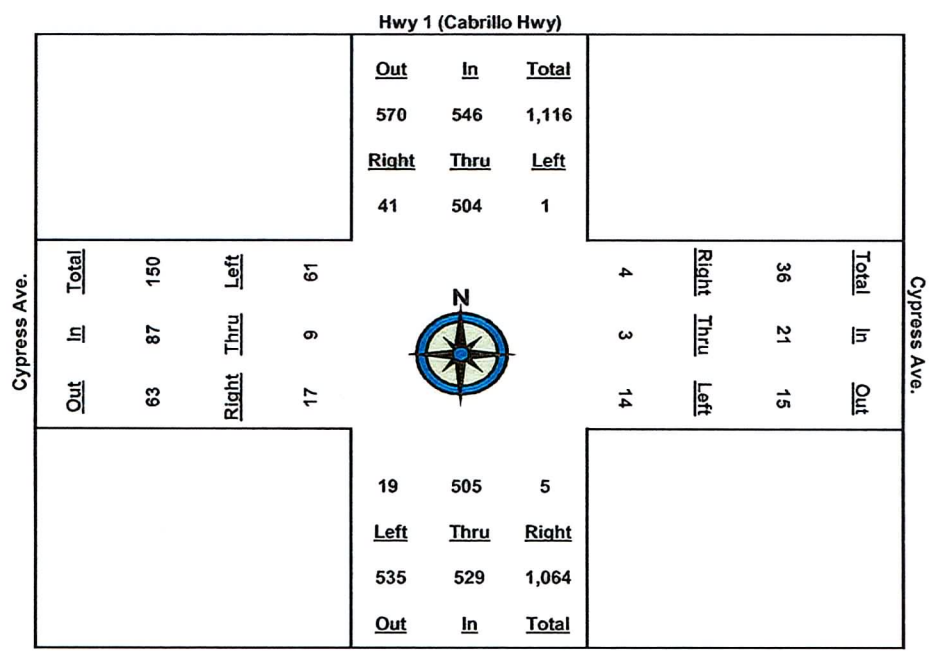
Date: 1/16/07
Counter: Kevin and Kushal
Intersection Name: Hwy 1 (Cabrillo Hwy) and Cypress Avenue
Weather:

AUTO-CENSUS
Traffic Monitoring and Analysis
870 Castlewood Dr. #1
Los Gatos, CA 95032
Phone 408-826-9673 Fax 408-877-162

	Hwy 1 (Cabrillo Hwy)				Cypress Ave.				Hwy 1 (Cabrillo Hwy)				Cypress Ave.			
	North Approach				East Approach				South Approach				West Approach			
Start Time	Right	Thru	Left	Total	Right	Thru	Left	Total	Right	Thru	Left	Total	Right	Thru	Left	Total
7:00	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
7:15	4	63	0	67	3	0	2	5	0	50	3	53	3	1	4	8
7:30	7	143	0	150	5	0	8	13	1	192	6	199	3	1	13	17
7:45	12	225	0	237	6	1	10	17	2	306	9	317	10	2	22	34
8:00	20	353	0	373	6	2	14	22	2	421	16	439	17	3	40	60
8:15	26	489	0	515	7	3	18	28	4	559	24	587	22	7	52	81
8:30	33	599	1	633	10	3	20	33	6	690	28	724	24	10	70	104
8:45	53	729	1	783	10	4	24	38	7	811	28	846	27	11	83	121
9:00	59	853	1	913	10	5	27	42	8	901	34	943	30	11	87	128

Peak Hour	Right	Thru	Left	Total	Right	Thru	Left	Total	Right	Thru	Left	Total	Right	Thru	Left	Total	PK Hour
7:00 - 8:00	20	353	0	373	6	2	14	22	2	421	16	439	17	3	40	60	894
7:15 - 8:15	22	426	0	448	4	3	16	23	4	509	21	534	19	6	48	73	1,078
7:30 - 8:30	26	456	1	483	5	3	12	20	5	498	22	525	21	9	57	87	1,115
7:45 - 8:45	41	504	1	546	4	3	14	21	5	505	19	529	17	9	61	87	1,183
8:00 - 9:00	39	500	1	540	4	3	13	20	6	480	18	504	13	8	47	68	1,132
Peak Volumes:	**41**	**504**	**1**	**546**	**4**	**3**	**14**	**21**	**5**	**505**	**19**	**529**	**17**	**9**	**61**	**87**	**1,183**

Cut and Paste	NR	NT	NL		ER	ET	EL		SR	ST	SL		WR	WT	WL
	41	504	1		4	3	14		5	505	19		17	9	61



AM Peak-Hour Volume Count Worksheet

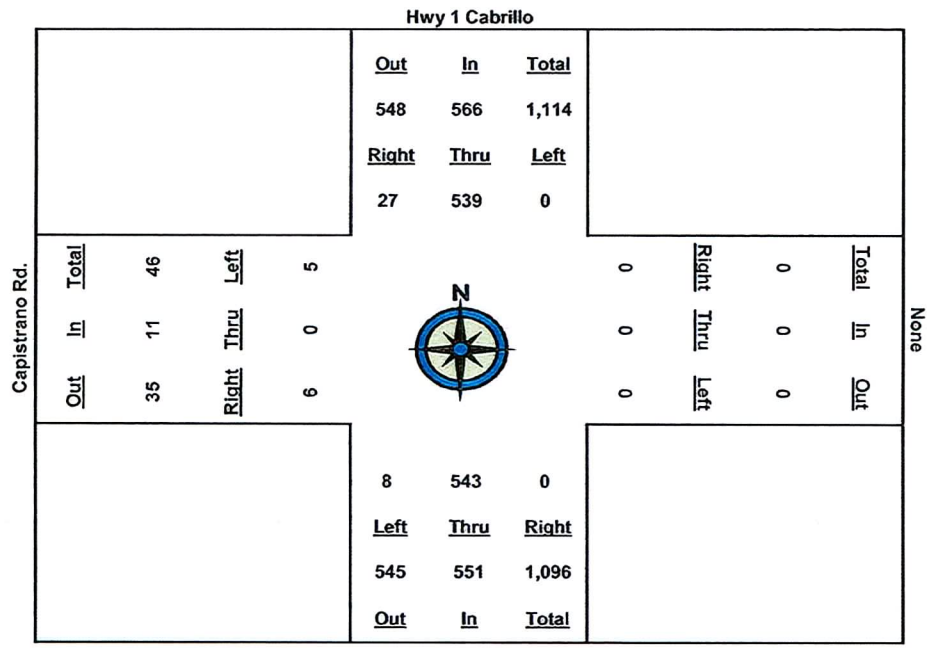
Date: 1/16/07
Counter: Patti and Logan
Intersection Name: Hwy 1 (Cabrillo) and Capistrano Rd. North
Weather: Clear

AUTO-CENSUS
Traffic Monitoring and Analysis
870 Castlewood Dr. #1
Los Gatos, CA 95032
Phone 408-826-9673 Fax 408-877-162

	Hwy 1 Cabrillo				None				Hwy 1 Cabrillo				Capistrano Rd.			
	North Approach				East Approach				South Approach				West Approach			
Start Time	Right	Thru	Left	Total	Right	Thru	Left	Total	Right	Thru	Left	Total	Right	Thru	Left	Total
7:00	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
7:15	3	150	0	153	0	0	0	0	0	48	1	49	0	0	1	1
7:30	6	248	0	254	0	0	0	0	0	170	1	171	1	0	3	4
7:45	11	354	0	365	0	0	0	0	0	300	1	301	1	0	4	5
8:00	12	490	0	502	0	0	0	0	0	420	1	421	4	0	4	8
8:15	22	634	0	656	0	0	0	0	0	569	5	574	4	0	4	8
8:30	25	754	0	779	0	0	0	0	0	724	5	729	7	0	4	11
8:45	27	884	0	911	0	0	0	0	0	860	8	868	8	0	7	15
9:00	39	1,029	0	1,068	0	0	0	0	0	963	9	972	10	0	9	19

Peak Hour	Right	Thru	Left	Total	Right	Thru	Left	Total	Right	Thru	Left	Total	Right	Thru	Left	Total	PK Hour
7:00 - 8:00	12	490	0	502	0	0	0	0	0	420	1	421	4	0	4	8	931
7:15 - 8:15	19	484	0	503	0	0	0	0	0	521	4	525	4	0	3	7	1,035
7:30 - 8:30	19	506	0	525	0	0	0	0	0	554	4	558	6	0	1	7	1,090
7:45 - 8:45	16	530	0	546	0	0	0	0	0	560	7	567	7	0	3	10	1,123
8:00 - 9:00	27	539	0	566	0	0	0	0	0	543	8	551	6	0	5	11	1,128
Peak Volumes:	**27**	**539**	**0**	**566**	**0**	**0**	**0**	**0**	**0**	**543**	**8**	**551**	**6**	**0**	**5**	**11**	**1,128**

Cut and Paste	NR	NT	NL		ER	ET	EL		SR	ST	SL		WR	WT	WL
	27	539	0		0	0	0		0	543	8		6	0	5



AM Peak-Hour Volume Count Worksheet

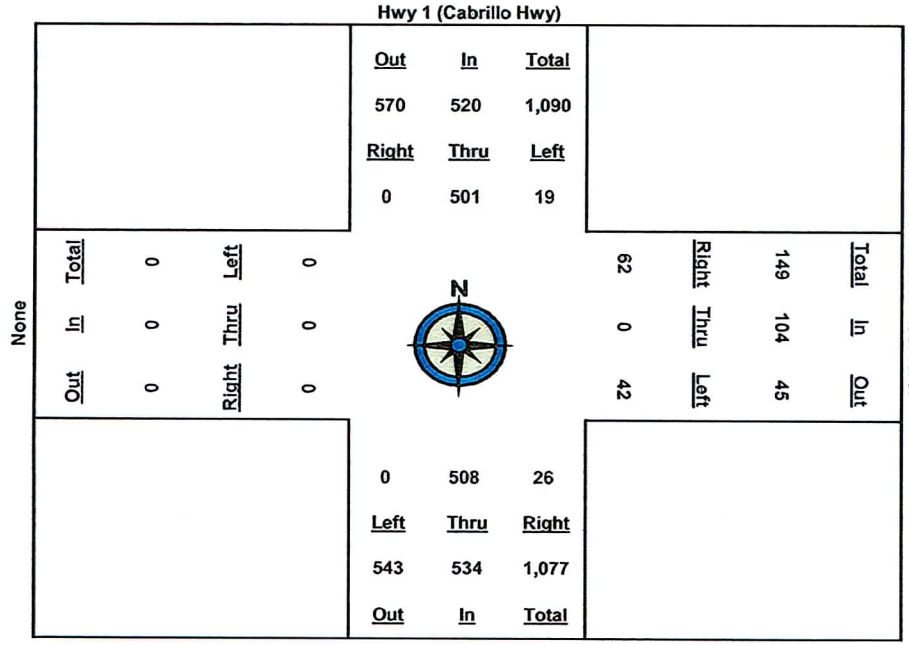
Date: 1/16/07
Counter: Jamie and Friend
Intersection Name: Hwy 1 (Cabrillo Hwy) and Coral Reef Ave.
Weather: Clear

AUTO-CENSUS
Traffic Monitoring and Analysis
870 Castlewood Dr. #1
Los Gatos, CA 95032
Phone 408-826-9673 Fax 408-877-162

	Hwy 1 (Cabrillo Hwy)				Coral Reef Ave.				Hwy 1 (Cabrillo Hwy)				None			
	North Approach				East Approach				South Approach				West Approach			
Start Time	Right	Thru	Left	Total	Right	Thru	Left	Total	Right	Thru	Left	Total	Right	Thru	Left	Total
7:00	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
7:15	0	151	1	152	15	0	15	30	3	63	0	66	0	0	0	0
7:30	0	246	5	251	26	0	30	56	7	151	0	158	0	0	0	0
7:45	0	358	9	367	37	0	38	75	9	258	0	267	0	0	0	0
8:00	0	498	16	514	49	0	56	105	14	350	0	364	0	0	0	0
8:15	0	627	18	645	68	0	64	132	19	452	0	471	0	0	0	0
8:30	0	738	23	761	90	0	71	161	27	657	0	684	0	0	0	0
8:45	0	859	28	887	99	0	80	179	35	766	0	801	0	0	0	0
9:00	0	983	33	1,016	106	0	85	191	40	812	0	852	0	0	0	0

Peak Hour	Right	Thru	Left	Total	Right	Thru	Left	Total	Right	Thru	Left	Total	Right	Thru	Left	Total	PK Hour
7:00 - 8:00	0	498	16	514	49	0	56	105	14	350	0	364	0	0	0	0	983
7:15 - 8:15	0	476	17	493	53	0	49	102	16	389	0	405	0	0	0	0	1,000
7:30 - 8:30	0	492	18	510	64	0	41	105	20	506	0	526	0	0	0	0	1,141
7:45 - 8:45	0	501	19	520	62	0	42	104	26	508	0	534	0	0	0	0	1,158
8:00 - 9:00	0	485	17	502	57	0	29	86	26	462	0	488	0	0	0	0	1,076
Peak Volumes:	**0**	**501**	**19**	**520**	**62**	**0**	**42**	**104**	**26**	**508**	**0**	**534**	**0**	**0**	**0**	**0**	**1,158**

Cut and Paste	NR	NT	NL		ER	ET	EL		SR	ST	SL		WR	WT	WL
	0	501	19		62	0	42		26	508	0		0	0	0



AM Peak-Hour Volume Count Worksheet

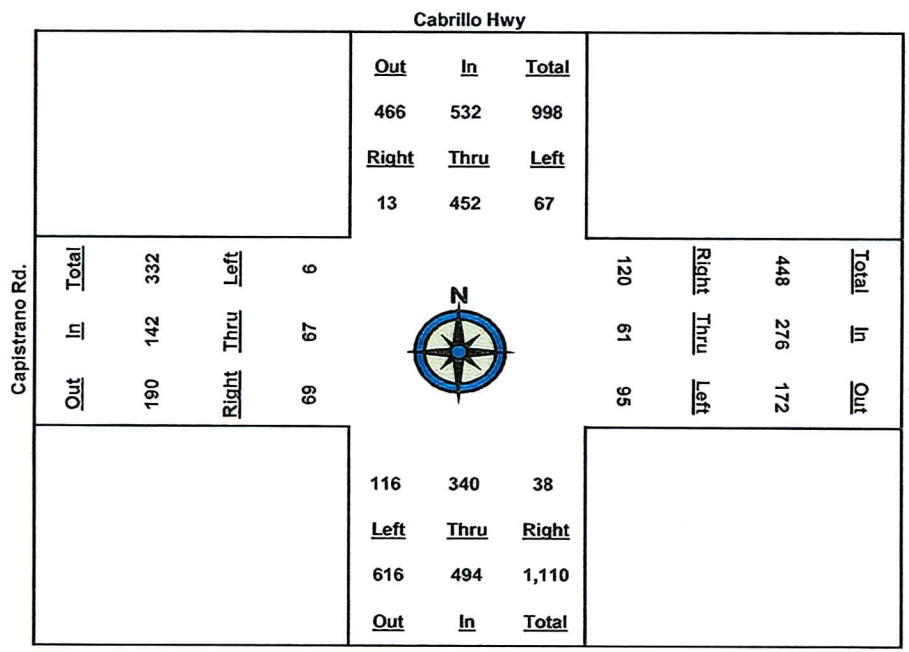
Date: 1/18/07
Counter: Alvan and Ngoc
Intersection Name: Cabrillo Hwy and Capistrano Road (South)
Weather: Clear

AUTO-CENSUS
Traffic Monitoring and Analysis
19222 Vineyard Ln.
Saratoga, CA 95070
Phone 408-826-9673 Fax 408-877-162

	Cabrillo Hwy				Alhambra Ave.				Cabrillo Hwy				Capistrano Rd.			
	North Approach				East Approach				South Approach				West Approach			
Start Time	Right	Thru	Left	Total	Right	Thru	Left	Total	Right	Thru	Left	Total	Right	Thru	Left	Total
7:00	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
7:15	2	145	12	159	34	13	22	69	3	52	15	70	30	11	1	42
7:30	7	241	34	282	56	21	37	114	14	127	30	171	47	20	1	68
7:45	8	326	48	382	82	35	50	167	21	211	52	284	62	33	3	98
8:00	13	470	67	550	105	45	78	228	35	309	98	442	87	64	5	156
8:15	13	568	80	661	143	71	108	322	44	384	122	550	105	76	8	189
8:30	19	654	95	768	172	78	129	379	55	478	145	678	119	86	9	214
8:45	21	778	115	914	202	96	145	443	59	551	168	778	131	100	9	240
9:00	21	851	119	991	212	109	156	477	70	614	188	872	146	110	10	266

Peak Hour	Right	Thru	Left	Total	Right	Thru	Left	Total	Right	Thru	Left	Total	Right	Thru	Left	Total	PK Hour
7:00 - 8:00	13	470	67	550	105	45	78	228	35	309	98	442	87	64	5	156	1,376
7:15 - 8:15	11	423	68	502	109	58	86	253	41	332	107	480	75	65	7	147	1,382
7:30 - 8:30	12	413	61	486	116	57	92	265	41	351	115	507	72	66	8	146	1,404
7:45 - 8:45	13	452	67	532	120	61	95	276	38	340	116	494	69	67	6	142	1,444
8:00 - 9:00	8	381	52	441	107	64	78	249	35	305	90	430	59	46	5	110	1,230
Peak Volumes:	**13**	**452**	**67**	**532**	**120**	**61**	**95**	**276**	**38**	**340**	**116**	**494**	**69**	**67**	**6**	**142**	**1,444**

Cut and Paste	NR	NT	NL		ER	ET	EL		SR	ST	SL		WR	WT	WL
	13	452	67		120	61	95		38	340	116		69	67	6



PM Peak-Hour Volume Count Worksheet

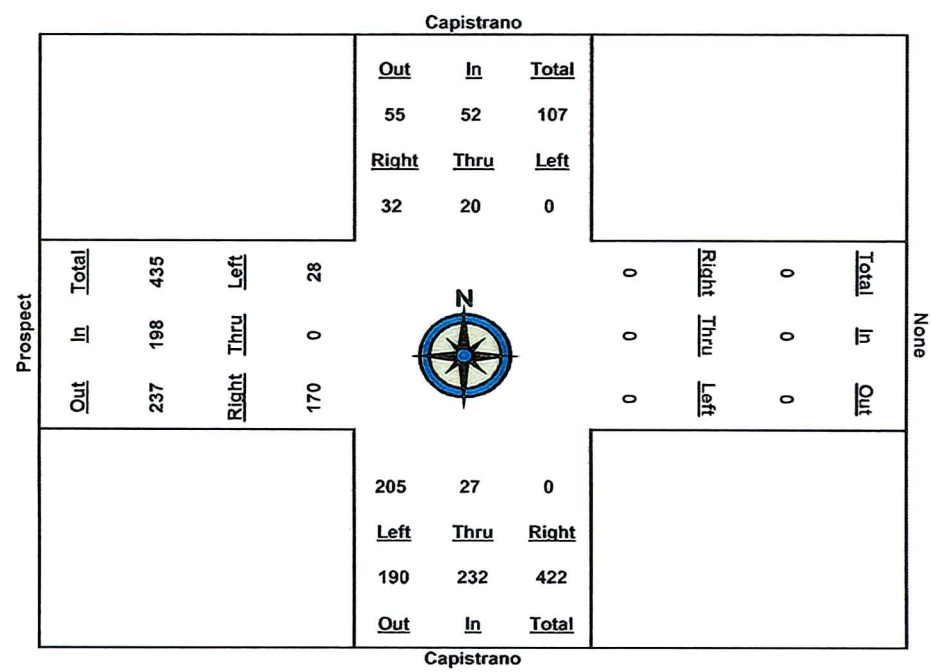
Date: 1/18/06
Counter: Patti and Robert
Intersection Name: Capistrano and Prospect
Weather: Clear

AUTO-CENSUS
Traffic Monitoring and Analysis
19222 Vineyard Ln.
Saratoga, CA 95070
Phone 408-826-9673 Fax 408-877-1625

	Capistrano				None				Capistrano				Prospect			
	North Approach				East Approach				South Approach				West Approach			
Start Time	Right	Thru	Left	Total	Right	Thru	Left	Total	Right	Thru	Left	Total	Right	Thru	Left	Total
4:00	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
4:15	5	6	0	11	0	0	0	0	0	3	41	44	37	0	3	40
4:30	15	10	0	25	0	0	0	0	0	11	73	84	83	0	8	91
4:45	22	14	0	36	0	0	0	0	0	19	127	146	126	0	15	141
5:00	29	20	0	49	0	0	0	0	0	27	187	214	171	0	23	194
5:15	38	24	0	62	0	0	0	0	0	32	236	268	211	0	27	238
5:30	47	30	0	77	0	0	0	0	0	38	278	316	253	0	36	289
5:45	50	32	0	82	0	0	0	0	0	43	318	361	305	0	42	347
6:00	55	34	0	89	0	0	0	0	0	43	345	388	346	0	43	389

Peak Hour	Right	Thru	Left	Total	Right	Thru	Left	Total	Right	Thru	Left	Total	Right	Thru	Left	Total	PK Hour
4:00 - 5:00	29	20	0	49	0	0	0	0	0	27	187	214	171	0	23	194	457
4:15 - 5:15	33	18	0	51	0	0	0	0	0	29	195	224	174	0	24	198	473
4:30 - 5:30	32	20	0	52	0	0	0	0	0	27	205	232	170	0	28	198	482
4:45 - 5:45	28	18	0	46	0	0	0	0	0	24	191	215	179	0	27	206	467
5:00 - 6:00	26	14	0	40	0	0	0	0	0	16	158	174	175	0	20	195	409
Peak Volumes:	**32**	**20**	**0**	**52**	**0**	**0**	**0**	**0**	**0**	**27**	**205**	**232**	**170**	**0**	**28**	**198**	**482**

Cut and Paste	NR	NT	NL		ER	ET	EL		SR	ST	SL		WR	WT	WL
	32	20	0		0	0	0		0	27	205		170	0	28



PM Peak-Hour Volume Count Worksheet

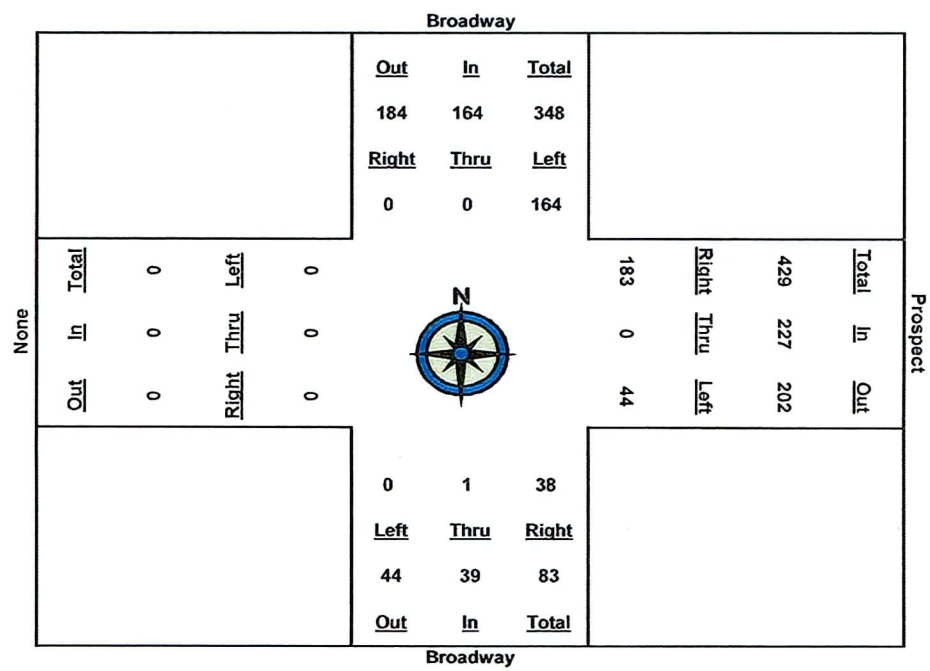
Date: 1/18/06
Counter: Logan and Keith
Intersection Name: Prospect and Broadway
Weather: Clear

AUTO-CENSUS
Traffic Monitoring and Analysis
19222 Vineyard Ln.
Saratoga, CA 95070
Phone 408-826-9673 Fax 408-877-162[illegible]

	Broadway				Prospect				Broadway				None			
	North Approach				East Approach				South Approach				West Approach			
Start Time	Right	Thru	Left	Total	Right	Thru	Left	Total	Right	Thru	Left	Total	Right	Thru	Left	Total
4:00	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
4:15	0	1	26	27	33	0	10	43	9	0	0	9	0	0	0	0
4:30	0	1	72	73	65	0	15	80	20	1	0	21	0	0	0	0
4:45	0	1	113	114	115	0	30	145	26	1	0	27	0	0	0	0
5:00	0	1	154	155	165	0	44	209	41	1	0	42	0	0	0	0
5:15	0	1	190	191	216	0	54	270	47	1	0	48	0	0	0	0
5:30	0	1	227	228	255	0	61	316	58	1	0	59	0	0	0	0
5:45	0	1	275	276	300	0	68	368	70	1	0	71	0	0	0	0
6:00	0	1	306	307	320	0	74	394	84	1	0	85	0	0	0	0

Peak Hour	Right	Thru	Left	Total	Right	Thru	Left	Total	Right	Thru	Left	Total	Right	Thru	Left	Total	PK Hour
4:00 - 5:00	0	1	154	155	165	0	44	209	41	1	0	42	0	0	0	0	406
4:15 - 5:15	0	0	164	164	183	0	44	227	38	1	0	39	0	0	0	0	430
4:30 - 5:30	0	0	155	155	190	0	46	236	38	0	0	38	0	0	0	0	429
4:45 - 5:45	0	0	162	162	185	0	38	223	44	0	0	44	0	0	0	0	429
5:00 - 6:00	0	0	152	152	155	0	30	185	43	0	0	43	0	0	0	0	380
Peak Volumes:	**0**	**0**	**164**	**164**	**183**	**0**	**44**	**227**	**38**	**1**	**0**	**39**	**0**	**0**	**0**	**0**	**430**

Cut and Paste	NR	NT	NL		ER	ET	EL		SR	ST	SL		WR	WT	WL
	0	0	164		183	0	44		38	1	0		0	0	0



PM Peak-Hour Volume Count Worksheet

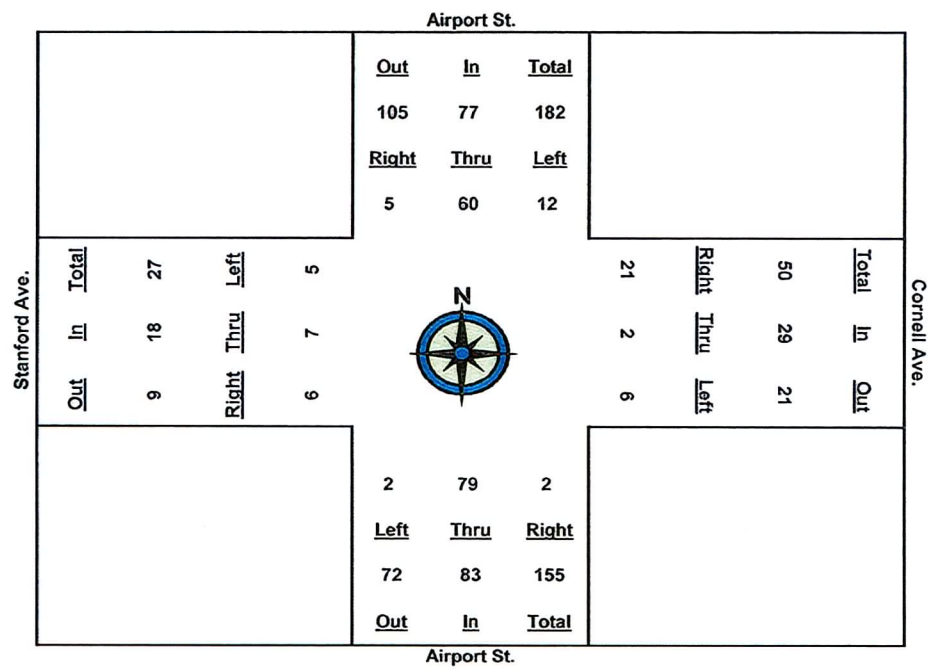
Date: 1/17/07
Counter: Kevin and Logan
Intersection Name: Airport St. and Cornell/Stanford Ave
Weather: Clear

AUTO-CENSUS
Traffic Monitoring and Analysis
870 Castlewood Dr. #1
Los Gatos, CA 95032
Phone 408-826-9673 Fax 408-877-1625

	Airport St.				Cornell Ave.				Airport St.				Stanford Ave.			
	North Approach				East Approach				South Approach				West Approach			
Start Time	Right	Thru	Left	Total	Right	Thru	Left	Total	Right	Thru	Left	Total	Right	Thru	Left	Total
4:00	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
4:15	1	14	1	16	4	2	1	7	1	12	2	15	0	1	0	1
4:30	4	30	6	40	11	2	4	17	2	24	2	28	0	5	1	6
4:45	5	42	9	56	16	3	6	25	2	42	3	47	0	8	1	9
5:00	6	58	10	74	22	3	7	32	2	62	3	67	5	8	2	15
5:15	6	74	13	93	25	4	7	36	3	91	4	98	6	8	5	19
5:30	6	89	16	111	30	4	8	42	3	111	5	119	9	8	5	22
5:45	6	111	17	134	34	4	10	48	3	126	5	134	10	10	8	28
6:00	6	126	20	152	40	4	11	55	3	134	5	142	10	10	13	33

Peak Hour	Right	Thru	Left	Total	Right	Thru	Left	Total	Right	Thru	Left	Total	Right	Thru	Left	Total	PK Hour
4:00 - 5:00	6	58	10	74	22	3	7	32	2	62	3	67	5	8	2	15	188
4:15 - 5:15	5	60	12	77	21	2	6	29	2	79	2	83	6	7	5	18	207
4:30 - 5:30	2	59	10	71	19	2	4	25	1	87	3	91	9	3	4	16	203
4:45 - 5:45	1	69	8	78	18	1	4	23	1	84	2	87	10	2	7	19	207
5:00 - 6:00	0	68	10	78	18	1	4	23	1	72	2	75	5	2	11	18	194
Peak Volumes:	**5**	**60**	**12**	**77**	**21**	**2**	**6**	**29**	**2**	**79**	**2**	**83**	**6**	**7**	**5**	**18**	**207**

Cut and Paste	NR	NT	NL		ER	ET	EL		SR	ST	SL		WR	WT	WL
	5	60	12		21	2	6		2	79	2		6	7	5



PM Peak-Hour Volume Count Worksheet

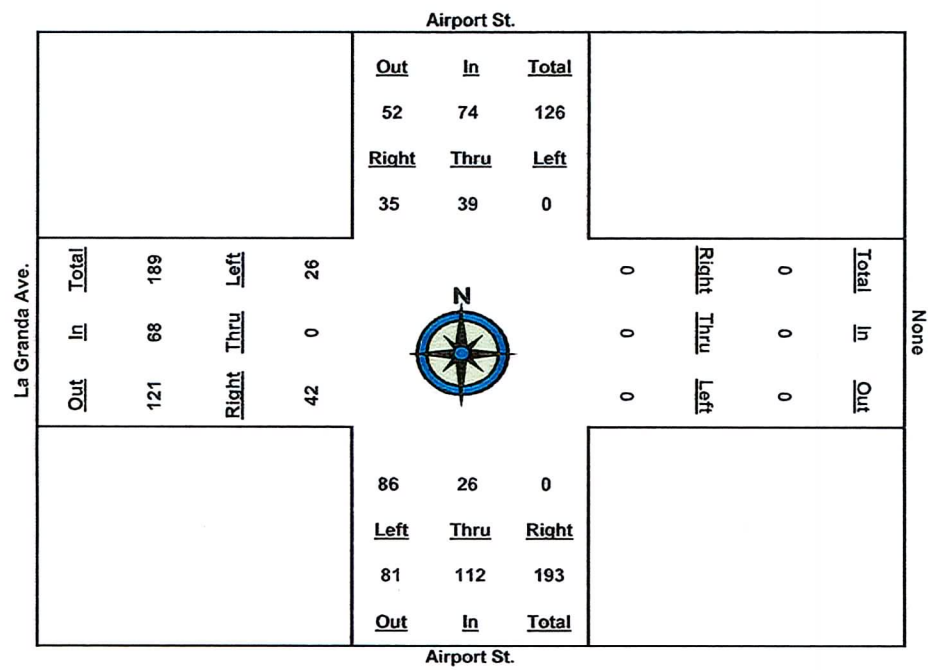
Date: 1/17/07
Counter: Matt and Robert
Intersection Name: Airport St. and La Granada Avenue
Weather: Clear

AUTO-CENSUS
Traffic Monitoring and Analysis
870 Castlewood Dr. #1
Los Gatos, CA 95032
Phone 408-826-9673 Fax 408-877-1625

	Airport St.				None				Airport St.				La Granda Ave.			
	North Approach				East Approach				South Approach				West Approach			
Start Time	Right	Thru	Left	Total	Right	Thru	Left	Total	Right	Thru	Left	Total	Right	Thru	Left	Total
4:00	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
4:15	8	16	0	24	0	0	0	0	0	11	15	26	9	0	7	16
4:30	16	29	0	45	0	0	0	0	0	15	27	42	22	0	13	35
4:45	24	39	0	63	0	0	0	0	0	19	45	64	25	0	20	45
5:00	33	46	0	79	0	0	0	0	0	24	66	90	33	0	26	59
5:15	46	58	0	104	0	0	0	0	0	36	97	133	46	0	36	82
5:30	51	67	0	118	0	0	0	0	0	41	114	155	55	0	42	97
5:45	59	78	0	137	0	0	0	0	0	45	131	176	67	0	46	113
6:00	63	83	0	146	0	0	0	0	0	57	144	201	80	0	49	129

Peak Hour	Right	Thru	Left	Total	Right	Thru	Left	Total	Right	Thru	Left	Total	Right	Thru	Left	Total	PK Hour
4:00 - 5:00	33	46	0	79	0	0	0	0	0	24	66	90	33	0	26	59	228
4:15 - 5:15	38	42	0	80	0	0	0	0	0	25	82	107	37	0	29	66	253
4:30 - 5:30	35	38	0	73	0	0	0	0	0	26	87	113	33	0	29	62	248
4:45 - 5:45	35	39	0	74	0	0	0	0	0	26	86	112	42	0	26	68	254
5:00 - 6:00	30	37	0	67	0	0	0	0	0	33	78	111	47	0	23	70	248
Peak Volumes:	**35**	**39**	**0**	**74**	**0**	**0**	**0**	**0**	**0**	**26**	**86**	**112**	**42**	**0**	**26**	**68**	**254**

Cut and Paste	NR	NT	NL		ER	ET	EL		SR	ST	SL		WR	WT	WL
	35	39	0		0	0	0		0	26	86		42	0	26



PM Peak-Hour Volume Count Worksheet

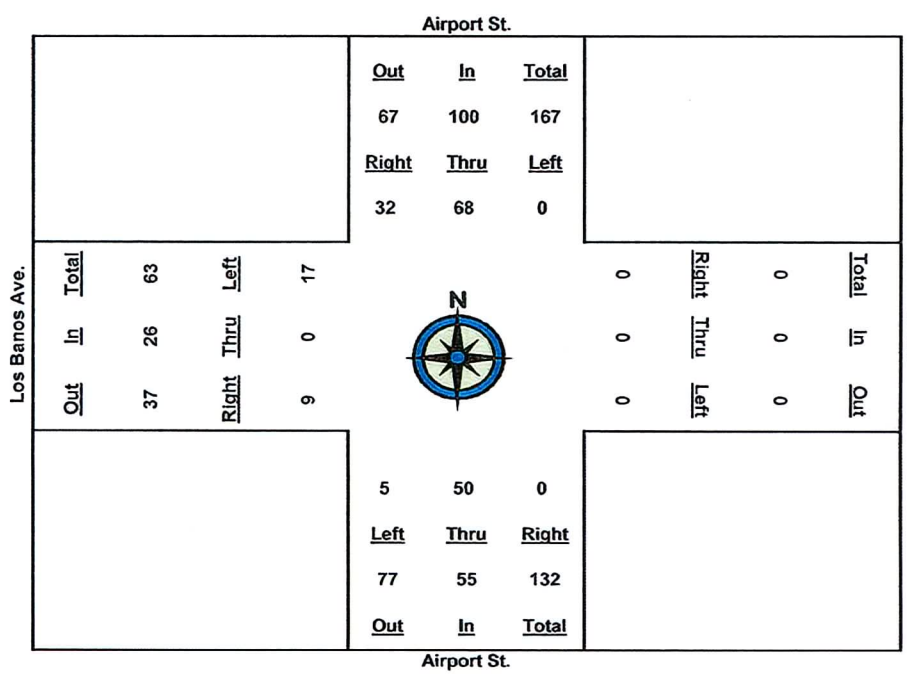
Date: 1/17/07
Counter: Patti and Robert
Intersection Name: Airport St. and Los Banos Ave.
Weather: Clear

AUTO-CENSUS
Traffic Monitoring and Analysis
870 Castlewood Dr. #1
Los Gatos, CA 95032
Phone 408-826-9673 Fax 408-877-162

	Airport St.				None				Airport St.				Los Banos Ave.			
	North Approach				East Approach				South Approach				West Approach			
Start Time	Right	Thru	Left	Total	Right	Thru	Left	Total	Right	Thru	Left	Total	Right	Thru	Left	Total
4:00	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
4:15	8	12	0	20	0	0	0	0	0	16	1	17	1	0	6	7
4:30	16	26	0	42	0	0	0	0	0	25	1	26	3	0	9	12
4:45	22	43	0	65	0	0	0	0	0	34	4	38	4	0	18	22
5:00	30	60	0	90	0	0	0	0	0	48	4	52	8	0	21	29
5:15	40	80	0	120	0	0	0	0	0	66	6	72	10	0	23	33
5:30	47	90	0	137	0	0	0	0	0	74	8	82	12	0	26	38
5:45	52	96	0	148	0	0	0	0	0	81	8	89	16	0	33	49
6:00	61	103	0	164	0	0	0	0	0	88	9	97	20	0	36	56

Peak Hour	Right	Thru	Left	Total	Right	Thru	Left	Total	Right	Thru	Left	Total	Right	Thru	Left	Total	PK Hour
4:00 - 5:00	30	60	0	90	0	0	0	0	0	48	4	52	8	0	21	29	171
4:15 - 5:15	32	68	0	100	0	0	0	0	0	50	5	55	9	0	17	26	181
4:30 - 5:30	31	64	0	95	0	0	0	0	0	49	7	56	9	0	17	26	177
4:45 - 5:45	30	53	0	83	0	0	0	0	0	47	4	51	12	0	15	27	161
5:00 - 6:00	31	43	0	74	0	0	0	0	0	40	5	45	12	0	15	27	146
Peak Volumes:	**32**	**68**	**0**	**100**	**0**	**0**	**0**	**0**	**0**	**50**	**5**	**55**	**9**	**0**	**17**	**26**	**181**

Cut and Paste	NR	NT	NL		ER	ET	EL		SR	ST	SL		WR	WT	WL
	32	68	0		0	0	0		0	50	5		9	0	17



PM Peak-Hour Volume Count Worksheet

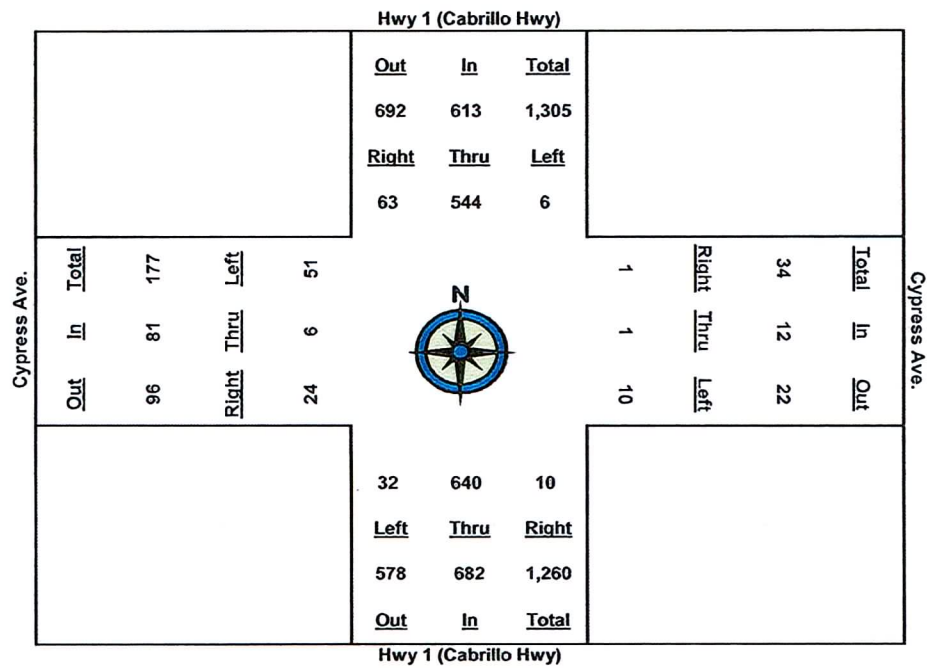
Date: 1/16/07
Counter: Kevin and Logan
Intersection Name: Hwy 1 (Cabrillo Hwy) and Cypress Avenue
Weather: Clear

AUTO-CENSUS
Traffic Monitoring and Analysis
870 Castlewood Dr. #1
Los Gatos, CA 95032
Phone 408-826-9673 Fax 408-877-162

	Hwy 1 (Cabrillo Hwy)				Cypress Ave.				Hwy 1 (Cabrillo Hwy)				Cypress Ave.			
	North Approach				East Approach				South Approach				West Approach			
Start Time	Right	Thru	Left	Total	Right	Thru	Left	Total	Right	Thru	Left	Total	Right	Thru	Left	Total
4:00	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
4:15	9	138	1	148	0	0	1	1	1	151	5	157	5	1	3	9
4:30	21	278	1	300	0	1	1	2	3	294	11	308	9	1	5	15
4:45	41	421	3	465	0	1	4	5	3	434	20	457	15	4	22	41
5:00	56	541	7	604	1	1	10	12	6	598	26	630	15	5	40	60
5:15	72	682	7	761	1	1	11	13	11	791	37	839	29	7	54	90
5:30	84	774	7	865	1	4	12	17	13	940	42	995	35	7	66	108
5:45	95	911	12	1,018	2	5	14	21	16	1,102	46	1,164	38	7	79	124
6:00	103	1,020	12	1,135	4	5	16	25	18	1,269	49	1,336	42	8	83	133

Peak Hour	Right	Thru	Left	Total	Right	Thru	Left	Total	Right	Thru	Left	Total	Right	Thru	Left	Total	PK Hour
4:00 - 5:00	56	541	7	604	1	1	10	12	6	598	26	630	15	5	40	60	1,306
4:15 - 5:15	63	544	6	613	1	1	10	12	10	640	32	682	24	6	51	81	1,388
4:30 - 5:30	63	496	6	565	1	3	11	15	10	646	31	687	26	6	61	93	1,360
4:45 - 5:45	54	490	9	553	2	4	10	16	13	668	26	707	23	3	57	83	1,359
5:00 - 6:00	47	479	5	531	3	4	6	13	12	671	23	706	27	3	43	73	1,323
Peak Volumes:	**63**	**544**	**6**	**613**	**1**	**1**	**10**	**12**	**10**	**640**	**32**	**682**	**24**	**6**	**51**	**81**	**1,388**

Cut and Paste	NR	NT	NL		ER	ET	EL		SR	ST	SL		WR	WT	WL
	63	544	6		1	1	10		10	640	32		24	6	51



PM Peak-Hour Volume Count Worksheet

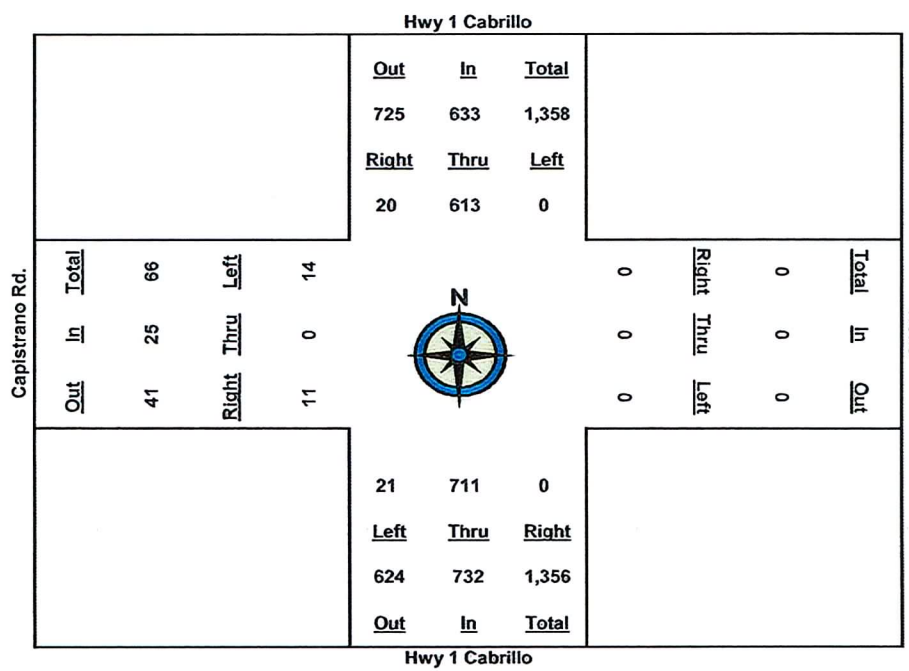
Date: 1/16/07
Counter: Patti and Matt
Intersection Name: Hwy 1 (Cabrillo) and Capistrano Rd. North
Weather: Clear

AUTO-CENSUS
Traffic Monitoring and Analysis
870 Castlewood Dr. #1
Los Gatos, CA 95032
Phone 408-826-9673 Fax 408-877-162

	Hwy 1 Cabrillo				None				Hwy 1 Cabrillo				Capistrano Rd.			
	North Approach				East Approach				South Approach				West Approach			
Start Time	Right	Thru	Left	Total	Right	Thru	Left	Total	Right	Thru	Left	Total	Right	Thru	Left	Total
4:00	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
4:15	8	153	0	161	0	0	0	0	0	146	2	148	5	0	6	11
4:30	19	298	0	317	0	0	0	0	0	284	3	287	6	0	12	18
4:45	25	452	0	477	0	0	0	0	0	442	12	454	9	0	16	25
5:00	28	613	0	641	0	0	0	0	0	634	19	653	12	0	19	31
5:15	34	772	0	806	0	0	0	0	0	830	22	852	15	0	24	39
5:30	39	911	0	950	0	0	0	0	0	995	24	1,019	17	0	26	43
5:45	44	1,047	0	1,091	0	0	0	0	0	1,118	26	1,144	20	0	31	51
6:00	50	1,176	0	1,226	0	0	0	0	0	1,299	27	1,326	21	0	34	55

Peak Hour	Right	Thru	Left	Total	Right	Thru	Left	Total	Right	Thru	Left	Total	Right	Thru	Left	Total	PK Hour
4:00 - 5:00	28	613	0	641	0	0	0	0	0	634	19	653	12	0	19	31	1,325
4:15 - 5:15	26	619	0	645	0	0	0	0	0	684	20	704	10	0	18	28	1,377
4:30 - 5:30	20	613	0	633	0	0	0	0	0	711	21	732	11	0	14	25	1,390
4:45 - 5:45	19	595	0	614	0	0	0	0	0	676	14	690	11	0	15	26	1,330
5:00 - 6:00	22	563	0	585	0	0	0	0	0	665	8	673	9	0	15	24	1,282
Peak Volumes:	**20**	**613**	**0**	**633**	**0**	**0**	**0**	**0**	**0**	**711**	**21**	**732**	**11**	**0**	**14**	**25**	**1,390**

Cut and Paste	NR	NT	NL		ER	ET	EL		SR	ST	SL		WR	WT	WL
	20	613	0		0	0	0		0	711	21		11	0	14



PM Peak-Hour Volume Count Worksheet

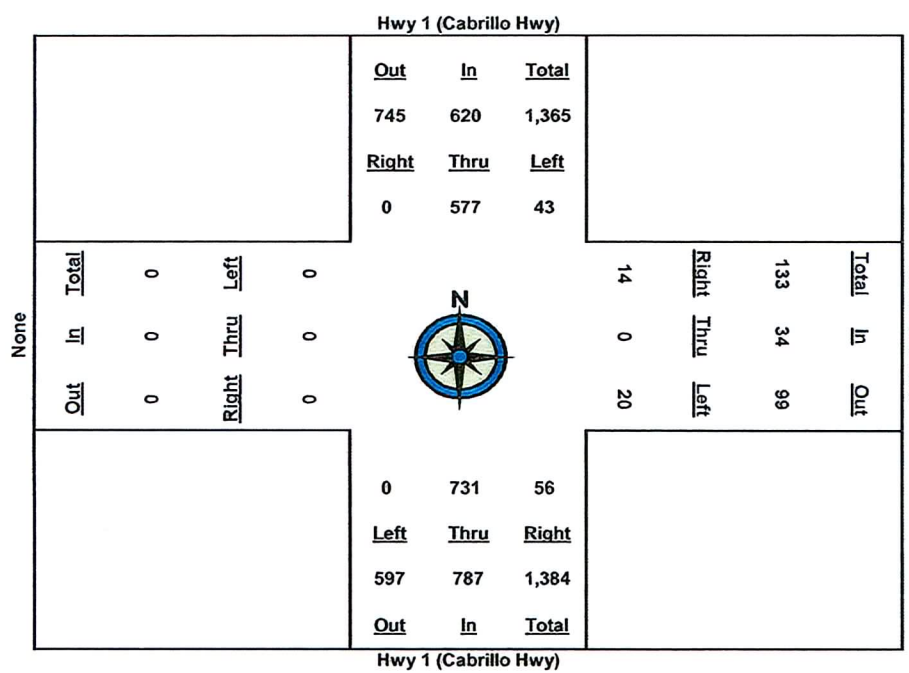
Date: 1/16/07
Counter: Alvan and Ngoc
Intersection Name: Hwy 1 (Cabrillo Hwy) and Coral Reef Ave.
Weather: Clear

AUTO-CENSUS
Traffic Monitoring and Analysis
870 Castlewood Dr. #1
Los Gatos, CA 95032
Phone 408-826-9673 Fax 408-877-162

	Hwy 1 (Cabrillo Hwy)				Coral Reef Ave.				Hwy 1 (Cabrillo Hwy)				None			
	North Approach				East Approach				South Approach				West Approach			
Start Time	Right	Thru	Left	Total	Right	Thru	Left	Total	Right	Thru	Left	Total	Right	Thru	Left	Total
4:00	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
4:15	0	76	6	82	4	0	3	7	12	88	0	100	0	0	0	0
4:30	0	197	13	210	8	0	13	21	20	231	0	251	0	0	0	0
4:45	0	358	24	382	10	0	21	31	31	388	0	419	0	0	0	0
5:00	0	550	34	584	13	0	25	38	45	570	0	615	0	0	0	0
5:15	0	657	44	701	17	0	31	48	62	770	0	832	0	0	0	0
5:30	0	774	56	830	22	0	33	55	76	962	0	1,038	0	0	0	0
5:45	0	913	72	985	26	0	38	64	99	1,101	0	1,200	0	0	0	0
6:00	0	1,008	77	1,085	26	0	42	68	116	1,271	0	1,387	0	0	0	0

Peak Hour	Right	Thru	Left	Total	Right	Thru	Left	Total	Right	Thru	Left	Total	Right	Thru	Left	Total	PK Hour
4:00 - 5:00	0	550	34	584	13	0	25	38	45	570	0	615	0	0	0	0	1,237
4:15 - 5:15	0	581	38	619	13	0	28	41	50	682	0	732	0	0	0	0	1,392
4:30 - 5:30	0	577	43	620	14	0	20	34	56	731	0	787	0	0	0	0	1,441
4:45 - 5:45	0	555	48	603	16	0	17	33	68	713	0	781	0	0	0	0	1,417
5:00 - 6:00	0	458	43	501	13	0	17	30	71	701	0	772	0	0	0	0	1,303
Peak Volumes:	**0**	**577**	**43**	**620**	**14**	**0**	**20**	**34**	**56**	**731**	**0**	**787**	**0**	**0**	**0**	**0**	**1,441**

Cut and Paste	NR	NT	NL		ER	ET	EL		SR	ST	SL		WR	WT	WL
	0	577	43		14	0	20		56	731	0		0	0	0



PM Peak-Hour Volume Count Worksheet

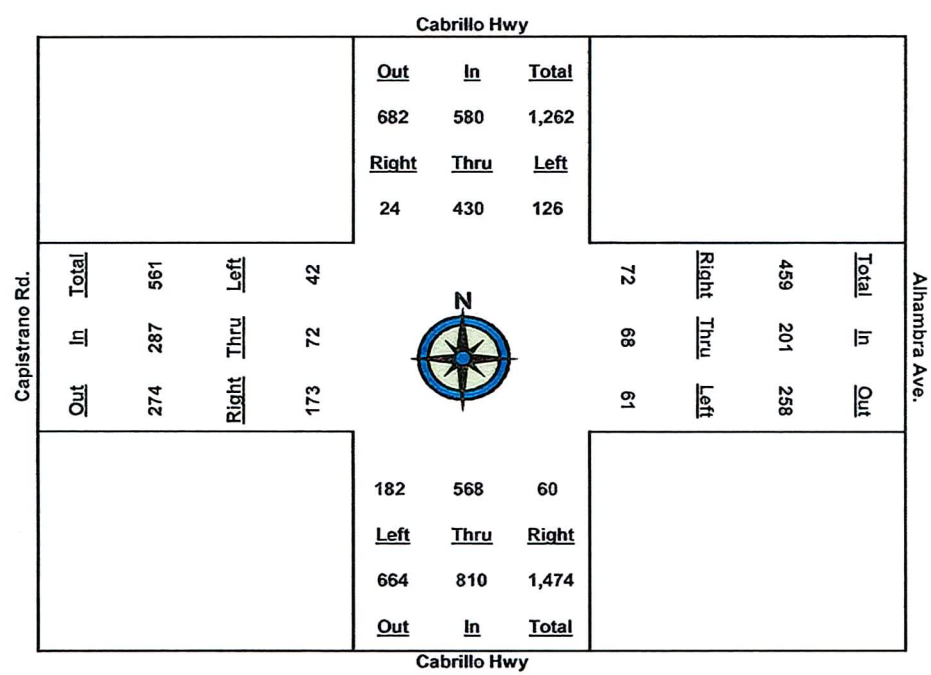
Date: 1/18/07
Counter: Alvan and Ngoc
Intersection Name: Cabrillo Hwy and Capistrano Road (South)
Weather: Clear

AUTO-CENSUS
Traffic Monitoring and Analysis
19222 Vineyard Ln.
Saratoga, CA 95070
Phone 408-826-9673 Fax 408-877-1625

	Cabrillo Hwy				Alhambra Ave.				Cabrillo Hwy				Capistrano Rd.			
	North Approach				East Approach				South Approach				West Approach			
Start Time	Right	Thru	Left	Total	Right	Thru	Left	Total	Right	Thru	Left	Total	Right	Thru	Left	Total
4:00	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
4:15	4	108	11	123	17	14	15	46	11	126	32	169	33	10	9	52
4:30	12	233	49	294	30	32	37	99	22	246	68	336	85	29	23	137
4:45	16	333	72	421	49	41	51	141	34	381	130	545	119	46	32	197
5:00	22	447	113	582	70	62	65	197	54	550	174	778	159	61	40	260
5:15	28	538	137	703	89	82	76	247	71	694	214	979	206	82	51	339
5:30	30	620	173	823	110	97	85	292	89	836	251	1,176	232	102	56	390
5:45	34	723	207	964	135	115	98	348	111	980	288	1,379	271	119	60	450
6:00	34	810	247	1,091	144	122	106	372	131	1,131	319	1,581	299	131	72	502

Peak Hour	Right	Thru	Left	Total	Right	Thru	Left	Total	Right	Thru	Left	Total	Right	Thru	Left	Total	PK Hour
4:00 - 5:00	22	447	113	582	70	62	65	197	54	550	174	778	159	61	40	260	1,817
4:15 - 5:15	24	430	126	580	72	68	61	201	60	568	182	810	173	72	42	287	1,878
4:30 - 5:30	18	387	124	529	80	65	48	193	67	590	183	840	147	73	33	253	1,815
4:45 - 5:45	18	390	135	543	86	74	47	207	77	599	158	834	152	73	28	253	1,837
5:00 - 6:00	12	363	134	509	74	60	41	175	77	581	145	803	140	70	32	242	1,729
Peak Volumes:	**24**	**430**	**126**	**580**	**72**	**68**	**61**	**201**	**60**	**568**	**182**	**810**	**173**	**72**	**42**	**287**	**1,878**

Cut and Paste	NR	NT	NL		ER	ET	EL		SR	ST	SL		WR	WT	WL
	24	430	126		72	68	61		60	568	182		173	72	42

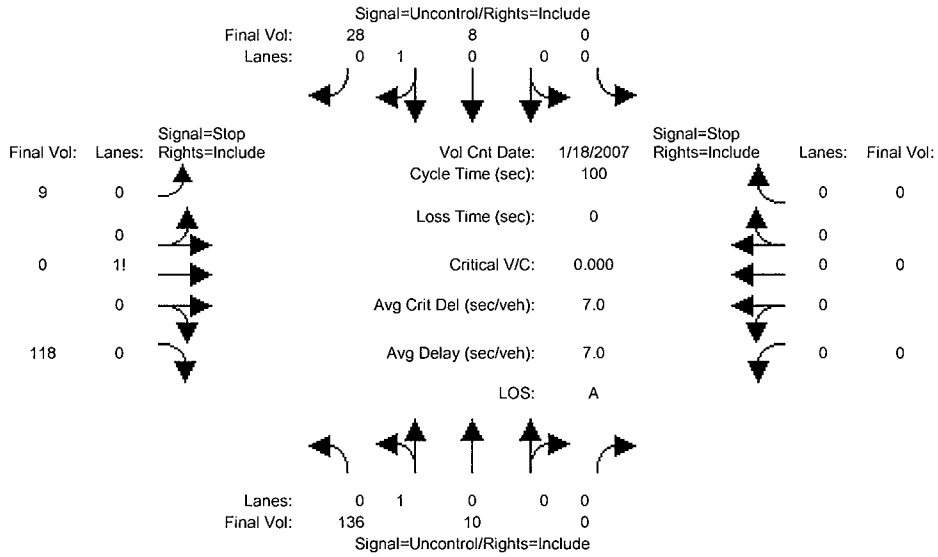


Level of Service Calculations

Big Wave Office Park and Wellness Center
Half Moon Bay, California

Level Of Service Computation Report
2000 HCM Unsignalized (Future Volume Alternative)
Existing AM

Intersection #1: Prospect & Capistrano



Approach:	North Bound			South Bound			East Bound			West Bound		
Movement:	L	T	R	L	T	R	L	T	R	L	T	R
Volume Module: >> Count Date: 18 Jan 2007 << 7:45 - 8:45 AM												
Base Vol:	136	10	0	0	8	28	9	0	118	0	0	0
Growth Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Initial Bse:	136	10	0	0	8	28	9	0	118	0	0	0
Added Vol:	0	0	0	0	0	0	0	0	0	0	0	0
ATI:	0	0	0	0	0	0	0	0	0	0	0	0
Initial Fut:	136	10	0	0	8	28	9	0	118	0	0	0
User Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Volume:	136	10	0	0	8	28	9	0	118	0	0	0
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
FinalVolume:	136	10	0	0	8	28	9	0	118	0	0	0
Critical Gap Module:												
Critical Gp:	4.1	xxxx	xxxxx	xxxxx	xxxx	xxxxx	6.4	6.5	6.2	xxxxx	xxxx	xxxxx
FollowUpTim:	2.2	xxxx	xxxxx	xxxxx	xxxx	xxxxx	3.5	4.0	3.3	xxxxx	xxxx	xxxxx
Capacity Module:												
Cnflict Vol:	36	xxxx	xxxxx	xxxx	xxxx	xxxxx	304	304	22	xxxx	xxxx	xxxxx
Potent Cap.:	1588	xxxx	xxxxx	xxxx	xxxx	xxxxx	692	613	1061	xxxx	xxxx	xxxxx
Move Cap.:	1588	xxxx	xxxxx	xxxx	xxxx	xxxxx	643	556	1061	xxxx	xxxx	xxxxx
Volume/Cap:	0.09	xxxx	xxxx	xxxx	xxxx	xxxx	0.01	0.00	0.11	xxxx	xxxx	xxxx
Level Of Service Module:												
2Way95thQ:	0.3	xxxx	xxxxx	xxxx	xxxx	xxxxx	xxxx	xxxx	xxxxx	xxxx	xxxx	xxxxx
Control Del:	7.5	xxxx	xxxxx	xxxxx	xxxx	xxxxx	xxxxx	xxxx	xxxxx	xxxxx	xxxx	xxxxx
LOS by Move:	A	*	*	*	*	*	*	*	*	*	*	*
Movement:	LT	LTR	RT	LT	LTR	RT	LT	LTR	RT	LT	LTR	RT
Shared Cap.:	xxxx	xxxx	xxxxx	xxxx	xxxx	xxxxx	xxxx	1014	xxxxx	xxxx	xxxx	xxxxx
SharedQueue:	0.3	xxxx	xxxxx	xxxxx	xxxx	xxxxx	xxxxx	0.4	xxxxx	xxxxx	xxxx	xxxxx
Shrd ConDel:	7.5	xxxx	xxxxx	xxxxx	xxxx	xxxxx	xxxxx	9.1	xxxxx	xxxxx	xxxx	xxxxx
Shared LOS:	A	*	*	*	*	*	*	A	*	*	*	*
ApproachDel:	xxxxxx			xxxxxx			9.1			xxxxxx		
ApproachLOS:	*			*			A			*		

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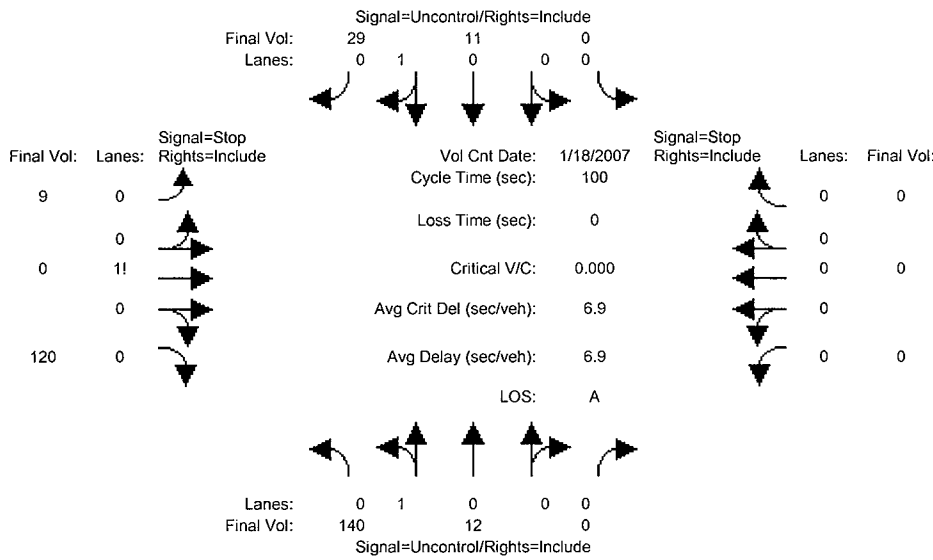
Big Wave Office Park and Wellness Center
Half Moon Bay, California

Level Of Service Computation Report
2000 HCM Unsignalized (Future Volume Alternative)
Background AM

Intersection #1: Prospect & Capistrano



Approach:	North Bound			South Bound			East Bound			West Bound		
Movement:	L	T	R	L	T	R	L	T	R	L	T	R
Volume Module: >> Count Date: 18 Jan 2007 << 7:45 - 8:45 AM												
Base Vol:	136	10	0	0	8	28	9	0	118	0	0	0
Growth Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Initial Bse:	136	10	0	0	8	28	9	0	118	0	0	0
Added Vol:	0	0	0	0	0	0	0	0	0	0	0	0
ATI:	4	2	0	0	3	1	0	0	2	0	0	0
Initial Fut:	140	12	0	0	11	29	9	0	120	0	0	0
User Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Volume:	140	12	0	0	11	29	9	0	120	0	0	0
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
FinalVolume:	140	12	0	0	11	29	9	0	120	0	0	0
Critical Gap Module:												
Critical Gp:	4.1	xxxx	xxxxx	xxxxx	xxxx	xxxxx	6.4	6.5	6.2	xxxxx	xxxx	xxxxx
FollowUpTim:	2.2	xxxx	xxxxx	xxxxx	xxxx	xxxxx	3.5	4.0	3.3	xxxxx	xxxx	xxxxx
Capacity Module:												
Cnflict Vol:	40	xxxx	xxxxx	xxxx	xxxx	xxxxx	318	318	26	xxxx	xxxx	xxxxx
Potent Cap.:	1583	xxxx	xxxxx	xxxx	xxxx	xxxxx	680	602	1056	xxxx	xxxx	xxxxx
Move Cap.:	1583	xxxx	xxxxx	xxxx	xxxx	xxxxx	630	544	1056	xxxx	xxxx	xxxxx
Volume/Cap:	0.09	xxxx	xxxx	xxxx	xxxx	xxxx	0.01	0.00	0.11	xxxx	xxxx	xxxx
Level Of Service Module:												
2Way95thQ:	0.3	xxxx	xxxxx	xxxx	xxxx	xxxxx	xxxx	xxxx	xxxxx	xxxx	xxxx	xxxxx
Control Del:	7.5	xxxx	xxxxx	xxxxx	xxxx	xxxxx	xxxxx	xxxx	xxxxx	xxxxx	xxxx	xxxxx
LOS by Move:	A	*	*	*	*	*	*	*	*	*	*	*
Movement:	LT	LTR	RT	LT	LTR	RT	LT	LTR	RT	LT	LTR	RT
Shared Cap.:	xxxx	xxxx	xxxxx	xxxx	xxxx	xxxxx	xxxx	1009	xxxxx	xxxx	xxxx	xxxxx
SharedQueue:	0.3	xxxx	xxxxx	xxxxx	xxxx	xxxxx	xxxxx	0.4	xxxxx	xxxxx	xxxx	xxxxx
Shrd ConDel:	7.5	xxxx	xxxxx	xxxxx	xxxx	xxxxx	xxxxx	9.1	xxxxx	xxxxx	xxxx	xxxxx
Shared LOS:	A	*	*	*	*	*	*	A	*	*	*	*
ApproachDel:	xxxxxx			xxxxxx			9.1			xxxxxx		
ApproachLOS:	*			*			A			*		

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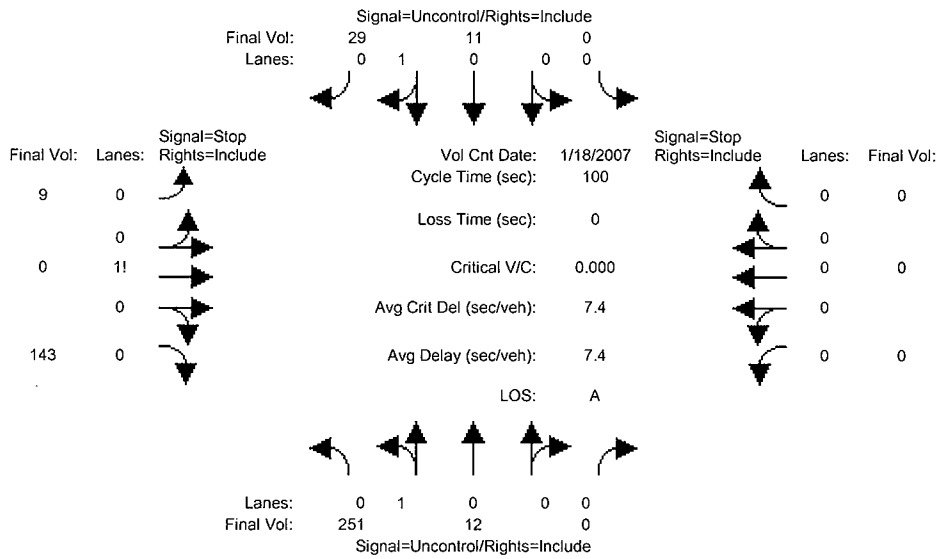
Big Wave Office Park and Wellness Center
Half Moon Bay, California

Level Of Service Computation Report
2000 HCM Unsignalized (Future Volume Alternative)
Project AM

Intersection #1: Prospect & Capistrano



Approach:	North Bound			South Bound			East Bound			West Bound		
Movement:	L	T	R	L	T	R	L	T	R	L	T	R
Volume Module: >> Count Date: 18 Jan 2007 << 7:45 - 8:45 AM												
Base Vol:	136	10	0	0	8	28	9	0	118	0	0	0
Growth Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Initial Bse:	136	10	0	0	8	28	9	0	118	0	0	0
Added Vol:	111	0	0	0	0	0	0	0	23	0	0	0
ATI:	4	2	0	0	3	1	0	0	2	0	0	0
Initial Fut:	251	12	0	0	11	29	9	0	143	0	0	0
User Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Volume:	251	12	0	0	11	29	9	0	143	0	0	0
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
FinalVolume:	251	12	0	0	11	29	9	0	143	0	0	0
Critical Gap Module:												
Critical Gp:	4.1	xxxx	xxxxx	xxxxx	xxxx	xxxxx	6.4	6.5	6.2	xxxxx	xxxx	xxxxx
FollowUpTim:	2.2	xxxx	xxxxx	xxxxx	xxxx	xxxxx	3.5	4.0	3.3	xxxxx	xxxx	xxxxx
Capacity Module:												
Cnflict Vol:	40	xxxx	xxxxx	xxxx	xxxx	xxxxx	540	540	26	xxxx	xxxx	xxxxx
Potent Cap.:	1583	xxxx	xxxxx	xxxx	xxxx	xxxxx	507	452	1056	xxxx	xxxx	xxxxx
Move Cap.:	1583	xxxx	xxxxx	xxxx	xxxx	xxxxx	435	368	1056	xxxx	xxxx	xxxxx
Volume/Cap:	0.16	xxxx	xxxx	xxxx	xxxx	xxxx	0.02	0.00	0.14	xxxx	xxxx	xxxx
Level Of Service Module:												
2Way95thQ:	0.6	xxxx	xxxxx	xxxx	xxxx	xxxxx	xxxx	xxxx	xxxxx	xxxx	xxxx	xxxxx
Control Del:	7.7	xxxx	xxxxx	xxxxx	xxxx	xxxxx	xxxxx	xxxx	xxxxx	xxxxx	xxxx	xxxxx
LOS by Move:	A	*	*	*	*	*	*	*	*	*	*	*
Movement:	LT	LTR	RT	LT	LTR	RT	LT	LTR	RT	LT	LTR	RT
Shared Cap.:	xxxx	xxxx	xxxxx	xxxx	xxxx	xxxxx	xxxx	974	xxxxx	xxxx	xxxx	xxxxx
SharedQueue:	0.6	xxxx	xxxxx	xxxxx	xxxx	xxxxx	xxxxx	0.6	xxxxx	xxxxx	xxxx	xxxxx
Shrd ConDel:	7.7	xxxx	xxxxx	xxxxx	xxxx	xxxxx	xxxxx	9.4	xxxxx	xxxxx	xxxx	xxxxx
Shared LOS:	A	*	*	*	*	*	*	A	*	*	*	*
ApproachDel:	xxxxxx			xxxxxx			9.4			xxxxxx		
ApproachLOS:	*			*			A			*		

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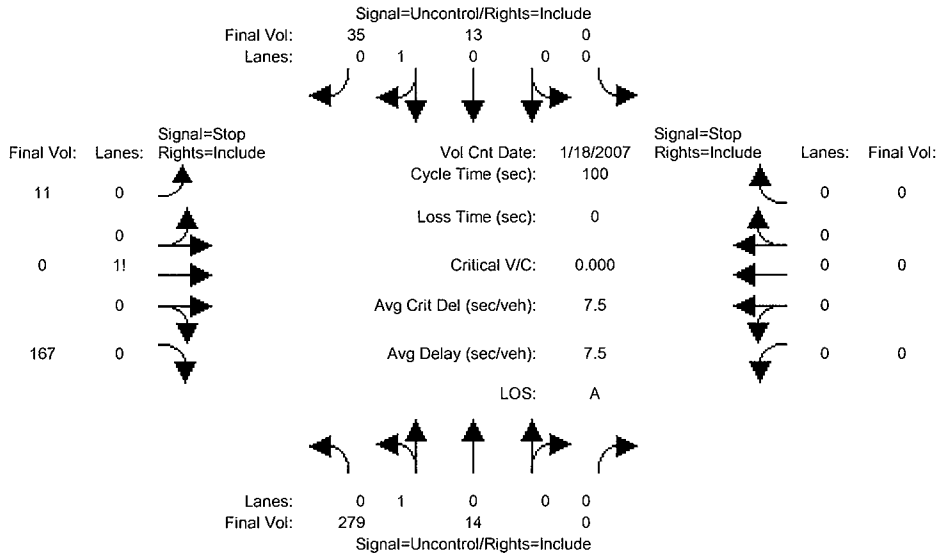
Big Wave Office Park and Wellness Center
Half Moon Bay, California

Level Of Service Computation Report
2000 HCM Unsignalized (Future Volume Alternative)
Cumulative Project AM

Intersection #1: Prospect & Capistrano



Approach:	North Bound			South Bound			East Bound			West Bound		
Movement:	L	T	R	L	T	R	L	T	R	L	T	R
Volume Module: >> Count Date: 18 Jan 2007 << 7:45 - 8:45 AM												
Base Vol:	136	10	0	0	8	28	9	0	118	0	0	0
Growth Adj:	1.20	1.20	1.20	1.20	1.20	1.20	1.20	1.20	1.20	1.20	1.20	1.20
Initial Bse:	163	12	0	0	10	34	11	0	142	0	0	0
Added Vol:	111	0	0	0	0	0	0	0	23	0	0	0
ATI+Cumul:	5	2	0	0	3	1	0	0	2	0	0	0
Initial Fut:	279	14	0	0	13	35	11	0	167	0	0	0
User Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Volume:	279	14	0	0	13	35	11	0	167	0	0	0
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
FinalVolume:	279	14	0	0	13	35	11	0	167	0	0	0
Critical Gap Module:												
Critical Gp:	4.1	xxxx	xxxxx	xxxxx	xxxx	xxxxx	6.4	6.5	6.2	xxxxx	xxxx	xxxxx
FollowUpTim:	2.2	xxxx	xxxxx	xxxxx	xxxx	xxxxx	3.5	4.0	3.3	xxxxx	xxxx	xxxxx
Capacity Module:												
Cnflict Vol:	47	xxxx	xxxxx	xxxx	xxxx	xxxxx	602	602	30	xxxx	xxxx	xxxxx
Potent Cap.:	1573	xxxx	xxxxx	xxxx	xxxx	xxxxx	466	416	1050	xxxx	xxxx	xxxxx
Move Cap.:	1573	xxxx	xxxxx	xxxx	xxxx	xxxxx	390	329	1050	xxxx	xxxx	xxxxx
Volume/Cap:	0.18	xxxx	xxxx	xxxx	xxxx	xxxx	0.03	0.00	0.16	xxxx	xxxx	xxxx
Level Of Service Module:												
2Way95thQ:	0.6	xxxx	xxxxx	xxxx	xxxx	xxxxx	xxxx	xxxx	xxxxx	xxxx	xxxx	xxxxx
Control Del:	7.8	xxxx	xxxxx	xxxxx	xxxx	xxxxx	xxxxx	xxxx	xxxxx	xxxxx	xxxx	xxxxx
LOS by Move:	A	*	*	*	*	*	*	*	*	*	*	*
Movement:	LT	LTR	RT	LT	LTR	RT	LT	LTR	RT	LT	LTR	RT
Shared Cap.:	xxxx	xxxx	xxxxx	xxxx	xxxx	xxxxx	xxxx	952	xxxxx	xxxx	xxxx	xxxxx
SharedQueue:	0.6	xxxx	xxxxx	xxxxx	xxxx	xxxxx	xxxxx	0.7	xxxxx	xxxxx	xxxx	xxxxx
Shrd ConDel:	7.8	xxxx	xxxxx	xxxxx	xxxx	xxxxx	xxxxx	9.6	xxxxx	xxxxx	xxxx	xxxxx
Shared LOS:	A	*	*	*	*	*	*	A	*	*	*	*
ApproachDel:	xxxxxx			xxxxxx			9.6			xxxxxx		
ApproachLOS:	*			*			A			*		

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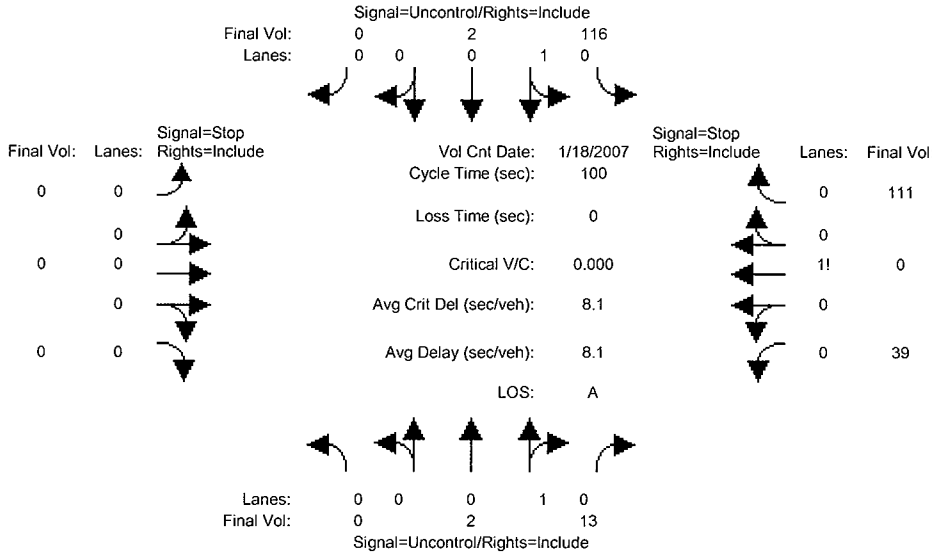
Big Wave Office Park and Wellness Center
Half Moon Bay, California

Level Of Service Computation Report
2000 HCM Unsignalized (Future Volume Alternative)
Existing AM

Intersection #2: Broadway & Prospect



Approach:	North Bound			South Bound			East Bound			West Bound		
Movement:	L	T	R	L	T	R	L	T	R	L	T	R
Volume Module: >> Count Date: 18 Jan 2007 << 7:30 - 8:30 AM												
Base Vol:	0	2	13	116	2	0	0	0	0	39	0	111
Growth Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Initial Bse:	0	2	13	116	2	0	0	0	0	39	0	111
Added Vol:	0	0	0	0	0	0	0	0	0	0	0	0
:	0	0	0	0	0	0	0	0	0	0	0	0
Initial Fut:	0	2	13	116	2	0	0	0	0	39	0	111
User Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Volume:	0	2	13	116	2	0	0	0	0	39	0	111
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
FinalVolume:	0	2	13	116	2	0	0	0	0	39	0	111
Critical Gap Module:												
Critical Gp:	xxxxx	xxxx	xxxxx	4.1	xxxx	xxxxx	xxxxx	xxxx	xxxxx	6.4	6.5	6.2
FollowUpTim:	xxxxx	xxxx	xxxxx	2.2	xxxx	xxxxx	xxxxx	xxxx	xxxxx	3.5	4.0	3.3
Capacity Module:												
Cnflict Vol:	xxxx	xxxx	xxxxx	15	xxxx	xxxxx	xxxx	xxxx	xxxxx	243	243	9
Potent Cap.:	xxxx	xxxx	xxxxx	1616	xxxx	xxxxx	xxxx	xxxx	xxxxx	750	663	1079
Move Cap.:	xxxx	xxxx	xxxxx	1616	xxxx	xxxxx	xxxx	xxxx	xxxxx	706	612	1079
Volume/Cap:	xxxx	xxxx	xxxx	0.07	xxxx	xxxx	xxxx	xxxx	xxxx	0.06	0.00	0.10
Level Of Service Module:												
2Way95thQ:	xxxx	xxxx	xxxxx	0.2	xxxx	xxxxx	xxxx	xxxx	xxxxx	xxxx	xxxx	xxxxx
Control Del:	xxxxx	xxxx	xxxxx	7.4	xxxx	xxxxx	xxxxx	xxxx	xxxxx	xxxxx	xxxx	xxxxx
LOS by Move:	*	*	*	A	*	*	*	*	*	*	*	*
Movement:	LT	LTR	RT	LT	LTR	RT	LT	LTR	RT	LT	LTR	RT
Shared Cap.:	xxxx	xxxx	xxxxx	xxxx	xxxx	xxxxx	xxxx	xxxx	xxxxx	xxxx	949	xxxxx
SharedQueue:	xxxxx	xxxx	xxxxx	0.2	xxxx	xxxxx	xxxxx	xxxx	xxxxx	xxxxx	0.6	xxxxx
Shrd ConDel:	xxxxx	xxxx	xxxxx	7.4	xxxx	xxxxx	xxxxx	xxxx	xxxxx	xxxxx	9.5	xxxxx
Shared LOS:	*	*	*	A	*	*	*	*	*	*	A	*
ApproachDel:	xxxxxx			xxxxxx			xxxxxx			9.5		
ApproachLOS:	*			*			*			A		

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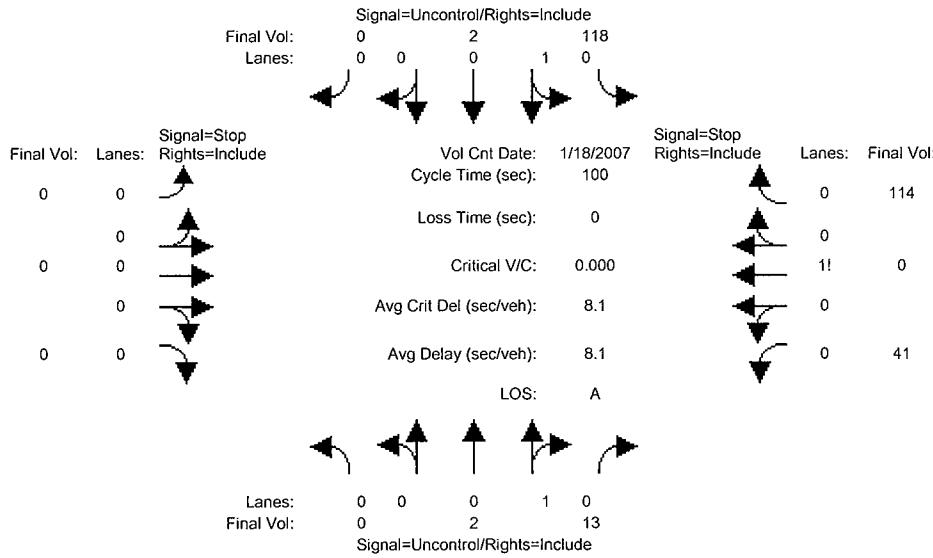
Big Wave Office Park and Wellness Center
Half Moon Bay, California

Level Of Service Computation Report
2000 HCM Unsignalized (Future Volume Alternative)
Background AM

Intersection #2: Broadway & Prospect



Approach:	North Bound			South Bound			East Bound			West Bound		
Movement:	L	T	R	L	T	R	L	T	R	L	T	R
Volume Module: >> Count Date: 18 Jan 2007 << 7:30 - 8:30 AM												
Base Vol:	0	2	13	116	2	0	0	0	0	39	0	111
Growth Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Initial Bse:	0	2	13	116	2	0	0	0	0	39	0	111
Added Vol:	0	0	0	0	0	0	0	0	0	0	0	0
ATI:	0	0	0	2	0	0	0	0	0	2	0	3
Initial Fut:	0	2	13	118	2	0	0	0	0	41	0	114
User Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Volume:	0	2	13	118	2	0	0	0	0	41	0	114
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
FinalVolume:	0	2	13	118	2	0	0	0	0	41	0	114
Critical Gap Module:												
Critical Gp:	xxxxx	xxxx	xxxxx	4.1	xxxx	xxxxx	xxxxx	xxxx	xxxxx	6.4	6.5	6.2
FollowUpTim:	xxxxx	xxxx	xxxxx	2.2	xxxx	xxxxx	xxxxx	xxxx	xxxxx	3.5	4.0	3.3
Capacity Module:												
Cnflict Vol:	xxxx	xxxx	xxxxx	15	xxxx	xxxxx	xxxx	xxxx	xxxxx	247	247	9
Potent Cap.:	xxxx	xxxx	xxxxx	1616	xxxx	xxxxx	xxxx	xxxx	xxxxx	746	659	1079
Move Cap.:	xxxx	xxxx	xxxxx	1616	xxxx	xxxxx	xxxx	xxxx	xxxxx	702	608	1079
Volume/Cap:	xxxx	xxxx	xxxx	0.07	xxxx	xxxx	xxxx	xxxx	xxxx	0.06	0.00	0.11
Level Of Service Module:												
2Way95thQ:	xxxx	xxxx	xxxxx	0.2	xxxx	xxxxx	xxxx	xxxx	xxxxx	xxxx	xxxx	xxxxx
Control Del:	xxxxx	xxxx	xxxxx	7.4	xxxx	xxxxx	xxxxx	xxxx	xxxxx	xxxxx	xxxx	xxxxx
LOS by Move:	*	*	*	A	*	*	*	*	*	*	*	*
Movement:	LT	LTR	RT	LT	LTR	RT	LT	LTR	RT	LT	LTR	RT
Shared Cap.:	xxxx	xxxx	xxxxx	xxxx	xxxx	xxxxx	xxxx	xxxx	xxxxx	xxxx	945	xxxxx
SharedQueue:	xxxxx	xxxx	xxxxx	0.2	xxxx	xxxxx	xxxxx	xxxx	xxxxx	xxxxx	0.6	xxxxx
Shrd ConDel:	xxxxx	xxxx	xxxxx	7.4	xxxx	xxxxx	xxxxx	xxxx	xxxxx	xxxxx	9.6	xxxxx
Shared LOS:	*	*	*	A	*	*	*	*	*	*	A	*
ApproachDel:	xxxxxx			xxxxxx			xxxxxx			9.6		
ApproachLOS:	*			*			*			A		

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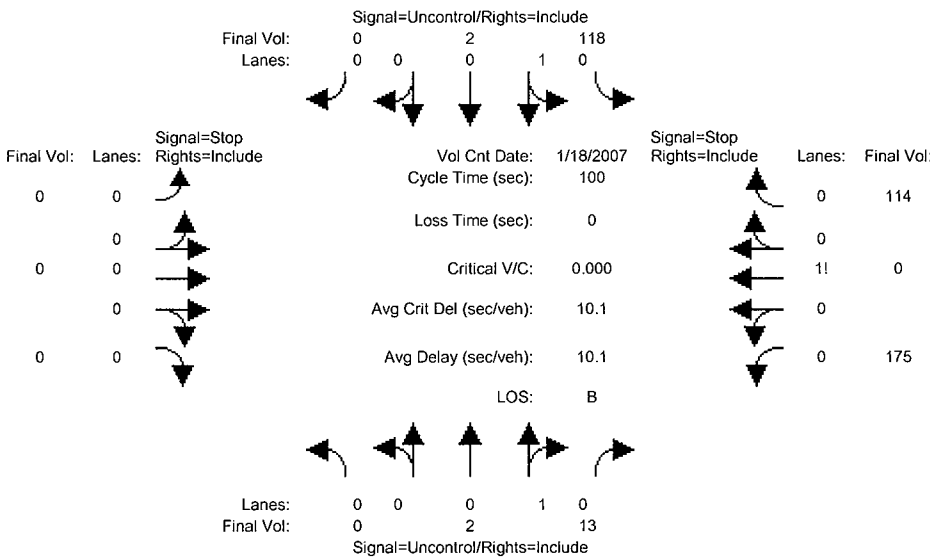
Big Wave Office Park and Wellness Center
Half Moon Bay, California

Level Of Service Computation Report
2000 HCM Unsignalized (Future Volume Alternative)
Project AM

Intersection #2: Broadway & Prospect



Approach:	North Bound			South Bound			East Bound			West Bound		
Movement:	L -	T -	R	L -	T -	R	L -	T -	R	L -	T -	R
Volume Module: >> Count Date: 18 Jan 2007 << 7:30 - 8:30 AM												
Base Vol:	0	2	13	116	2	0	0	0	0	39	0	111
Growth Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Initial Bse:	0	2	13	116	2	0	0	0	0	39	0	111
Added Vol:	0	0	0	0	0	0	0	0	0	134	0	0
ATI:	0	0	0	2	0	0	0	0	0	2	0	3
Initial Fut:	0	2	13	118	2	0	0	0	0	175	0	114
User Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Volume:	0	2	13	118	2	0	0	0	0	175	0	114
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
FinalVolume:	0	2	13	118	2	0	0	0	0	175	0	114
Critical Gap Module:												
Critical Gp:	xxxxx	xxxx	xxxxx	4.1	xxxx	xxxxx	xxxxx	xxxx	xxxxx	6.4	6.5	6.2
FollowUpTim:	xxxxx	xxxx	xxxxx	2.2	xxxx	xxxxx	xxxxx	xxxx	xxxxx	3.5	4.0	3.3
Capacity Module:												
Cnflict Vol:	xxxx	xxxx	xxxxx	15	xxxx	xxxxx	xxxx	xxxx	xxxxx	247	247	9
Potent Cap.:	xxxx	xxxx	xxxxx	1616	xxxx	xxxxx	xxxx	xxxx	xxxxx	746	659	1079
Move Cap.:	xxxx	xxxx	xxxxx	1616	xxxx	xxxxx	xxxx	xxxx	xxxxx	702	608	1079
Volume/Cap:	xxxx	xxxx	xxxx	0.07	xxxx	xxxx	xxxx	xxxx	xxxx	0.25	0.00	0.11
Level Of Service Module:												
2Way95thQ:	xxxx	xxxx	xxxxx	0.2	xxxx	xxxxx	xxxx	xxxx	xxxxx	xxxx	xxxx	xxxxx
Control Del:	xxxxx	xxxx	xxxxx	7.4	xxxx	xxxxx	xxxxx	xxxx	xxxxx	xxxxx	xxxx	xxxxx
LOS by Move:	*	*	*	A	*	*	*	*	*	*	*	*
Movement:	LT -	LTR -	RT	LT -	LTR -	RT	LT -	LTR -	RT	LT -	LTR -	RT
Shared Cap.:	xxxx	xxxx	xxxxx	xxxx	xxxx	xxxxx	xxxx	xxxx	xxxxx	xxxx	814	xxxxx
SharedQueue:	xxxxx	xxxx	xxxxx	0.2	xxxx	xxxxx	xxxxx	xxxx	xxxxx	xxxxx	1.6	xxxxx
Shrd ConDel:	xxxxx	xxxx	xxxxx	7.4	xxxx	xxxxx	xxxxx	xxxx	xxxxx	xxxxx	11.8	xxxxx
Shared LOS:	*	*	*	A	*	*	*	*	*	*	B	*
ApproachDel:	xxxxxx			xxxxxx			xxxxxx			11.8		
ApproachLOS:	*			*			*			B		

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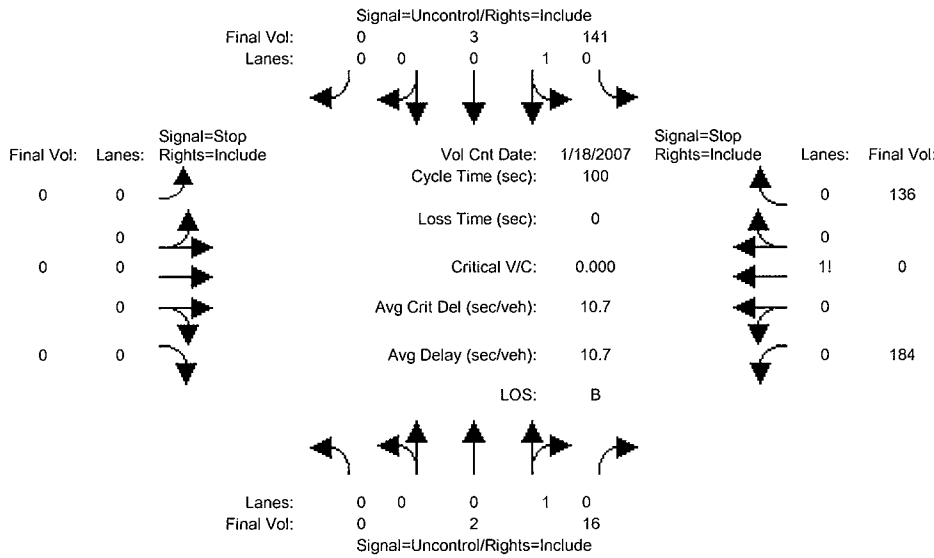
Big Wave Office Park and Wellness Center
Half Moon Bay, California

Level Of Service Computation Report
2000 HCM Unsignalized (Future Volume Alternative)
Cumulative Project AM

Intersection #2: Broadway & Prospect



Approach:	North Bound			South Bound			East Bound			West Bound		
Movement:	L	T	R	L	T	R	L	T	R	L	T	R
Volume Module: >> Count Date: 18 Jan 2007 << 7:30 - 8:30 AM												
Base Vol:	0	2	13	116	2	0	0	0	0	39	0	111
Growth Adj:	1.20	1.20	1.20	1.20	1.20	1.20	1.20	1.20	1.20	1.20	1.20	1.20
Initial Bse:	0	2	16	139	2	0	0	0	0	47	0	133
Added Vol:	0	0	0	0	0	0	0	0	0	134	0	0
ATI+Cumul:	0	0	0	2	1	0	0	0	0	3	0	3
Initial Fut:	0	2	16	141	3	0	0	0	0	184	0	136
User Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Volume:	0	2	16	141	3	0	0	0	0	184	0	136
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
FinalVolume:	0	2	16	141	3	0	0	0	0	184	0	136
Critical Gap Module:												
Critical Gp:	xxxxx	xxxx	xxxxx	4.1	xxxx	xxxxx	xxxxx	xxxx	xxxxx	6.4	6.5	6.2
FollowUpTim:	xxxxx	xxxx	xxxxx	2.2	xxxx	xxxxx	xxxxx	xxxx	xxxxx	3.5	4.0	3.3
Capacity Module:												
Cnflict Vol:	xxxx	xxxx	xxxxx	18	xxxx	xxxxx	xxxx	xxxx	xxxxx	296	296	10
Potent Cap.:	xxxx	xxxx	xxxxx	1612	xxxx	xxxxx	xxxx	xxxx	xxxxx	699	619	1077
Move Cap.:	xxxx	xxxx	xxxxx	1612	xxxx	xxxxx	xxxx	xxxx	xxxxx	648	560	1077
Volume/Cap:	xxxx	xxxx	xxxx	0.09	xxxx	xxxx	xxxx	xxxx	xxxx	0.28	0.00	0.13
Level Of Service Module:												
2Way95thQ:	xxxx	xxxx	xxxxx	0.3	xxxx	xxxxx	xxxx	xxxx	xxxxx	xxxx	xxxx	xxxxx
Control Del:	xxxxx	xxxx	xxxxx	7.4	xxxx	xxxxx	xxxxx	xxxx	xxxxx	xxxxx	xxxx	xxxxx
LOS by Move:	*	*	*	A	*	*	*	*	*	*	*	*
Movement:	LT - LTR - RT			LT - LTR - RT			LT - LTR - RT			LT - LTR - RT		
Shared Cap.:	xxxx	xxxx	xxxxx	xxxx	xxxx	xxxxx	xxxx	xxxx	xxxxx	xxxx	781	xxxxx
SharedQueue:	xxxxx	xxxx	xxxxx	0.3	xxxx	xxxxx	xxxxx	xxxx	xxxxx	xxxxx	2.0	xxxxx
Shrd ConDel:	xxxxx	xxxx	xxxxx	7.4	xxxx	xxxxx	xxxxx	xxxx	xxxxx	xxxxx	12.8	xxxxx
Shared LOS:	*	*	*	A	*	*	*	*	*	*	B	*
ApproachDel:	xxxxxx			xxxxxx			xxxxxx			12.8		
ApproachLOS:	*			*			*			B		

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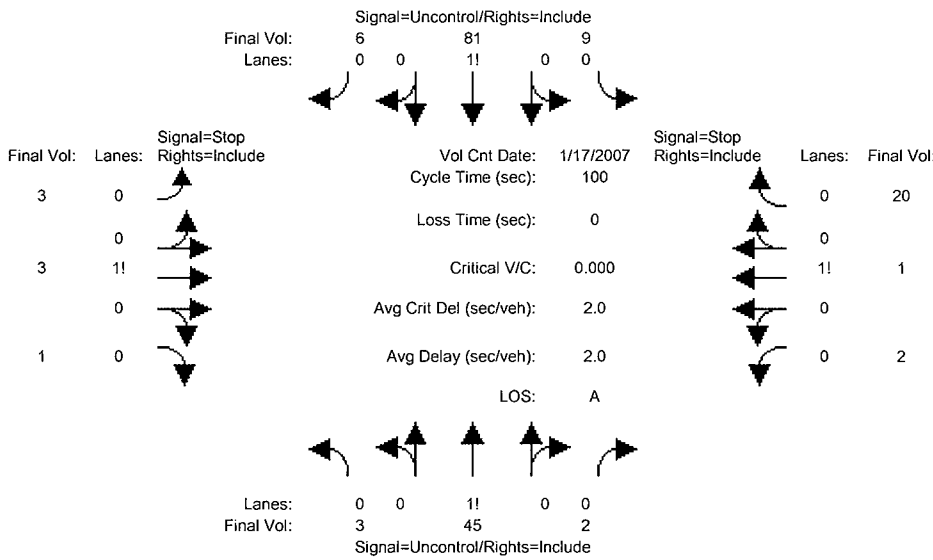
Big Wave Office Park and Wellness Center
Half Moon Bay, California

Level Of Service Computation Report
2000 HCM Unsignalized (Future Volume Alternative)
Existing AM

Intersection #3: Airport & Stanford/Cornell



Approach:	North Bound			South Bound			East Bound			West Bound		
Movement:	L	T	R	L	T	R	L	T	R	L	T	R
Volume Module: >> Count Date: 17 Jan 2007 << 7:30 - 8:30 AM												
Base Vol:	3	45	2	9	81	6	3	3	1	2	1	20
Growth Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Initial Bse:	3	45	2	9	81	6	3	3	1	2	1	20
Added Vol:	0	0	0	0	0	0	0	0	0	0	0	0
:	0	0	0	0	0	0	0	0	0	0	0	0
Initial Fut:	3	45	2	9	81	6	3	3	1	2	1	20
User Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Volume:	3	45	2	9	81	6	3	3	1	2	1	20
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
FinalVolume:	3	45	2	9	81	6	3	3	1	2	1	20
Critical Gap Module:												
Critical Gp:	4.1	xxxx	xxxxx	4.1	xxxx	xxxxx	7.1	6.5	6.2	7.1	6.5	6.2
FollowUpTim:	2.2	xxxx	xxxxx	2.2	xxxx	xxxxx	3.5	4.0	3.3	3.5	4.0	3.3
Capacity Module:												
Cnflict Vol:	87	xxxx	xxxxx	47	xxxx	xxxxx	165	155	84	156	157	46
Potent Cap.:	1522	xxxx	xxxxx	1573	xxxx	xxxxx	805	741	981	815	739	1029
Move Cap.:	1522	xxxx	xxxxx	1573	xxxx	xxxxx	784	735	981	807	733	1029
Volume/Cap:	0.00	xxxx	xxxx	0.01	xxxx	xxxx	0.00	0.00	0.00	0.00	0.00	0.02
Level Of Service Module:												
2Way95thQ:	0.0	xxxx	xxxxx	0.0	xxxx	xxxxx	xxxx	xxxx	xxxxx	xxxx	xxxx	xxxxx
Control Del:	7.4	xxxx	xxxxx	7.3	xxxx	xxxxx	xxxxx	xxxx	xxxxx	xxxxx	xxxx	xxxxx
LOS by Move:	A	*	*	A	*	*	*	*	*	*	*	*
Movement:	LT	LTR	RT	LT	LTR	RT	LT	LTR	RT	LT	LTR	RT
Shared Cap.:	xxxx	xxxx	xxxxx	xxxx	xxxx	xxxxx	xxxx	784	xxxxx	xxxx	988	xxxxx
SharedQueue:	xxxxx	xxxx	xxxxx	xxxxx	xxxx	xxxxx	xxxxx	0.0	xxxxx	xxxxx	0.1	xxxxx
Shrd ConDel:	xxxxx	xxxx	xxxxx	xxxxx	xxxx	xxxxx	xxxxx	9.6	xxxxx	xxxxx	8.7	xxxxx
Shared LOS:	*	*	*	*	*	*	*	A	*	*	A	*
ApproachDel:	xxxxxx			xxxxxx			9.6			8.7		
ApproachLOS:	*			*			A			A		

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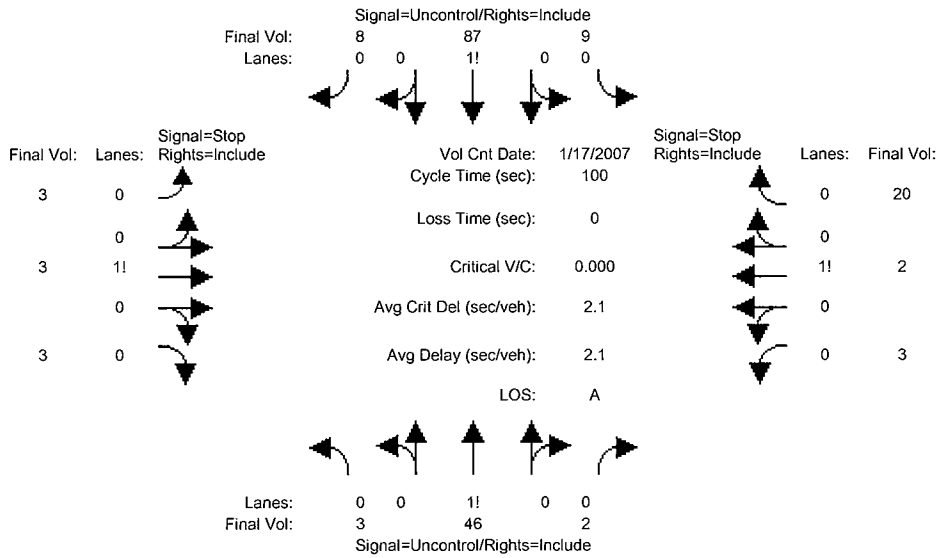
Big Wave Office Park and Wellness Center
Half Moon Bay, California

Level Of Service Computation Report
2000 HCM Unsignalized (Future Volume Alternative)
Background AM

Intersection #3: Airport & Stanford/Cornell



Approach:	North Bound			South Bound			East Bound			West Bound		
Movement:	L	T	R	L	T	R	L	T	R	L	T	R
Volume Module: >> Count Date: 17 Jan 2007 << 7:30 - 8:30 AM												
Base Vol:	3	45	2	9	81	6	3	3	1	2	1	20
Growth Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Initial Bse:	3	45	2	9	81	6	3	3	1	2	1	20
Added Vol:	0	0	0	0	0	0	0	0	0	0	0	0
ATI:	0	1	0	0	6	2	0	0	2	1	1	0
Initial Fut:	3	46	2	9	87	8	3	3	3	3	2	20
User Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Volume:	3	46	2	9	87	8	3	3	3	3	2	20
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
FinalVolume:	3	46	2	9	87	8	3	3	3	3	2	20
Critical Gap Module:												
Critical Gp:	4.1	xxxx	xxxxx	4.1	xxxx	xxxxx	7.1	6.5	6.2	7.1	6.5	6.2
FollowUpTim:	2.2	xxxx	xxxxx	2.2	xxxx	xxxxx	3.5	4.0	3.3	3.5	4.0	3.3
Capacity Module:												
Cnflict Vol:	95	xxxx	xxxxx	48	xxxx	xxxxx	173	163	91	165	166	47
Potent Cap.:	1512	xxxx	xxxxx	1572	xxxx	xxxxx	794	733	972	804	730	1028
Move Cap.:	1512	xxxx	xxxxx	1572	xxxx	xxxxx	773	727	972	794	725	1028
Volume/Cap:	0.00	xxxx	xxxx	0.01	xxxx	xxxx	0.00	0.00	0.00	0.00	0.00	0.02
Level Of Service Module:												
2Way95thQ:	0.0	xxxx	xxxxx	0.0	xxxx	xxxxx	xxxx	xxxx	xxxxx	xxxx	xxxx	xxxxx
Control Del:	7.4	xxxx	xxxxx	7.3	xxxx	xxxxx	xxxxx	xxxx	xxxxx	xxxxx	xxxx	xxxxx
LOS by Move:	A	*	*	A	*	*	*	*	*	*	*	*
Movement:	LT	LTR	RT	LT	LTR	RT	LT	LTR	RT	LT	LTR	RT
Shared Cap.:	xxxx	xxxx	xxxxx	xxxx	xxxx	xxxxx	xxxx	811	xxxxx	xxxx	962	xxxxx
SharedQueue:	xxxxx	xxxx	xxxxx	xxxxx	xxxx	xxxxx	xxxxx	0.0	xxxxx	xxxxx	0.1	xxxxx
Shrd ConDel:	xxxxx	xxxx	xxxxx	xxxxx	xxxx	xxxxx	xxxxx	9.5	xxxxx	xxxxx	8.8	xxxxx
Shared LOS:	*	*	*	*	*	*	*	A	*	*	A	*
ApproachDel:	xxxxxx			xxxxxx			9.5			8.8		
ApproachLOS:	*			*			A			A		

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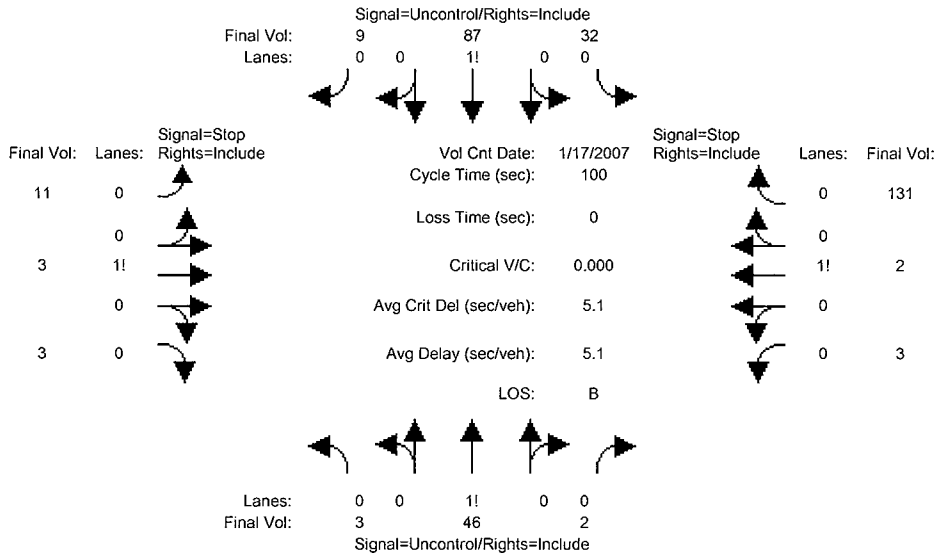
Big Wave Office Park and Wellness Center
Half Moon Bay, California

Level Of Service Computation Report
2000 HCM Unsignalized (Future Volume Alternative)
Project AM

Intersection #3: Airport & Stanford/Cornell



Approach:	North Bound			South Bound			East Bound			West Bound		
Movement:	L	T	R	L	T	R	L	T	R	L	T	R
Volume Module: >> Count Date: 17 Jan 2007 << 7:30 - 8:30 AM												
Base Vol:	3	45	2	9	81	6	3	3	1	2	1	20
Growth Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Initial Bse:	3	45	2	9	81	6	3	3	1	2	1	20
Added Vol:	0	0	0	23	0	1	8	0	0	0	0	111
ATI:	0	1	0	0	6	2	0	0	2	1	1	0
Initial Fut:	3	46	2	32	87	9	11	3	3	3	2	131
User Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Volume:	3	46	2	32	87	9	11	3	3	3	2	131
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
FinalVolume:	3	46	2	32	87	9	11	3	3	3	2	131
Critical Gap Module:												
Critical Gp:	4.1	xxxx	xxxxx	4.1	xxxx	xxxxx	7.1	6.5	6.2	7.1	6.5	6.2
FollowUpTim:	2.2	xxxx	xxxxx	2.2	xxxx	xxxxx	3.5	4.0	3.3	3.5	4.0	3.3
Capacity Module:												
Cnflict Vol:	96	xxxx	xxxxx	48	xxxx	xxxxx	275	210	92	212	213	47
Potent Cap.:	1510	xxxx	xxxxx	1572	xxxx	xxxxx	681	691	971	750	688	1028
Move Cap.:	1510	xxxx	xxxxx	1572	xxxx	xxxxx	583	675	971	732	672	1028
Volume/Cap:	0.00	xxxx	xxxx	0.02	xxxx	xxxx	0.02	0.00	0.00	0.00	0.00	0.13
Level Of Service Module:												
2Way95thQ:	0.0	xxxx	xxxxx	0.1	xxxx	xxxxx	xxxx	xxxx	xxxxx	xxxx	xxxx	xxxxx
Control Del:	7.4	xxxx	xxxxx	7.3	xxxx	xxxxx	xxxxx	xxxx	xxxxx	xxxxx	xxxx	xxxxx
LOS by Move:	A	*	*	A	*	*	*	*	*	*	*	*
Movement:	LT	LTR	RT	LT	LTR	RT	LT	LTR	RT	LT	LTR	RT
Shared Cap.:	xxxx	xxxx	xxxxx	xxxx	xxxx	xxxxx	xxxx	644	xxxxx	xxxx	1011	xxxxx
SharedQueue:	xxxxx	xxxx	xxxxx	xxxxx	xxxx	xxxxx	xxxxx	0.1	xxxxx	xxxxx	0.5	xxxxx
Shrd ConDel:	xxxxx	xxxx	xxxxx	xxxxx	xxxx	xxxxx	xxxxx	10.7	xxxxx	xxxxx	9.1	xxxxx
Shared LOS:	*	*	*	*	*	*	*	B	*	*	A	*
ApproachDel:	xxxxxx			xxxxxx			10.7			9.1		
ApproachLOS:	*			*			B			A		

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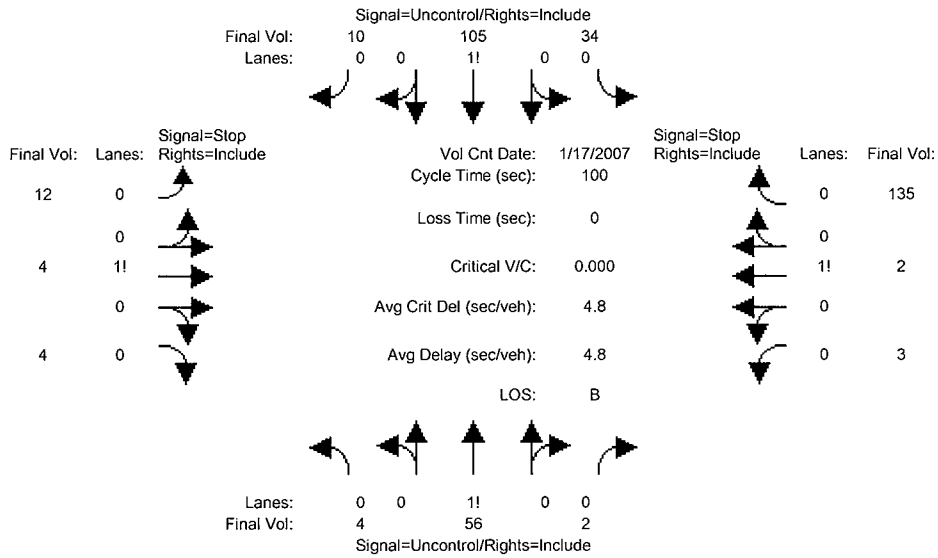
Big Wave Office Park and Wellness Center
Half Moon Bay, California

Level Of Service Computation Report
2000 HCM Unsignalized (Future Volume Alternative)
Cumulative Project AM

Intersection #3: Airport & Stanford/Cornell



Approach:	North Bound			South Bound			East Bound			West Bound		
Movement:	L	T	R	L	T	R	L	T	R	L	T	R
Volume Module: >> Count Date: 17 Jan 2007 << 7:30 - 8:30 AM												
Base Vol:	3	45	2	9	81	6	3	3	1	2	1	20
Growth Adj:	1.20	1.20	1.20	1.20	1.20	1.20	1.20	1.20	1.20	1.20	1.20	1.20
Initial Bse:	4	54	2	11	97	7	4	4	1	2	1	24
Added Vol:	0	0	0	23	0	1	8	0	0	0	0	111
ATI+Cumul:	0	2	0	0	8	2	0	0	3	1	1	0
Initial Fut:	4	56	2	34	105	10	12	4	4	3	2	135
User Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Volume:	4	56	2	34	105	10	12	4	4	3	2	135
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
FinalVolume:	4	56	2	34	105	10	12	4	4	3	2	135
Critical Gap Module:												
Critical Gp:	4.1	xxxx	xxxxx	4.1	xxxx	xxxxx	7.1	6.5	6.2	7.1	6.5	6.2
FollowUpTim:	2.2	xxxx	xxxxx	2.2	xxxx	xxxxx	3.5	4.0	3.3	3.5	4.0	3.3
Capacity Module:												
Cnflict Vol:	115	xxxx	xxxxx	58	xxxx	xxxxx	311	244	110	246	247	57
Potent Cap.:	1486	xxxx	xxxxx	1559	xxxx	xxxxx	646	662	949	712	659	1015
Move Cap.:	1486	xxxx	xxxxx	1559	xxxx	xxxxx	548	646	949	692	642	1015
Volume/Cap:	0.00	xxxx	xxxx	0.02	xxxx	xxxx	0.02	0.01	0.00	0.00	0.00	0.13
Level Of Service Module:												
2Way95thQ:	0.0	xxxx	xxxxx	0.1	xxxx	xxxxx	xxxx	xxxx	xxxxx	xxxx	xxxx	xxxxx
Control Del:	7.4	xxxx	xxxxx	7.4	xxxx	xxxxx	xxxxx	xxxx	xxxxx	xxxxx	xxxx	xxxxx
LOS by Move:	A	*	*	A	*	*	*	*	*	*	*	*
Movement:	LT	LTR	RT	LT	LTR	RT	LT	LTR	RT	LT	LTR	RT
Shared Cap.:	xxxx	xxxx	xxxxx	xxxx	xxxx	xxxxx	xxxx	622	xxxxx	xxxx	994	xxxxx
SharedQueue:	xxxxx	xxxx	xxxxx	xxxxx	xxxx	xxxxx	xxxxx	0.1	xxxxx	xxxxx	0.5	xxxxx
Shrd ConDel:	xxxxx	xxxx	xxxxx	xxxxx	xxxx	xxxxx	xxxxx	11.0	xxxxx	xxxxx	9.2	xxxxx
Shared LOS:	*	*	*	*	*	*	*	B	*	*	A	*
ApproachDel:	xxxxxx			xxxxxx			11.0			9.2		
ApproachLOS:	*			*			B			A		

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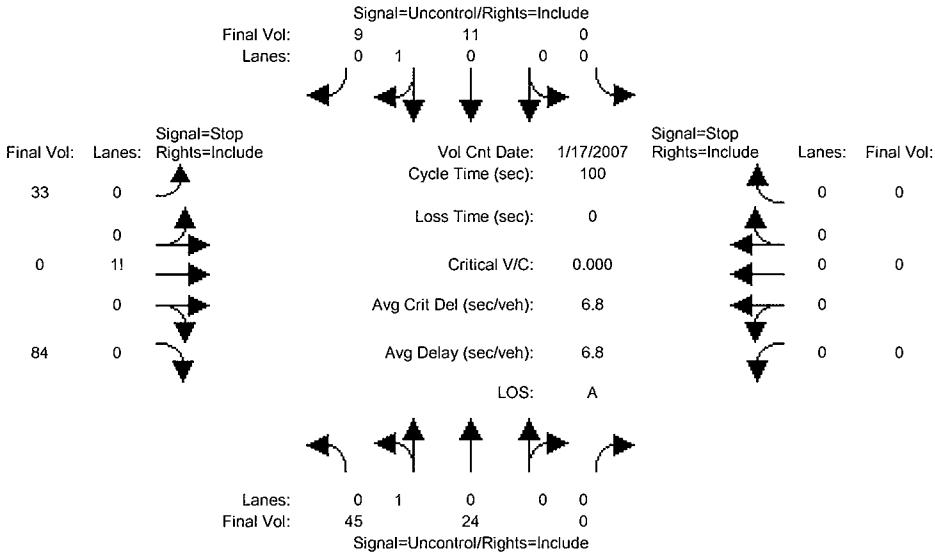
Big Wave Office Park and Wellness Center
Half Moon Bay, California

Level Of Service Computation Report
2000 HCM Unsignalized (Future Volume Alternative)
Existing AM

Intersection #4: Airport & La Granada



Approach:	North Bound			South Bound			East Bound			West Bound		
Movement:	L	T	R	L	T	R	L	T	R	L	T	R
Volume Module: >> Count Date: 17 Jan 2007 << 7:30 - 8:30 AM												
Base Vol:	45	24	0	0	11	9	33	0	84	0	0	0
Growth Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Initial Bse:	45	24	0	0	11	9	33	0	84	0	0	0
Added Vol:	0	0	0	0	0	0	0	0	0	0	0	0
ATI:	0	0	0	0	0	0	0	0	0	0	0	0
Initial Fut:	45	24	0	0	11	9	33	0	84	0	0	0
User Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Volume:	45	24	0	0	11	9	33	0	84	0	0	0
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
FinalVolume:	45	24	0	0	11	9	33	0	84	0	0	0
Critical Gap Module:												
Critical Gp:	4.1	xxxx	xxxxx	xxxxx	xxxx	xxxxx	6.4	6.5	6.2	xxxxx	xxxx	xxxxx
FollowUpTim:	2.2	xxxx	xxxxx	xxxxx	xxxx	xxxxx	3.5	4.0	3.3	xxxxx	xxxx	xxxxx
Capacity Module:												
Cnflict Vol:	20	xxxx	xxxxx	xxxx	xxxx	xxxxx	130	130	16	xxxx	xxxx	xxxxx
Potent Cap.:	1609	xxxx	xxxxx	xxxx	xxxx	xxxxx	870	765	1070	xxxx	xxxx	xxxxx
Move Cap.:	1609	xxxx	xxxxx	xxxx	xxxx	xxxxx	851	743	1070	xxxx	xxxx	xxxxx
Volume/Cap:	0.03	xxxx	xxxx	xxxx	xxxx	xxxx	0.04	0.00	0.08	xxxx	xxxx	xxxx
Level Of Service Module:												
2Way95thQ:	0.1	xxxx	xxxxx	xxxx	xxxx	xxxxx	xxxx	xxxx	xxxxx	xxxx	xxxx	xxxxx
Control Del:	7.3	xxxx	xxxxx	xxxxx	xxxx	xxxxx	xxxxx	xxxx	xxxxx	xxxxx	xxxx	xxxxx
LOS by Move:	A	*	*	*	*	*	*	*	*	*	*	*
Movement:	LT	LTR	RT	LT	LTR	RT	LT	LTR	RT	LT	LTR	RT
Shared Cap.:	xxxx	xxxx	xxxxx	xxxx	xxxx	xxxxx	xxxx	997	xxxxx	xxxx	xxxx	xxxxx
SharedQueue:	0.1	xxxx	xxxxx	xxxxx	xxxx	xxxxx	xxxxx	0.4	xxxxx	xxxxx	xxxx	xxxxx
Shrd ConDel:	7.3	xxxx	xxxxx	xxxxx	xxxx	xxxxx	xxxxx	9.1	xxxxx	xxxxx	xxxx	xxxxx
Shared LOS:	A	*	*	*	*	*	*	A	*	*	*	*
ApproachDel:	xxxxxx			xxxxxx			9.1			xxxxxx		
ApproachLOS:	*			*			A			*		

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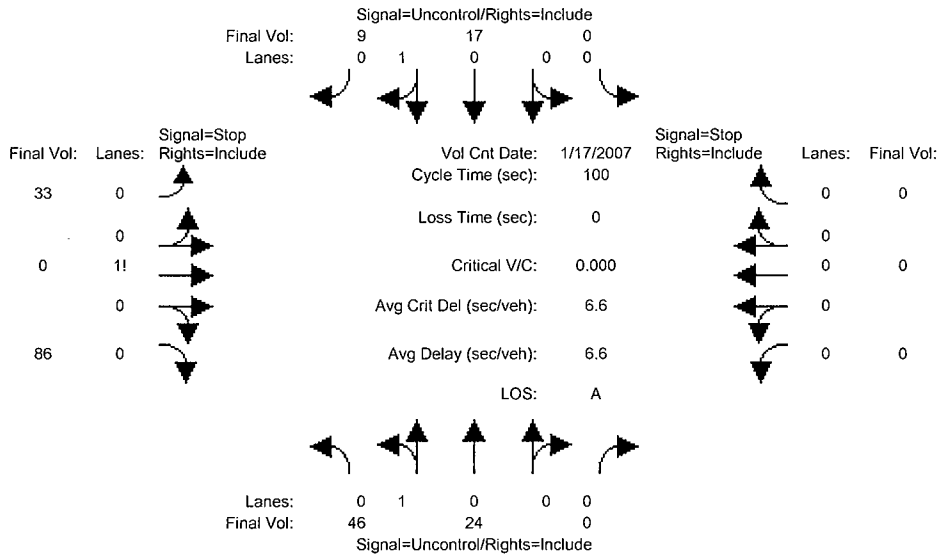
Big Wave Office Park and Wellness Center
Half Moon Bay, California

Level Of Service Computation Report
2000 HCM Unsignalized (Future Volume Alternative)
Background AM

Intersection #4: Airport & La Granada



Approach:	North Bound			South Bound			East Bound			West Bound		
Movement:	L	T	R	L	T	R	L	T	R	L	T	R
Volume Module: >> Count Date: 17 Jan 2007 << 7:30 - 8:30 AM												
Base Vol:	45	24	0	0	11	9	33	0	84	0	0	0
Growth Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Initial Bse:	45	24	0	0	11	9	33	0	84	0	0	0
Added Vol:	0	0	0	0	0	0	0	0	0	0	0	0
ATI:	1	0	0	0	6	0	0	0	2	0	0	0
Initial Fut:	46	24	0	0	17	9	33	0	86	0	0	0
User Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Volume:	46	24	0	0	17	9	33	0	86	0	0	0
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
FinalVolume:	46	24	0	0	17	9	33	0	86	0	0	0
Critical Gap Module:												
Critical Gp:	4.1	xxxx	xxxxx	xxxxx	xxxx	xxxxx	6.4	6.5	6.2	xxxxx	xxxx	xxxxx
FollowUpTim:	2.2	xxxx	xxxxx	xxxxx	xxxx	xxxxx	3.5	4.0	3.3	xxxxx	xxxx	xxxxx
Capacity Module:												
Cnflict Vol:	26	xxxx	xxxxx	xxxx	xxxx	xxxxx	138	138	22	xxxx	xxxx	xxxxx
Potent Cap.:	1601	xxxx	xxxxx	xxxx	xxxx	xxxxx	861	757	1062	xxxx	xxxx	xxxxx
Move Cap.:	1601	xxxx	xxxxx	xxxx	xxxx	xxxxx	841	735	1062	xxxx	xxxx	xxxxx
Volume/Cap:	0.03	xxxx	xxxx	xxxx	xxxx	xxxx	0.04	0.00	0.08	xxxx	xxxx	xxxx
Level Of Service Module:												
2Way95thQ:	0.1	xxxx	xxxxx	xxxx	xxxx	xxxxx	xxxx	xxxx	xxxxx	xxxx	xxxx	xxxxx
Control Del:	7.3	xxxx	xxxxx	xxxxx	xxxx	xxxxx	xxxxx	xxxx	xxxxx	xxxxx	xxxx	xxxxx
LOS by Move:	A	*	*	*	*	*	*	*	*	*	*	*
Movement:	LT	LTR	RT	LT	LTR	RT	LT	LTR	RT	LT	LTR	RT
Shared Cap.:	xxxx	xxxx	xxxxx	xxxx	xxxx	xxxxx	xxxx	990	xxxxx	xxxx	xxxx	xxxxx
SharedQueue:	0.1	xxxx	xxxxx	xxxxx	xxxx	xxxxx	xxxxx	0.4	xxxxx	xxxxx	xxxx	xxxxx
Shrd ConDel:	7.3	xxxx	xxxxx	xxxxx	xxxx	xxxxx	xxxxx	9.1	xxxxx	xxxxx	xxxx	xxxxx
Shared LOS:	A	*	*	*	*	*	*	A	*	*	*	*
ApproachDel:	xxxxxx			xxxxxx			9.1			xxxxxx		
ApproachLOS:	*			*			A			*		

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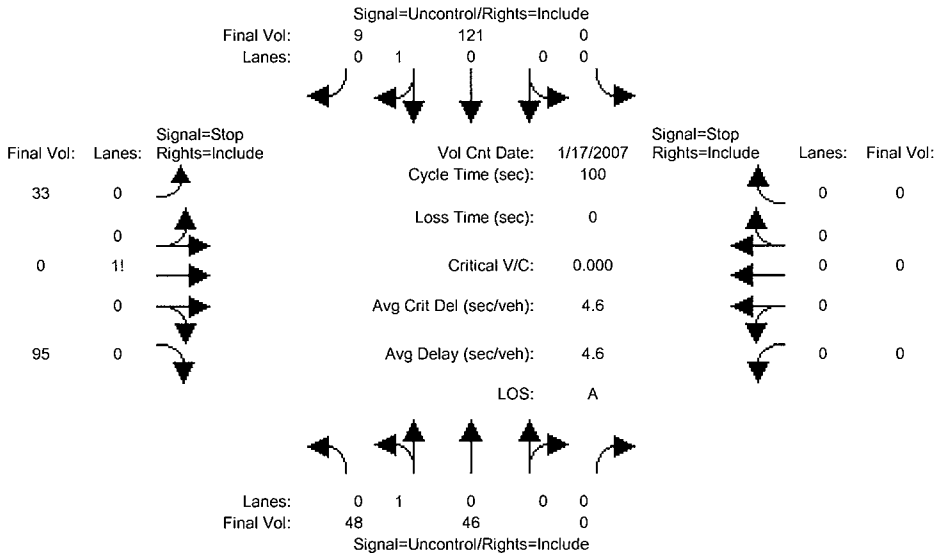
Big Wave Office Park and Wellness Center
Half Moon Bay, California

Level Of Service Computation Report
2000 HCM Unsignalized (Future Volume Alternative)
Project AM

Intersection #4: Airport & La Granada



Approach:	North Bound			South Bound			East Bound			West Bound		
Movement:	L	T	R	L	T	R	L	T	R	L	T	R
Volume Module: >> Count Date: 17 Jan 2007 << 7:30 - 8:30 AM												
Base Vol:	45	24	0	0	11	9	33	0	84	0	0	0
Growth Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Initial Bse:	45	24	0	0	11	9	33	0	84	0	0	0
Added Vol:	2	22	0	0	104	0	0	0	9	0	0	0
ATI:	1	0	0	0	6	0	0	0	2	0	0	0
Initial Fut:	48	46	0	0	121	9	33	0	95	0	0	0
User Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Volume:	48	46	0	0	121	9	33	0	95	0	0	0
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
FinalVolume:	48	46	0	0	121	9	33	0	95	0	0	0
Critical Gap Module:												
Critical Gp:	4.1	xxxx	xxxxx	xxxxx	xxxx	xxxxx	6.4	6.5	6.2	xxxxx	xxxx	xxxxx
FollowUpTim:	2.2	xxxx	xxxxx	xxxxx	xxxx	xxxxx	3.5	4.0	3.3	xxxxx	xxxx	xxxxx
Capacity Module:												
Cnflict Vol:	130	xxxx	xxxxx	xxxx	xxxx	xxxxx	268	268	126	xxxx	xxxx	xxxxx
Potent Cap.:	1468	xxxx	xxxxx	xxxx	xxxx	xxxxx	726	642	930	xxxx	xxxx	xxxxx
Move Cap.:	1468	xxxx	xxxxx	xxxx	xxxx	xxxxx	707	620	930	xxxx	xxxx	xxxxx
Volume/Cap:	0.03	xxxx	xxxx	xxxx	xxxx	xxxx	0.05	0.00	0.10	xxxx	xxxx	xxxx

Level Of Service Module:												
2Way95thQ:	0.1	xxxx	xxxxx	xxxx	xxxx	xxxxx	xxxx	xxxx	xxxxx	xxxx	xxxx	xxxxx
Control Del:	7.5	xxxx	xxxxx	xxxxx	xxxx	xxxxx	xxxxx	xxxx	xxxxx	xxxxx	xxxx	xxxxx
LOS by Move:	A	*	*	*	*	*	*	*	*	*	*	*
Movement:	LT	-	LTR - RT	LT	-	LTR - RT	LT	-	LTR - RT	LT	-	LTR - RT
Shared Cap.:	xxxx	xxxx	xxxxx	xxxx	xxxx	xxxxx	xxxx	860	xxxxx	xxxx	xxxx	xxxxx
SharedQueue:	0.1	xxxx	xxxxx	xxxxx	xxxx	xxxxx	xxxxx	0.5	xxxxx	xxxxx	xxxx	xxxxx
Shrd ConDel:	7.5	xxxx	xxxxx	xxxxx	xxxx	xxxxx	xxxxx	9.9	xxxxx	xxxxx	xxxx	xxxxx
Shared LOS:	A	*	*	*	*	*	*	A	*	*	*	*
ApproachDel:	xxxxxx			xxxxxx			9.9			xxxxxx		
ApproachLOS:	*			*			A			*		

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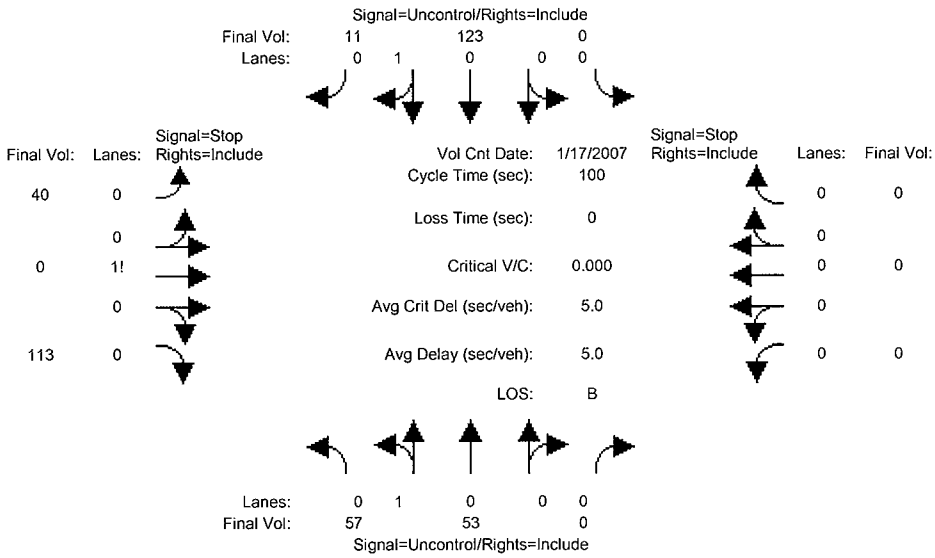
Intersection #4: Airport & La Granada



Approach:	North Bound			South Bound			East Bound			West Bound		
Movement:	L	T	R	L	T	R	L	T	R	L	T	R
Volume Module: >> Count Date: 17 Jan 2007 << 7:30 - 8:30 AM												
Base Vol:	45	24	0	0	11	9	33	0	84	0	0	0
Growth Adj:	1.20	1.20	1.20	1.20	1.20	1.20	1.20	1.20	1.20	1.20	1.20	1.20
Initial Bse:	54	29	0	0	13	11	40	0	101	0	0	0
Added Vol:	2	22	0	0	104	0	0	0	9	0	0	0
ATI+Cumul:	1	2	0	0	6	0	0	0	3	0	0	0
Initial Fut:	57	53	0	0	123	11	40	0	113	0	0	0
User Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Volume:	57	53	0	0	123	11	40	0	113	0	0	0
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
FinalVolume:	57	53	0	0	123	11	40	0	113	0	0	0
Critical Gap Module:												
Critical Gp:	4.1	xxxx	xxxxx	xxxxx	xxxx	xxxxx	6.4	6.5	6.2	xxxxx	xxxx	xxxxx
FollowUpTim:	2.2	xxxx	xxxxx	xxxxx	xxxx	xxxxx	3.5	4.0	3.3	xxxxx	xxxx	xxxxx
Capacity Module:												
Cnflict Vol:	134	xxxx	xxxxx	xxxx	xxxx	xxxxx	295	295	129	xxxx	xxxx	xxxxx
Potent Cap.:	1463	xxxx	xxxxx	xxxx	xxxx	xxxxx	700	619	927	xxxx	xxxx	xxxxx
Move Cap.:	1463	xxxx	xxxxx	xxxx	xxxx	xxxxx	678	594	927	xxxx	xxxx	xxxxx
Volume/Cap:	0.04	xxxx	xxxx	xxxx	xxxx	xxxx	0.06	0.00	0.12	xxxx	xxxx	xxxx
Level Of Service Module:												
2Way95thQ:	0.1	xxxx	xxxxx	xxxx	xxxx	xxxxx	xxxx	xxxx	xxxxx	xxxx	xxxx	xxxxx
Control Del:	7.6	xxxx	xxxxx	xxxxx	xxxx	xxxxx	xxxxx	xxxx	xxxxx	xxxxx	xxxx	xxxxx
LOS by Move:	A	*	*	*	*	*	*	*	*	*	*	*
Movement:	LT	LTR	RT	LT	LTR	RT	LT	LTR	RT	LT	LTR	RT
Shared Cap.:	xxxx	xxxx	xxxxx	xxxx	xxxx	xxxxx	xxxx	846	xxxxx	xxxx	xxxx	xxxxx
SharedQueue:	0.1	xxxx	xxxxx	xxxxx	xxxx	xxxxx	xxxxx	0.7	xxxxx	xxxxx	xxxx	xxxxx
Shrd ConDel:	7.6	xxxx	xxxxx	xxxxx	xxxx	xxxxx	xxxxx	10.2	xxxxx	xxxxx	xxxx	xxxxx
Shared LOS:	A	*	*	*	*	*	*	B	*	*	*	*
ApproachDel:	xxxxxx			xxxxxx			10.2			xxxxxx		
ApproachLOS:	*			*			B			*		

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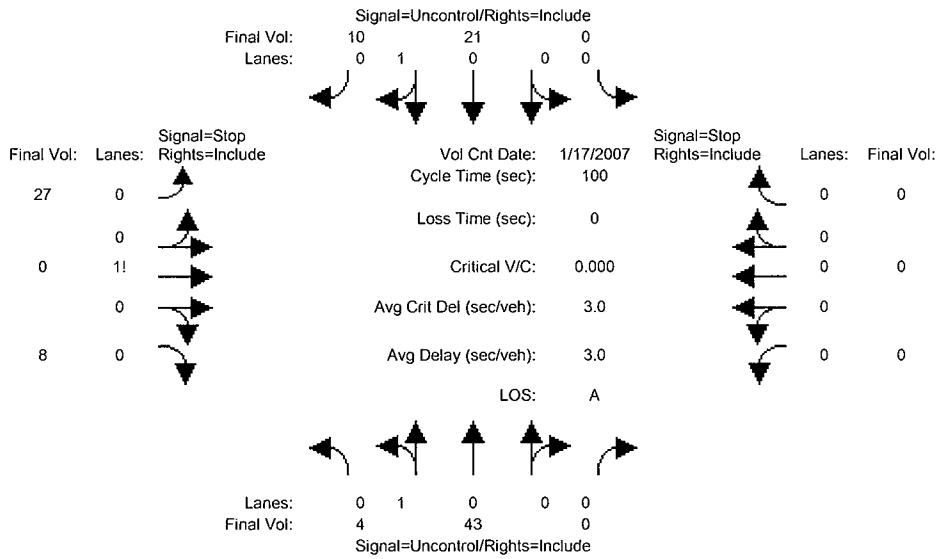
Existing AM

Intersection #5: Airport & Los Banos



Approach:	North Bound			South Bound			East Bound			West Bound		
Movement:	L	T	R	L	T	R	L	T	R	L	T	R
Volume Module: >> Count Date: 17 Jan 2007 << 7:45 - 8:45 AM												
Base Vol:	4	43	0	0	21	10	27	0	8	0	0	0
Growth Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Initial Bse:	4	43	0	0	21	10	27	0	8	0	0	0
Added Vol:	0	0	0	0	0	0	0	0	0	0	0	0
ATI:	0	0	0	0	0	0	0	0	0	0	0	0
Initial Fut:	4	43	0	0	21	10	27	0	8	0	0	0
User Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Volume:	4	43	0	0	21	10	27	0	8	0	0	0
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
FinalVolume:	4	43	0	0	21	10	27	0	8	0	0	0
Critical Gap Module:												
Critical Gp:	4.1	xxxx	xxxxx	xxxxx	xxxx	xxxxx	6.4	6.5	6.2	xxxxx	xxxx	xxxxx
FollowUpTim:	2.2	xxxx	xxxxx	xxxxx	xxxx	xxxxx	3.5	4.0	3.3	xxxxx	xxxx	xxxxx
Capacity Module:												
Cnflict Vol:	31	xxxx	xxxxx	xxxx	xxxx	xxxxx	77	77	26	xxxx	xxxx	xxxxx
Potent Cap.:	1595	xxxx	xxxxx	xxxx	xxxx	xxxxx	931	817	1056	xxxx	xxxx	xxxxx
Move Cap.:	1595	xxxx	xxxxx	xxxx	xxxx	xxxxx	929	815	1056	xxxx	xxxx	xxxxx
Volume/Cap:	0.00	xxxx	xxxx	xxxx	xxxx	xxxx	0.03	0.00	0.01	xxxx	xxxx	xxxx
Level Of Service Module:												
2Way95thQ:	0.0	xxxx	xxxxx	xxxx	xxxx	xxxxx	xxxx	xxxx	xxxxx	xxxx	xxxx	xxxxx
Control Del:	7.3	xxxx	xxxxx	xxxxx	xxxx	xxxxx	xxxxx	xxxx	xxxxx	xxxxx	xxxx	xxxxx
LOS by Move:	A	*	*	*	*	*	*	*	*	*	*	*
Movement:	LT	LTR	RT	LT	LTR	RT	LT	LTR	RT	LT	LTR	RT
Shared Cap.:	xxxx	xxxx	xxxxx	xxxx	xxxx	xxxxx	xxxx	955	xxxxx	xxxx	xxxx	xxxxx
SharedQueue:	0.0	xxxx	xxxxx	xxxxx	xxxx	xxxxx	xxxxx	0.1	xxxxx	xxxxx	xxxx	xxxxx
Shrd ConDel:	7.3	xxxx	xxxxx	xxxxx	xxxx	xxxxx	xxxxx	8.9	xxxxx	xxxxx	xxxx	xxxxx
Shared LOS:	A	*	*	*	*	*	*	A	*	*	*	*
ApproachDel:	xxxxxx			xxxxxx			8.9			xxxxxx		
ApproachLOS:	*			*			A			*		

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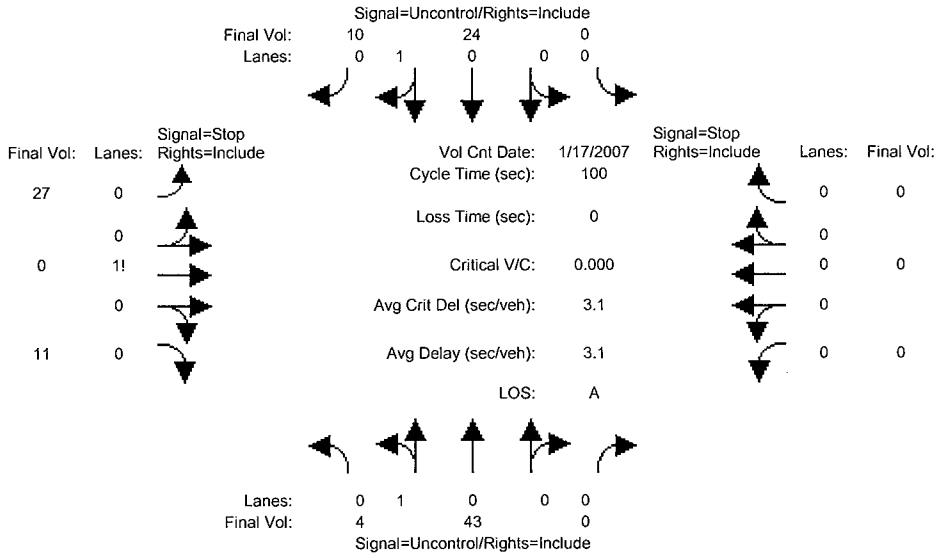
Level Of Service Computation Report
2000 HCM Unsignalized (Future Volume Alternative)
Background AM

Intersection #5: Airport & Los Banos



Approach:	North Bound			South Bound			East Bound			West Bound		
Movement:	L	T	R	L	T	R	L	T	R	L	T	R
Volume Module: >> Count Date: 17 Jan 2007 << 7:45 - 8:45 AM												
Base Vol:	4	43	0	0	21	10	27	0	8	0	0	0
Growth Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Initial Bse:	4	43	0	0	21	10	27	0	8	0	0	0
Added Vol:	0	0	0	0	0	0	0	0	0	0	0	0
ATI:	0	0	0	0	3	0	0	0	3	0	0	0
Initial Fut:	4	43	0	0	24	10	27	0	11	0	0	0
User Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Volume:	4	43	0	0	24	10	27	0	11	0	0	0
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
FinalVolume:	4	43	0	0	24	10	27	0	11	0	0	0
Critical Gap Module:												
Critical Gp:	4.1	xxxx	xxxxx	xxxxx	xxxx	xxxxx	6.4	6.5	6.2	xxxxx	xxxx	xxxxx
FollowUpTim:	2.2	xxxx	xxxxx	xxxxx	xxxx	xxxxx	3.5	4.0	3.3	xxxxx	xxxx	xxxxx
Capacity Module:												
Cnflict Vol:	34	xxxx	xxxxx	xxxx	xxxx	xxxxx	80	80	29	xxxx	xxxx	xxxxx
Potent Cap.:	1591	xxxx	xxxxx	xxxx	xxxx	xxxxx	927	814	1052	xxxx	xxxx	xxxxx
Move Cap.:	1591	xxxx	xxxxx	xxxx	xxxx	xxxxx	926	812	1052	xxxx	xxxx	xxxxx
Volume/Cap:	0.00	xxxx	xxxx	xxxx	xxxx	xxxx	0.03	0.00	0.01	xxxx	xxxx	xxxx
Level Of Service Module:												
2Way95thQ:	0.0	xxxx	xxxxx	xxxx	xxxx	xxxxx	xxxx	xxxx	xxxxx	xxxx	xxxx	xxxxx
Control Del:	7.3	xxxx	xxxxx	xxxxx	xxxx	xxxxx	xxxxx	xxxx	xxxxx	xxxxx	xxxx	xxxxx
LOS by Move:	A	*	*	*	*	*	*	*	*	*	*	*
Movement:	LT	LTR	RT	LT	LTR	RT	LT	LTR	RT	LT	LTR	RT
Shared Cap.:	xxxx	xxxx	xxxxx	xxxx	xxxx	xxxxx	xxxx	959	xxxxx	xxxx	xxxx	xxxxx
SharedQueue:	0.0	xxxx	xxxxx	xxxxx	xxxx	xxxxx	xxxxx	0.1	xxxxx	xxxxx	xxxx	xxxxx
Shrd ConDel:	7.3	xxxx	xxxxx	xxxxx	xxxx	xxxxx	xxxxx	8.9	xxxxx	xxxxx	xxxx	xxxxx
Shared LOS:	A	*	*	*	*	*	*	A	*	*	*	*
ApproachDel:	xxxxxx			xxxxxx			8.9			xxxxxx		
ApproachLOS:	*			*			A			*		

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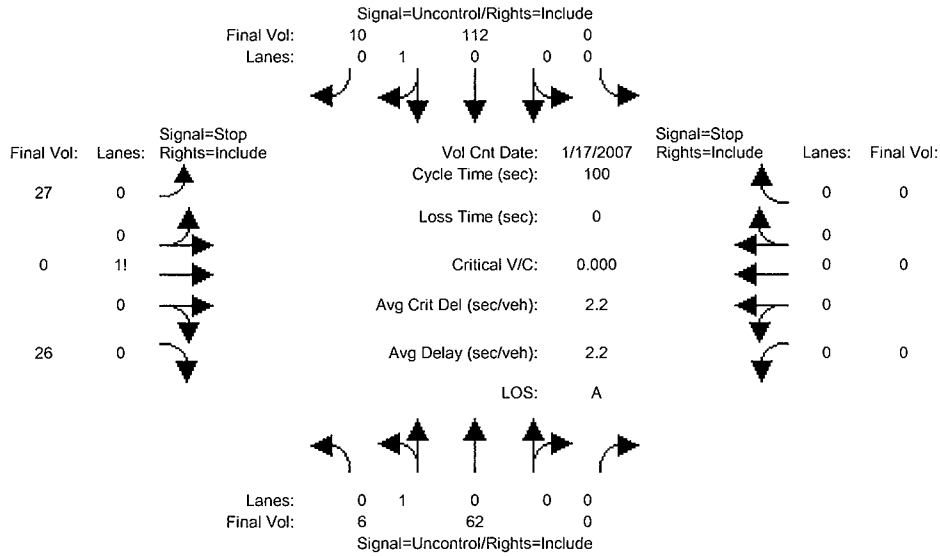
Intersection #5: Airport & Los Banos



Approach:	North Bound			South Bound			East Bound			West Bound		
Movement:	L	T	R	L	T	R	L	T	R	L	T	R
Volume Module: >> Count Date: 17 Jan 2007 << 7:45 - 8:45 AM												
Base Vol:	4	43	0	0	21	10	27	0	8	0	0	0
Growth Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Initial Bse:	4	43	0	0	21	10	27	0	8	0	0	0
Added Vol:	2	19	0	0	88	0	0	0	15	0	0	0
ATI:	0	0	0	0	3	0	0	0	3	0	0	0
Initial Fut:	6	62	0	0	112	10	27	0	26	0	0	0
User Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Volume:	6	62	0	0	112	10	27	0	26	0	0	0
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
FinalVolume:	6	62	0	0	112	10	27	0	26	0	0	0
Critical Gap Module:												
Critical Gp:	4.1	xxxx	xxxxx	xxxxx	xxxx	xxxxx	6.4	6.5	6.2	xxxxx	xxxx	xxxxx
FollowUpTim:	2.2	xxxx	xxxxx	xxxxx	xxxx	xxxxx	3.5	4.0	3.3	xxxxx	xxxx	xxxxx
Capacity Module:												
Cnflict Vol:	122	xxxx	xxxxx	xxxx	xxxx	xxxxx	191	191	117	xxxx	xxxx	xxxxx
Potent Cap.:	1478	xxxx	xxxxx	xxxx	xxxx	xxxxx	803	708	941	xxxx	xxxx	xxxxx
Move Cap.:	1478	xxxx	xxxxx	xxxx	xxxx	xxxxx	800	705	941	xxxx	xxxx	xxxxx
Volume/Cap:	0.00	xxxx	xxxx	xxxx	xxxx	xxxx	0.03	0.00	0.03	xxxx	xxxx	xxxx
Level Of Service Module:												
2Way95thQ:	0.0	xxxx	xxxxx	xxxx	xxxx	xxxxx	xxxx	xxxx	xxxxx	xxxx	xxxx	xxxxx
Control Del:	7.4	xxxx	xxxxx	xxxxx	xxxx	xxxxx	xxxxx	xxxx	xxxxx	xxxxx	xxxx	xxxxx
LOS by Move:	A	*	*	*	*	*	*	*	*	*	*	*
Movement:	LT -	LTR -	RT	LT -	LTR -	RT	LT -	LTR -	RT	LT -	LTR -	RT
Shared Cap.:	xxxx	xxxx	xxxxx	xxxx	xxxx	xxxxx	xxxx	863	xxxxx	xxxx	xxxx	xxxxx
SharedQueue:	0.0	xxxx	xxxxx	xxxxx	xxxx	xxxxx	xxxxx	0.2	xxxxx	xxxxx	xxxx	xxxxx
Shrd ConDel:	7.4	xxxx	xxxxx	xxxxx	xxxx	xxxxx	xxxxx	9.4	xxxxx	xxxxx	xxxx	xxxxx
Shared LOS:	A	*	*	*	*	*	*	A	*	*	*	*
ApproachDel:	xxxxxx			xxxxxx			9.4			xxxxxx		
ApproachLOS:	*			*			A			*		

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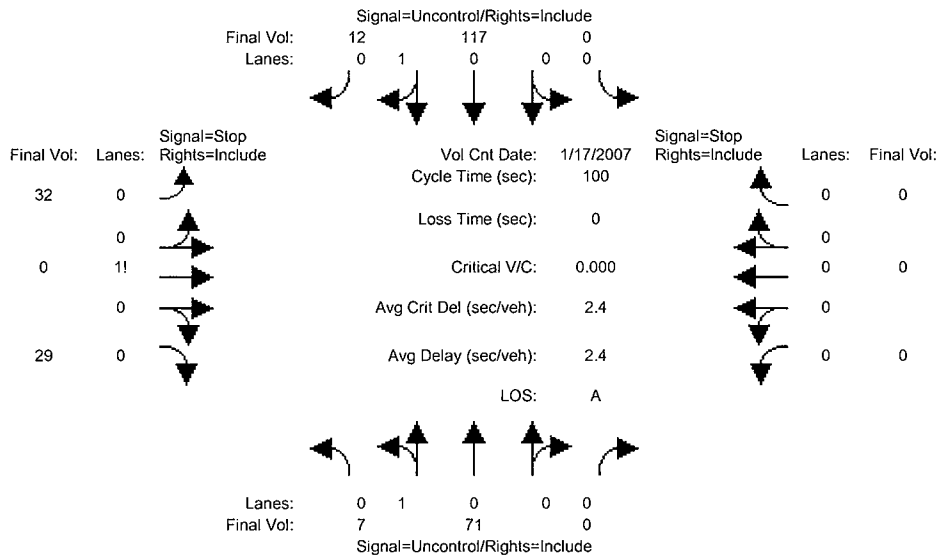
Intersection #5: Airport & Los Banos



Approach:	North Bound			South Bound			East Bound			West Bound		
Movement:	L	T	R	L	T	R	L	T	R	L	T	R
Volume Module: >> Count Date: 17 Jan 2007 << 7:45 - 8:45 AM												
Base Vol:	4	43	0	0	21	10	27	0	8	0	0	0
Growth Adj:	1.20	1.20	1.20	1.20	1.20	1.20	1.20	1.20	1.20	1.20	1.20	1.20
Initial Bse:	5	52	0	0	25	12	32	0	10	0	0	0
Added Vol:	2	19	0	0	88	0	0	0	15	0	0	0
ATI+Cumul:	0	0	0	0	4	0	0	0	4	0	0	0
Initial Fut:	7	71	0	0	117	12	32	0	29	0	0	0
User Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Volume:	7	71	0	0	117	12	32	0	29	0	0	0
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
FinalVolume:	7	71	0	0	117	12	32	0	29	0	0	0
Critical Gap Module:												
Critical Gp:	4.1	xxxx	xxxxx	xxxxx	xxxx	xxxxx	6.4	6.5	6.2	xxxxx	xxxx	xxxxx
FollowUpTim:	2.2	xxxx	xxxxx	xxxxx	xxxx	xxxxx	3.5	4.0	3.3	xxxxx	xxxx	xxxxx
Capacity Module:												
Cnflict Vol:	129	xxxx	xxxxx	xxxx	xxxx	xxxxx	207	207	123	xxxx	xxxx	xxxxx
Potent Cap.:	1469	xxxx	xxxxx	xxxx	xxxx	xxxxx	786	693	933	xxxx	xxxx	xxxxx
Move Cap.:	1469	xxxx	xxxxx	xxxx	xxxx	xxxxx	783	690	933	xxxx	xxxx	xxxxx
Volume/Cap:	0.00	xxxx	xxxx	xxxx	xxxx	xxxx	0.04	0.00	0.03	xxxx	xxxx	xxxx
Level Of Service Module:												
2Way95thQ:	0.0	xxxx	xxxxx	xxxx	xxxx	xxxxx	xxxx	xxxx	xxxxx	xxxx	xxxx	xxxxx
Control Del:	7.5	xxxx	xxxxx	xxxxx	xxxx	xxxxx	xxxxx	xxxx	xxxxx	xxxxx	xxxx	xxxxx
LOS by Move:	A	*	*	*	*	*	*	*	*	*	*	*
Movement:	LT	LTR	RT	LT	LTR	RT	LT	LTR	RT	LT	LTR	RT
Shared Cap.:	xxxx	xxxx	xxxxx	xxxx	xxxx	xxxxx	xxxx	847	xxxxx	xxxx	xxxx	xxxxx
SharedQueue:	0.0	xxxx	xxxxx	xxxxx	xxxx	xxxxx	xxxxx	0.2	xxxxx	xxxxx	xxxx	xxxxx
Shrd ConDel:	7.5	xxxx	xxxxx	xxxxx	xxxx	xxxxx	xxxxx	9.6	xxxxx	xxxxx	xxxx	xxxxx
Shared LOS:	A	*	*	*	*	*	*	A	*	*	*	*
ApproachDel:	xxxxxx			xxxxxx			9.6			xxxxxx		
ApproachLOS:	*			*			A			*		

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Half Moon Bay, California

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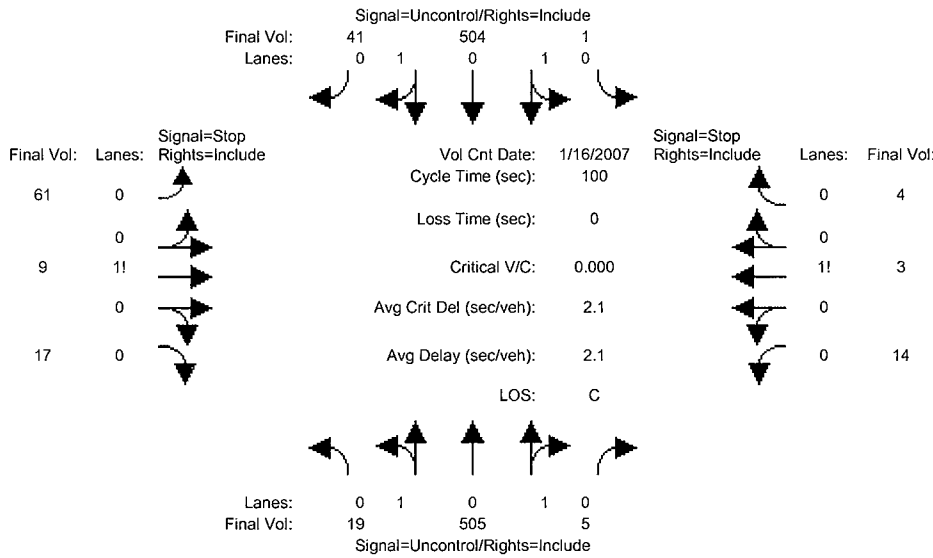
Intersection #6: Hwy 1 & Cypress



Approach:	North Bound			South Bound			East Bound			West Bound		
Movement:	L	T	R	L	T	R	L	T	R	L	T	R
Volume Module: >> Count Date: 16 Jan 2007 << 7:45 - 8:45 AM												
Base Vol:	19	505	5	1	504	41	61	9	17	14	3	4
Growth Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Initial Bse:	19	505	5	1	504	41	61	9	17	14	3	4
Added Vol:	0	0	0	0	0	0	0	0	0	0	0	0
PasserByVol:	0	0	0	0	0	0	0	0	0	0	0	0
Initial Fut:	19	505	5	1	504	41	61	9	17	14	3	4
User Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Volume:	19	505	5	1	504	41	61	9	17	14	3	4
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
FinalVolume:	19	505	5	1	504	41	61	9	17	14	3	4
Critical Gap Module:												
Critical Gp:	4.1	xxxx	xxxxx	4.1	xxxx	xxxxx	7.5	6.5	6.9	7.5	6.5	6.9
FollowUpTim:	2.2	xxxx	xxxxx	2.2	xxxx	xxxxx	3.5	4.0	3.3	3.5	4.0	3.3
Capacity Module:												
Cnflict Vol:	545	xxxx	xxxxx	510	xxxx	xxxxx	819	1075	273	804	1093	255
Potent Cap.:	1034	xxxx	xxxxx	1065	xxxx	xxxxx	271	222	731	278	216	750
Move Cap.:	1034	xxxx	xxxxx	1065	xxxx	xxxxx	263	217	731	259	212	750
Volume/Cap:	0.02	xxxx	xxxx	0.00	xxxx	xxxx	0.23	0.04	0.02	0.05	0.01	0.01
Level Of Service Module:												
2Way95thQ:	0.1	xxxx	xxxxx	0.0	xxxx	xxxxx	xxxx	xxxx	xxxxx	xxxx	xxxx	xxxxx
Control Del:	8.5	xxxx	xxxxx	8.4	xxxx	xxxxx	xxxxx	xxxx	xxxxx	xxxxx	xxxx	xxxxx
LOS by Move:	A	*	*	A	*	*	*	*	*	*	*	*
Movement:	LT	LTR	RT	LT	LTR	RT	LT	LTR	RT	LT	LTR	RT
Shared Cap.:	xxxx	xxxx	xxxxx	xxxx	xxxx	xxxxx	xxxx	293	xxxxx	xxxx	285	xxxxx
SharedQueue:	0.1	xxxx	xxxxx	0.0	xxxx	xxxxx	xxxxx	1.2	xxxxx	xxxxx	0.2	xxxxx
Shrd ConDel:	8.5	xxxx	xxxxx	8.4	xxxx	xxxxx	xxxxx	22.4	xxxxx	xxxxx	18.6	xxxxx
Shared LOS:	A	*	*	A	*	*	*	C	*	*	C	*
ApproachDel:	xxxxxx			xxxxxx			22.4			18.6		
ApproachLOS:	*			*			C			C		

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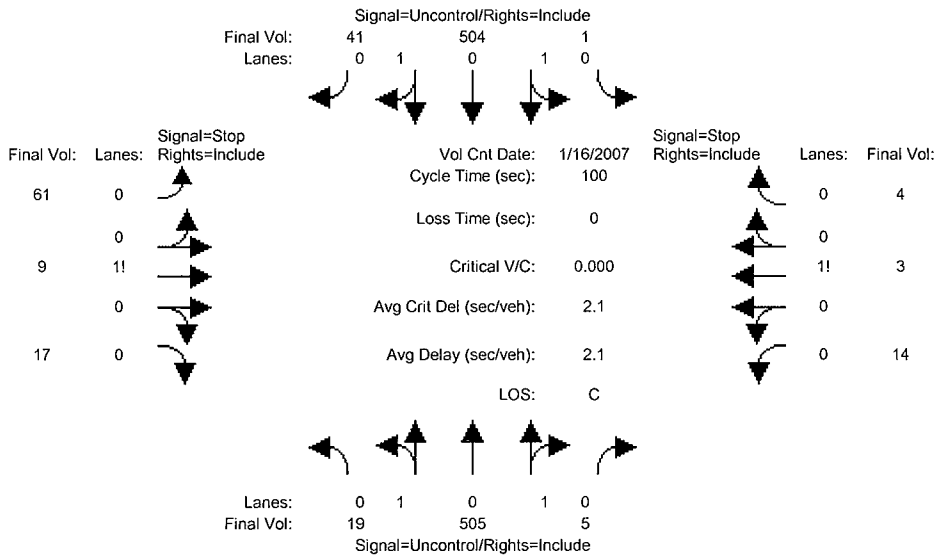
Big Wave Office Park and Wellness Center
Half Moon Bay, California

Level Of Service Computation Report
2000 HCM Unsignalized (Future Volume Alternative)
Background AM

Intersection #6: Hwy 1 & Cypress



Approach:	North Bound			South Bound			East Bound			West Bound		
Movement:	L	T	R	L	T	R	L	T	R	L	T	R
Volume Module: >> Count Date: 16 Jan 2007 << 7:45 - 8:45 AM												
Base Vol:	19	505	5	1	504	41	61	9	17	14	3	4
Growth Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Initial Bse:	19	505	5	1	504	41	61	9	17	14	3	4
Added Vol:	0	0	0	0	0	0	0	0	0	0	0	0
PasserByVol:	0	0	0	0	0	0	0	0	0	0	0	0
Initial Fut:	19	505	5	1	504	41	61	9	17	14	3	4
User Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Volume:	19	505	5	1	504	41	61	9	17	14	3	4
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
FinalVolume:	19	505	5	1	504	41	61	9	17	14	3	4
Critical Gap Module:												
Critical Gp:	4.1	xxxx	xxxxx	4.1	xxxx	xxxxx	7.5	6.5	6.9	7.5	6.5	6.9
FollowUpTim:	2.2	xxxx	xxxxx	2.2	xxxx	xxxxx	3.5	4.0	3.3	3.5	4.0	3.3
Capacity Module:												
Cnflict Vol:	545	xxxx	xxxxx	510	xxxx	xxxxx	819	1075	273	804	1093	255
Potent Cap.:	1034	xxxx	xxxxx	1065	xxxx	xxxxx	271	222	731	278	216	750
Move Cap.:	1034	xxxx	xxxxx	1065	xxxx	xxxxx	263	217	731	259	212	750
Volume/Cap:	0.02	xxxx	xxxx	0.00	xxxx	xxxx	0.23	0.04	0.02	0.05	0.01	0.01
Level Of Service Module:												
2Way95thQ:	0.1	xxxx	xxxxx	0.0	xxxx	xxxxx	xxxx	xxxx	xxxxx	xxxx	xxxx	xxxxx
Control Del:	8.5	xxxx	xxxxx	8.4	xxxx	xxxxx	xxxxx	xxxx	xxxxx	xxxxx	xxxx	xxxxx
LOS by Move:	A	*	*	A	*	*	*	*	*	*	*	*
Movement:	LT	LTR	RT	LT	LTR	RT	LT	LTR	RT	LT	LTR	RT
Shared Cap.:	xxxx	xxxx	xxxxx	xxxx	xxxx	xxxxx	xxxx	293	xxxxx	xxxx	285	xxxxx
SharedQueue:	0.1	xxxx	xxxxx	0.0	xxxx	xxxxx	xxxxx	1.2	xxxxx	xxxxx	0.2	xxxxx
Shrd ConDel:	8.5	xxxx	xxxxx	8.4	xxxx	xxxxx	xxxxx	22.4	xxxxx	xxxxx	18.6	xxxxx
Shared LOS:	A	*	*	A	*	*	*	C	*	*	C	*
ApproachDel:	xxxxxx			xxxxxx			22.4			18.6		
ApproachLOS:	*			*			C			C		

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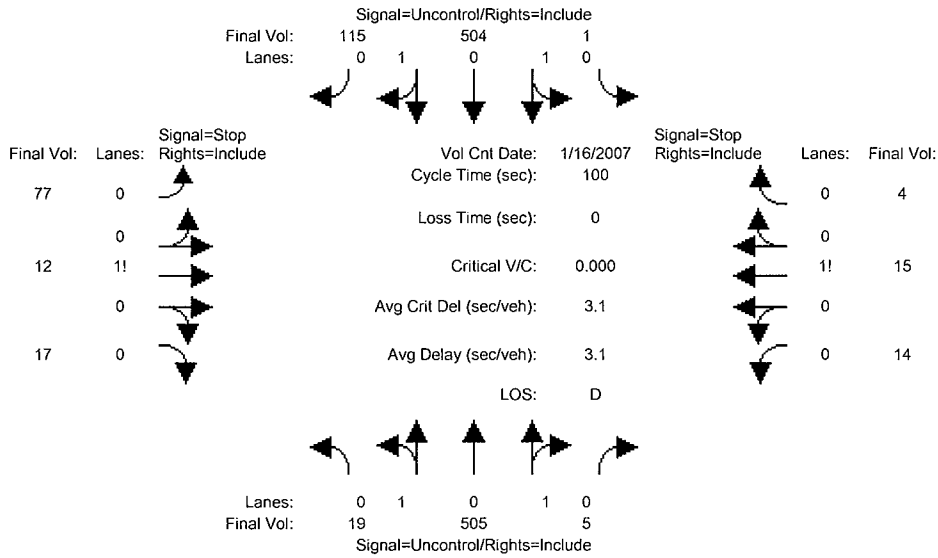
Big Wave Office Park and Wellness Center
Half Moon Bay, California

Level Of Service Computation Report
2000 HCM Unsignalized (Future Volume Alternative)
Project AM

Intersection #6: Hwy 1 & Cypress



Approach:	North Bound			South Bound			East Bound			West Bound		
Movement:	L	T	R	L	T	R	L	T	R	L	T	R
Volume Module: >> Count Date: 16 Jan 2007 << 7:45 - 8:45 AM												
Base Vol:	19	505	5	1	504	41	61	9	17	14	3	4
Growth Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Initial Bse:	19	505	5	1	504	41	61	9	17	14	3	4
Added Vol:	0	0	0	0	0	74	16	3	0	0	12	0
PasserByVol:	0	0	0	0	0	0	0	0	0	0	0	0
Initial Fut:	19	505	5	1	504	115	77	12	17	14	15	4
User Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Volume:	19	505	5	1	504	115	77	12	17	14	15	4
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
FinalVolume:	19	505	5	1	504	115	77	12	17	14	15	4
Critical Gap Module:												
Critical Gp:	4.1	xxxx	xxxxx	4.1	xxxx	xxxxx	7.5	6.5	6.9	7.5	6.5	6.9
FollowUpTim:	2.2	xxxx	xxxxx	2.2	xxxx	xxxxx	3.5	4.0	3.3	3.5	4.0	3.3
Capacity Module:												
Cnflict Vol:	619	xxxx	xxxxx	510	xxxx	xxxxx	862	1112	310	806	1167	255
Potent Cap.:	971	xxxx	xxxxx	1065	xxxx	xxxxx	252	211	692	277	195	750
Move Cap.:	971	xxxx	xxxxx	1065	xxxx	xxxxx	232	206	692	254	191	750
Volume/Cap:	0.02	xxxx	xxxx	0.00	xxxx	xxxx	0.33	0.06	0.02	0.06	0.08	0.01
Level Of Service Module:												
2Way95thQ:	0.1	xxxx	xxxxx	0.0	xxxx	xxxxx	xxxx	xxxx	xxxxx	xxxx	xxxx	xxxxx
Control Del:	8.8	xxxx	xxxxx	8.4	xxxx	xxxxx	xxxxx	xxxx	xxxxx	xxxxx	xxxx	xxxxx
LOS by Move:	A	*	*	A	*	*	*	*	*	*	*	*
Movement:	LT	LTR	RT	LT	LTR	RT	LT	LTR	RT	LT	LTR	RT
Shared Cap.:	xxxx	xxxx	xxxxx	xxxx	xxxx	xxxxx	xxxx	256	xxxxx	xxxx	238	xxxxx
SharedQueue:	0.1	xxxx	xxxxx	0.0	xxxx	xxxxx	xxxxx	1.9	xxxxx	xxxxx	0.5	xxxxx
Shrd ConDel:	8.8	xxxx	xxxxx	8.4	xxxx	xxxxx	xxxxx	28.7	xxxxx	xxxxx	22.6	xxxxx
Shared LOS:	A	*	*	A	*	*	*	D	*	*	C	*
ApproachDel:	xxxxxx			xxxxxx			28.7			22.6		
ApproachLOS:	*			*			D			C		

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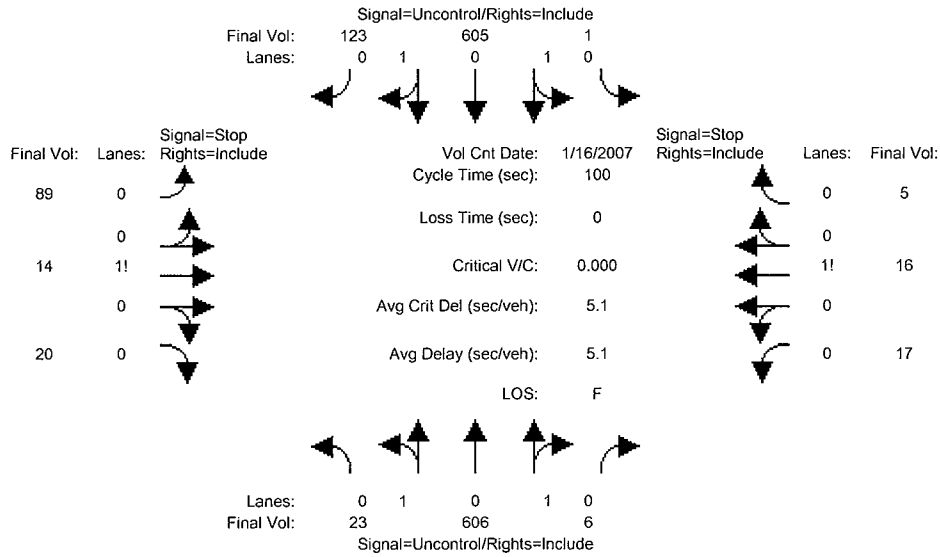
Big Wave Office Park and Wellness Center
Half Moon Bay, California

Level Of Service Computation Report
2000 HCM Unsignalized (Future Volume Alternative)
Cumulative Project AM

Intersection #6: Hwy 1 & Cypress



Approach:	North Bound			South Bound			East Bound			West Bound		
Movement:	L -	T -	R	L -	T -	R	L -	T -	R	L -	T -	R
Volume Module: >> Count Date: 16 Jan 2007 << 7:45 - 8:45 AM												
Base Vol:	19	505	5	1	504	41	61	9	17	14	3	4
Growth Adj:	1.20	1.20	1.20	1.20	1.20	1.20	1.20	1.20	1.20	1.20	1.20	1.20
Initial Bse:	23	606	6	1	605	49	73	11	20	17	4	5
Added Vol:	0	0	0	0	0	74	16	3	0	0	12	0
ATI+Cumul:	0	0	0	0	0	0	0	0	0	0	0	0
Initial Fut:	23	606	6	1	605	123	89	14	20	17	16	5
User Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Volume:	23	606	6	1	605	123	89	14	20	17	16	5
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
FinalVolume:	23	606	6	1	605	123	89	14	20	17	16	5
Critical Gap Module:												
Critical Gp:	4.1	xxxx	xxxxx	4.1	xxxx	xxxxx	7.5	6.5	6.9	7.5	6.5	6.9
FollowUpTim:	2.2	xxxx	xxxxx	2.2	xxxx	xxxxx	3.5	4.0	3.3	3.5	4.0	3.3
Capacity Module:												
Cnflict Vol:	728	xxxx	xxxxx	612	xxxx	xxxxx	1025	1326	364	966	1385	306
Potent Cap.:	885	xxxx	xxxxx	977	xxxx	xxxxx	192	157	639	212	145	696
Move Cap.:	885	xxxx	xxxxx	977	xxxx	xxxxx	171	153	639	187	141	696
Volume/Cap:	0.03	xxxx	xxxx	0.00	xxxx	xxxx	0.52	0.09	0.03	0.09	0.11	0.01
Level Of Service Module:												
2Way95thQ:	0.1	xxxx	xxxxx	0.0	xxxx	xxxxx	xxxx	xxxx	xxxxx	xxxx	xxxx	xxxxx
Control Del:	9.2	xxxx	xxxxx	8.7	xxxx	xxxxx	xxxxx	xxxx	xxxxx	xxxxx	xxxx	xxxxx
LOS by Move:	A	*	*	A	*	*	*	*	*	*	*	*
Movement:	LT -	LTR -	RT	LT -	LTR -	RT	LT -	LTR -	RT	LT -	LTR -	RT
Shared Cap.:	xxxx	xxxx	xxxxx	xxxx	xxxx	xxxxx	xxxx	191	xxxxx	xxxx	179	xxxxx
SharedQueue:	0.1	xxxx	xxxxx	0.0	xxxx	xxxxx	xxxxx	3.8	xxxxx	xxxxx	0.8	xxxxx
Shrd ConDel:	9.2	xxxx	xxxxx	8.7	xxxx	xxxxx	xxxxx	52.7	xxxxx	xxxxx	30.3	xxxxx
Shared LOS:	A	*	*	A	*	*	*	F	*	*	D	*
ApproachDel:	xxxxxx			xxxxxx			52.7			30.3		
ApproachLOS:	*			*			F			D		

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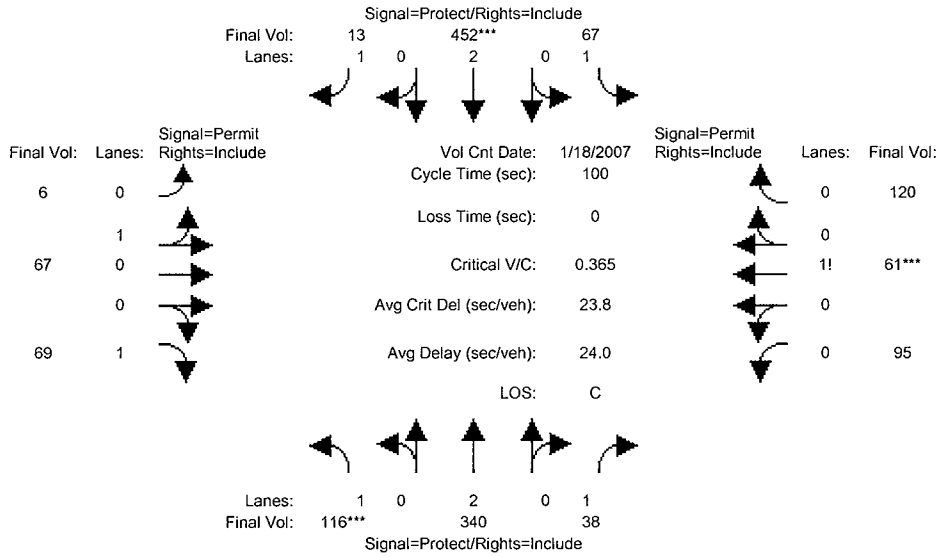
Big Wave Office Park and Wellness Center
Half Moon Bay, California

Level Of Service Computation Report
2000 HCM Operations (Future Volume Alternative)
Existing AM

Intersection #7: Hwy 1 & Capistrano (S)



Approach:	North Bound			South Bound			East Bound			West Bound		
Movement:	L	T	R	L	T	R	L	T	R	L	T	R
Min. Green:	7	10	10	7	10	10	0	0	0	0	0	0
Volume Module: >> Count Date: 18 Jan 2007 << 7:45 - 8:45 AM												
Base Vol:	116	340	38	67	452	13	6	67	69	95	61	120
Growth Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Initial Bse:	116	340	38	67	452	13	6	67	69	95	61	120
Added Vol:	0	0	0	0	0	0	0	0	0	0	0	0
:	0	0	0	0	0	0	0	0	0	0	0	0
Initial Fut:	116	340	38	67	452	13	6	67	69	95	61	120
User Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Volume:	116	340	38	67	452	13	6	67	69	95	61	120
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:	116	340	38	67	452	13	6	67	69	95	61	120
PCE Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
MLF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
FinalVolume:	116	340	38	67	452	13	6	67	69	95	61	120
Saturation Flow Module:												
Sat/Lane:	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Adjustment:	0.95	0.95	0.85	0.95	0.95	0.85	0.98	0.98	0.85	0.83	0.83	0.83
Lanes:	1.00	2.00	1.00	1.00	2.00	1.00	0.08	0.92	1.00	0.34	0.22	0.44
Final Sat.:	1805	3610	1615	1805	3610	1615	153	1712	1615	542	348	684
Capacity Analysis Module:												
Vol/Sat:	0.06	0.09	0.02	0.04	0.13	0.01	0.04	0.04	0.04	0.18	0.18	0.18
Crit Moves:	****				****						****	
Green/Cycle:	0.18	0.31	0.31	0.21	0.34	0.34	0.48	0.48	0.48	0.48	0.48	0.48
Volume/Cap:	0.36	0.31	0.08	0.17	0.36	0.02	0.08	0.08	0.09	0.36	0.36	0.36
Delay/Veh:	37.0	26.8	24.8	32.3	24.8	21.8	14.1	14.1	14.1	16.6	16.6	16.6
User DelAdj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
AdjDel/Veh:	37.0	26.8	24.8	32.3	24.8	21.8	14.1	14.1	14.1	16.6	16.6	16.6
LOS by Move:	D	C	C	C	C	C	B	B	B	B	B	B
HCM2kAvgQ:	3	4	1	2	6	0	1	1	1	5	5	5

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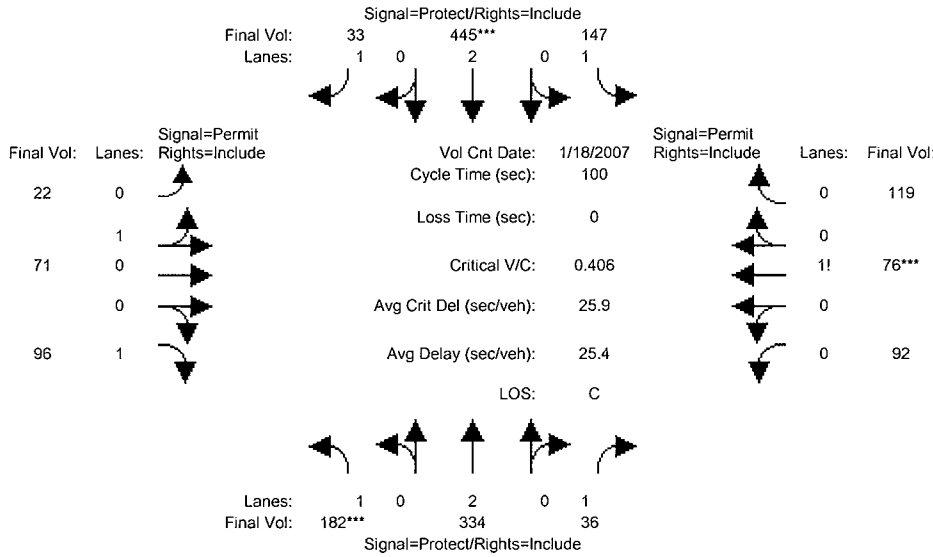
Big Wave Office Park and Wellness Center
Half Moon Bay, California

Level Of Service Computation Report
2000 HCM Operations (Future Volume Alternative)
Background AM

Intersection #7: Hwy 1 & Capistrano (S)



Approach:	North Bound			South Bound			East Bound			West Bound		
Movement:	L	T	R	L	T	R	L	T	R	L	T	R
Min. Green:	7	10	10	7	10	10	0	0	0	0	0	0
Volume Module: >> Count Date: 18 Jan 2007 << 7:45 - 8:45 AM												
Base Vol:	116	340	38	67	452	13	6	67	69	95	61	120
Growth Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Initial Bse:	116	340	38	67	452	13	6	67	69	95	61	120
Added Vol:	0	0	0	0	0	0	0	0	0	0	0	0
ATI:	66	-6	-2	80	-7	20	16	4	27	-3	15	-1
Initial Fut:	182	334	36	147	445	33	22	71	96	92	76	119
User Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Volume:	182	334	36	147	445	33	22	71	96	92	76	119
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:	182	334	36	147	445	33	22	71	96	92	76	119
PCE Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
MLF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
FinalVolume:	182	334	36	147	445	33	22	71	96	92	76	119
Saturation Flow Module:												
Sat/Lane:	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Adjustment:	0.95	0.95	0.85	0.95	0.95	0.85	0.91	0.91	0.85	0.83	0.83	0.83
Lanes:	1.00	2.00	1.00	1.00	2.00	1.00	0.24	0.76	1.00	0.32	0.26	0.42
Final Sat.:	1805	3610	1615	1805	3610	1615	410	1323	1615	507	418	655
Capacity Analysis Module:												
Vol/Sat:	0.10	0.09	0.02	0.08	0.12	0.02	0.05	0.05	0.06	0.18	0.18	0.18
Crit Moves:	****				****						****	
Green/Cycle:	0.25	0.30	0.30	0.25	0.30	0.30	0.45	0.45	0.45	0.45	0.45	0.45
Volume/Cap:	0.41	0.30	0.07	0.33	0.41	0.07	0.12	0.12	0.13	0.41	0.41	0.41
Delay/Veh:	32.0	26.8	24.8	31.2	27.9	24.8	16.2	16.2	16.3	19.0	19.0	19.0
User DelAdj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
AdjDel/Veh:	32.0	26.8	24.8	31.2	27.9	24.8	16.2	16.2	16.3	19.0	19.0	19.0
LOS by Move:	C	C	C	C	C	C	B	B	B	B	B	B
HCM2kAvgQ:	5	4	1	4	6	1	2	2	2	6	6	6

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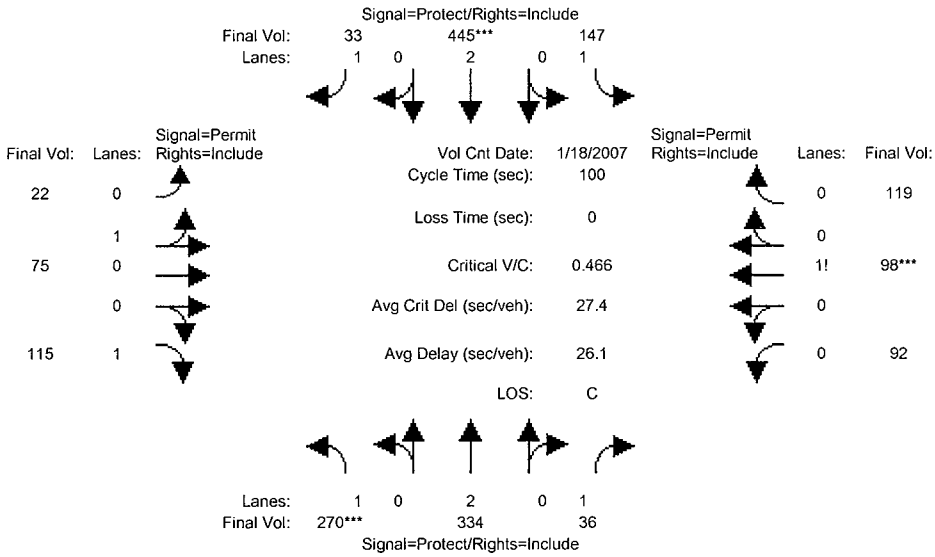
Big Wave Office Park and Wellness Center
Half Moon Bay, California

Level Of Service Computation Report
2000 HCM Operations (Future Volume Alternative)
Project AM

Intersection #7: Hwy 1 & Capistrano (S)



Approach:	North Bound			South Bound			East Bound			West Bound		
Movement:	L	T	R	L	T	R	L	T	R	L	T	R
Min. Green:	7	10	10	7	10	10	0	0	0	0	0	0
Volume Module: >> Count Date: 18 Jan 2007 << 7:45 - 8:45 AM												
Base Vol:	116	340	38	67	452	13	6	67	69	95	61	120
Growth Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Initial Bse:	116	340	38	67	452	13	6	67	69	95	61	120
Added Vol:	88	0	0	0	0	0	0	4	19	0	22	0
ATI:	66	-6	-2	80	-7	20	16	4	27	-3	15	-1
Initial Fut:	270	334	36	147	445	33	22	75	115	92	98	119
User Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Volume:	270	334	36	147	445	33	22	75	115	92	98	119
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:	270	334	36	147	445	33	22	75	115	92	98	119
PCE Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
MLF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
FinalVolume:	270	334	36	147	445	33	22	75	115	92	98	119
Saturation Flow Module:												
Sat/Lane:	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Adjustment:	0.95	0.95	0.85	0.95	0.95	0.85	0.91	0.91	0.85	0.84	0.84	0.84
Lanes:	1.00	2.00	1.00	1.00	2.00	1.00	0.23	0.77	1.00	0.30	0.32	0.38
Final Sat.:	1805	3610	1615	1805	3610	1615	392	1337	1615	475	506	615
Capacity Analysis Module:												
Vol/Sat:	0.15	0.09	0.02	0.08	0.12	0.02	0.06	0.06	0.07	0.19	0.19	0.19
Crit Moves:	****				****						****	
Green/Cycle:	0.32	0.32	0.32	0.26	0.26	0.26	0.42	0.42	0.42	0.42	0.42	0.42
Volume/Cap:	0.47	0.29	0.07	0.31	0.47	0.08	0.14	0.14	0.17	0.47	0.47	0.47
Delay/Veh:	27.7	25.4	23.5	30.0	31.2	27.7	18.2	18.2	18.5	21.7	21.7	21.7
User DelAdj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
AdjDel/Veh:	27.7	25.4	23.5	30.0	31.2	27.7	18.2	18.2	18.5	21.7	21.7	21.7
LOS by Move:	C	C	C	C	C	C	B	B	B	C	C	C
HCM2kAvgQ:	7	4	1	4	6	1	2	2	2	7	7	7

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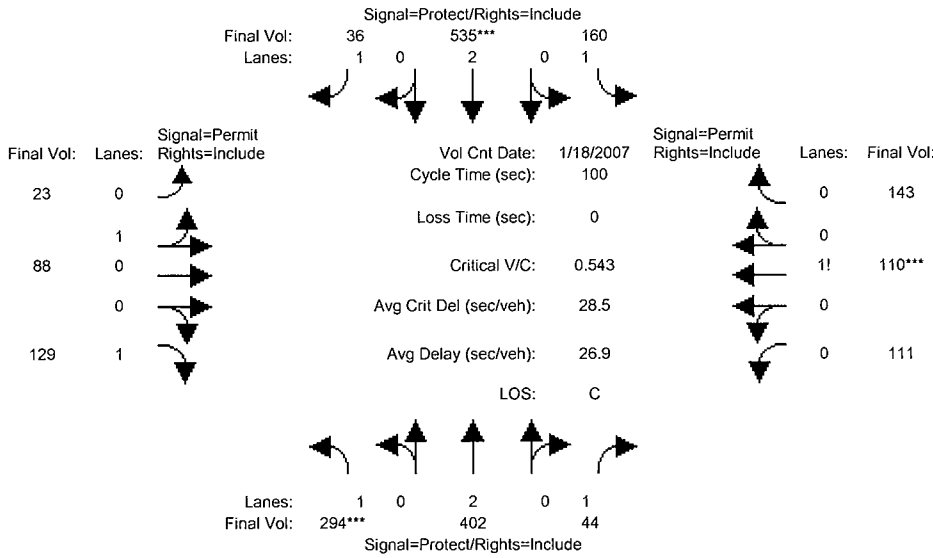
Big Wave Office Park and Wellness Center
Half Moon Bay, California

Level Of Service Computation Report
2000 HCM Operations (Future Volume Alternative)
Cumulative Project AM

Intersection #7: Hwy 1 & Capistrano (S)



Approach:	North Bound			South Bound			East Bound			West Bound		
Movement:	L	T	R	L	T	R	L	T	R	L	T	R
Min. Green:	7	10	10	7	10	10	0	0	0	0	0	0
Volume Module: >> Count Date: 18 Jan 2007 << 7:45 - 8:45 AM												
Base Vol:	116	340	38	67	452	13	6	67	69	95	61	120
Growth Adj:	1.20	1.20	1.20	1.20	1.20	1.20	1.20	1.20	1.20	1.20	1.20	1.20
Initial Bse:	139	408	46	80	542	16	7	80	83	114	73	144
Added Vol:	88	0	0	0	0	0	0	4	19	0	22	0
ATI+Cumul:	67	-6	-2	80	-7	20	16	4	27	-3	15	-1
Initial Fut:	294	402	44	160	535	36	23	88	129	111	110	143
User Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Volume:	294	402	44	160	535	36	23	88	129	111	110	143
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:	294	402	44	160	535	36	23	88	129	111	110	143
PCE Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
MLF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
FinalVolume:	294	402	44	160	535	36	23	88	129	111	110	143
Saturation Flow Module:												
Sat/Lane:	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Adjustment:	0.95	0.95	0.85	0.95	0.95	0.85	0.91	0.91	0.85	0.83	0.83	0.83
Lanes:	1.00	2.00	1.00	1.00	2.00	1.00	0.21	0.79	1.00	0.30	0.30	0.40
Final Sat.:	1805	3610	1615	1805	3610	1615	358	1365	1615	479	476	617
Capacity Analysis Module:												
Vol/Sat:	0.16	0.11	0.03	0.09	0.15	0.02	0.06	0.06	0.08	0.23	0.23	0.23
Crit Moves:	****				****						****	
Green/Cycle:	0.30	0.32	0.32	0.25	0.27	0.27	0.43	0.43	0.43	0.43	0.43	0.43
Volume/Cap:	0.54	0.35	0.08	0.35	0.54	0.08	0.15	0.15	0.19	0.54	0.54	0.54
Delay/Veh:	30.4	26.3	23.9	31.0	31.6	27.1	17.7	17.7	18.0	22.3	22.3	22.3
User DelAdj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
AdjDel/Veh:	30.4	26.3	23.9	31.0	31.6	27.1	17.7	17.7	18.0	22.3	22.3	22.3
LOS by Move:	C	C	C	C	C	C	B	B	B	C	C	C
HCM2kAvgQ:	8	5	1	4	8	1	2	2	2	9	9	9

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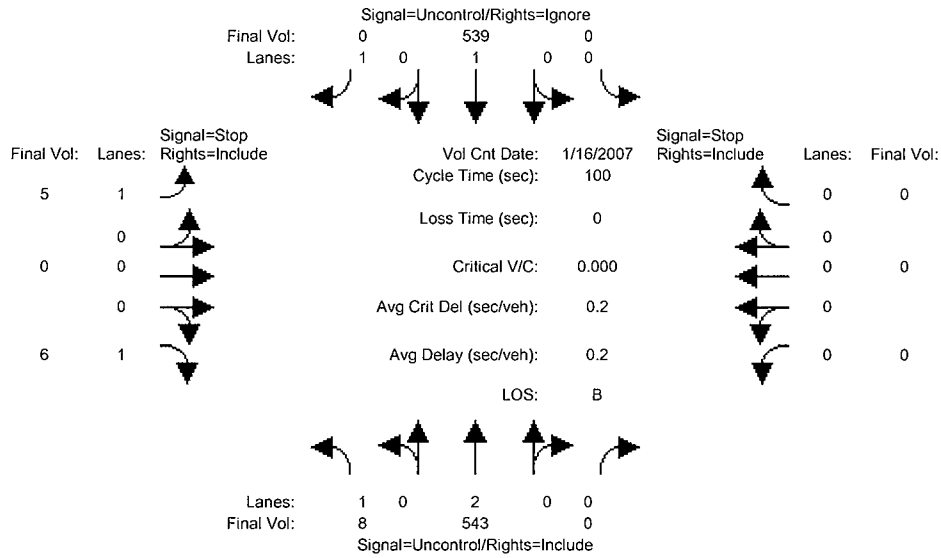
Big Wave Office Park and Wellness Center
Half Moon Bay, California

Level Of Service Computation Report
2000 HCM Unsignalized (Future Volume Alternative)
Existing AM

Intersection #17: Hwy 1 & Capistrano (N)



Approach:	North Bound			South Bound			East Bound			West Bound		
Movement:	L	T	R	L	T	R	L	T	R	L	T	R
Volume Module: >> Count Date: 16 Jan 2007 << 8:00 - 9:00 AM												
Base Vol:	8	543	0	0	539	27	5	0	6	0	0	0
Growth Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Initial Bse:	8	543	0	0	539	27	5	0	6	0	0	0
Added Vol:	0	0	0	0	0	0	0	0	0	0	0	0
PasserByVol:	0	0	0	0	0	0	0	0	0	0	0	0
Initial Fut:	8	543	0	0	539	27	5	0	6	0	0	0
User Adj:	1.00	1.00	1.00	1.00	1.00	0.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Adj:	1.00	1.00	1.00	1.00	1.00	0.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Volume:	8	543	0	0	539	0	5	0	6	0	0	0
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
FinalVolume:	8	543	0	0	539	0	5	0	6	0	0	0
Critical Gap Module:												
Critical Gp:	4.1	xxxx	xxxxx	xxxxx	xxxx	xxxxx	6.4	xxxx	6.2	xxxxx	xxxx	xxxxx
FollowUpTim:	2.2	xxxx	xxxxx	xxxxx	xxxx	xxxxx	3.5	xxxx	3.3	xxxxx	xxxx	xxxxx
Capacity Module:												
Cnflict Vol:	539	xxxx	xxxxx	xxxx	xxxx	xxxxx	827	xxxx	539	xxxx	xxxx	xxxxx
Potent Cap.:	1040	xxxx	xxxxx	xxxx	xxxx	xxxxx	344	xxxx	546	xxxx	xxxx	xxxxx
Move Cap.:	1040	xxxx	xxxxx	xxxx	xxxx	xxxxx	342	xxxx	546	xxxx	xxxx	xxxxx
Volume/Cap:	0.01	xxxx	xxxx	xxxx	xxxx	xxxx	0.01	xxxx	0.01	xxxx	xxxx	xxxx
Level Of Service Module:												
2Way95thQ:	0.0	xxxx	xxxxx	xxxx	xxxx	xxxxx	0.0	xxxx	0.0	xxxx	xxxx	xxxxx
Control Del:	8.5	xxxx	xxxxx	xxxxx	xxxx	xxxxx	15.7	xxxx	11.7	xxxxx	xxxx	xxxxx
LOS by Move:	A	*	*	*	*	*	C	*	B	*	*	*
Movement:	LT	LTR	RT	LT	LTR	RT	LT	LTR	RT	LT	LTR	RT
Shared Cap.:	xxxx	xxxx	xxxxx	xxxx	xxxx	xxxxx	xxxx	xxxx	xxxxx	xxxx	xxxx	xxxxx
SharedQueue:	xxxxx	xxxx	xxxxx	xxxxx	xxxx	xxxxx	xxxxx	xxxx	xxxxx	xxxxx	xxxx	xxxxx
Shrd ConDel:	xxxxx	xxxx	xxxxx	xxxxx	xxxx	xxxxx	xxxxx	xxxx	xxxxx	xxxxx	xxxx	xxxxx
Shared LOS:	*	*	*	*	*	*	*	*	*	*	*	*
ApproachDel:	xxxxxx			xxxxxx			13.5			xxxxxx		
ApproachLOS:	*			*			B			*		

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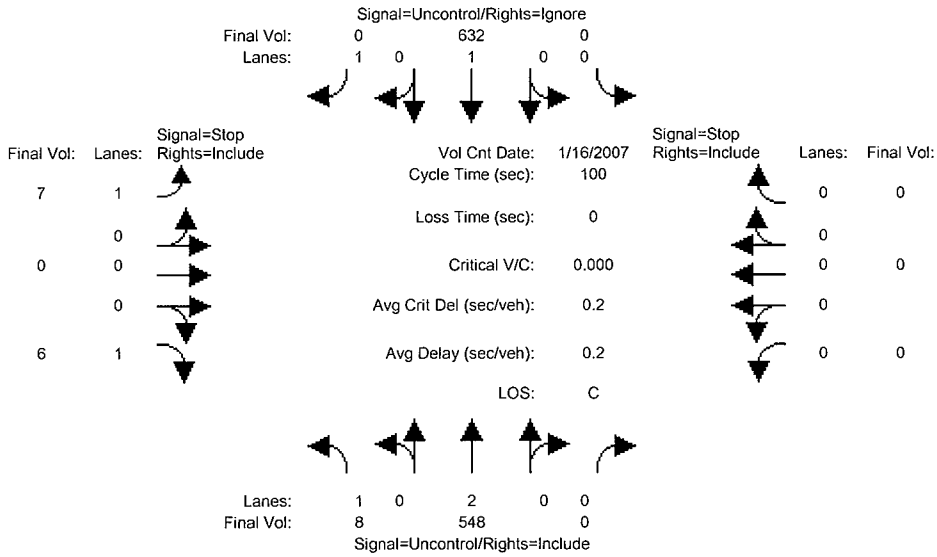
Big Wave Office Park and Wellness Center
Half Moon Bay, California

Level Of Service Computation Report
2000 HCM Unsignalized (Future Volume Alternative)
Background AM

Intersection #17: Hwy 1 & Capistrano (N)



Approach:	North Bound			South Bound			East Bound			West Bound		
Movement:	L	T	R	L	T	R	L	T	R	L	T	R
Volume Module: >> Count Date: 16 Jan 2007 << 8:00 - 9:00 AM												
Base Vol:	8	543	0	0	539	27	5	0	6	0	0	0
Growth Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Initial Bse:	8	543	0	0	539	27	5	0	6	0	0	0
Added Vol:	0	0	0	0	0	0	0	0	0	0	0	0
ATI:	0	5	0	0	93	4	2	0	0	0	0	0
Initial Fut:	8	548	0	0	632	31	7	0	6	0	0	0
User Adj:	1.00	1.00	1.00	1.00	1.00	0.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Adj:	1.00	1.00	1.00	1.00	1.00	0.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Volume:	8	548	0	0	632	0	7	0	6	0	0	0
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
FinalVolume:	8	548	0	0	632	0	7	0	6	0	0	0
Critical Gap Module:												
Critical Gp:	4.1	xxxx	xxxxx	xxxxx	xxxx	xxxxx	6.4	xxxx	6.2	xxxxx	xxxx	xxxxx
FollowUpTim:	2.2	xxxx	xxxxx	xxxxx	xxxx	xxxxx	3.5	xxxx	3.3	xxxxx	xxxx	xxxxx
Capacity Module:												
Cnflict Vol:	632	xxxx	xxxxx	xxxx	xxxx	xxxxx	922	xxxx	632	xxxx	xxxx	xxxxx
Potent Cap.:	960	xxxx	xxxxx	xxxx	xxxx	xxxxx	302	xxxx	484	xxxx	xxxx	xxxxx
Move Cap.:	960	xxxx	xxxxx	xxxx	xxxx	xxxxx	300	xxxx	484	xxxx	xxxx	xxxxx
Volume/Cap:	0.01	xxxx	xxxx	xxxx	xxxx	xxxx	0.02	xxxx	0.01	xxxx	xxxx	xxxx
Level Of Service Module:												
2Way95thQ:	0.0	xxxx	xxxxx	xxxx	xxxx	xxxxx	0.1	xxxx	0.0	xxxx	xxxx	xxxxx
Control Del:	8.8	xxxx	xxxxx	xxxxx	xxxx	xxxxx	17.3	xxxx	12.5	xxxxx	xxxx	xxxxx
LOS by Move:	A	*	*	*	*	*	C	*	B	*	*	*
Movement:	LT	LTR	RT	LT	LTR	RT	LT	LTR	RT	LT	LTR	RT
Shared Cap.:	xxxx	xxxx	xxxxx	xxxx	xxxx	xxxxx	xxxx	xxxx	xxxxx	xxxx	xxxx	xxxxx
SharedQueue:	xxxxx	xxxx	xxxxx	xxxxx	xxxx	xxxxx	xxxxx	xxxx	xxxxx	xxxxx	xxxx	xxxxx
Shrd ConDel:	xxxxx	xxxx	xxxxx	xxxxx	xxxx	xxxxx	xxxxx	xxxx	xxxxx	xxxxx	xxxx	xxxxx
Shared LOS:	*	*	*	*	*	*	*	*	*	*	*	*
ApproachDel:	xxxxxx			xxxxxx			15.1			xxxxxx		
ApproachLOS:	*			*			C			*		

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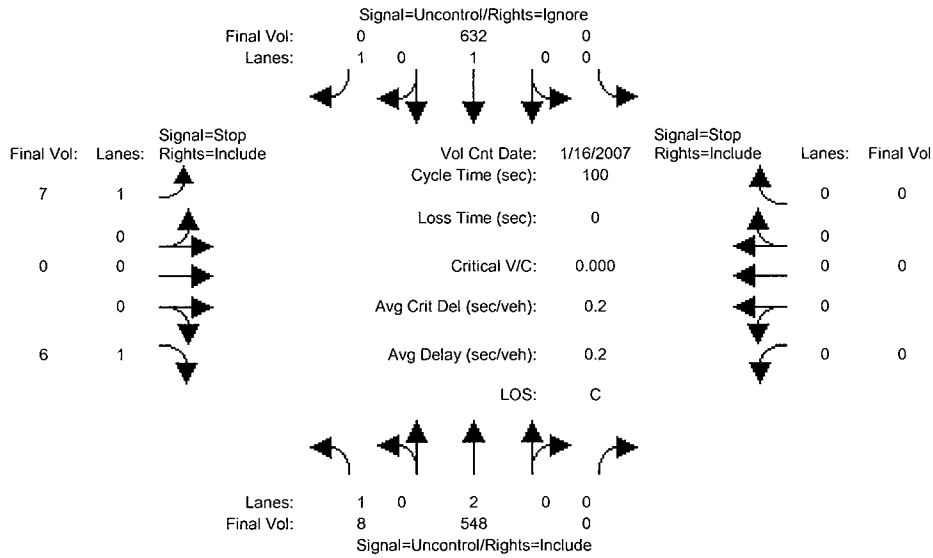
Big Wave Office Park and Wellness Center
Half Moon Bay, California

Level Of Service Computation Report
2000 HCM Unsignalized (Future Volume Alternative)
Project AM

Intersection #17: Hwy 1 & Capistrano (N)



Approach:	North Bound				South Bound				East Bound				West Bound			
Movement:	L	-	T	- R	L	-	T	- R	L	-	T	- R	L	-	T	- R
Volume Module: >> Count Date: 16 Jan 2007 << 8:00 - 9:00 AM																
Base Vol:	8		543	0	0		539	27	5		0	6	0		0	0
Growth Adj:	1.00	1.00		1.00	1.00	1.00		1.00	1.00	1.00		1.00	1.00	1.00		1.00
Initial Bse:	8		543	0	0		539	27	5		0	6	0		0	0
Added Vol:	0		0	0	0		0	0	0		0	0	0		0	0
ATI:	0		5	0	0		93	4	2		0	0	0		0	0
Initial Fut:	8		548	0	0		632	31	7		0	6	0		0	0
User Adj:	1.00	1.00		1.00	1.00	1.00		0.00	1.00	1.00		1.00	1.00	1.00		1.00
PHF Adj:	1.00	1.00		1.00	1.00	1.00		0.00	1.00	1.00		1.00	1.00	1.00		1.00
PHF Volume:	8		548	0	0		632	0	7		0	6	0		0	0
Reduct Vol:	0		0	0	0		0	0	0		0	0	0		0	0
FinalVolume:	8		548	0	0		632	0	7		0	6	0		0	0
Critical Gap Module:																
Critical Gp:	4.1	xxxx	xxxxx	xxxxx	xxxx	xxxxx		6.4	xxxx		6.2	xxxxx	xxxx	xxxxx		
FollowUpTim:	2.2	xxxx	xxxxx	xxxxx	xxxx	xxxxx		3.5	xxxx		3.3	xxxxx	xxxx	xxxxx		
Capacity Module:																
Cnflict Vol:	632	xxxx	xxxxx	xxxx	xxxx	xxxxx		922	xxxx		632	xxxx	xxxx	xxxxx		
Potent Cap.:	960	xxxx	xxxxx	xxxx	xxxx	xxxxx		302	xxxx		484	xxxx	xxxx	xxxxx		
Move Cap.:	960	xxxx	xxxxx	xxxx	xxxx	xxxxx		300	xxxx		484	xxxx	xxxx	xxxxx		
Volume/Cap:	0.01	xxxx	xxxx	xxxx	xxxx	xxxx		0.02	xxxx		0.01	xxxx	xxxx	xxxx		
Level Of Service Module:																
2Way95thQ:	0.0	xxxx	xxxxx	xxxx	xxxx	xxxxx		0.1	xxxx		0.0	xxxx	xxxx	xxxxx		
Control Del:	8.8	xxxx	xxxxx	xxxxx	xxxx	xxxxx		17.3	xxxx		12.5	xxxxx	xxxx	xxxxx		
LOS by Move:	A	*		*	*		*	C	*		B	*	*		*	
Movement:	LT	-	LTR	- RT	LT	-	LTR	- RT	LT	-	LTR	- RT	LT	-	LTR	- RT
Shared Cap.:	xxxx	xxxx	xxxxx	xxxx	xxxx	xxxxx		xxxx	xxxx	xxxxx	xxxx	xxxx	xxxxx			
SharedQueue:	xxxxx	xxxx	xxxxx	xxxxx	xxxx	xxxxx		xxxxx	xxxx	xxxxx	xxxxx	xxxx	xxxxx			
Shrd ConDel:	xxxxx	xxxx	xxxxx	xxxxx	xxxx	xxxxx		xxxxx	xxxx	xxxxx	xxxxx	xxxx	xxxxx			
Shared LOS:	*		*	*	*		*	*	*		*	*	*		*	
ApproachDel:	xxxxxx			xxxxxx				15.1				xxxxxx				
ApproachLOS:	*			*				C				*				

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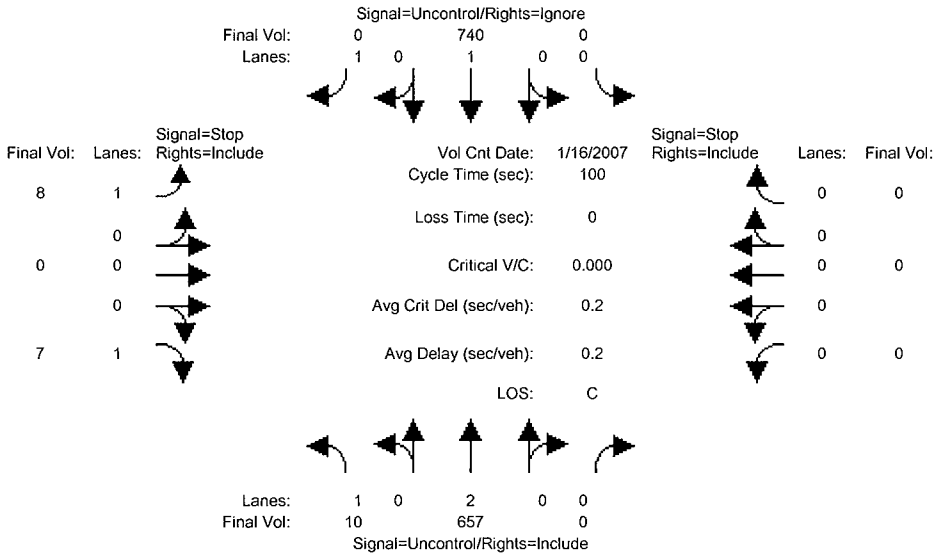
Big Wave Office Park and Wellness Center
Half Moon Bay, California

Level Of Service Computation Report
2000 HCM Unsignalized (Future Volume Alternative)
Cumulative Project AM

Intersection #17: Hwy 1 & Capistrano (N)



Approach:	North Bound			South Bound			East Bound			West Bound		
Movement:	L	T	R	L	T	R	L	T	R	L	T	R
Volume Module: >> Count Date: 16 Jan 2007 << 8:00 - 9:00 AM												
Base Vol:	8	543	0	0	539	27	5	0	6	0	0	0
Growth Adj:	1.20	1.20	1.20	1.20	1.20	1.20	1.20	1.20	1.20	1.20	1.20	1.20
Initial Bse:	10	652	0	0	647	32	6	0	7	0	0	0
Added Vol:	0	0	0	0	0	0	0	0	0	0	0	0
ATI+Cumul:	0	5	0	0	93	4	2	0	0	0	0	0
Initial Fut:	10	657	0	0	740	36	8	0	7	0	0	0
User Adj:	1.00	1.00	1.00	1.00	1.00	0.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Adj:	1.00	1.00	1.00	1.00	1.00	0.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Volume:	10	657	0	0	740	0	8	0	7	0	0	0
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
FinalVolume:	10	657	0	0	740	0	8	0	7	0	0	0
Critical Gap Module:												
Critical Gp:	4.1	xxxx	xxxxx	xxxxx	xxxx	xxxxx	6.4	xxxx	6.2	xxxxx	xxxx	xxxxx
FollowUpTim:	2.2	xxxx	xxxxx	xxxxx	xxxx	xxxxx	3.5	xxxx	3.3	xxxxx	xxxx	xxxxx
Capacity Module:												
Cnflict Vol:	740	xxxx	xxxxx	xxxx	xxxx	xxxxx	1087	xxxx	740	xxxx	xxxx	xxxxx
Potent Cap.:	876	xxxx	xxxxx	xxxx	xxxx	xxxxx	241	xxxx	420	xxxx	xxxx	xxxxx
Move Cap.:	876	xxxx	xxxxx	xxxx	xxxx	xxxxx	239	xxxx	420	xxxx	xxxx	xxxxx
Volume/Cap:	0.01	xxxx	xxxx	xxxx	xxxx	xxxx	0.03	xxxx	0.02	xxxx	xxxx	xxxx
Level Of Service Module:												
2Way95thQ:	0.0	xxxx	xxxxx	xxxx	xxxx	xxxxx	0.1	xxxx	0.1	xxxx	xxxx	xxxxx
Control Del:	9.2	xxxx	xxxxx	xxxxx	xxxx	xxxxx	20.6	xxxx	13.7	xxxxx	xxxx	xxxxx
LOS by Move:	A	*	*	*	*	*	C	*	B	*	*	*
Movement:	LT	LTR	RT	LT	LTR	RT	LT	LTR	RT	LT	LTR	RT
Shared Cap.:	xxxx	xxxx	xxxxx	xxxx	xxxx	xxxxx	xxxx	xxxx	xxxxx	xxxx	xxxx	xxxxx
SharedQueue:	xxxxx	xxxx	xxxxx	xxxxx	xxxx	xxxxx	xxxxx	xxxx	xxxxx	xxxxx	xxxx	xxxxx
Shrd ConDel:	xxxxx	xxxx	xxxxx	xxxxx	xxxx	xxxxx	xxxxx	xxxx	xxxxx	xxxxx	xxxx	xxxxx
Shared LOS:	*	*	*	*	*	*	*	*	*	*	*	*
ApproachDel:	xxxxxx			xxxxxx			17.3			xxxxxx		
ApproachLOS:	*			*			C			*		

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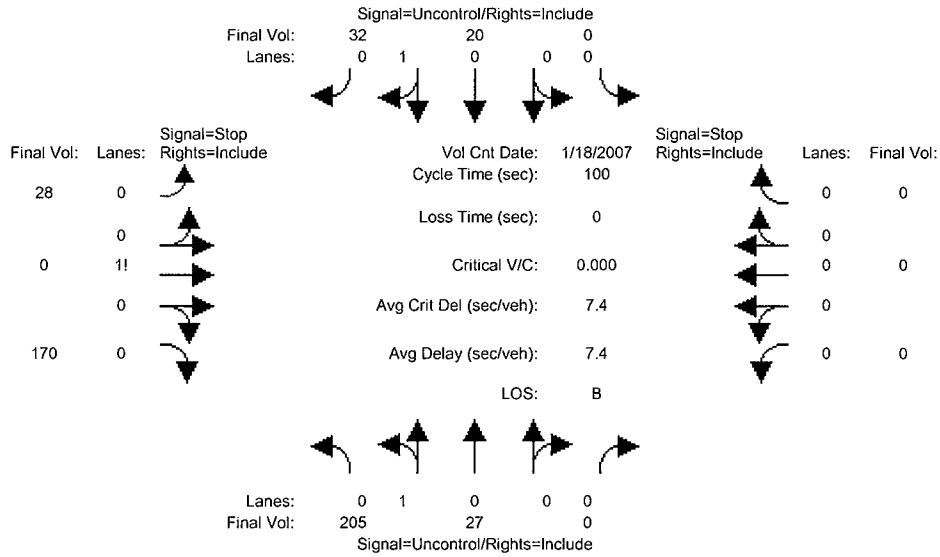
Half Moon Bay, California

Level Of Service Computation Report
2000 HCM Unsignalized (Future Volume Alternative)
Existing PM

Intersection #1: Prospect & Capistrano



Approach:	North Bound			South Bound			East Bound			West Bound		
Movement:	L	T	R	L	T	R	L	T	R	L	T	R
Volume Module: >> Count Date: 18 Jan 2007 << 4:30 - 5:30 PM												
Base Vol:	205	27	0	0	20	32	28	0	170	0	0	0
Growth Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Initial Bse:	205	27	0	0	20	32	28	0	170	0	0	0
Added Vol:	0	0	0	0	0	0	0	0	0	0	0	0
PasserByVol:	0	0	0	0	0	0	0	0	0	0	0	0
Initial Fut:	205	27	0	0	20	32	28	0	170	0	0	0
User Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Volume:	205	27	0	0	20	32	28	0	170	0	0	0
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
FinalVolume:	205	27	0	0	20	32	28	0	170	0	0	0
Critical Gap Module:												
Critical Gp:	4.1	xxxx	xxxxx	xxxxx	xxxx	xxxxx	6.4	6.5	6.2	xxxxx	xxxx	xxxxx
FollowUpTim:	2.2	xxxx	xxxxx	xxxxx	xxxx	xxxxx	3.5	4.0	3.3	xxxxx	xxxx	xxxxx
Capacity Module:												
Cnflict Vol:	52	xxxx	xxxxx	xxxx	xxxx	xxxxx	473	473	36	xxxx	xxxx	xxxxx
Potent Cap.:	1567	xxxx	xxxxx	xxxx	xxxx	xxxxx	553	493	1042	xxxx	xxxx	xxxxx
Move Cap.:	1567	xxxx	xxxxx	xxxx	xxxx	xxxxx	491	420	1042	xxxx	xxxx	xxxxx
Volume/Cap:	0.13	xxxx	xxxx	xxxx	xxxx	xxxx	0.06	0.00	0.16	xxxx	xxxx	xxxx
Level Of Service Module:												
2Way95thQ:	0.5	xxxx	xxxxx	xxxx	xxxx	xxxxx	xxxx	xxxx	xxxxx	xxxx	xxxx	xxxxx
Control Del:	7.6	xxxx	xxxxx	xxxxx	xxxx	xxxxx	xxxxx	xxxx	xxxxx	xxxxx	xxxx	xxxxx
LOS by Move:	A	*	*	*	*	*	*	*	*	*	*	*
Movement:	LT	LTR	RT	LT	LTR	RT	LT	LTR	RT	LT	LTR	RT
Shared Cap.:	xxxx	xxxx	xxxxx	xxxx	xxxx	xxxxx	xxxx	899	xxxxx	xxxx	xxxx	xxxxx
SharedQueue:	0.5	xxxx	xxxxx	xxxxx	xxxx	xxxxx	xxxxx	0.8	xxxxx	xxxxx	xxxx	xxxxx
Shrd ConDel:	7.6	xxxx	xxxxx	xxxxx	xxxx	xxxxx	xxxxx	10.1	xxxxx	xxxxx	xxxx	xxxxx
Shared LOS:	A	*	*	*	*	*	*	B	*	*	*	*
ApproachDel:	xxxxxx			xxxxxx			10.1			xxxxxx		
ApproachLOS:	*			*			B			*		

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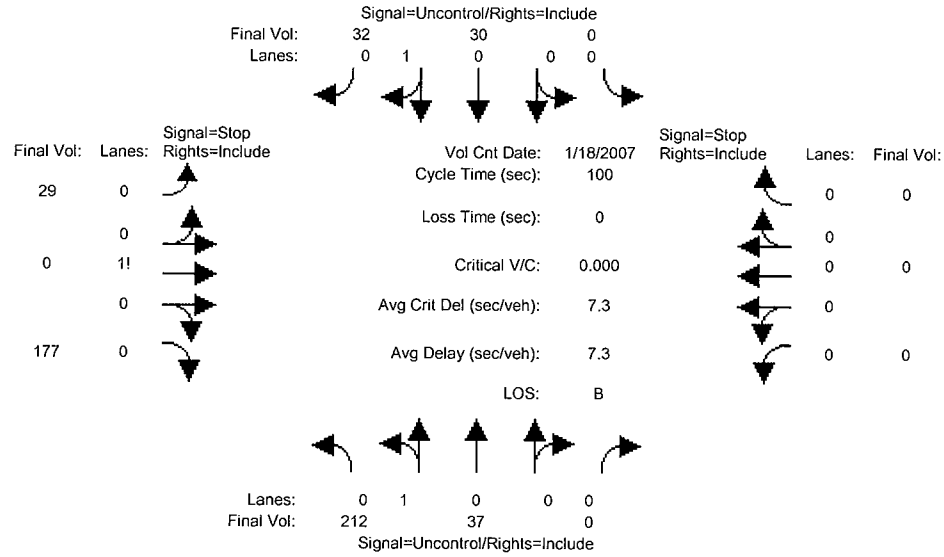
Big Wave Office Park and Wellness Center
Half Moon Bay, California

Level Of Service Computation Report
2000 HCM Unsignalized (Future Volume Alternative)
Background PM

Intersection #1: Prospect & Capistrano



Approach:	North Bound			South Bound			East Bound			West Bound		
Movement:	L	T	R	L	T	R	L	T	R	L	T	R
Volume Module: >> Count Date: 18 Jan 2007 << 4:30 - 5:30 PM												
Base Vol:	205	27	0	0	20	32	28	0	170	0	0	0
Growth Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Initial Bse:	205	27	0	0	20	32	28	0	170	0	0	0
Added Vol:	0	0	0	0	0	0	0	0	0	0	0	0
ATI:	7	10	0	0	10	0	1	0	7	0	0	0
Initial Fut:	212	37	0	0	30	32	29	0	177	0	0	0
User Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Volume:	212	37	0	0	30	32	29	0	177	0	0	0
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
FinalVolume:	212	37	0	0	30	32	29	0	177	0	0	0
Critical Gap Module:												
Critical Gp:	4.1	xxxx	xxxxx	xxxxx	xxxx	xxxxx	6.4	6.5	6.2	xxxxx	xxxx	xxxxx
FollowUpTim:	2.2	xxxx	xxxxx	xxxxx	xxxx	xxxxx	3.5	4.0	3.3	xxxxx	xxxx	xxxxx
Capacity Module:												
Cnflict Vol:	62	xxxx	xxxxx	xxxx	xxxx	xxxxx	507	507	46	xxxx	xxxx	xxxxx
Potent Cap.:	1554	xxxx	xxxxx	xxxx	xxxx	xxxxx	529	471	1029	xxxx	xxxx	xxxxx
Move Cap.:	1554	xxxx	xxxxx	xxxx	xxxx	xxxxx	466	398	1029	xxxx	xxxx	xxxxx
Volume/Cap:	0.14	xxxx	xxxx	xxxx	xxxx	xxxx	0.06	0.00	0.17	xxxx	xxxx	xxxx
Level Of Service Module:												
2Way95thQ:	0.5	xxxx	xxxxx	xxxx	xxxx	xxxxx	xxxx	xxxx	xxxxx	xxxx	xxxx	xxxxx
Control Del:	7.7	xxxx	xxxxx	xxxxx	xxxx	xxxxx	xxxxx	xxxx	xxxxx	xxxxx	xxxx	xxxxx
LOS by Move:	A	*	*	*	*	*	*	*	*	*	*	*
Movement:	LT	LTR	RT	LT	LTR	RT	LT	LTR	RT	LT	LTR	RT
Shared Cap.:	xxxx	xxxx	xxxxx	xxxx	xxxx	xxxxx	xxxx	880	xxxxx	xxxx	xxxx	xxxxx
SharedQueue:	0.5	xxxx	xxxxx	xxxxx	xxxx	xxxxx	xxxxx	0.9	xxxxx	xxxxx	xxxx	xxxxx
Shrd ConDel:	7.7	xxxx	xxxxx	xxxxx	xxxx	xxxxx	xxxxx	10.3	xxxxx	xxxxx	xxxx	xxxxx
Shared LOS:	A	*	*	*	*	*	*	B	*	*	*	*
ApproachDel:	xxxxxx			xxxxxx			10.3			xxxxxx		
ApproachLOS:	*			*			B			*		

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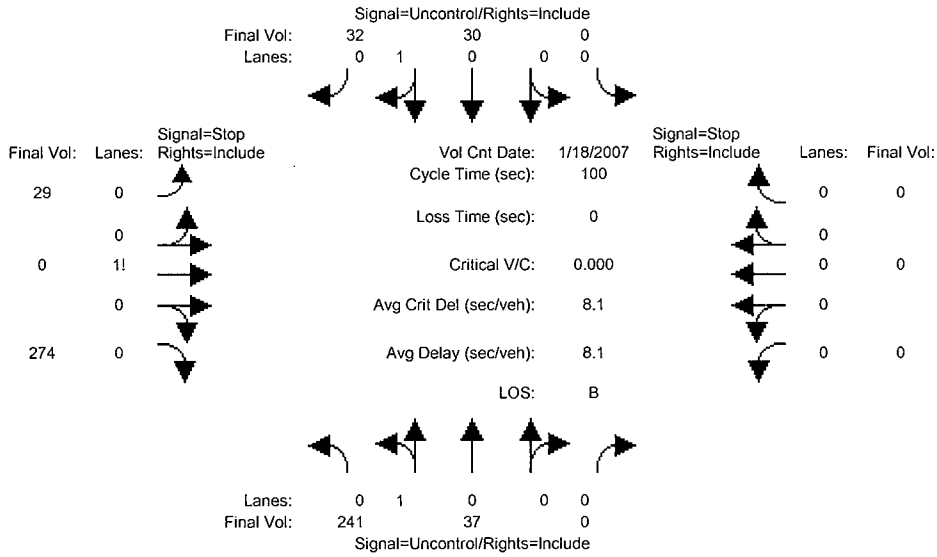
Big Wave Office Park and Wellness Center
Half Moon Bay, California

Level Of Service Computation Report
2000 HCM Unsignalized (Future Volume Alternative)
Project PM

Intersection #1: Prospect & Capistrano



Approach:	North Bound			South Bound			East Bound			West Bound		
Movement:	L	T	R	L	T	R	L	T	R	L	T	R
Volume Module: >> Count Date: 18 Jan 2007 << 4:30 - 5:30 PM												
Base Vol:	205	27	0	0	20	32	28	0	170	0	0	0
Growth Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Initial Bse:	205	27	0	0	20	32	28	0	170	0	0	0
Added Vol:	29	0	0	0	0	0	0	0	97	0	0	0
ATI:	7	10	0	0	10	0	1	0	7	0	0	0
Initial Fut:	241	37	0	0	30	32	29	0	274	0	0	0
User Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Volume:	241	37	0	0	30	32	29	0	274	0	0	0
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
FinalVolume:	241	37	0	0	30	32	29	0	274	0	0	0
Critical Gap Module:												
Critical Gp:	4.1	xxxx	xxxxx	xxxxx	xxxx	xxxxx	6.4	6.5	6.2	xxxxx	xxxx	xxxxx
FollowUpTim:	2.2	xxxx	xxxxx	xxxxx	xxxx	xxxxx	3.5	4.0	3.3	xxxxx	xxxx	xxxxx
Capacity Module:												
Cnflict Vol:	62	xxxx	xxxxx	xxxx	xxxx	xxxxx	565	565	46	xxxx	xxxx	xxxxx
Potent Cap.:	1554	xxxx	xxxxx	xxxx	xxxx	xxxxx	490	437	1029	xxxx	xxxx	xxxxx
Move Cap.:	1554	xxxx	xxxxx	xxxx	xxxx	xxxxx	422	359	1029	xxxx	xxxx	xxxxx
Volume/Cap:	0.16	xxxx	xxxx	xxxx	xxxx	xxxx	0.07	0.00	0.27	xxxx	xxxx	xxxx
Level Of Service Module:												
2Way95thQ:	0.5	xxxx	xxxxx	xxxx	xxxx	xxxxx	xxxx	xxxx	xxxxx	xxxx	xxxx	xxxxx
Control Del:	7.7	xxxx	xxxxx	xxxxx	xxxx	xxxxx	xxxxx	xxxx	xxxxx	xxxxx	xxxx	xxxxx
LOS by Move:	A	*	*	*	*	*	*	*	*	*	*	*
Movement:	LT	LTR	RT	LT	LTR	RT	LT	LTR	RT	LT	LTR	RT
Shared Cap.:	xxxx	xxxx	xxxxx	xxxx	xxxx	xxxxx	xxxx	905	xxxxx	xxxx	xxxx	xxxxx
SharedQueue:	0.5	xxxx	xxxxx	xxxxx	xxxx	xxxxx	xxxxx	1.5	xxxxx	xxxxx	xxxx	xxxxx
Shrd ConDel:	7.7	xxxx	xxxxx	xxxxx	xxxx	xxxxx	xxxxx	11.0	xxxxx	xxxxx	xxxx	xxxxx
Shared LOS:	A	*	*	*	*	*	*	B	*	*	*	*
ApproachDel:	xxxxxx			xxxxxx			11.0			xxxxxx		
ApproachLOS:	*			*			B			*		

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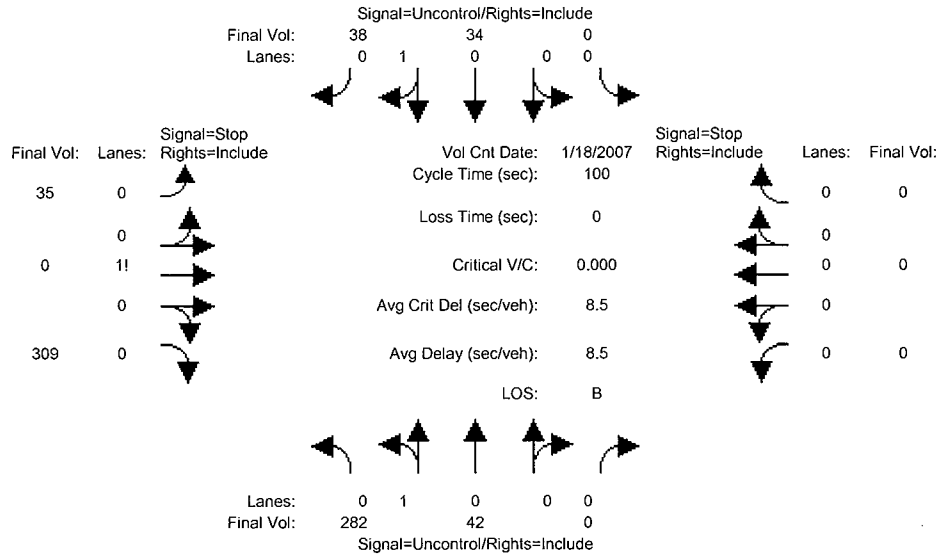
Big Wave Office Park and Wellness Center
Half Moon Bay, California

Level Of Service Computation Report
2000 HCM Unsignalized (Future Volume Alternative)
Cumulative Project PM

Intersection #1: Prospect & Capistrano



Approach:	North Bound			South Bound			East Bound			West Bound		
Movement:	L	T	R	L	T	R	L	T	R	L	T	R
Volume Module: >> Count Date: 18 Jan 2007 << 4:30 - 5:30 PM												
Base Vol:	205	27	0	0	20	32	28	0	170	0	0	0
Growth Adj:	1.20	1.20	1.20	1.20	1.20	1.20	1.20	1.20	1.20	1.20	1.20	1.20
Initial Bse:	246	32	0	0	24	38	34	0	204	0	0	0
Added Vol:	29	0	0	0	0	0	0	0	97	0	0	0
ATI+Cumul:	7	10	0	0	10	0	1	0	8	0	0	0
Initial Fut:	282	42	0	0	34	38	35	0	309	0	0	0
User Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Volume:	282	42	0	0	34	38	35	0	309	0	0	0
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
FinalVolume:	282	42	0	0	34	38	35	0	309	0	0	0
Critical Gap Module:												
Critical Gp:	4.1	xxxx	xxxxx	xxxxx	xxxx	xxxxx	6.4	6.5	6.2	xxxxx	xxxx	xxxxx
FollowUpTim:	2.2	xxxx	xxxxx	xxxxx	xxxx	xxxxx	3.5	4.0	3.3	xxxxx	xxxx	xxxxx
Capacity Module:												
Cnflict Vol:	72	xxxx	xxxxx	xxxx	xxxx	xxxxx	660	660	53	xxxx	xxxx	xxxxx
Potent Cap.:	1540	xxxx	xxxxx	xxxx	xxxx	xxxxx	431	386	1020	xxxx	xxxx	xxxxx
Move Cap.:	1540	xxxx	xxxxx	xxxx	xxxx	xxxxx	359	302	1020	xxxx	xxxx	xxxxx
Volume/Cap:	0.18	xxxx	xxxx	xxxx	xxxx	xxxx	0.10	0.00	0.30	xxxx	xxxx	xxxx
Level Of Service Module:												
2Way95thQ:	0.7	xxxx	xxxxx	xxxx	xxxx	xxxxx	xxxx	xxxx	xxxxx	xxxx	xxxx	xxxxx
Control Del:	7.9	xxxx	xxxxx	xxxxx	xxxx	xxxxx	xxxxx	xxxx	xxxxx	xxxxx	xxxx	xxxxx
LOS by Move:	A	*	*	*	*	*	*	*	*	*	*	*
Movement:	LT	LTR	RT	LT	LTR	RT	LT	LTR	RT	LT	LTR	RT
Shared Cap.:	xxxx	xxxx	xxxxx	xxxx	xxxx	xxxxx	xxxx	861	xxxxx	xxxx	xxxx	xxxxx
SharedQueue:	0.7	xxxx	xxxxx	xxxxx	xxxx	xxxxx	xxxxx	1.9	xxxxx	xxxxx	xxxx	xxxxx
Shrd ConDel:	7.9	xxxx	xxxxx	xxxxx	xxxx	xxxxx	xxxxx	11.9	xxxxx	xxxxx	xxxx	xxxxx
Shared LOS:	A	*	*	*	*	*	*	B	*	*	*	*
ApproachDel:	xxxxxx			xxxxxx			11.9			xxxxxx		
ApproachLOS:	*			*			B			*		

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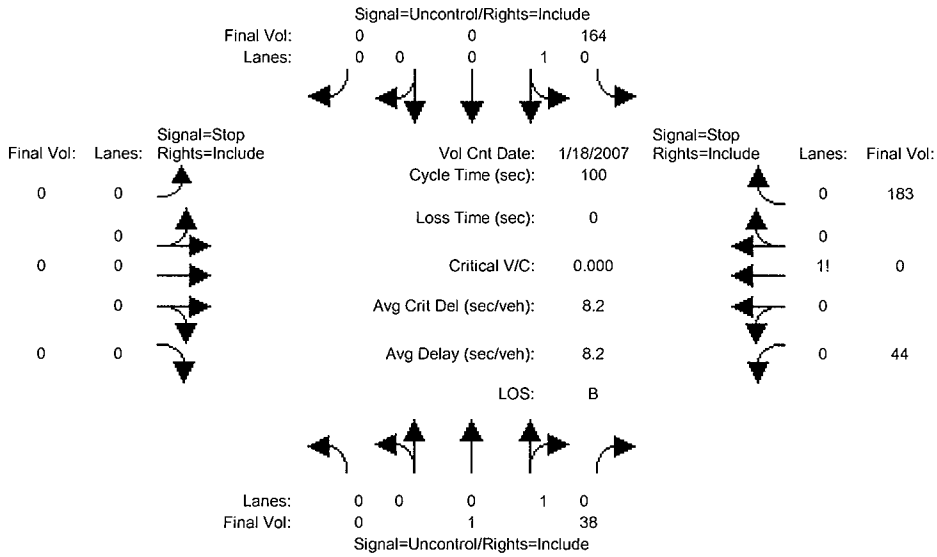
Big Wave Office Park and Wellness Center
Half Moon Bay, California

Level Of Service Computation Report
2000 HCM Unsignalized (Future Volume Alternative)
Existing PM

Intersection #2: Broadway & Prospect



Approach:	North Bound			South Bound			East Bound			West Bound		
Movement:	L	T	R	L	T	R	L	T	R	L	T	R
Volume Module: >> Count Date: 18 Jan 2007 << 4:15 - 5:15 PM												
Base Vol:	0	1	38	164	0	0	0	0	0	44	0	183
Growth Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Initial Bse:	0	1	38	164	0	0	0	0	0	44	0	183
Added Vol:	0	0	0	0	0	0	0	0	0	0	0	0
PasserByVol:	0	0	0	0	0	0	0	0	0	0	0	0
Initial Fut:	0	1	38	164	0	0	0	0	0	44	0	183
User Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Volume:	0	1	38	164	0	0	0	0	0	44	0	183
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
FinalVolume:	0	1	38	164	0	0	0	0	0	44	0	183
Critical Gap Module:												
Critical Gp:	xxxxx	xxxx	xxxxx	4.1	xxxx	xxxxx	xxxxx	xxxx	xxxxx	6.4	6.5	6.2
FollowUpTim:	xxxxx	xxxx	xxxxx	2.2	xxxx	xxxxx	xxxxx	xxxx	xxxxx	3.5	4.0	3.3
Capacity Module:												
Cnflict Vol:	xxxx	xxxx	xxxxx	39	xxxx	xxxxx	xxxx	xxxx	xxxxx	348	348	20
Potent Cap.:	xxxx	xxxx	xxxxx	1584	xxxx	xxxxx	xxxx	xxxx	xxxxx	653	579	1064
Move Cap.:	xxxx	xxxx	xxxxx	1584	xxxx	xxxxx	xxxx	xxxx	xxxxx	601	519	1064
Volume/Cap:	xxxx	xxxx	xxxx	0.10	xxxx	xxxx	xxxx	xxxx	xxxx	0.07	0.00	0.17
Level Of Service Module:												
2Way95thQ:	xxxx	xxxx	xxxxx	0.3	xxxx	xxxxx	xxxx	xxxx	xxxxx	xxxx	xxxx	xxxxx
Control Del:	xxxxx	xxxx	xxxxx	7.5	xxxx	xxxxx	xxxxx	xxxx	xxxxx	xxxxx	xxxx	xxxxx
LOS by Move:	*	*	*	A	*	*	*	*	*	*	*	*
Movement:	LT	LTR	RT	LT	LTR	RT	LT	LTR	RT	LT	LTR	RT
Shared Cap.:	xxxx	xxxx	xxxxx	xxxx	xxxx	xxxxx	xxxx	xxxx	xxxxx	xxxx	926	xxxxx
SharedQueue:	xxxxx	xxxx	xxxxx	xxxxx	xxxx	xxxxx	xxxxx	xxxx	xxxxx	xxxxx	1.0	xxxxx
Shrd ConDel:	xxxxx	xxxx	xxxxx	xxxxx	xxxx	xxxxx	xxxxx	xxxx	xxxxx	xxxxx	10.1	xxxxx
Shared LOS:	*	*	*	*	*	*	*	*	*	*	B	*
ApproachDel:	xxxxxx			xxxxxx			xxxxxx			10.1		
ApproachLOS:	*			*			*			B		

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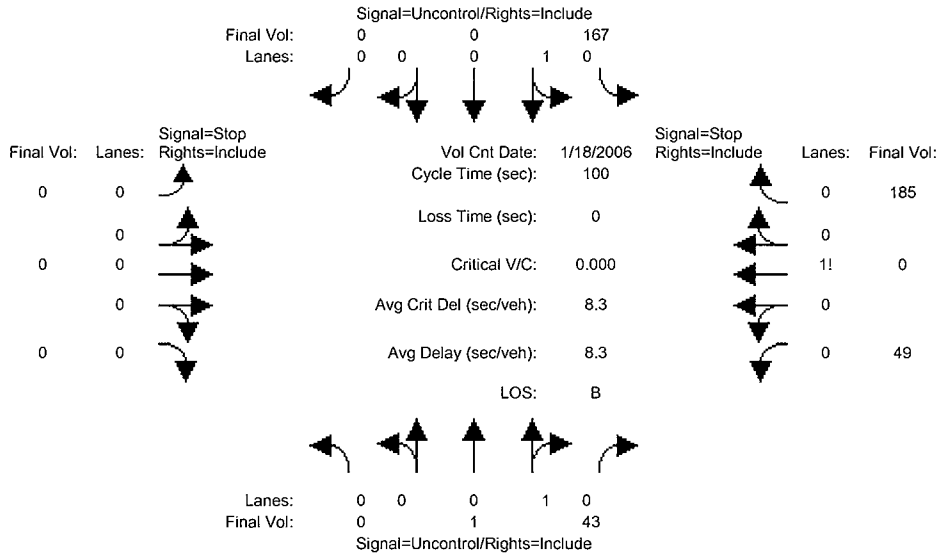
Big Wave Office Park and Wellness Center
Half Moon Bay, California

Level Of Service Computation Report
2000 HCM Unsignalized (Future Volume Alternative)
Background PM

Intersection #2: Broadway & Prospect



Approach:	North Bound			South Bound			East Bound			West Bound		
Movement:	L -	T -	R	L -	T -	R	L -	T -	R	L -	T -	R
Volume Module: >> Count Date: 18 Jan 2006 << 4:15 - 5:15 PM												
Base Vol:	0	1	38	164	0	0	0	0	0	44	0	183
Growth Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Initial Bse:	0	1	38	164	0	0	0	0	0	44	0	183
Added Vol:	0	0	0	0	0	0	0	0	0	0	0	0
ATI:	0	0	5	3	0	0	0	0	0	5	0	2
Initial Fut:	0	1	43	167	0	0	0	0	0	49	0	185
User Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Volume:	0	1	43	167	0	0	0	0	0	49	0	185
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
FinalVolume:	0	1	43	167	0	0	0	0	0	49	0	185
Critical Gap Module:												
Critical Gp:	xxxxx	xxxx	xxxxx	4.1	xxxx	xxxxx	xxxxx	xxxx	xxxxx	6.4	6.5	6.2
FollowUpTim:	xxxxx	xxxx	xxxxx	2.2	xxxx	xxxxx	xxxxx	xxxx	xxxxx	3.5	4.0	3.3
Capacity Module:												
Cnflict Vol:	xxxx	xxxx	xxxxx	44	xxxx	xxxxx	xxxx	xxxx	xxxxx	357	357	23
Potent Cap.:	xxxx	xxxx	xxxxx	1577	xxxx	xxxxx	xxxx	xxxx	xxxxx	646	573	1060
Move Cap.:	xxxx	xxxx	xxxxx	1577	xxxx	xxxxx	xxxx	xxxx	xxxxx	593	512	1060
Volume/Cap:	xxxx	xxxx	xxxx	0.11	xxxx	xxxx	xxxx	xxxx	xxxx	0.08	0.00	0.17
Level Of Service Module:												
2Way95thQ:	xxxx	xxxx	xxxxx	0.4	xxxx	xxxxx	xxxx	xxxx	xxxxx	xxxx	xxxx	xxxxx
Control Del:	xxxxx	xxxx	xxxxx	7.6	xxxx	xxxxx	xxxxx	xxxx	xxxxx	xxxxx	xxxx	xxxxx
LOS by Move:	*	*	*	A	*	*	*	*	*	*	*	*
Movement:	LT -	LTR -	RT	LT -	LTR -	RT	LT -	LTR -	RT	LT -	LTR -	RT
Shared Cap.:	xxxx	xxxx	xxxxx	xxxx	xxxx	xxxxx	xxxx	xxxx	xxxxx	xxxx	910	xxxxx
SharedQueue:	xxxxx	xxxx	xxxxx	xxxxx	xxxx	xxxxx	xxxxx	xxxx	xxxxx	xxxxx	1.0	xxxxx
Shrd ConDel:	xxxxx	xxxx	xxxxx	xxxxx	xxxx	xxxxx	xxxxx	xxxx	xxxxx	xxxxx	10.3	xxxxx
Shared LOS:	*	*	*	*	*	*	*	*	*	*	B	*
ApproachDel:	xxxxxx			xxxxxx			xxxxxx			10.3		
ApproachLOS:	*			*			*			B		

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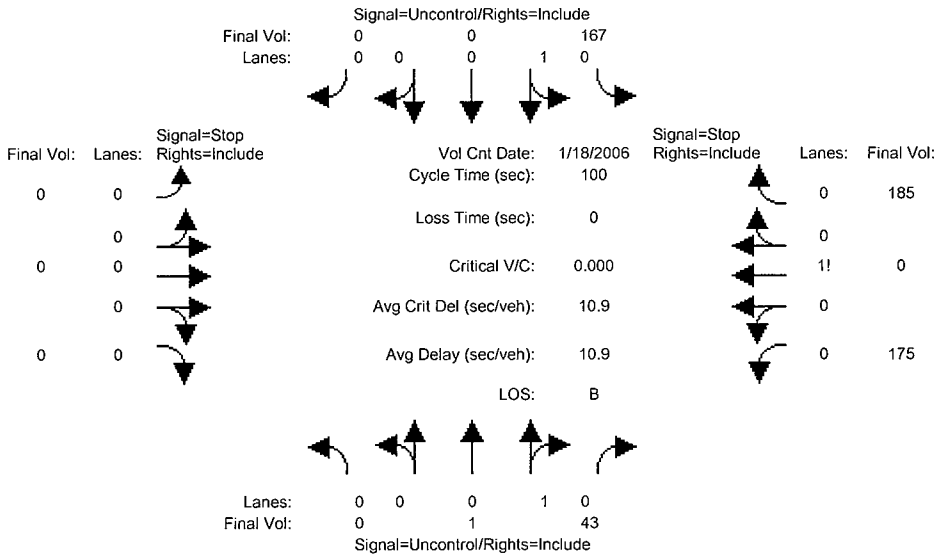
Big Wave Office Park and Wellness Center
Half Moon Bay, California

Level Of Service Computation Report
2000 HCM Unsignalized (Future Volume Alternative)
Project PM

Intersection #2: Broadway & Prospect



Approach:	North Bound			South Bound			East Bound			West Bound		
Movement:	L	T	R	L	T	R	L	T	R	L	T	R
Volume Module: >> Count Date: 18 Jan 2006 << 4:15 - 5:15 PM												
Base Vol:	0	1	38	164	0	0	0	0	0	44	0	183
Growth Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Initial Bse:	0	1	38	164	0	0	0	0	0	44	0	183
Added Vol:	0	0	0	0	0	0	0	0	0	126	0	0
ATI:	0	0	5	3	0	0	0	0	0	5	0	2
Initial Fut:	0	1	43	167	0	0	0	0	0	175	0	185
User Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Volume:	0	1	43	167	0	0	0	0	0	175	0	185
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
FinalVolume:	0	1	43	167	0	0	0	0	0	175	0	185
Critical Gap Module:												
Critical Gp:	xxxxx	xxxx	xxxxx	4.1	xxxx	xxxxx	xxxxx	xxxx	xxxxx	6.4	6.5	6.2
FollowUpTim:	xxxxx	xxxx	xxxxx	2.2	xxxx	xxxxx	xxxxx	xxxx	xxxxx	3.5	4.0	3.3
Capacity Module:												
Cnflict Vol:	xxxx	xxxx	xxxxx	44	xxxx	xxxxx	xxxx	xxxx	xxxxx	357	357	23
Potent Cap.:	xxxx	xxxx	xxxxx	1577	xxxx	xxxxx	xxxx	xxxx	xxxxx	646	573	1060
Move Cap.:	xxxx	xxxx	xxxxx	1577	xxxx	xxxxx	xxxx	xxxx	xxxxx	593	512	1060
Volume/Cap:	xxxx	xxxx	xxxx	0.11	xxxx	xxxx	xxxx	xxxx	xxxx	0.29	0.00	0.17
Level Of Service Module:												
2Way95thQ:	xxxx	xxxx	xxxxx	0.4	xxxx	xxxxx	xxxx	xxxx	xxxxx	xxxx	xxxx	xxxxx
Control Del:	xxxxx	xxxx	xxxxx	7.6	xxxx	xxxxx	xxxxx	xxxx	xxxxx	xxxxx	xxxx	xxxxx
LOS by Move:	*	*	*	A	*	*	*	*	*	*	*	*
Movement:	LT	LTR	RT	LT	LTR	RT	LT	LTR	RT	LT	LTR	RT
Shared Cap.:	xxxx	xxxx	xxxxx	xxxx	xxxx	xxxxx	xxxx	xxxx	xxxxx	xxxx	767	xxxxx
SharedQueue:	xxxxx	xxxx	xxxxx	xxxxx	xxxx	xxxxx	xxxxx	xxxx	xxxxx	xxxxx	2.5	xxxxx
Shrd ConDel:	xxxxx	xxxx	xxxxx	xxxxx	xxxx	xxxxx	xxxxx	xxxx	xxxxx	xxxxx	13.8	xxxxx
Shared LOS:	*	*	*	*	*	*	*	*	*	*	B	*
ApproachDel:	xxxxxx			xxxxxx			xxxxxx			13.8		
ApproachLOS:	*			*			*			B		

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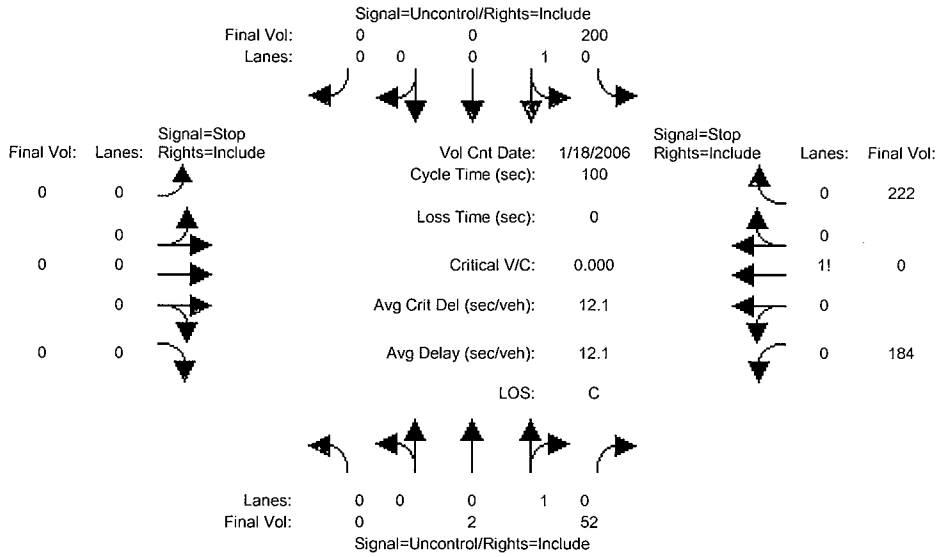
Big Wave Office Park and Wellness Center
Half Moon Bay, California

Level Of Service Computation Report
2000 HCM Unsignalized (Future Volume Alternative)
Cumulative Project PM

Intersection #2: Broadway & Prospect



Approach:	North Bound			South Bound			East Bound			West Bound		
Movement:	L	T	R	L	T	R	L	T	R	L	T	R
Volume Module: >> Count Date: 18 Jan 2006 << 4:15 - 5:15 PM												
Base Vol:	0	1	38	164	0	0	0	0	0	44	0	183
Growth Adj:	1.20	1.20	1.20	1.20	1.20	1.20	1.20	1.20	1.20	1.20	1.20	1.20
Initial Bse:	0	1	46	197	0	0	0	0	0	53	0	220
Added Vol:	0	0	0	0	0	0	0	0	0	126	0	0
ATI+Cumul:	0	1	6	3	0	0	0	0	0	5	0	2
Initial Fut:	0	2	52	200	0	0	0	0	0	184	0	222
User Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Volume:	0	2	52	200	0	0	0	0	0	184	0	222
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
FinalVolume:	0	2	52	200	0	0	0	0	0	184	0	222
Critical Gap Module:												
Critical Gp:	xxxxx	xxxx	xxxxx	4.1	xxxx	xxxxx	xxxxx	xxxx	xxxxx	6.4	6.5	6.2
FollowUpTim:	xxxxx	xxxx	xxxxx	2.2	xxxx	xxxxx	xxxxx	xxxx	xxxxx	3.5	4.0	3.3
Capacity Module:												
Cnflict Vol:	xxxx	xxxx	xxxxx	54	xxxx	xxxxx	xxxx	xxxx	xxxxx	428	428	28
Potent Cap.:	xxxx	xxxx	xxxxx	1565	xxxx	xxxxx	xxxx	xxxx	xxxxx	588	522	1053
Move Cap.:	xxxx	xxxx	xxxxx	1565	xxxx	xxxxx	xxxx	xxxx	xxxxx	530	456	1053
Volume/Cap:	xxxx	xxxx	xxxx	0.13	xxxx	xxxx	xxxx	xxxx	xxxx	0.35	0.00	0.21
Level Of Service Module:												
2Way95thQ:	xxxx	xxxx	xxxxx	0.4	xxxx	xxxxx	xxxx	xxxx	xxxxx	xxxx	xxxx	xxxxx
Control Del:	xxxxx	xxxx	xxxxx	7.6	xxxx	xxxxx	xxxxx	xxxx	xxxxx	xxxxx	xxxx	xxxxx
LOS by Move:	*	*	*	A	*	*	*	*	*	*	*	*
Movement:	LT - LTR - RT			LT - LTR - RT			LT - LTR - RT			LT - LTR - RT		
Shared Cap.:	xxxx	xxxx	xxxxx	xxxx	xxxx	xxxxx	xxxx	xxxx	xxxxx	xxxx	728	xxxxx
SharedQueue:	xxxxx	xxxx	xxxxx	xxxxx	xxxx	xxxxx	xxxxx	xxxx	xxxxx	xxxxx	3.5	xxxxx
Shrd ConDel:	xxxxx	xxxx	xxxxx	xxxxx	xxxx	xxxxx	xxxxx	xxxx	xxxxx	xxxxx	16.0	xxxxx
Shared LOS:	*	*	*	*	*	*	*	*	*	*	C	*
ApproachDel:	xxxxxx			xxxxxx			xxxxxx			16.0		
ApproachLOS:	*			*			*			C		

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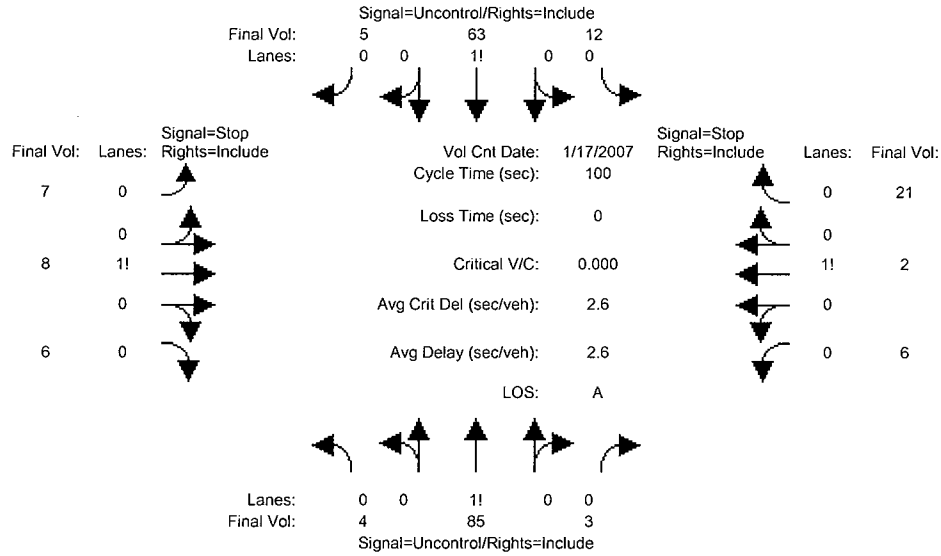
Big Wave Office Park and Wellness Center
Half Moon Bay, California

Level Of Service Computation Report
2000 HCM Unsignalized (Future Volume Alternative)
Background PM

Intersection #3: Airport & Stanford/Cornell



Approach:	North Bound			South Bound			East Bound			West Bound		
Movement:	L	T	R	L	T	R	L	T	R	L	T	R
Volume Module: >> Count Date: 17 Jan 2007 << 4:15 - 5:15 PM												
Base Vol:	2	79	2	12	60	5	5	7	6	6	2	21
Growth Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Initial Bse:	2	79	2	12	60	5	5	7	6	6	2	21
Added Vol:	0	0	0	0	0	0	0	0	0	0	0	0
ATI:	2	6	1	0	3	0	2	1	0	0	0	0
Initial Fut:	4	85	3	12	63	5	7	8	6	6	2	21
User Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Volume:	4	85	3	12	63	5	7	8	6	6	2	21
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
FinalVolume:	4	85	3	12	63	5	7	8	6	6	2	21
Critical Gap Module:												
Critical Gp:	4.1	xxxx	xxxxx	4.1	xxxx	xxxxx	7.1	6.5	6.2	7.1	6.5	6.2
FollowUpTim:	2.2	xxxx	xxxxx	2.2	xxxx	xxxxx	3.5	4.0	3.3	3.5	4.0	3.3
Capacity Module:												
Cnflict Vol:	68	xxxx	xxxxx	88	xxxx	xxxxx	196	186	66	191	187	87
Potent Cap.:	1546	xxxx	xxxxx	1520	xxxx	xxxxx	768	712	1004	773	712	978
Move Cap.:	1546	xxxx	xxxxx	1520	xxxx	xxxxx	744	705	1004	756	704	978
Volume/Cap:	0.00	xxxx	xxxx	0.01	xxxx	xxxx	0.01	0.01	0.01	0.01	0.00	0.02
Level Of Service Module:												
2Way95thQ:	0.0	xxxx	xxxxx	0.0	xxxx	xxxxx	xxxx	xxxx	xxxxx	xxxx	xxxx	xxxxx
Control Del:	7.3	xxxx	xxxxx	7.4	xxxx	xxxxx	xxxxx	xxxx	xxxxx	xxxxx	xxxx	xxxxx
LOS by Move:	A	*	*	A	*	*	*	*	*	*	*	*
Movement:	LT	LTR	RT	LT	LTR	RT	LT	LTR	RT	LT	LTR	RT
Shared Cap.:	xxxx	xxxx	xxxxx	xxxx	xxxx	xxxxx	xxxx	786	xxxxx	xxxx	899	xxxxx
SharedQueue:	xxxxx	xxxx	xxxxx	xxxxx	xxxx	xxxxx	xxxxx	0.1	xxxxx	xxxxx	0.1	xxxxx
Shrd ConDel:	xxxxx	xxxx	xxxxx	xxxxx	xxxx	xxxxx	xxxxx	9.7	xxxxx	xxxxx	9.1	xxxxx
Shared LOS:	*	*	*	*	*	*	*	A	*	*	A	*
ApproachDel:	xxxxxx			xxxxxx			9.7			9.1		
ApproachLOS:	*			*			A			A		

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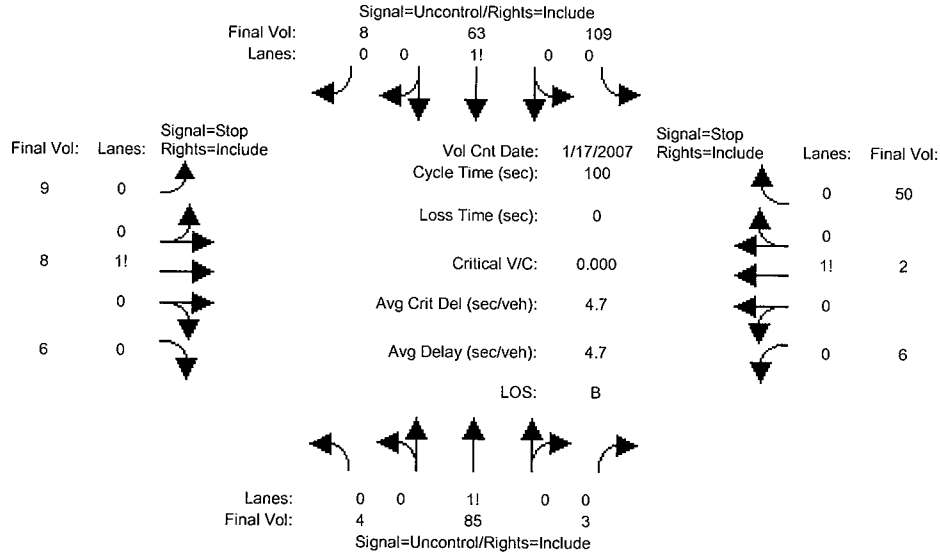
Big Wave Office Park and Wellness Center
Half Moon Bay, California

Level Of Service Computation Report
2000 HCM Unsignalized (Future Volume Alternative)
Project PM

Intersection #3: Airport & Stanford/Cornell



Approach:	North Bound			South Bound			East Bound			West Bound		
Movement:	L	T	R	L	T	R	L	T	R	L	T	R
Volume Module: >> Count Date: 17 Jan 2007 << 4:15 - 5:15 PM												
Base Vol:	2	79	2	12	60	5	5	7	6	6	2	21
Growth Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Initial Bse:	2	79	2	12	60	5	5	7	6	6	2	21
Added Vol:	0	0	0	97	0	3	2	0	0	0	0	29
ATI:	2	6	1	0	3	0	2	1	0	0	0	0
Initial Fut:	4	85	3	109	63	8	9	8	6	6	2	50
User Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Volume:	4	85	3	109	63	8	9	8	6	6	2	50
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
FinalVolume:	4	85	3	109	63	8	9	8	6	6	2	50
Critical Gap Module:												
Critical Gp:	4.1	xxxx	xxxxx	4.1	xxxx	xxxxx	7.1	6.5	6.2	7.1	6.5	6.2
FollowUpTim:	2.2	xxxx	xxxxx	2.2	xxxx	xxxxx	3.5	4.0	3.3	3.5	4.0	3.3
Capacity Module:												
Cnflict Vol:	71	xxxx	xxxxx	88	xxxx	xxxxx	406	381	67	387	384	87
Potent Cap.:	1542	xxxx	xxxxx	1520	xxxx	xxxxx	559	555	1002	576	553	978
Move Cap.:	1542	xxxx	xxxxx	1520	xxxx	xxxxx	497	511	1002	532	510	978
Volume/Cap:	0.00	xxxx	xxxx	0.07	xxxx	xxxx	0.02	0.02	0.01	0.01	0.00	0.05
Level Of Service Module:												
2Way95thQ:	0.0	xxxx	xxxxx	0.2	xxxx	xxxxx	xxxx	xxxx	xxxxx	xxxx	xxxx	xxxxx
Control Del:	7.3	xxxx	xxxxx	7.6	xxxx	xxxxx	xxxxx	xxxx	xxxxx	xxxxx	xxxx	xxxxx
LOS by Move:	A	*	*	A	*	*	*	*	*	*	*	*
Movement:	LT	LTR	RT	LT	LTR	RT	LT	LTR	RT	LT	LTR	RT
Shared Cap.:	xxxx	xxxx	xxxxx	xxxx	xxxx	xxxxx	xxxx	579	xxxxx	xxxx	874	xxxxx
SharedQueue:	xxxxx	xxxx	xxxxx	xxxxx	xxxx	xxxxx	xxxxx	0.1	xxxxx	xxxxx	0.2	xxxxx
Shrd ConDel:	xxxxx	xxxx	xxxxx	xxxxx	xxxx	xxxxx	xxxxx	11.5	xxxxx	xxxxx	9.4	xxxxx
Shared LOS:	*	*	*	*	*	*	*	B	*	*	A	*
ApproachDel:	xxxxxx			xxxxxx			11.5			9.4		
ApproachLOS:	*			*			B			A		

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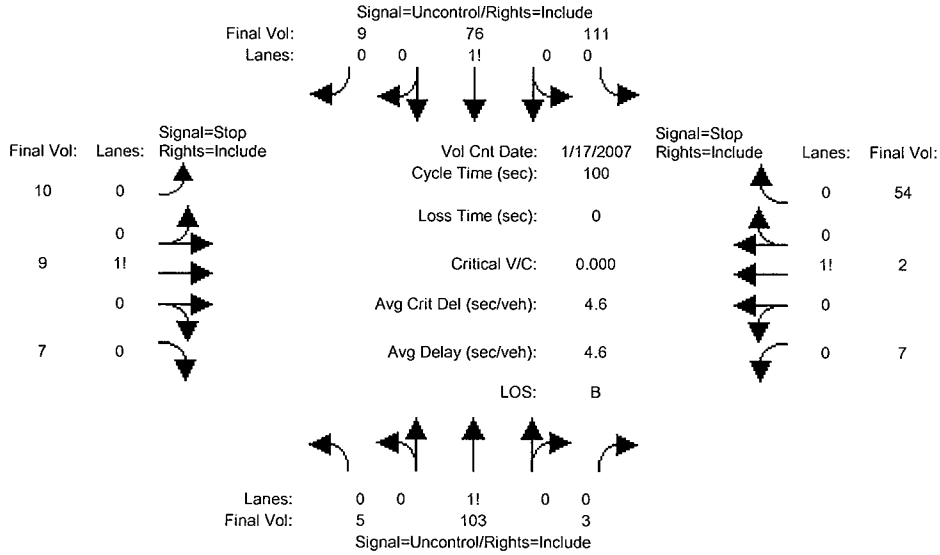
Half Moon Bay, California

Level Of Service Computation Report
2000 HCM Unsignalized (Future Volume Alternative)
Cumulative Project PM

Intersection #3: Airport & Stanford/Cornell



Approach:	North Bound			South Bound			East Bound			West Bound		
Movement:	L	T	R	L	T	R	L	T	R	L	T	R
Volume Module: >> Count Date: 17 Jan 2007 << 4:15 - 5:15 PM												
Base Vol:	2	79	2	12	60	5	5	7	6	6	2	21
Growth Adj:	1.20	1.20	1.20	1.20	1.20	1.20	1.20	1.20	1.20	1.20	1.20	1.20
Initial Bse:	2	95	2	14	72	6	6	8	7	7	2	25
Added Vol:	0	0	0	97	0	3	2	0	0	0	0	29
ATI+Cumul:	3	8	1	0	4	0	2	1	0	0	0	0
Initial Fut:	5	103	3	111	76	9	10	9	7	7	2	54
User Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Volume:	5	103	3	111	76	9	10	9	7	7	2	54
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
FinalVolume:	5	103	3	111	76	9	10	9	7	7	2	54
Critical Gap Module:												
Critical Gp:	4.1	xxxx	xxxxx	4.1	xxxx	xxxxx	7.1	6.5	6.2	7.1	6.5	6.2
FollowUpTim:	2.2	xxxx	xxxxx	2.2	xxxx	xxxxx	3.5	4.0	3.3	3.5	4.0	3.3
Capacity Module:												
Cnflict Vol:	85	xxxx	xxxxx	106	xxxx	xxxxx	447	420	81	427	423	105
Potent Cap.:	1524	xxxx	xxxxx	1498	xxxx	xxxxx	525	527	985	541	525	956
Move Cap.:	1524	xxxx	xxxxx	1498	xxxx	xxxxx	462	484	985	496	482	956
Volume/Cap:	0.00	xxxx	xxxx	0.07	xxxx	xxxx	0.02	0.02	0.01	0.01	0.00	0.06
Level Of Service Module:												
2Way95thQ:	0.0	xxxx	xxxxx	0.2	xxxx	xxxxx	xxxx	xxxx	xxxxx	xxxx	xxxx	xxxxx
Control Del:	7.4	xxxx	xxxxx	7.6	xxxx	xxxxx	xxxxx	xxxx	xxxxx	xxxxx	xxxx	xxxxx
LOS by Move:	A	*	*	A	*	*	*	*	*	*	*	*
Movement:	LT	LTR	RT	LT	LTR	RT	LT	LTR	RT	LT	LTR	RT
Shared Cap.:	xxxx	xxxx	xxxxx	xxxx	xxxx	xxxxx	xxxx	550	xxxxx	xxxx	837	xxxxx
SharedQueue:	xxxxx	xxxx	xxxxx	xxxxx	xxxx	xxxxx	xxxxx	0.2	xxxxx	xxxxx	0.2	xxxxx
Shrd ConDel:	xxxxx	xxxx	xxxxx	xxxxx	xxxx	xxxxx	xxxxx	11.9	xxxxx	xxxxx	9.7	xxxxx
Shared LOS:	*	*	*	*	*	*	*	B	*	*	A	*
ApproachDel:	xxxxxx			xxxxxx			11.9			9.7		
ApproachLOS:	*			*			B			A		

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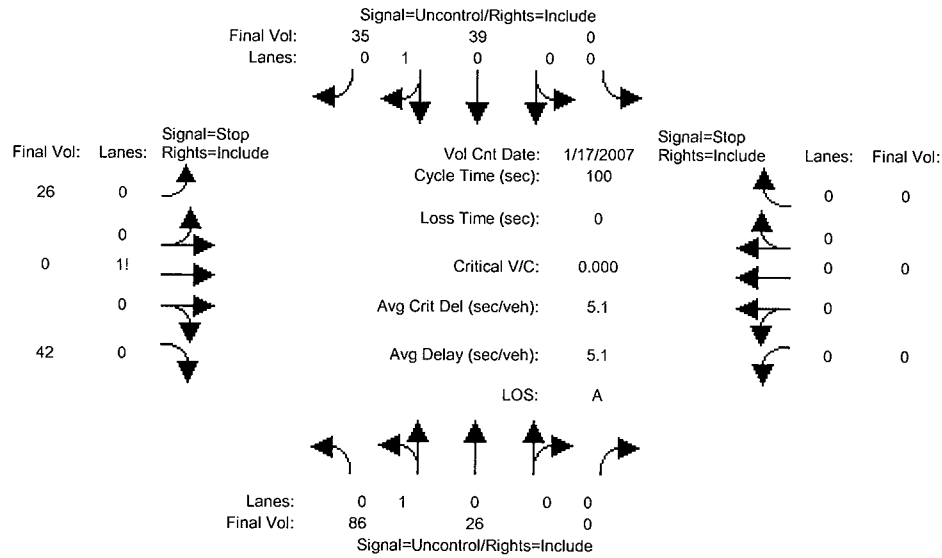
Big Wave Office Park and Wellness Center
Half Moon Bay, California

Level Of Service Computation Report
2000 HCM Unsignalized (Future Volume Alternative)
Existing PM

Intersection #4: Airport & La Granada



Approach:	North Bound			South Bound			East Bound			West Bound		
Movement:	L	T	R	L	T	R	L	T	R	L	T	R
Volume Module: >> Count Date: 17 Jan 2007 << 4:45 - 5:45 PM												
Base Vol:	86	26	0	0	39	35	26	0	42	0	0	0
Growth Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Initial Bse:	86	26	0	0	39	35	26	0	42	0	0	0
Added Vol:	0	0	0	0	0	0	0	0	0	0	0	0
PasserByVol:	0	0	0	0	0	0	0	0	0	0	0	0
Initial Fut:	86	26	0	0	39	35	26	0	42	0	0	0
User Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Volume:	86	26	0	0	39	35	26	0	42	0	0	0
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
FinalVolume:	86	26	0	0	39	35	26	0	42	0	0	0
Critical Gap Module:												
Critical Gp:	4.1	xxxx	xxxxx	xxxxx	xxxx	xxxxx	6.4	6.5	6.2	xxxxx	xxxx	xxxxx
FollowUpTim:	2.2	xxxx	xxxxx	xxxxx	xxxx	xxxxx	3.5	4.0	3.3	xxxxx	xxxx	xxxxx
Capacity Module:												
Cnflict Vol:	74	xxxx	xxxxx	xxxx	xxxx	xxxxx	255	255	57	xxxx	xxxx	xxxxx
Potent Cap.:	1538	xxxx	xxxxx	xxxx	xxxx	xxxxx	739	653	1016	xxxx	xxxx	xxxxx
Move Cap.:	1538	xxxx	xxxxx	xxxx	xxxx	xxxxx	705	614	1016	xxxx	xxxx	xxxxx
Volume/Cap:	0.06	xxxx	xxxx	xxxx	xxxx	xxxx	0.04	0.00	0.04	xxxx	xxxx	xxxx
Level Of Service Module:												
2Way95thQ:	0.2	xxxx	xxxxx	xxxx	xxxx	xxxxx	xxxx	xxxx	xxxxx	xxxx	xxxx	xxxxx
Control Del:	7.5	xxxx	xxxxx	xxxxx	xxxx	xxxxx	xxxxx	xxxx	xxxxx	xxxxx	xxxx	xxxxx
LOS by Move:	A	*	*	*	*	*	*	*	*	*	*	*
Movement:	LT	LTR	RT	LT	LTR	RT	LT	LTR	RT	LT	LTR	RT
Shared Cap.:	xxxx	xxxx	xxxxx	xxxx	xxxx	xxxxx	xxxx	869	xxxxx	xxxx	xxxx	xxxxx
SharedQueue:	0.2	xxxx	xxxxx	xxxxx	xxxx	xxxxx	xxxxx	0.3	xxxxx	xxxxx	xxxx	xxxxx
Shrd ConDel:	7.5	xxxx	xxxxx	xxxxx	xxxx	xxxxx	xxxxx	9.5	xxxxx	xxxxx	xxxx	xxxxx
Shared LOS:	A	*	*	*	*	*	*	A	*	*	*	*
ApproachDel:		xxxxxx			xxxxxx			9.5			xxxxxx	
ApproachLOS:		*			*			A			*	

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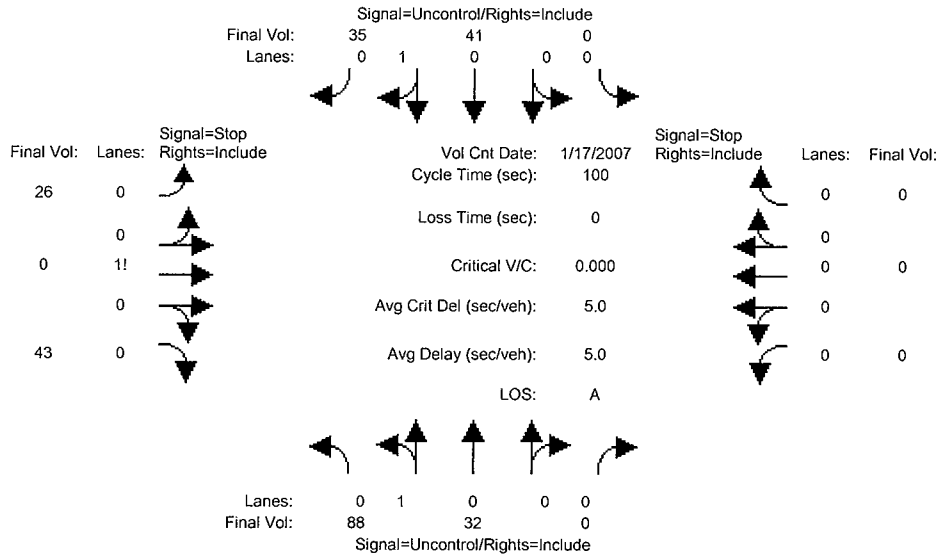
Big Wave Office Park and Wellness Center
Half Moon Bay, California

Level Of Service Computation Report
2000 HCM Unsignalized (Future Volume Alternative)
Background PM

Intersection #4: Airport & La Granada



Approach:	North Bound			South Bound			East Bound			West Bound		
Movement:	L	T	R	L	T	R	L	T	R	L	T	R
Volume Module: >> Count Date: 17 Jan 2007 << 4:45 - 5:45 PM												
Base Vol:	86	26	0	0	39	35	26	0	42	0	0	0
Growth Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Initial Bse:	86	26	0	0	39	35	26	0	42	0	0	0
Added Vol:	0	0	0	0	0	0	0	0	0	0	0	0
ATI:	2	6	0	0	2	0	0	0	1	0	0	0
Initial Fut:	88	32	0	0	41	35	26	0	43	0	0	0
User Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Volume:	88	32	0	0	41	35	26	0	43	0	0	0
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
FinalVolume:	88	32	0	0	41	35	26	0	43	0	0	0
Critical Gap Module:												
Critical Gp:	4.1	xxxx	xxxxx	xxxxx	xxxx	xxxxx	6.4	6.5	6.2	xxxxx	xxxx	xxxxx
FollowUpTim:	2.2	xxxx	xxxxx	xxxxx	xxxx	xxxxx	3.5	4.0	3.3	xxxxx	xxxx	xxxxx
Capacity Module:												
Cnflict Vol:	76	xxxx	xxxxx	xxxx	xxxx	xxxxx	267	267	59	xxxx	xxxx	xxxxx
Potent Cap.:	1536	xxxx	xxxxx	xxxx	xxxx	xxxxx	727	643	1013	xxxx	xxxx	xxxxx
Move Cap.:	1536	xxxx	xxxxx	xxxx	xxxx	xxxxx	694	604	1013	xxxx	xxxx	xxxxx
Volume/Cap:	0.06	xxxx	xxxx	xxxx	xxxx	xxxx	0.04	0.00	0.04	xxxx	xxxx	xxxx
Level Of Service Module:												
2Way95thQ:	0.2	xxxx	xxxxx	xxxx	xxxx	xxxxx	xxxx	xxxx	xxxxx	xxxx	xxxx	xxxxx
Control Del:	7.5	xxxx	xxxxx	xxxxx	xxxx	xxxxx	xxxxx	xxxx	xxxxx	xxxxx	xxxx	xxxxx
LOS by Move:	A	*	*	*	*	*	*	*	*	*	*	*
Movement:	LT	LTR	RT	LT	LTR	RT	LT	LTR	RT	LT	LTR	RT
Shared Cap.:	xxxx	xxxx	xxxxx	xxxx	xxxx	xxxxx	xxxx	863	xxxxx	xxxx	xxxx	xxxxx
SharedQueue:	0.2	xxxx	xxxxx	xxxxx	xxxx	xxxxx	xxxxx	0.3	xxxxx	xxxxx	xxxx	xxxxx
Shrd ConDel:	7.5	xxxx	xxxxx	xxxxx	xxxx	xxxxx	xxxxx	9.5	xxxxx	xxxxx	xxxx	xxxxx
Shared LOS:	A	*	*	*	*	*	*	A	*	*	*	*
ApproachDel:	xxxxxx			xxxxxx			9.5			xxxxxx		
ApproachLOS:	*			*			A			*		

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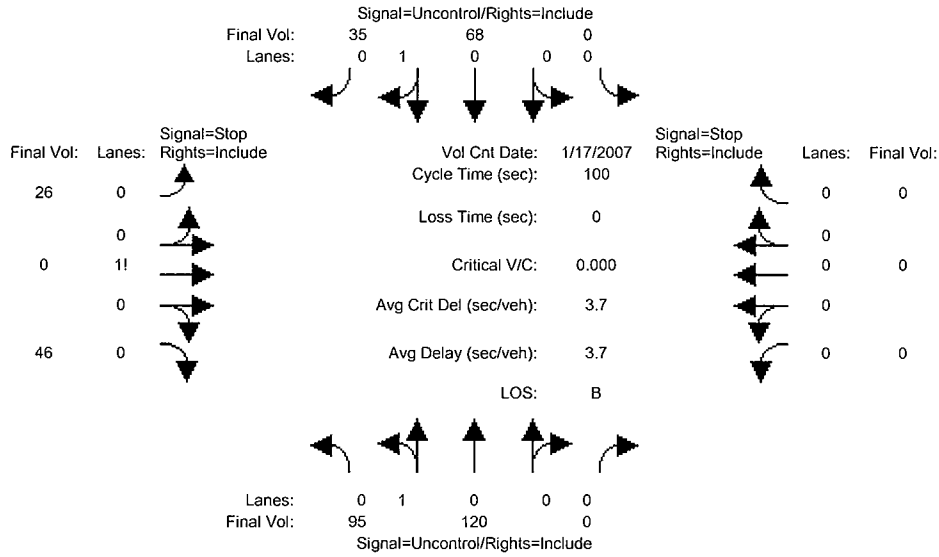
Big Wave Office Park and Wellness Center
Half Moon Bay, California

Level Of Service Computation Report
2000 HCM Unsignalized (Future Volume Alternative)
Project PM

Intersection #4: Airport & La Granada



Approach:	North Bound			South Bound			East Bound			West Bound		
Movement:	L	T	R	L	T	R	L	T	R	L	T	R
Volume Module: >> Count Date: 17 Jan 2007 << 4:45 - 5:45 PM												
Base Vol:	86	26	0	0	39	35	26	0	42	0	0	0
Growth Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Initial Bse:	86	26	0	0	39	35	26	0	42	0	0	0
Added Vol:	7	88	0	0	27	0	0	0	3	0	0	0
ATI:	2	6	0	0	2	0	0	0	1	0	0	0
Initial Fut:	95	120	0	0	68	35	26	0	46	0	0	0
User Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Volume:	95	120	0	0	68	35	26	0	46	0	0	0
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
FinalVolume:	95	120	0	0	68	35	26	0	46	0	0	0
Critical Gap Module:												
Critical Gp:	4.1	xxxx	xxxxx	xxxxx	xxxx	xxxxx	6.4	6.5	6.2	xxxxx	xxxx	xxxxx
FollowUpTim:	2.2	xxxx	xxxxx	xxxxx	xxxx	xxxxx	3.5	4.0	3.3	xxxxx	xxxx	xxxxx
Capacity Module:												
Cnflict Vol:	103	xxxx	xxxxx	xxxx	xxxx	xxxxx	396	396	86	xxxx	xxxx	xxxxx
Potent Cap.:	1502	xxxx	xxxxx	xxxx	xxxx	xxxxx	613	545	979	xxxx	xxxx	xxxxx
Move Cap.:	1502	xxxx	xxxxx	xxxx	xxxx	xxxxx	582	508	979	xxxx	xxxx	xxxxx
Volume/Cap:	0.06	xxxx	xxxx	xxxx	xxxx	xxxx	0.04	0.00	0.05	xxxx	xxxx	xxxx
Level Of Service Module:												
2Way95thQ:	0.2	xxxx	xxxxx	xxxx	xxxx	xxxxx	xxxx	xxxx	xxxxx	xxxx	xxxx	xxxxx
Control Del:	7.6	xxxx	xxxxx	xxxxx	xxxx	xxxxx	xxxxx	xxxx	xxxxx	xxxxx	xxxx	xxxxx
LOS by Move:	A	*	*	*	*	*	*	*	*	*	*	*
Movement:	LT	LTR	RT	LT	LTR	RT	LT	LTR	RT	LT	LTR	RT
Shared Cap.:	xxxx	xxxx	xxxxx	xxxx	xxxx	xxxxx	xxxx	785	xxxxx	xxxx	xxxx	xxxxx
SharedQueue:	0.2	xxxx	xxxxx	xxxxx	xxxx	xxxxx	xxxxx	0.3	xxxxx	xxxxx	xxxx	xxxxx
Shrd ConDel:	7.6	xxxx	xxxxx	xxxxx	xxxx	xxxxx	xxxxx	10.0	xxxxx	xxxxx	xxxx	xxxxx
Shared LOS:	A	*	*	*	*	*	*	B	*	*	*	*
ApproachDel:	xxxxxx			xxxxxx			10.0			xxxxxx		
ApproachLOS:	*			*			B			*		

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Level Of Service Computation Report
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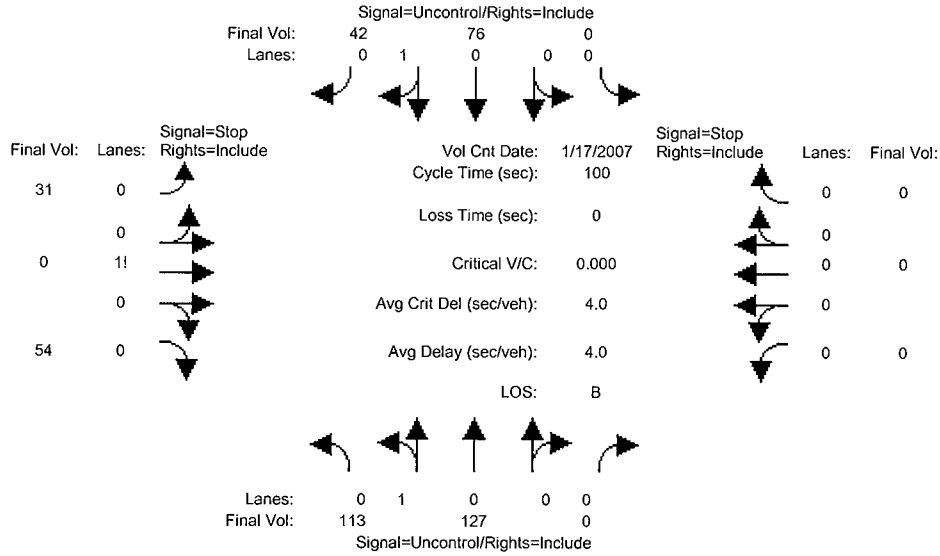
Cumulative Project PM

Intersection #4: Airport & La Granada



Approach:	North Bound			South Bound			East Bound			West Bound		
Movement:	L	T	R	L	T	R	L	T	R	L	T	R
Volume Module: >> Count Date: 17 Jan 2007 << 4:45 - 5:45 PM												
Base Vol:	86	26	0	0	39	35	26	0	42	0	0	0
Growth Adj:	1.20	1.20	1.20	1.20	1.20	1.20	1.20	1.20	1.20	1.20	1.20	1.20
Initial Bse:	103	31	0	0	47	42	31	0	50	0	0	0
Added Vol:	7	88	0	0	27	0	0	0	3	0	0	0
ATI+Cumul:	3	8	0	0	2	0	0	0	1	0	0	0
Initial Fut:	113	127	0	0	76	42	31	0	54	0	0	0
User Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Volume:	113	127	0	0	76	42	31	0	54	0	0	0
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
FinalVolume:	113	127	0	0	76	42	31	0	54	0	0	0
Critical Gap Module:												
Critical Gp:	4.1	xxxx	xxxxx	xxxxx	xxxx	xxxxx	6.4	6.5	6.2	xxxxx	xxxx	xxxxx
FollowUpTim:	2.2	xxxx	xxxxx	xxxxx	xxxx	xxxxx	3.5	4.0	3.3	xxxxx	xxxx	xxxxx
Capacity Module:												
Cnflict Vol:	118	xxxx	xxxxx	xxxx	xxxx	xxxxx	450	450	97	xxxx	xxxx	xxxxx
Potent Cap.:	1483	xxxx	xxxxx	xxxx	xxxx	xxxxx	570	507	965	xxxx	xxxx	xxxxx
Move Cap.:	1483	xxxx	xxxxx	xxxx	xxxx	xxxxx	535	466	965	xxxx	xxxx	xxxxx
Volume/Cap:	0.08	xxxx	xxxx	xxxx	xxxx	xxxx	0.06	0.00	0.06	xxxx	xxxx	xxxx
Level Of Service Module:												
2Way95thQ:	0.2	xxxx	xxxxx	xxxx	xxxx	xxxxx	xxxx	xxxx	xxxxx	xxxx	xxxx	xxxxx
Control Del:	7.6	xxxx	xxxxx	xxxxx	xxxx	xxxxx	xxxxx	xxxx	xxxxx	xxxxx	xxxx	xxxxx
LOS by Move:	A	*	*	*	*	*	*	*	*	*	*	*
Movement:	LT	LTR	RT	LT	LTR	RT	LT	LTR	RT	LT	LTR	RT
Shared Cap.:	xxxx	xxxx	xxxxx	xxxx	xxxx	xxxxx	xxxx	746	xxxxx	xxxx	xxxx	xxxxx
SharedQueue:	0.2	xxxx	xxxxx	xxxxx	xxxx	xxxxx	xxxxx	0.4	xxxxx	xxxxx	xxxx	xxxxx
Shrd ConDel:	7.6	xxxx	xxxxx	xxxxx	xxxx	xxxxx	xxxxx	10.4	xxxxx	xxxxx	xxxx	xxxxx
Shared LOS:	A	*	*	*	*	*	*	B	*	*	*	*
ApproachDel:	xxxxxx			xxxxxx			10.4			xxxxxx		
ApproachLOS:	*			*			B			*		

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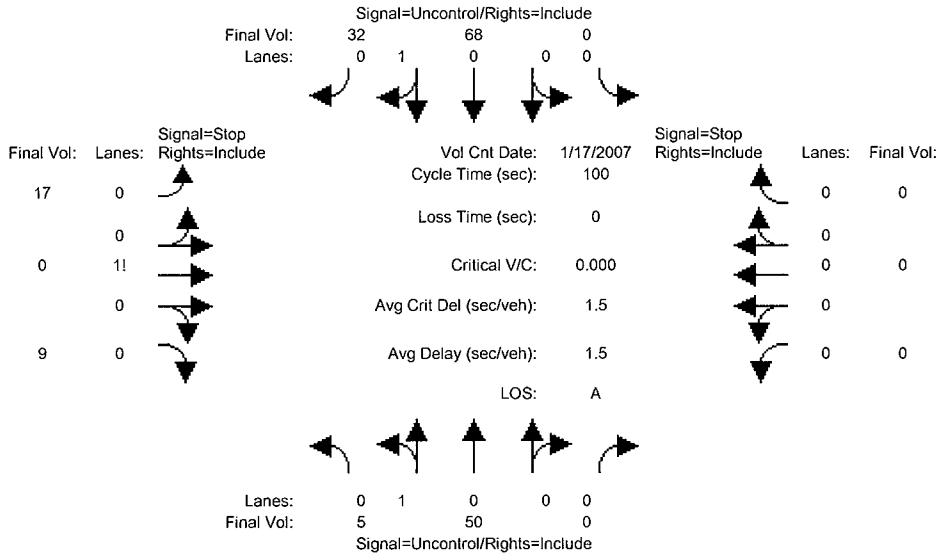
Intersection #5: Airport & Los Banos



Approach:	North Bound			South Bound			East Bound			West Bound		
Movement:	L	T	R	L	T	R	L	T	R	L	T	R
Volume Module: >> Count Date: 17 Jan 2007 << 4:15 - 5:15 PM												
Base Vol:	5	50	0	0	68	32	17	0	9	0	0	0
Growth Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Initial Bse:	5	50	0	0	68	32	17	0	9	0	0	0
Added Vol:	0	0	0	0	0	0	0	0	0	0	0	0
PasserByVol:	0	0	0	0	0	0	0	0	0	0	0	0
Initial Fut:	5	50	0	0	68	32	17	0	9	0	0	0
User Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Volume:	5	50	0	0	68	32	17	0	9	0	0	0
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
FinalVolume:	5	50	0	0	68	32	17	0	9	0	0	0
Critical Gap Module:												
Critical Gp:	4.1	xxxx	xxxxx	xxxxx	xxxx	xxxxx	6.4	6.5	6.2	xxxxx	xxxx	xxxxx
FollowUpTim:	2.2	xxxx	xxxxx	xxxxx	xxxx	xxxxx	3.5	4.0	3.3	xxxxx	xxxx	xxxxx
Capacity Module:												
Cnflict Vol:	100	xxxx	xxxxx	xxxx	xxxx	xxxxx	144	144	84	xxxx	xxxx	xxxxx
Potent Cap.:	1505	xxxx	xxxxx	xxxx	xxxx	xxxxx	853	751	981	xxxx	xxxx	xxxxx
Move Cap.:	1505	xxxx	xxxxx	xxxx	xxxx	xxxxx	851	748	981	xxxx	xxxx	xxxxx
Volume/Cap:	0.00	xxxx	xxxx	xxxx	xxxx	xxxx	0.02	0.00	0.01	xxxx	xxxx	xxxx
Level Of Service Module:												
2Way95thQ:	0.0	xxxx	xxxxx	xxxx	xxxx	xxxxx	xxxx	xxxx	xxxxx	xxxx	xxxx	xxxxx
Control Del:	7.4	xxxx	xxxxx	xxxxx	xxxx	xxxxx	xxxxx	xxxx	xxxxx	xxxxx	xxxx	xxxxx
LOS by Move:	A	*	*	*	*	*	*	*	*	*	*	*
Movement:	LT	LTR	RT	LT	LTR	RT	LT	LTR	RT	LT	LTR	RT
Shared Cap.:	xxxx	xxxx	xxxxx	xxxx	xxxx	xxxxx	xxxx	892	xxxxx	xxxx	xxxx	xxxxx
SharedQueue:	0.0	xxxx	xxxxx	xxxxx	xxxx	xxxxx	xxxxx	0.1	xxxxx	xxxxx	xxxx	xxxxx
Shrd ConDel:	7.4	xxxx	xxxxx	xxxxx	xxxx	xxxxx	xxxxx	9.2	xxxxx	xxxxx	xxxx	xxxxx
Shared LOS:	A	*	*	*	*	*	*	A	*	*	*	*
ApproachDel:	xxxxxx			xxxxxx			9.2			xxxxxx		
ApproachLOS:	*			*			A			*		

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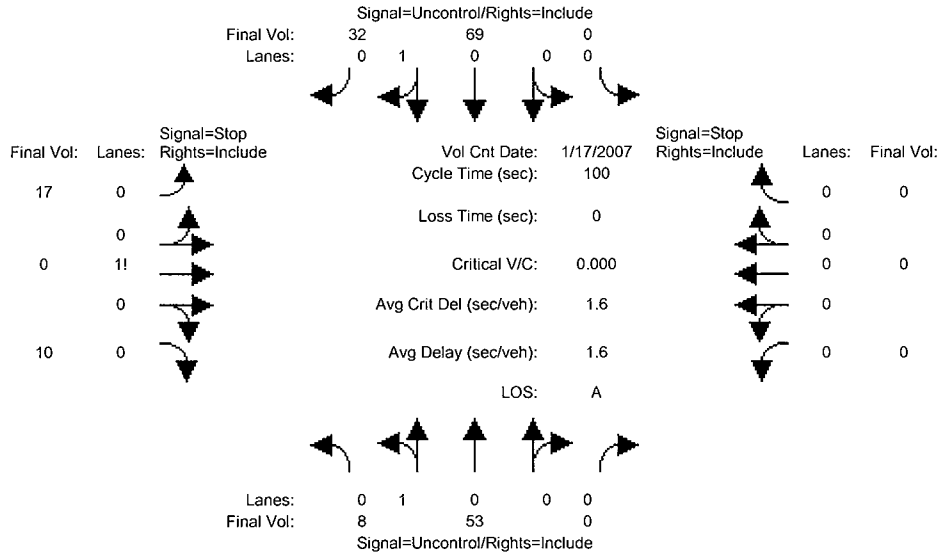
Level Of Service Computation Report
2000 HCM Unsignalized (Future Volume Alternative)
Background PM

Intersection #5: Airport & Los Banos



Approach:	North Bound			South Bound			East Bound			West Bound		
Movement:	L	T	R	L	T	R	L	T	R	L	T	R
Volume Module: >> Count Date: 17 Jan 2007 << 4:15 - 5:15 PM												
Base Vol:	5	50	0	0	68	32	17	0	9	0	0	0
Growth Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Initial Bse:	5	50	0	0	68	32	17	0	9	0	0	0
Added Vol:	0	0	0	0	0	0	0	0	0	0	0	0
ATI:	3	3	0	0	1	0	0	0	1	0	0	0
Initial Fut:	8	53	0	0	69	32	17	0	10	0	0	0
User Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Volume:	8	53	0	0	69	32	17	0	10	0	0	0
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
FinalVolume:	8	53	0	0	69	32	17	0	10	0	0	0
Critical Gap Module:												
Critical Gp:	4.1	xxxx	xxxxx	xxxxx	xxxx	xxxxx	6.4	6.5	6.2	xxxxx	xxxx	xxxxx
FollowUpTim:	2.2	xxxx	xxxxx	xxxxx	xxxx	xxxxx	3.5	4.0	3.3	xxxxx	xxxx	xxxxx
Capacity Module:												
Cnflict Vol:	101	xxxx	xxxxx	xxxx	xxxx	xxxxx	154	154	85	xxxx	xxxx	xxxxx
Potent Cap.:	1504	xxxx	xxxxx	xxxx	xxxx	xxxxx	842	741	980	xxxx	xxxx	xxxxx
Move Cap.:	1504	xxxx	xxxxx	xxxx	xxxx	xxxxx	839	738	980	xxxx	xxxx	xxxxx
Volume/Cap:	0.01	xxxx	xxxx	xxxx	xxxx	xxxx	0.02	0.00	0.01	xxxx	xxxx	xxxx
Level Of Service Module:												
2Way95thQ:	0.0	xxxx	xxxxx	xxxx	xxxx	xxxxx	xxxx	xxxx	xxxxx	xxxx	xxxx	xxxxx
Control Del:	7.4	xxxx	xxxxx	xxxxx	xxxx	xxxxx	xxxxx	xxxx	xxxxx	xxxxx	xxxx	xxxxx
LOS by Move:	A	*	*	*	*	*	*	*	*	*	*	*
Movement:	LT	LTR	RT	LT	LTR	RT	LT	LTR	RT	LT	LTR	RT
Shared Cap.:	xxxx	xxxx	xxxxx	xxxx	xxxx	xxxxx	xxxx	886	xxxxx	xxxx	xxxx	xxxxx
SharedQueue:	0.0	xxxx	xxxxx	xxxxx	xxxx	xxxxx	xxxxx	0.1	xxxxx	xxxxx	xxxx	xxxxx
Shrd ConDel:	7.4	xxxx	xxxxx	xxxxx	xxxx	xxxxx	xxxxx	9.2	xxxxx	xxxxx	xxxx	xxxxx
Shared LOS:	A	*	*	*	*	*	*	A	*	*	*	*
ApproachDel:		xxxxxx			xxxxxx			9.2			xxxxxx	
ApproachLOS:		*			*			A			*	

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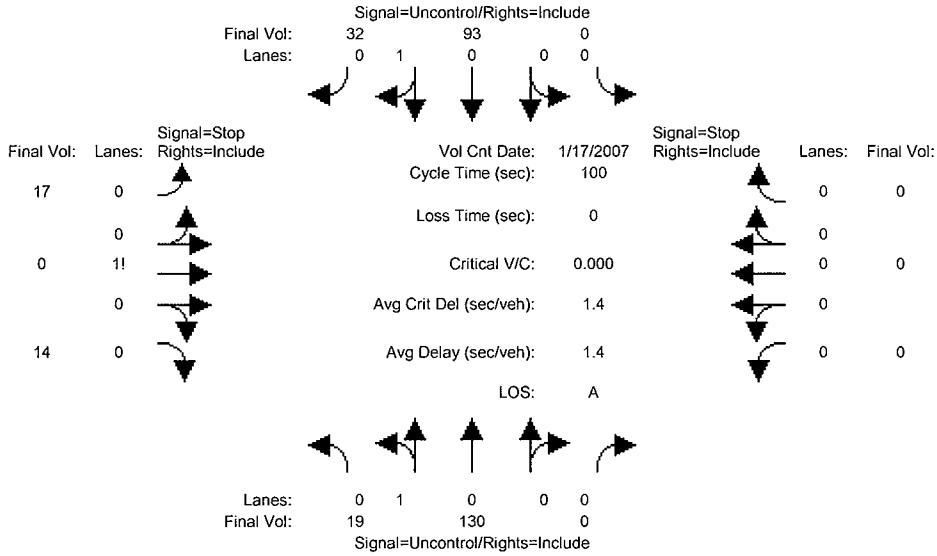
Project PM

Intersection #5: Airport & Los Banos



Approach:	North Bound			South Bound			East Bound			West Bound		
Movement:	L	T	R	L	T	R	L	T	R	L	T	R
Volume Module: >> Count Date: 17 Jan 2007 << 4:15 - 5:15 PM												
Base Vol:	5	50	0	0	68	32	17	0	9	0	0	0
Growth Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Initial Bse:	5	50	0	0	68	32	17	0	9	0	0	0
Added Vol:	11	77	0	0	24	0	0	0	4	0	0	0
ATI:	3	3	0	0	1	0	0	0	1	0	0	0
Initial Fut:	19	130	0	0	93	32	17	0	14	0	0	0
User Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Volume:	19	130	0	0	93	32	17	0	14	0	0	0
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
FinalVolume:	19	130	0	0	93	32	17	0	14	0	0	0
Critical Gap Module:												
Critical Gp:	4.1	xxxx	xxxxx	xxxxx	xxxx	xxxxx	6.4	6.5	6.2	xxxxx	xxxx	xxxxx
FollowUpTim:	2.2	xxxx	xxxxx	xxxxx	xxxx	xxxxx	3.5	4.0	3.3	xxxxx	xxxx	xxxxx
Capacity Module:												
Cnflict Vol:	125	xxxx	xxxxx	xxxx	xxxx	xxxxx	277	277	109	xxxx	xxxx	xxxxx
Potent Cap.:	1474	xxxx	xxxxx	xxxx	xxxx	xxxxx	717	634	950	xxxx	xxxx	xxxxx
Move Cap.:	1474	xxxx	xxxxx	xxxx	xxxx	xxxxx	710	626	950	xxxx	xxxx	xxxxx
Volume/Cap:	0.01	xxxx	xxxx	xxxx	xxxx	xxxx	0.02	0.00	0.01	xxxx	xxxx	xxxx
Level Of Service Module:												
2Way95thQ:	0.0	xxxx	xxxxx	xxxx	xxxx	xxxxx	xxxx	xxxx	xxxxx	xxxx	xxxx	xxxxx
Control Del:	7.5	xxxx	xxxxx	xxxxx	xxxx	xxxxx	xxxxx	xxxx	xxxxx	xxxxx	xxxx	xxxxx
LOS by Move:	A	*	*	*	*	*	*	*	*	*	*	*
Movement:	LT	LTR	RT	LT	LTR	RT	LT	LTR	RT	LT	LTR	RT
Shared Cap.:	xxxx	xxxx	xxxxx	xxxx	xxxx	xxxxx	xxxx	801	xxxxx	xxxx	xxxx	xxxxx
SharedQueue:	0.0	xxxx	xxxxx	xxxxx	xxxx	xxxxx	xxxxx	0.1	xxxxx	xxxxx	xxxx	xxxxx
Shrd ConDel:	7.5	xxxx	xxxxx	xxxxx	xxxx	xxxxx	xxxxx	9.7	xxxxx	xxxxx	xxxx	xxxxx
Shared LOS:	A	*	*	*	*	*	*	A	*	*	*	*
ApproachDel:	xxxxxx			xxxxxx			9.7			xxxxxx		
ApproachLOS:	*			*			A			*		

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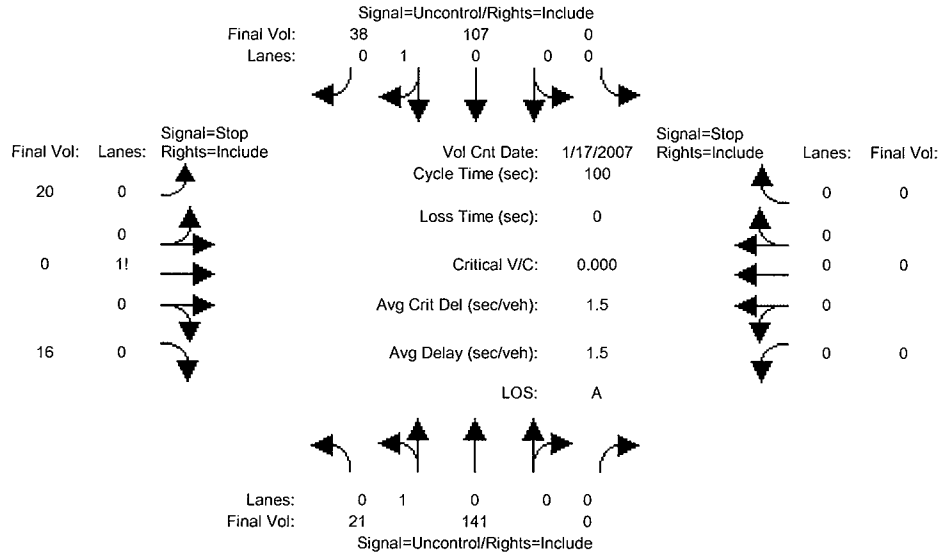
Intersection #5: Airport & Los Banos



Approach:	North Bound			South Bound			East Bound			West Bound		
Movement:	L	T	R	L	T	R	L	T	R	L	T	R
Volume Module: >> Count Date: 17 Jan 2007 << 4:15 - 5:15 PM												
Base Vol:	5	50	0	0	68	32	17	0	9	0	0	0
Growth Adj:	1.20	1.20	1.20	1.20	1.20	1.20	1.20	1.20	1.20	1.20	1.20	1.20
Initial Bse:	6	60	0	0	82	38	20	0	11	0	0	0
Added Vol:	11	77	0	0	24	0	0	0	4	0	0	0
ATI+Cumul:	4	4	0	0	1	0	0	0	1	0	0	0
Initial Fut:	21	141	0	0	107	38	20	0	16	0	0	0
User Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Volume:	21	141	0	0	107	38	20	0	16	0	0	0
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
FinalVolume:	21	141	0	0	107	38	20	0	16	0	0	0
Critical Gap Module:												
Critical Gp:	4.1	xxxx	xxxxx	xxxxx	xxxx	xxxxx	6.4	6.5	6.2	xxxxx	xxxx	xxxxx
FollowUpTim:	2.2	xxxx	xxxxx	xxxxx	xxxx	xxxxx	3.5	4.0	3.3	xxxxx	xxxx	xxxxx
Capacity Module:												
Cnflict Vol:	145	xxxx	xxxxx	xxxx	xxxx	xxxxx	309	309	126	xxxx	xxxx	xxxxx
Potent Cap.:	1450	xxxx	xxxxx	xxxx	xxxx	xxxxx	688	609	930	xxxx	xxxx	xxxxx
Move Cap.:	1450	xxxx	xxxxx	xxxx	xxxx	xxxxx	680	600	930	xxxx	xxxx	xxxxx
Volume/Cap:	0.01	xxxx	xxxx	xxxx	xxxx	xxxx	0.03	0.00	0.02	xxxx	xxxx	xxxx
Level Of Service Module:												
2Way95thQ:	0.0	xxxx	xxxxx	xxxx	xxxx	xxxxx	xxxx	xxxx	xxxxx	xxxx	xxxx	xxxxx
Control Del:	7.5	xxxx	xxxxx	xxxxx	xxxx	xxxxx	xxxxx	xxxx	xxxxx	xxxxx	xxxx	xxxxx
LOS by Move:	A	*	*	*	*	*	*	*	*	*	*	*
Movement:	LT	LTR	RT	LT	LTR	RT	LT	LTR	RT	LT	LTR	RT
Shared Cap.:	xxxx	xxxx	xxxxx	xxxx	xxxx	xxxxx	xxxx	770	xxxxx	xxxx	xxxx	xxxxx
SharedQueue:	0.0	xxxx	xxxxx	xxxxx	xxxx	xxxxx	xxxxx	0.1	xxxxx	xxxxx	xxxx	xxxxx
Shrd ConDel:	7.5	xxxx	xxxxx	xxxxx	xxxx	xxxxx	xxxxx	9.9	xxxxx	xxxxx	xxxx	xxxxx
Shared LOS:	A	*	*	*	*	*	*	A	*	*	*	*
ApproachDel:	xxxxxx			xxxxxx			9.9			xxxxxx		
ApproachLOS:	*			*			A			*		

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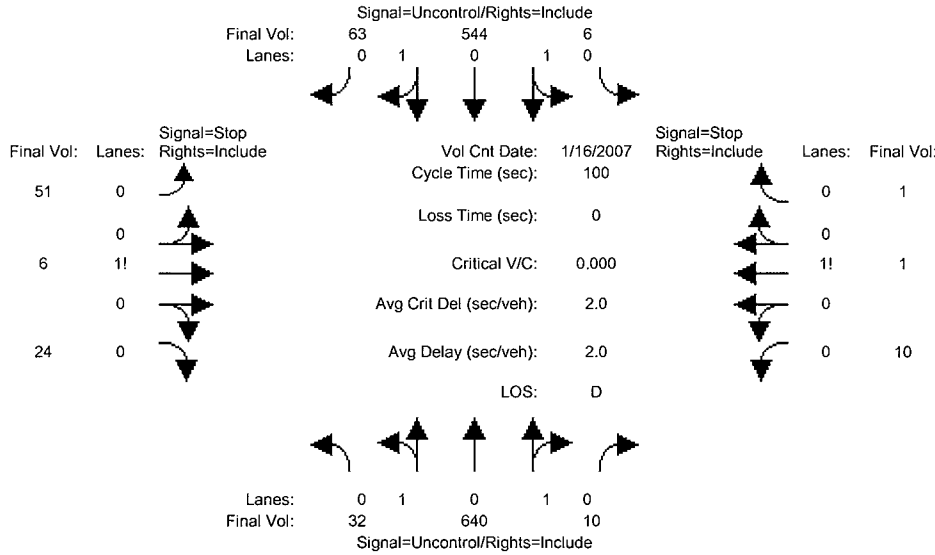
Intersection #6: Hwy 1 & Cypress



Approach:	North Bound			South Bound			East Bound			West Bound		
Movement:	L	T	R	L	T	R	L	T	R	L	T	R
Volume Module: >> Count Date: 16 Jan 2007 << 4:15 - 5:15 PM												
Base Vol:	32	640	10	6	544	63	51	6	24	10	1	1
Growth Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Initial Bse:	32	640	10	6	544	63	51	6	24	10	1	1
Added Vol:	0	0	0	0	0	0	0	0	0	0	0	0
PasserByVol:	0	0	0	0	0	0	0	0	0	0	0	0
Initial Fut:	32	640	10	6	544	63	51	6	24	10	1	1
User Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Volume:	32	640	10	6	544	63	51	6	24	10	1	1
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
FinalVolume:	32	640	10	6	544	63	51	6	24	10	1	1
Critical Gap Module:												
Critical Gp:	4.1	xxxx	xxxxx	4.1	xxxx	xxxxx	7.5	6.5	6.9	7.5	6.5	6.9
FollowUpTim:	2.2	xxxx	xxxxx	2.2	xxxx	xxxxx	3.5	4.0	3.3	3.5	4.0	3.3
Capacity Module:												
Cnflict Vol:	607	xxxx	xxxxx	650	xxxx	xxxxx	972	1302	304	996	1328	325
Potent Cap.:	981	xxxx	xxxxx	946	xxxx	xxxxx	210	162	699	202	157	677
Move Cap.:	981	xxxx	xxxxx	946	xxxx	xxxxx	202	156	699	183	150	677
Volume/Cap:	0.03	xxxx	xxxx	0.01	xxxx	xxxx	0.25	0.04	0.03	0.05	0.01	0.00
Level Of Service Module:												
2Way95thQ:	0.1	xxxx	xxxxx	0.0	xxxx	xxxxx	xxxx	xxxx	xxxxx	xxxx	xxxx	xxxxx
Control Del:	8.8	xxxx	xxxxx	8.8	xxxx	xxxxx	xxxxx	xxxx	xxxxx	xxxxx	xxxx	xxxxx
LOS by Move:	A	*	*	A	*	*	*	*	*	*	*	*
Movement:	LT	LTR	RT	LT	LTR	RT	LT	LTR	RT	LT	LTR	RT
Shared Cap.:	xxxx	xxxx	xxxxx	xxxx	xxxx	xxxxx	xxxx	249	xxxxx	xxxx	191	xxxxx
SharedQueue:	0.1	xxxx	xxxxx	0.0	xxxx	xxxxx	xxxxx	1.4	xxxxx	xxxxx	0.2	xxxxx
Shrd ConDel:	8.8	xxxx	xxxxx	8.8	xxxx	xxxxx	xxxxx	26.3	xxxxx	xxxxx	25.1	xxxxx
Shared LOS:	A	*	*	A	*	*	*	D	*	*	D	*
ApproachDel:	xxxxxx			xxxxxx			26.3			25.1		
ApproachLOS:	*			*			D			D		

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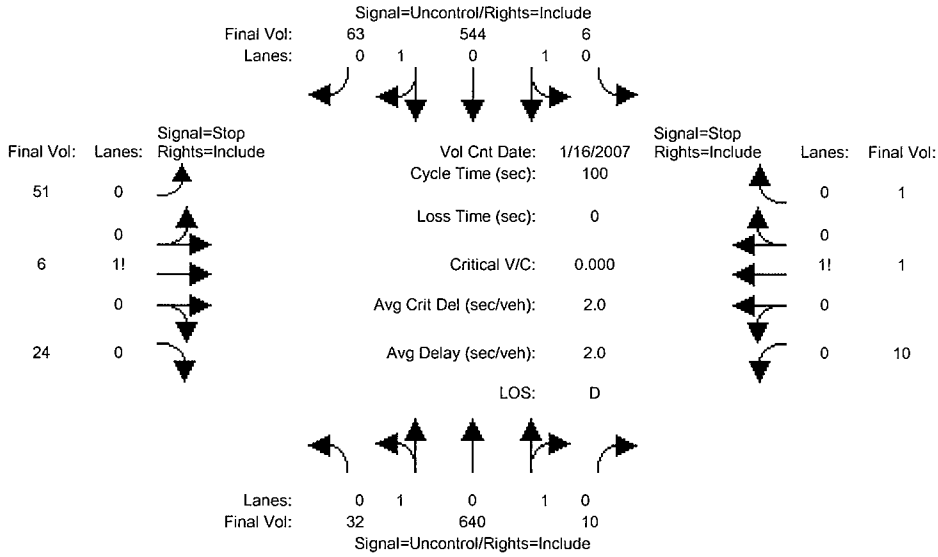
Big Wave Office Park and Wellness Center
Half Moon Bay, California

Level Of Service Computation Report
2000 HCM Unsignalized (Future Volume Alternative)
Background PM

Intersection #6: Hwy 1 & Cypress



Approach:	North Bound			South Bound			East Bound			West Bound		
Movement:	L	T	R	L	T	R	L	T	R	L	T	R
Volume Module: >> Count Date: 16 Jan 2007 << 4:15 - 5:15 PM												
Base Vol:	32	640	10	6	544	63	51	6	24	10	1	1
Growth Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Initial Bse:	32	640	10	6	544	63	51	6	24	10	1	1
Added Vol:	0	0	0	0	0	0	0	0	0	0	0	0
ATI:	0	0	0	0	0	0	0	0	0	0	0	0
Initial Fut:	32	640	10	6	544	63	51	6	24	10	1	1
User Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Volume:	32	640	10	6	544	63	51	6	24	10	1	1
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
FinalVolume:	32	640	10	6	544	63	51	6	24	10	1	1
Critical Gap Module:												
Critical Gp:	4.1	xxxx	xxxxx	4.1	xxxx	xxxxx	7.5	6.5	6.9	7.5	6.5	6.9
FollowUpTim:	2.2	xxxx	xxxxx	2.2	xxxx	xxxxx	3.5	4.0	3.3	3.5	4.0	3.3
Capacity Module:												
Cnflict Vol:	607	xxxx	xxxxx	650	xxxx	xxxxx	972	1302	304	996	1328	325
Potent Cap.:	981	xxxx	xxxxx	946	xxxx	xxxxx	210	162	699	202	157	677
Move Cap.:	981	xxxx	xxxxx	946	xxxx	xxxxx	202	156	699	183	150	677
Volume/Cap:	0.03	xxxx	xxxx	0.01	xxxx	xxxx	0.25	0.04	0.03	0.05	0.01	0.00
Level Of Service Module:												
2Way95thQ:	0.1	xxxx	xxxxx	0.0	xxxx	xxxxx	xxxx	xxxx	xxxxx	xxxx	xxxx	xxxxx
Control Del:	8.8	xxxx	xxxxx	8.8	xxxx	xxxxx	xxxxx	xxxx	xxxxx	xxxxx	xxxx	xxxxx
LOS by Move:	A	*	*	A	*	*	*	*	*	*	*	*
Movement:	LT	LTR	RT	LT	LTR	RT	LT	LTR	RT	LT	LTR	RT
Shared Cap.:	xxxx	xxxx	xxxxx	xxxx	xxxx	xxxxx	xxxx	249	xxxxx	xxxx	191	xxxxx
SharedQueue:	0.1	xxxx	xxxxx	0.0	xxxx	xxxxx	xxxxx	1.4	xxxxx	xxxxx	0.2	xxxxx
Shrd ConDel:	8.8	xxxx	xxxxx	8.8	xxxx	xxxxx	xxxxx	26.3	xxxxx	xxxxx	25.1	xxxxx
Shared LOS:	A	*	*	A	*	*	*	D	*	*	D	*
ApproachDel:	xxxxxx			xxxxxx			26.3			25.1		
ApproachLOS:	*			*			D			D		

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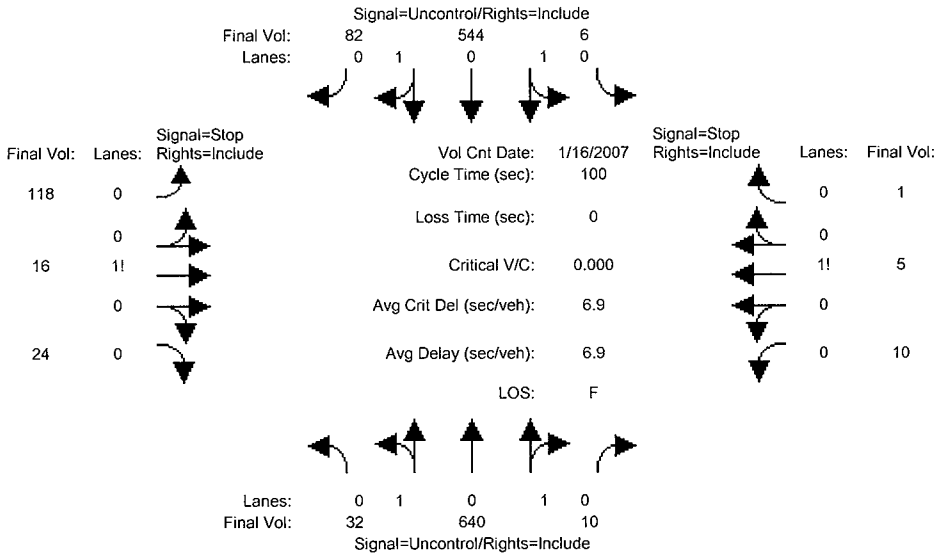
Big Wave Office Park and Wellness Center
Half Moon Bay, California

Level Of Service Computation Report
2000 HCM Unsignalized (Future Volume Alternative)
Project PM

Intersection #6: Hwy 1 & Cypress



Approach:	North Bound			South Bound			East Bound			West Bound		
Movement:	L	T	R	L	T	R	L	T	R	L	T	R
Volume Module: >> Count Date: 16 Jan 2007 << 4:15 - 5:15 PM												
Base Vol:	32	640	10	6	544	63	51	6	24	10	1	1
Growth Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Initial Bse:	32	640	10	6	544	63	51	6	24	10	1	1
Added Vol:	0	0	0	0	0	19	67	10	0	0	4	0
ATI:	0	0	0	0	0	0	0	0	0	0	0	0
Initial Fut:	32	640	10	6	544	82	118	16	24	10	5	1
User Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Volume:	32	640	10	6	544	82	118	16	24	10	5	1
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
FinalVolume:	32	640	10	6	544	82	118	16	24	10	5	1
Critical Gap Module:												
Critical Gp:	4.1	xxxx	xxxxx	4.1	xxxx	xxxxx	7.5	6.5	6.9	7.5	6.5	6.9
FollowUpTim:	2.2	xxxx	xxxxx	2.2	xxxx	xxxxx	3.5	4.0	3.3	3.5	4.0	3.3
Capacity Module:												
Cnflict Vol:	626	xxxx	xxxxx	650	xxxx	xxxxx	984	1311	313	1001	1347	325
Potent Cap.:	965	xxxx	xxxxx	946	xxxx	xxxxx	206	160	689	200	152	677
Move Cap.:	965	xxxx	xxxxx	946	xxxx	xxxxx	194	154	689	172	146	677
Volume/Cap:	0.03	xxxx	xxxx	0.01	xxxx	xxxx	0.61	0.10	0.03	0.06	0.03	0.00
Level Of Service Module:												
2Way95thQ:	0.1	xxxx	xxxxx	0.0	xxxx	xxxxx	xxxx	xxxx	xxxxx	xxxx	xxxx	xxxxx
Control Del:	8.9	xxxx	xxxxx	8.8	xxxx	xxxxx	xxxxx	xxxx	xxxxx	xxxxx	xxxx	xxxxx
LOS by Move:	A	*	*	A	*	*	*	*	*	*	*	*
Movement:	LT	LTR	RT	LT	LTR	RT	LT	LTR	RT	LT	LTR	RT
Shared Cap.:	xxxx	xxxx	xxxxx	xxxx	xxxx	xxxxx	xxxx	212	xxxxx	xxxx	171	xxxxx
SharedQueue:	0.1	xxxx	xxxxx	0.0	xxxx	xxxxx	xxxxx	5.0	xxxxx	xxxxx	0.3	xxxxx
Shrd ConDel:	8.9	xxxx	xxxxx	8.8	xxxx	xxxxx	xxxxx	59.8	xxxxx	xxxxx	28.3	xxxxx
Shared LOS:	A	*	*	A	*	*	*	F	*	*	D	*
ApproachDel:	xxxxxx			xxxxxx			59.8			28.3		
ApproachLOS:	*			*			F			D		

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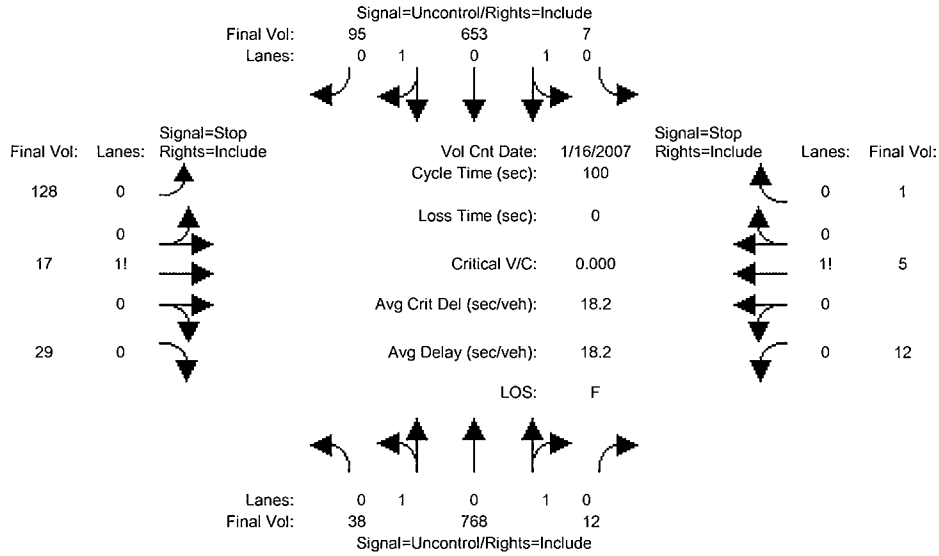
Big Wave Office Park and Wellness Center
Half Moon Bay, California

Level Of Service Computation Report
2000 HCM Unsignalized (Future Volume Alternative)
Cumulative Project PM

Intersection #6: Hwy 1 & Cypress



Approach:	North Bound			South Bound			East Bound			West Bound		
Movement:	L	T	R	L	T	R	L	T	R	L	T	R
Volume Module: >> Count Date: 16 Jan 2007 << 4:15 - 5:15 PM												
Base Vol:	32	640	10	6	544	63	51	6	24	10	1	1
Growth Adj:	1.20	1.20	1.20	1.20	1.20	1.20	1.20	1.20	1.20	1.20	1.20	1.20
Initial Bse:	38	768	12	7	653	76	61	7	29	12	1	1
Added Vol:	0	0	0	0	0	19	67	10	0	0	4	0
ATI+Cumul:	0	0	0	0	0	0	0	0	0	0	0	0
Initial Fut:	38	768	12	7	653	95	128	17	29	12	5	1
User Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Volume:	38	768	12	7	653	95	128	17	29	12	5	1
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
FinalVolume:	38	768	12	7	653	95	128	17	29	12	5	1
Critical Gap Module:												
Critical Gp:	4.1	xxxx	xxxxx	4.1	xxxx	xxxxx	7.5	6.5	6.9	7.5	6.5	6.9
FollowUpTim:	2.2	xxxx	xxxxx	2.2	xxxx	xxxxx	3.5	4.0	3.3	3.5	4.0	3.3
Capacity Module:												
Cnflict Vol:	747	xxxx	xxxxx	780	xxxx	xxxxx	1178	1571	374	1200	1613	390
Potent Cap.:	870	xxxx	xxxxx	846	xxxx	xxxxx	148	112	629	143	105	614
Move Cap.:	870	xxxx	xxxxx	846	xxxx	xxxxx	136	106	629	115	100	614
Volume/Cap:	0.04	xxxx	xxxx	0.01	xxxx	xxxx	0.94	0.16	0.05	0.10	0.05	0.00
Level Of Service Module:												
2Way95thQ:	0.1	xxxx	xxxxx	0.0	xxxx	xxxxx	xxxx	xxxx	xxxxx	xxxx	xxxx	xxxxx
Control Del:	9.3	xxxx	xxxxx	9.3	xxxx	xxxxx	xxxxx	xxxx	xxxxx	xxxxx	xxxx	xxxxx
LOS by Move:	A	*	*	A	*	*	*	*	*	*	*	*
Movement:	LT	LTR	RT	LT	LTR	RT	LT	LTR	RT	LT	LTR	RT
Shared Cap.:	xxxx	xxxx	xxxxx	xxxx	xxxx	xxxxx	xxxx	152	xxxxx	xxxx	116	xxxxx
SharedQueue:	0.1	xxxx	xxxxx	0.0	xxxx	xxxxx	xxxxx	9.6	xxxxx	xxxxx	0.5	xxxxx
Shrd ConDel:	9.3	xxxx	xxxxx	9.3	xxxx	xxxxx	xxxxx	178	xxxxx	xxxxx	41.9	xxxxx
Shared LOS:	A	*	*	A	*	*	*	F	*	*	E	*
ApproachDel:	xxxxxx			xxxxxx			177.7			41.9		
ApproachLOS:	*			*			F			E		

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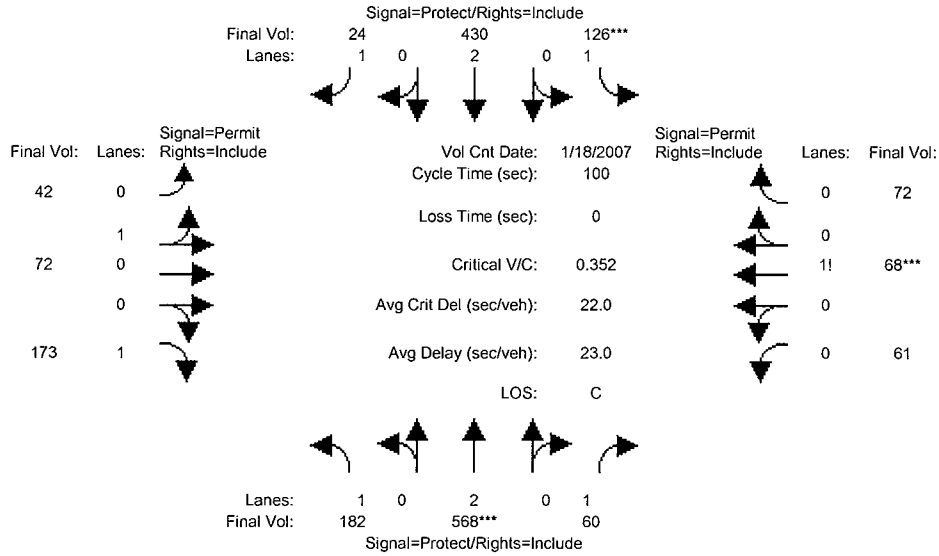
Big Wave Office Park and Wellness Center
Half Moon Bay, California

Level Of Service Computation Report
2000 HCM Operations (Future Volume Alternative)
Existing PM

Intersection #7: Hwy 1 & Capistrano (S)



Approach:	North Bound			South Bound			East Bound			West Bound		
Movement:	L -	T -	R	L -	T -	R	L -	T -	R	L -	T -	R
Min. Green:	7	10	10	7	10	10	0	0	0	0	0	0
Volume Module: >> Count Date: 18 Jan 2007 << 4:15 - 5:15 PM												
Base Vol:	182	568	60	126	430	24	42	72	173	61	68	72
Growth Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Initial Bse:	182	568	60	126	430	24	42	72	173	61	68	72
Added Vol:	0	0	0	0	0	0	0	0	0	0	0	0
PasserByVol:	0	0	0	0	0	0	0	0	0	0	0	0
Initial Fut:	182	568	60	126	430	24	42	72	173	61	68	72
User Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Volume:	182	568	60	126	430	24	42	72	173	61	68	72
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:	182	568	60	126	430	24	42	72	173	61	68	72
PCE Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
MLF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
FinalVolume:	182	568	60	126	430	24	42	72	173	61	68	72
Saturation Flow Module:												
Sat/Lane:	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Adjustment:	0.95	0.95	0.85	0.95	0.95	0.85	0.86	0.86	0.85	0.85	0.85	0.85
Lanes:	1.00	2.00	1.00	1.00	2.00	1.00	0.37	0.63	1.00	0.30	0.34	0.36
Final Sat.:	1805	3610	1615	1805	3610	1615	603	1034	1615	490	546	579
Capacity Analysis Module:												
Vol/Sat:	0.10	0.16	0.04	0.07	0.12	0.01	0.07	0.07	0.11	0.12	0.12	0.12
Crit Moves:		****		****							****	
Green/Cycle:	0.30	0.45	0.45	0.20	0.35	0.35	0.35	0.35	0.35	0.35	0.35	0.35
Volume/Cap:	0.34	0.35	0.08	0.35	0.34	0.04	0.20	0.20	0.30	0.35	0.35	0.35
Delay/Veh:	27.9	18.2	15.9	35.1	24.2	21.5	22.6	22.6	23.7	24.2	24.2	24.2
User DelAdj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
AdjDel/Veh:	27.9	18.2	15.9	35.1	24.2	21.5	22.6	22.6	23.7	24.2	24.2	24.2
LOS by Move:	C	B	B	D	C	C	C	C	C	C	C	C
HCM2kAvgQ:	4	6	1	4	5	0	2	2	4	5	5	5

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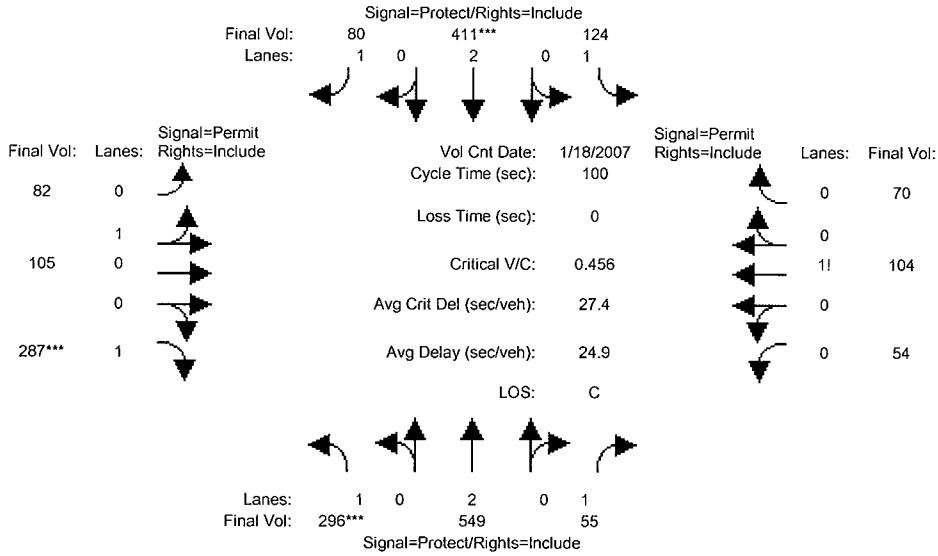
Big Wave Office Park and Wellness Center
Half Moon Bay, California

Level Of Service Computation Report
2000 HCM Operations (Future Volume Alternative)
Background PM

Intersection #7: Hwy 1 & Capistrano (S)



Approach:	North Bound			South Bound			East Bound			West Bound		
Movement:	L	T	R	L	T	R	L	T	R	L	T	R
Min. Green:	7	10	10	7	10	10	0	0	0	0	0	0
Volume Module: >> Count Date: 18 Jan 2007 << 4:15 - 5:15 PM												
Base Vol:	182	568	60	126	430	24	42	72	173	61	68	72
Growth Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Initial Bse:	182	568	60	126	430	24	42	72	173	61	68	72
Added Vol:	0	0	0	0	0	0	0	0	0	0	0	0
ATI:	114	-19	-5	-2	-19	56	40	33	114	-7	36	-2
Initial Fut:	296	549	55	124	411	80	82	105	287	54	104	70
User Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Volume:	296	549	55	124	411	80	82	105	287	54	104	70
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:	296	549	55	124	411	80	82	105	287	54	104	70
PCE Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
MLF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
FinalVolume:	296	549	55	124	411	80	82	105	287	54	104	70
Saturation Flow Module:												
Sat/Lane:	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Adjustment:	0.95	0.95	0.85	0.95	0.95	0.85	0.79	0.79	0.85	0.86	0.86	0.86
Lanes:	1.00	2.00	1.00	1.00	2.00	1.00	0.44	0.56	1.00	0.24	0.45	0.31
Final Sat.:	1805	3610	1615	1805	3610	1615	657	842	1615	389	749	504
Capacity Analysis Module:												
Vol/Sat:	0.16	0.15	0.03	0.07	0.11	0.05	0.12	0.12	0.18	0.14	0.14	0.14
Crit Moves:	****				****				****			
Green/Cycle:	0.36	0.42	0.42	0.19	0.25	0.25	0.39	0.39	0.39	0.39	0.39	0.39
Volume/Cap:	0.46	0.36	0.08	0.36	0.46	0.20	0.32	0.32	0.46	0.36	0.36	0.36
Delay/Veh:	25.0	20.1	17.6	35.7	32.1	29.8	21.6	21.6	23.1	21.9	21.9	21.9
User DelAdj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
AdjDel/Veh:	25.0	20.1	17.6	35.7	32.1	29.8	21.6	21.6	23.1	21.9	21.9	21.9
LOS by Move:	C	C	B	D	C	C	C	C	C	C	C	C
HCM2kAvgQ:	7	6	1	4	6	2	4	4	7	5	5	5

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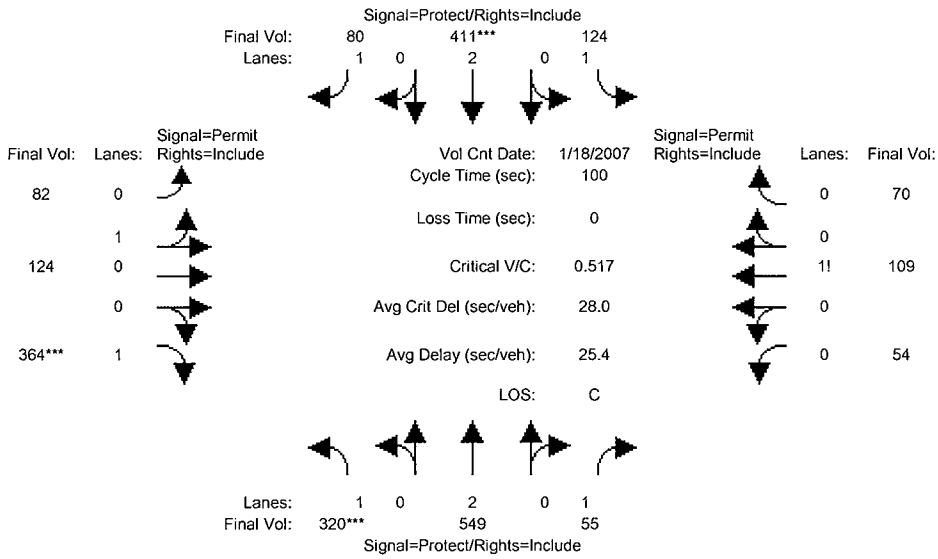
Big Wave Office Park and Wellness Center
Half Moon Bay, California

Level Of Service Computation Report
2000 HCM Operations (Future Volume Alternative)
Project PM

Intersection #7: Hwy 1 & Capistrano (S)



Approach:	North Bound			South Bound			East Bound			West Bound		
Movement:	L	T	R	L	T	R	L	T	R	L	T	R
Min. Green:	7	10	10	7	10	10	0	0	0	0	0	0
Volume Module: >> Count Date: 18 Jan 2007 << 4:15 - 5:15 PM												
Base Vol:	182	568	60	126	430	24	42	72	173	61	68	72
Growth Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Initial Bse:	182	568	60	126	430	24	42	72	173	61	68	72
Added Vol:	24	0	0	0	0	0	0	19	77	0	5	0
ATI:	114	-19	-5	-2	-19	56	40	33	114	-7	36	-2
Initial Fut:	320	549	55	124	411	80	82	124	364	54	109	70
User Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Volume:	320	549	55	124	411	80	82	124	364	54	109	70
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:	320	549	55	124	411	80	82	124	364	54	109	70
PCE Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
MLF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
FinalVolume:	320	549	55	124	411	80	82	124	364	54	109	70
Saturation Flow Module:												
Sat/Lane:	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Adjustment:	0.95	0.95	0.85	0.95	0.95	0.85	0.82	0.82	0.85	0.86	0.86	0.86
Lanes:	1.00	2.00	1.00	1.00	2.00	1.00	0.40	0.60	1.00	0.23	0.47	0.30
Final Sat.:	1805	3610	1615	1805	3610	1615	616	932	1615	381	769	494
Capacity Analysis Module:												
Vol/Sat:	0.18	0.15	0.03	0.07	0.11	0.05	0.13	0.13	0.23	0.14	0.14	0.14
Crit Moves:	****				****				****			
Green/Cycle:	0.34	0.39	0.39	0.18	0.22	0.22	0.44	0.44	0.44	0.44	0.44	0.44
Volume/Cap:	0.52	0.39	0.09	0.39	0.52	0.22	0.30	0.30	0.52	0.32	0.32	0.32
Delay/Veh:	27.0	22.4	19.6	37.1	34.9	32.3	18.6	18.6	21.2	18.8	18.8	18.8
User DelAdj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
AdjDel/Veh:	27.0	22.4	19.6	37.1	34.9	32.3	18.6	18.6	21.2	18.8	18.8	18.8
LOS by Move:	C	C	B	D	C	C	B	B	C	B	B	B
HCM2kAvgQ:	8	6	1	4	6	2	4	4	8	5	5	5

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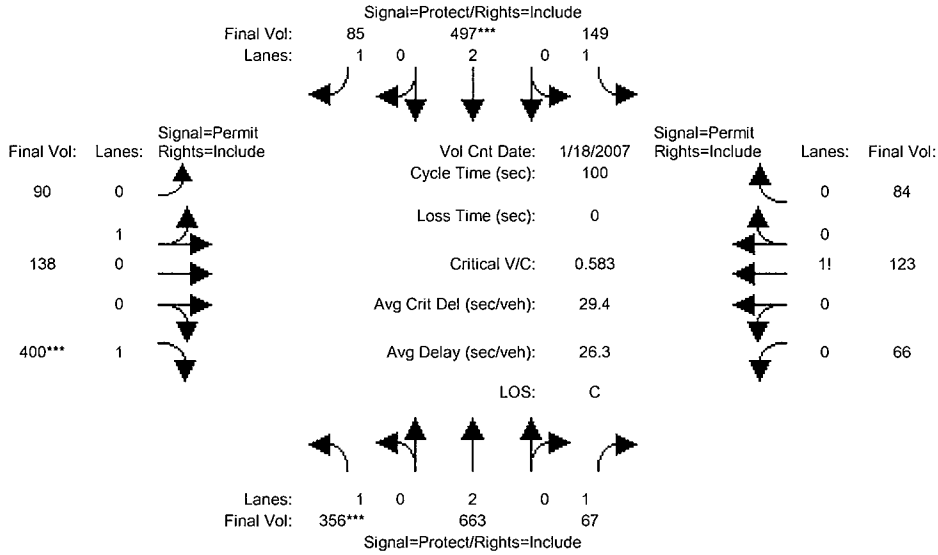
Big Wave Office Park and Wellness Center
Half Moon Bay, California

Level Of Service Computation Report
2000 HCM Operations (Future Volume Alternative)
Cumulative Project PM

Intersection #7: Hwy 1 & Capistrano (S)



Approach:	North Bound			South Bound			East Bound			West Bound		
Movement:	L	T	R	L	T	R	L	T	R	L	T	R
Min. Green:	7	10	10	7	10	10	0	0	0	0	0	0
Volume Module: >> Count Date: 18 Jan 2007 << 4:15 - 5:15 PM												
Base Vol:	182	568	60	126	430	24	42	72	173	61	68	72
Growth Adj:	1.20	1.20	1.20	1.20	1.20	1.20	1.20	1.20	1.20	1.20	1.20	1.20
Initial Bse:	218	682	72	151	516	29	50	86	208	73	82	86
Added Vol:	24	0	0	0	0	0	0	19	77	0	5	0
ATI+Cumul:	114	-19	-5	-2	-19	56	40	33	115	-7	36	-2
Initial Fut:	356	663	67	149	497	85	90	138	400	66	123	84
User Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Volume:	356	663	67	149	497	85	90	138	400	66	123	84
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:	356	663	67	149	497	85	90	138	400	66	123	84
PCE Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
MLF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
FinalVolume:	356	663	67	149	497	85	90	138	400	66	123	84
Saturation Flow Module:												
Sat/Lane:	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Adjustment:	0.95	0.95	0.85	0.95	0.95	0.85	0.78	0.78	0.85	0.85	0.85	0.85
Lanes:	1.00	2.00	1.00	1.00	2.00	1.00	0.40	0.60	1.00	0.24	0.45	0.31
Final Sat.:	1805	3610	1615	1805	3610	1615	583	892	1615	391	724	498
Capacity Analysis Module:												
Vol/Sat:	0.20	0.18	0.04	0.08	0.14	0.05	0.16	0.16	0.25	0.17	0.17	0.17
Crit Moves:	****				****				****			
Green/Cycle:	0.34	0.40	0.40	0.18	0.24	0.24	0.42	0.42	0.42	0.42	0.42	0.42
Volume/Cap:	0.58	0.46	0.10	0.46	0.58	0.22	0.37	0.37	0.58	0.40	0.40	0.40
Delay/Veh:	28.7	22.5	19.1	37.8	34.8	31.1	19.9	19.9	23.3	20.3	20.3	20.3
User DelAdj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
AdjDel/Veh:	28.7	22.5	19.1	37.8	34.8	31.1	19.9	19.9	23.3	20.3	20.3	20.3
LOS by Move:	C	C	B	D	C	C	B	B	C	C	C	C
HCM2kAvgQ:	9	8	1	5	8	2	5	5	10	6	6	6

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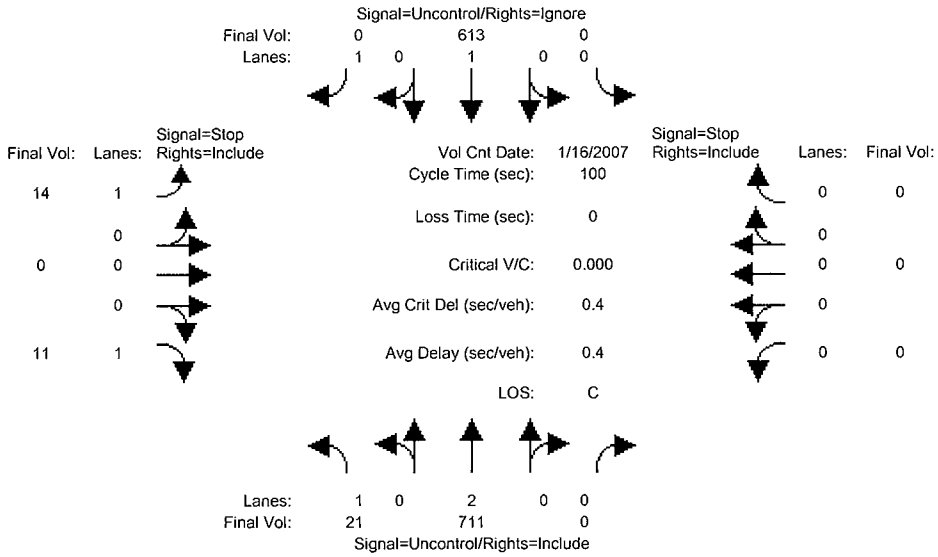
Big Wave Office Park and Wellness Center
Half Moon Bay, California

Level Of Service Computation Report
2000 HCM Unsignalized (Future Volume Alternative)
Existing PM

Intersection #17: Hwy 1 & Capistrano (N)



Approach:	North Bound			South Bound			East Bound			West Bound		
Movement:	L	T	R	L	T	R	L	T	R	L	T	R
Volume Module: >> Count Date: 16 Jan 2007 << 4:30 - 5:30 PM												
Base Vol:	21	711	0	0	613	20	14	0	11	0	0	0
Growth Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Initial Bse:	21	711	0	0	613	20	14	0	11	0	0	0
Added Vol:	0	0	0	0	0	0	0	0	0	0	0	0
PasserByVol:	0	0	0	0	0	0	0	0	0	0	0	0
Initial Fut:	21	711	0	0	613	20	14	0	11	0	0	0
User Adj:	1.00	1.00	1.00	1.00	1.00	0.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Adj:	1.00	1.00	1.00	1.00	1.00	0.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Volume:	21	711	0	0	613	0	14	0	11	0	0	0
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
FinalVolume:	21	711	0	0	613	0	14	0	11	0	0	0
Critical Gap Module:												
Critical Gp:	4.1	xxxx	xxxxx	xxxxx	xxxx	xxxxx	6.4	xxxx	6.2	xxxxx	xxxx	xxxxx
FollowUpTim:	2.2	xxxx	xxxxx	xxxxx	xxxx	xxxxx	3.5	xxxx	3.3	xxxxx	xxxx	xxxxx
Capacity Module:												
Cnflict Vol:	613	xxxx	xxxxx	xxxx	xxxx	xxxxx	1011	xxxx	613	xxxx	xxxx	xxxxx
Potent Cap.:	976	xxxx	xxxxx	xxxx	xxxx	xxxxx	268	xxxx	496	xxxx	xxxx	xxxxx
Move Cap.:	976	xxxx	xxxxx	xxxx	xxxx	xxxxx	264	xxxx	496	xxxx	xxxx	xxxxx
Volume/Cap:	0.02	xxxx	xxxx	xxxx	xxxx	xxxx	0.05	xxxx	0.02	xxxx	xxxx	xxxx
Level Of Service Module:												
2Way95thQ:	0.1	xxxx	xxxxx	xxxx	xxxx	xxxxx	0.2	xxxx	0.1	xxxx	xxxx	xxxxx
Control Del:	8.8	xxxx	xxxxx	xxxxx	xxxx	xxxxx	19.4	xxxx	12.4	xxxxx	xxxx	xxxxx
LOS by Move:	A	*	*	*	*	*	C	*	B	*	*	*
Movement:	LT	LTR	RT	LT	LTR	RT	LT	LTR	RT	LT	LTR	RT
Shared Cap.:	xxxx	xxxx	xxxxx	xxxx	xxxx	xxxxx	xxxx	xxxx	xxxxx	xxxx	xxxx	xxxxx
SharedQueue:	xxxxx	xxxx	xxxxx	xxxxx	xxxx	xxxxx	xxxxx	xxxx	xxxxx	xxxxx	xxxx	xxxxx
Shrd ConDel:	xxxxx	xxxx	xxxxx	xxxxx	xxxx	xxxxx	xxxxx	xxxx	xxxxx	xxxxx	xxxx	xxxxx
Shared LOS:	*	*	*	*	*	*	*	*	*	*	*	*
ApproachDel:	xxxxxx			xxxxxx			16.3			xxxxxx		
ApproachLOS:	*			*			C			*		

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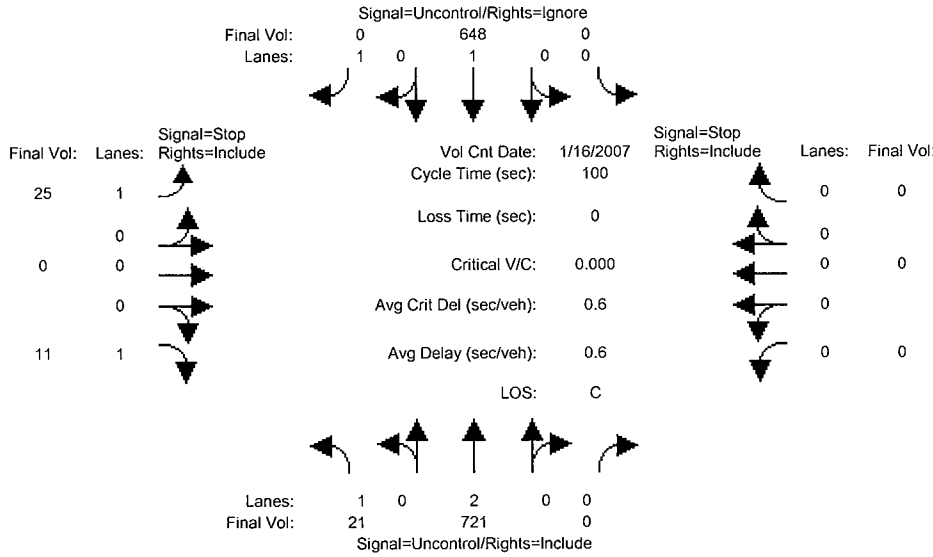
Big Wave Office Park and Wellness Center
Half Moon Bay, California

Level Of Service Computation Report
2000 HCM Unsignalized (Future Volume Alternative)
Background PM

Intersection #17: Hwy 1 & Capistrano (N)



Approach:	North Bound			South Bound			East Bound			West Bound		
Movement:	L	T	R	L	T	R	L	T	R	L	T	R
Volume Module: >> Count Date: 16 Jan 2007 << 4:30 - 5:30 PM												
Base Vol:	21	711	0	0	613	20	14	0	11	0	0	0
Growth Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Initial Bse:	21	711	0	0	613	20	14	0	11	0	0	0
Added Vol:	0	0	0	0	0	0	0	0	0	0	0	0
ATI:	0	10	0	0	35	10	11	0	0	0	0	0
Initial Fut:	21	721	0	0	648	30	25	0	11	0	0	0
User Adj:	1.00	1.00	1.00	1.00	1.00	0.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Adj:	1.00	1.00	1.00	1.00	1.00	0.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Volume:	21	721	0	0	648	0	25	0	11	0	0	0
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
FinalVolume:	21	721	0	0	648	0	25	0	11	0	0	0
Critical Gap Module:												
Critical Gp:	4.1	xxxx	xxxxx	xxxxx	xxxx	xxxxx	6.4	xxxx	6.2	xxxxx	xxxx	xxxxx
FollowUpTim:	2.2	xxxx	xxxxx	xxxxx	xxxx	xxxxx	3.5	xxxx	3.3	xxxxx	xxxx	xxxxx
Capacity Module:												
Cnflict Vol:	648	xxxx	xxxxx	xxxx	xxxx	xxxxx	1051	xxxx	648	xxxx	xxxx	xxxxx
Potent Cap.:	947	xxxx	xxxxx	xxxx	xxxx	xxxxx	254	xxxx	474	xxxx	xxxx	xxxxx
Move Cap.:	947	xxxx	xxxxx	xxxx	xxxx	xxxxx	249	xxxx	474	xxxx	xxxx	xxxxx
Volume/Cap:	0.02	xxxx	xxxx	xxxx	xxxx	xxxx	0.10	xxxx	0.02	xxxx	xxxx	xxxx
Level Of Service Module:												
2Way95thQ:	0.1	xxxx	xxxxx	xxxx	xxxx	xxxxx	0.3	xxxx	0.1	xxxx	xxxx	xxxxx
Control Del:	8.9	xxxx	xxxxx	xxxxx	xxxx	xxxxx	21.0	xxxx	12.8	xxxxx	xxxx	xxxxx
LOS by Move:	A	*	*	*	*	*	C	*	B	*	*	*
Movement:	LT	LTR	RT	LT	LTR	RT	LT	LTR	RT	LT	LTR	RT
Shared Cap.:	xxxx	xxxx	xxxxx	xxxx	xxxx	xxxxx	xxxx	xxxx	xxxxx	xxxx	xxxx	xxxxx
SharedQueue:	xxxxx	xxxx	xxxxx	xxxxx	xxxx	xxxxx	xxxxx	xxxx	xxxxx	xxxxx	xxxx	xxxxx
Shrd ConDel:	xxxxx	xxxx	xxxxx	xxxxx	xxxx	xxxxx	xxxxx	xxxx	xxxxx	xxxxx	xxxx	xxxxx
Shared LOS:	*	*	*	*	*	*	*	*	*	*	*	*
ApproachDel:	xxxxxx			xxxxxx			18.5			xxxxxx		
ApproachLOS:	*			*			C			*		

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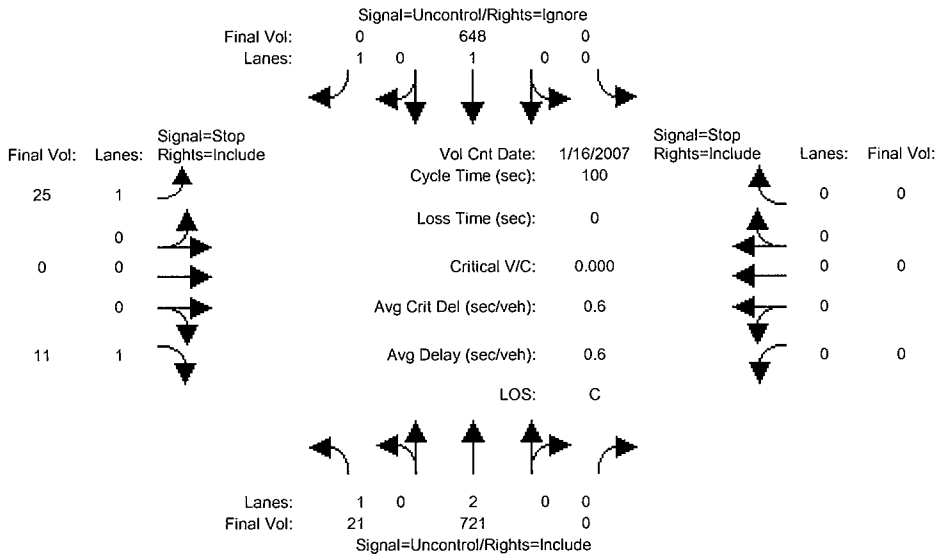
Big Wave Office Park and Wellness Center
Half Moon Bay, California

Level Of Service Computation Report
2000 HCM Unsignalized (Future Volume Alternative)
Project PM

Intersection #17: Hwy 1 & Capistrano (N)



Approach:	North Bound			South Bound			East Bound			West Bound		
Movement:	L	T	R	L	T	R	L	T	R	L	T	R
Volume Module: >> Count Date: 16 Jan 2007 << 4:30 - 5:30 PM												
Base Vol:	21	711	0	0	613	20	14	0	11	0	0	0
Growth Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Initial Bse:	21	711	0	0	613	20	14	0	11	0	0	0
Added Vol:	0	0	0	0	0	0	0	0	0	0	0	0
ATI:	0	10	0	0	35	10	11	0	0	0	0	0
Initial Fut:	21	721	0	0	648	30	25	0	11	0	0	0
User Adj:	1.00	1.00	1.00	1.00	1.00	0.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Adj:	1.00	1.00	1.00	1.00	1.00	0.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Volume:	21	721	0	0	648	0	25	0	11	0	0	0
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
FinalVolume:	21	721	0	0	648	0	25	0	11	0	0	0
Critical Gap Module:												
Critical Gp:	4.1	xxxx	xxxxx	xxxxx	xxxx	xxxxx	6.4	xxxx	6.2	xxxxx	xxxx	xxxxx
FollowUpTim:	2.2	xxxx	xxxxx	xxxxx	xxxx	xxxxx	3.5	xxxx	3.3	xxxxx	xxxx	xxxxx
Capacity Module:												
Cnflict Vol:	648	xxxx	xxxxx	xxxx	xxxx	xxxxx	1051	xxxx	648	xxxx	xxxx	xxxxx
Potent Cap.:	947	xxxx	xxxxx	xxxx	xxxx	xxxxx	254	xxxx	474	xxxx	xxxx	xxxxx
Move Cap.:	947	xxxx	xxxxx	xxxx	xxxx	xxxxx	249	xxxx	474	xxxx	xxxx	xxxxx
Volume/Cap:	0.02	xxxx	xxxx	xxxx	xxxx	xxxx	0.10	xxxx	0.02	xxxx	xxxx	xxxx
Level Of Service Module:												
2Way95thQ:	0.1	xxxx	xxxxx	xxxx	xxxx	xxxxx	0.3	xxxx	0.1	xxxx	xxxx	xxxxx
Control Del:	8.9	xxxx	xxxxx	xxxxx	xxxx	xxxxx	21.0	xxxx	12.8	xxxxx	xxxx	xxxxx
LOS by Move:	A	*	*	*	*	*	C	*	B	*	*	*
Movement:	LT	LTR	RT	LT	LTR	RT	LT	LTR	RT	LT	LTR	RT
Shared Cap.:	xxxx	xxxx	xxxxx	xxxx	xxxx	xxxxx	xxxx	xxxx	xxxxx	xxxx	xxxx	xxxxx
SharedQueue:	xxxxx	xxxx	xxxxx	xxxxx	xxxx	xxxxx	xxxxx	xxxx	xxxxx	xxxxx	xxxx	xxxxx
Shrd ConDel:	xxxxx	xxxx	xxxxx	xxxxx	xxxx	xxxxx	xxxxx	xxxx	xxxxx	xxxxx	xxxx	xxxxx
Shared LOS:	*	*	*	*	*	*	*	*	*	*	*	*
ApproachDel:	xxxxxx			xxxxxx			18.5			xxxxxx		
ApproachLOS:	*			*			C			*		

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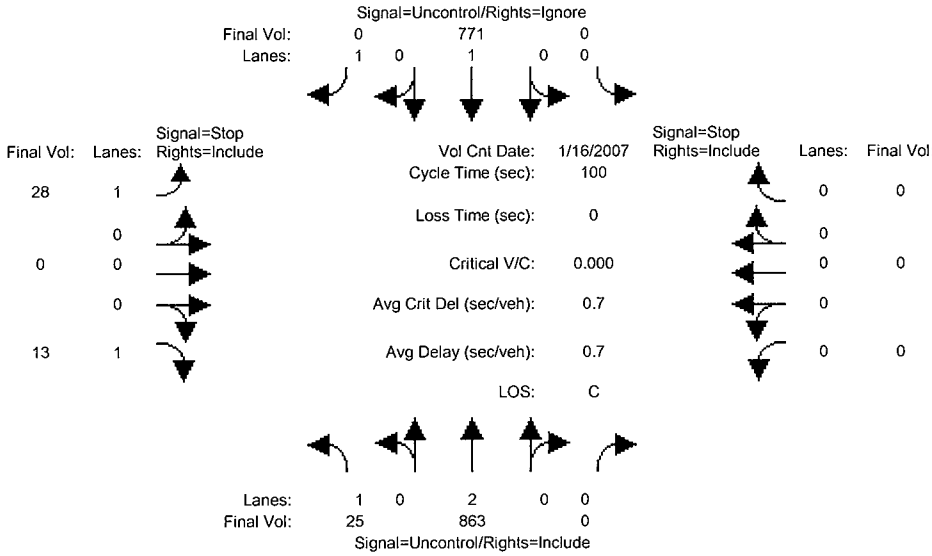
Big Wave Office Park and Wellness Center
Half Moon Bay, California

Level Of Service Computation Report
2000 HCM Unsignalized (Future Volume Alternative)
Cumulative Project PM

Intersection #17: Hwy 1 & Capistrano (N)



Approach:	North Bound			South Bound			East Bound			West Bound		
Movement:	L	T	R	L	T	R	L	T	R	L	T	R
Volume Module: >> Count Date: 16 Jan 2007 << 4:30 - 5:30 PM												
Base Vol:	21	711	0	0	613	20	14	0	11	0	0	0
Growth Adj:	1.20	1.20	1.20	1.20	1.20	1.20	1.20	1.20	1.20	1.20	1.20	1.20
Initial Bse:	25	853	0	0	736	24	17	0	13	0	0	0
Added Vol:	0	0	0	0	0	0	0	0	0	0	0	0
ATI+Cumul:	0	10	0	0	35	10	11	0	0	0	0	0
Initial Fut:	25	863	0	0	771	34	28	0	13	0	0	0
User Adj:	1.00	1.00	1.00	1.00	1.00	0.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Adj:	1.00	1.00	1.00	1.00	1.00	0.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Volume:	25	863	0	0	771	0	28	0	13	0	0	0
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
FinalVolume:	25	863	0	0	771	0	28	0	13	0	0	0
Critical Gap Module:												
Critical Gp:	4.1	xxxx	xxxxx	xxxxx	xxxx	xxxxx	6.4	xxxx	6.2	xxxxx	xxxx	xxxxx
FollowUpTim:	2.2	xxxx	xxxxx	xxxxx	xxxx	xxxxx	3.5	xxxx	3.3	xxxxx	xxxx	xxxxx
Capacity Module:												
Cnflict Vol:	771	xxxx	xxxxx	xxxx	xxxx	xxxxx	1253	xxxx	771	xxxx	xxxx	xxxxx
Potent Cap.:	853	xxxx	xxxxx	xxxx	xxxx	xxxxx	192	xxxx	403	xxxx	xxxx	xxxxx
Move Cap.:	853	xxxx	xxxxx	xxxx	xxxx	xxxxx	188	xxxx	403	xxxx	xxxx	xxxxx
Volume/Cap:	0.03	xxxx	xxxx	xxxx	xxxx	xxxx	0.15	xxxx	0.03	xxxx	xxxx	xxxx
Level Of Service Module:												
2Way95thQ:	0.1	xxxx	xxxxx	xxxx	xxxx	xxxxx	0.5	xxxx	0.1	xxxx	xxxx	xxxxx
Control Del:	9.3	xxxx	xxxxx	xxxxx	xxxx	xxxxx	27.5	xxxx	14.2	xxxxx	xxxx	xxxxx
LOS by Move:	A	*	*	*	*	*	D	*	B	*	*	*
Movement:	LT	LTR	RT	LT	LTR	RT	LT	LTR	RT	LT	LTR	RT
Shared Cap.:	xxxx	xxxx	xxxxx	xxxx	xxxx	xxxxx	xxxx	xxxx	xxxxx	xxxx	xxxx	xxxxx
SharedQueue:	xxxxx	xxxx	xxxxx	xxxxx	xxxx	xxxxx	xxxxx	xxxx	xxxxx	xxxxx	xxxx	xxxxx
Shrd ConDel:	xxxxx	xxxx	xxxxx	xxxxx	xxxx	xxxxx	xxxxx	xxxx	xxxxx	xxxxx	xxxx	xxxxx
Shared LOS:	*	*	*	*	*	*	*	*	*	*	*	*
ApproachDel:	xxxxxx			xxxxxx			23.2			xxxxxx		
ApproachLOS:	*			*			C			*		

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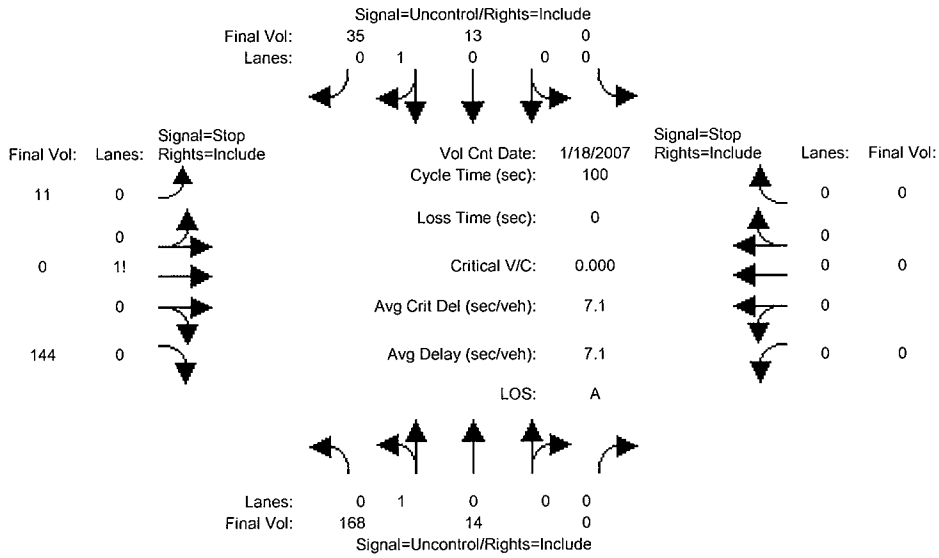
Big Wave Office Park and Wellness Center
Half Moon Bay, California

Level Of Service Computation Report
2000 HCM Unsignalized (Future Volume Alternative)
Cumulative w/o Project AM

Intersection #1: Prospect & Capistrano



Approach:	North Bound			South Bound			East Bound			West Bound		
Movement:	L	T	R	L	T	R	L	T	R	L	T	R
Volume Module: >> Count Date: 18 Jan 2007 << 7:45 - 8:45 AM												
Base Vol:	136	10	0	0	8	28	9	0	118	0	0	0
Growth Adj:	1.20	1.20	1.20	1.20	1.20	1.20	1.20	1.20	1.20	1.20	1.20	1.20
Initial Bse:	163	12	0	0	10	34	11	0	142	0	0	0
Added Vol:	0	0	0	0	0	0	0	0	0	0	0	0
ATI+Cumul:	5	2	0	0	3	1	0	0	2	0	0	0
Initial Fut:	168	14	0	0	13	35	11	0	144	0	0	0
User Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Volume:	168	14	0	0	13	35	11	0	144	0	0	0
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
FinalVolume:	168	14	0	0	13	35	11	0	144	0	0	0
Critical Gap Module:												
Critical Gp:	4.1	xxxx	xxxxx	xxxxx	xxxx	xxxxx	6.4	6.5	6.2	xxxxx	xxxx	xxxxx
FollowUpTim:	2.2	xxxx	xxxxx	xxxxx	xxxx	xxxxx	3.5	4.0	3.3	xxxxx	xxxx	xxxxx
Capacity Module:												
Cnflict Vol:	47	xxxx	xxxxx	xxxx	xxxx	xxxxx	380	380	30	xxxx	xxxx	xxxxx
Potent Cap.:	1573	xxxx	xxxxx	xxxx	xxxx	xxxxx	626	555	1050	xxxx	xxxx	xxxxx
Move Cap.:	1573	xxxx	xxxxx	xxxx	xxxx	xxxxx	569	490	1050	xxxx	xxxx	xxxxx
Volume/Cap:	0.11	xxxx	xxxx	xxxx	xxxx	xxxx	0.02	0.00	0.14	xxxx	xxxx	xxxx
Level Of Service Module:												
2Way95thQ:	0.4	xxxx	xxxxx	xxxx	xxxx	xxxxx	xxxx	xxxx	xxxxx	xxxx	xxxx	xxxxx
Control Del:	7.6	xxxx	xxxxx	xxxxx	xxxx	xxxxx	xxxxx	xxxx	xxxxx	xxxxx	xxxx	xxxxx
LOS by Move:	A	*	*	*	*	*	*	*	*	*	*	*
Movement:	LT	LTR	RT	LT	LTR	RT	LT	LTR	RT	LT	LTR	RT
Shared Cap.:	xxxx	xxxx	xxxxx	xxxx	xxxx	xxxxx	xxxx	992	xxxxx	xxxx	xxxx	xxxxx
SharedQueue:	0.4	xxxx	xxxxx	xxxxx	xxxx	xxxxx	xxxxx	0.6	xxxxx	xxxxx	xxxx	xxxxx
Shrd ConDel:	7.6	xxxx	xxxxx	xxxxx	xxxx	xxxxx	xxxxx	9.3	xxxxx	xxxxx	xxxx	xxxxx
Shared LOS:	A	*	*	*	*	*	*	A	*	*	*	*
ApproachDel:		xxxxxx			xxxxxx			9.3			xxxxxx	
ApproachLOS:		*			*			A			*	

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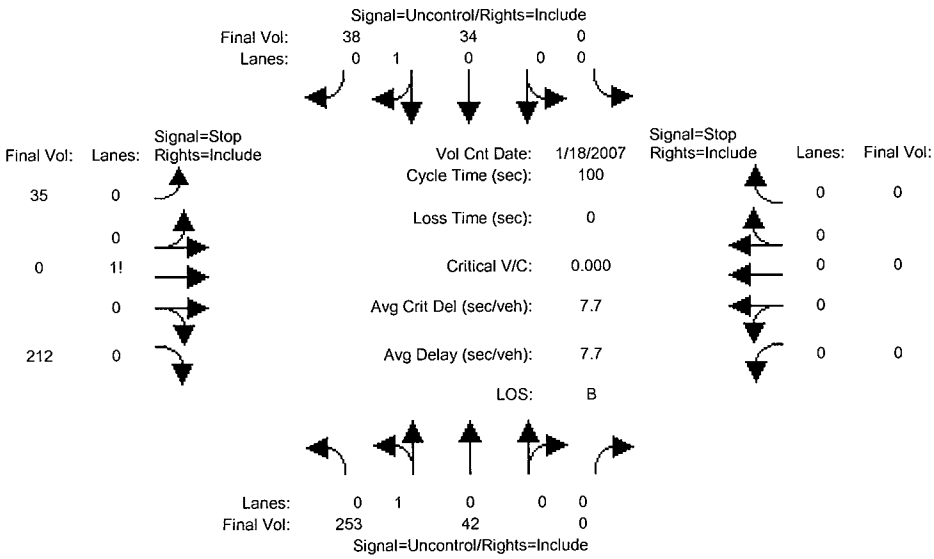
Half Moon Bay, California

Level Of Service Computation Report
2000 HCM Unsignalized (Future Volume Alternative)
Cumulative w/o Project PM

Intersection #1: Prospect & Capistrano



Approach:	North Bound			South Bound			East Bound			West Bound		
Movement:	L	T	R	L	T	R	L	T	R	L	T	R
Volume Module: >> Count Date: 18 Jan 2007 << 4:30 - 5:30 PM												
Base Vol:	205	27	0	0	20	32	28	0	170	0	0	0
Growth Adj:	1.20	1.20	1.20	1.20	1.20	1.20	1.20	1.20	1.20	1.20	1.20	1.20
Initial Bse:	246	32	0	0	24	38	34	0	204	0	0	0
Added Vol:	0	0	0	0	0	0	0	0	0	0	0	0
ATI+Cumul:	7	10	0	0	10	0	1	0	8	0	0	0
Initial Fut:	253	42	0	0	34	38	35	0	212	0	0	0
User Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Volume:	253	42	0	0	34	38	35	0	212	0	0	0
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
FinalVolume:	253	42	0	0	34	38	35	0	212	0	0	0
Critical Gap Module:												
Critical Gp:	4.1	xxxx	xxxxx	xxxxx	xxxx	xxxxx	6.4	6.5	6.2	xxxxx	xxxx	xxxxx
FollowUpTim:	2.2	xxxx	xxxxx	xxxxx	xxxx	xxxxx	3.5	4.0	3.3	xxxxx	xxxx	xxxxx
Capacity Module:												
Cnflict Vol:	72	xxxx	xxxxx	xxxx	xxxx	xxxxx	602	602	53	xxxx	xxxx	xxxxx
Potent Cap.:	1540	xxxx	xxxxx	xxxx	xxxx	xxxxx	466	416	1020	xxxx	xxxx	xxxxx
Move Cap.:	1540	xxxx	xxxxx	xxxx	xxxx	xxxxx	398	337	1020	xxxx	xxxx	xxxxx
Volume/Cap:	0.16	xxxx	xxxx	xxxx	xxxx	xxxx	0.09	0.00	0.21	xxxx	xxxx	xxxx
Level Of Service Module:												
2Way95thQ:	0.6	xxxx	xxxxx	xxxx	xxxx	xxxxx	xxxx	xxxx	xxxxx	xxxx	xxxx	xxxxx
Control Del:	7.8	xxxx	xxxxx	xxxxx	xxxx	xxxxx	xxxxx	xxxx	xxxxx	xxxxx	xxxx	xxxxx
LOS by Move:	A	*	*	*	*	*	*	*	*	*	*	*
Movement:	LT	LTR	RT	LT	LTR	RT	LT	LTR	RT	LT	LTR	RT
Shared Cap.:	xxxx	xxxx	xxxxx	xxxx	xxxx	xxxxx	xxxx	836	xxxxx	xxxx	xxxx	xxxxx
SharedQueue:	0.6	xxxx	xxxxx	xxxxx	xxxx	xxxxx	xxxxx	1.2	xxxxx	xxxxx	xxxx	xxxxx
Shrd ConDel:	7.8	xxxx	xxxxx	xxxxx	xxxx	xxxxx	xxxxx	11.1	xxxxx	xxxxx	xxxx	xxxxx
Shared LOS:	A	*	*	*	*	*	*	B	*	*	*	*
ApproachDel:		xxxxxx			xxxxxx			11.1			xxxxxx	
ApproachLOS:		*			*			B			*	

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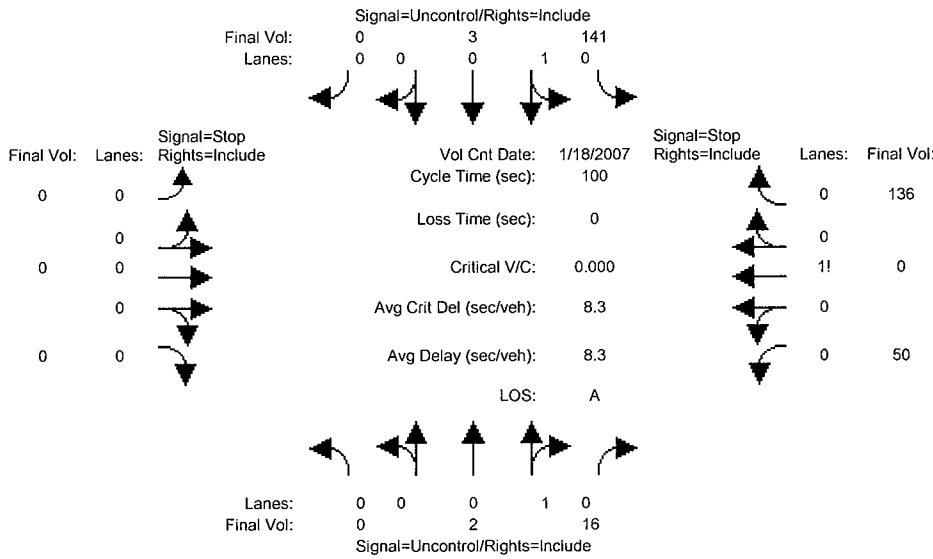
Big Wave Office Park and Wellness Center
Half Moon Bay, California

Level Of Service Computation Report
2000 HCM Unsignalized (Future Volume Alternative)
Cumulative w/o Project AM

Intersection #2: Broadway & Prospect



Approach:	North Bound			South Bound			East Bound			West Bound		
Movement:	L	T	R	L	T	R	L	T	R	L	T	R
Volume Module: >> Count Date: 18 Jan 2007 << 7:30 - 8:30 AM												
Base Vol:	0	2	13	116	2	0	0	0	0	39	0	111
Growth Adj:	1.20	1.20	1.20	1.20	1.20	1.20	1.20	1.20	1.20	1.20	1.20	1.20
Initial Bse:	0	2	16	139	2	0	0	0	0	47	0	133
Added Vol:	0	0	0	0	0	0	0	0	0	0	0	0
ATI+Cumul:	0	0	0	2	1	0	0	0	0	3	0	3
Initial Fut:	0	2	16	141	3	0	0	0	0	50	0	136
User Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Volume:	0	2	16	141	3	0	0	0	0	50	0	136
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
FinalVolume:	0	2	16	141	3	0	0	0	0	50	0	136
Critical Gap Module:												
Critical Gp:	xxxxx	xxxx	xxxxx	4.1	xxxx	xxxxx	xxxxx	xxxx	xxxxx	6.4	6.5	6.2
FollowUpTim:	xxxxx	xxxx	xxxxx	2.2	xxxx	xxxxx	xxxxx	xxxx	xxxxx	3.5	4.0	3.3
Capacity Module:												
Cnflict Vol:	xxxx	xxxx	xxxxx	18	xxxx	xxxxx	xxxx	xxxx	xxxxx	296	296	10
Potent Cap.:	xxxx	xxxx	xxxxx	1612	xxxx	xxxxx	xxxx	xxxx	xxxxx	699	619	1077
Move Cap.:	xxxx	xxxx	xxxxx	1612	xxxx	xxxxx	xxxx	xxxx	xxxxx	648	560	1077
Volume/Cap:	xxxx	xxxx	xxxx	0.09	xxxx	xxxx	xxxx	xxxx	xxxx	0.08	0.00	0.13
Level Of Service Module:												
2Way95thQ:	xxxx	xxxx	xxxxx	0.3	xxxx	xxxxx	xxxx	xxxx	xxxxx	xxxx	xxxx	xxxxx
Control Del:	xxxxx	xxxx	xxxxx	7.4	xxxx	xxxxx	xxxxx	xxxx	xxxxx	xxxxx	xxxx	xxxxx
LOS by Move:	*	*	*	A	*	*	*	*	*	*	*	*
Movement:	LT	LTR	RT	LT	LTR	RT	LT	LTR	RT	LT	LTR	RT
Shared Cap.:	xxxx	xxxx	xxxxx	xxxx	xxxx	xxxxx	xxxx	xxxx	xxxxx	xxxx	915	xxxxx
SharedQueue:	xxxxx	xxxx	xxxxx	0.3	xxxx	xxxxx	xxxxx	xxxx	xxxxx	xxxxx	0.8	xxxxx
Shrd ConDel:	xxxxx	xxxx	xxxxx	7.4	xxxx	xxxxx	xxxxx	xxxx	xxxxx	xxxxx	9.9	xxxxx
Shared LOS:	*	*	*	A	*	*	*	*	*	*	A	*
ApproachDel:	xxxxxx			xxxxxx			xxxxxx			9.9		
ApproachLOS:	*			*			*			A		

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Big Wave Office Park and Wellness Center
Half Moon Bay, California

Level Of Service Computation Report
2000 HCM Unsignalized (Future Volume Alternative)
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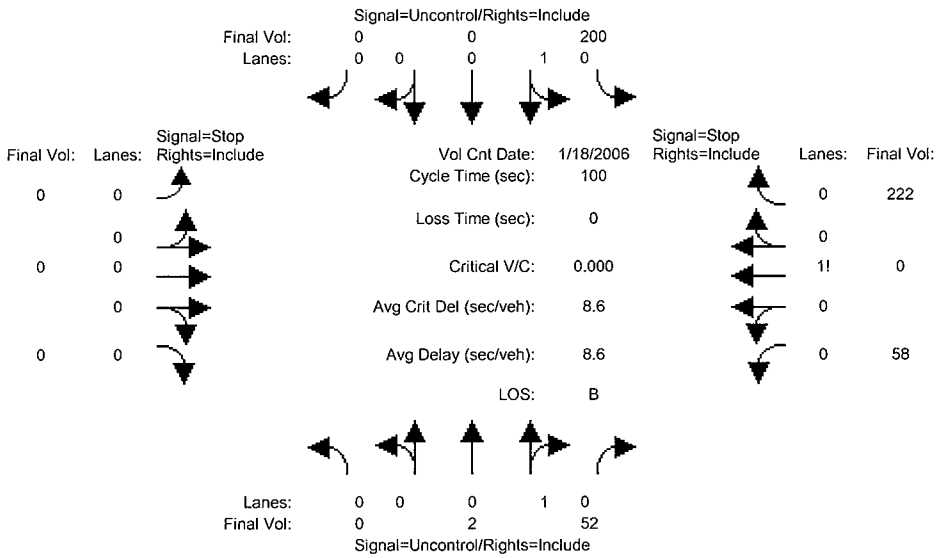
Intersection #2: Broadway & Prospect



Approach:	North Bound			South Bound			East Bound			West Bound		
Movement:	L	T	R	L	T	R	L	T	R	L	T	R
Volume Module: >> Count Date: 18 Jan 2006 << 4:15 - 5:15 PM												
Base Vol:	0	1	38	164	0	0	0	0	0	44	0	183
Growth Adj:	1.20	1.20	1.20	1.20	1.20	1.20	1.20	1.20	1.20	1.20	1.20	1.20
Initial Bse:	0	1	46	197	0	0	0	0	0	53	0	220
Added Vol:	0	0	0	0	0	0	0	0	0	0	0	0
ATI+Cumul:	0	1	6	3	0	0	0	0	0	5	0	2
Initial Fut:	0	2	52	200	0	0	0	0	0	58	0	222
User Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Volume:	0	2	52	200	0	0	0	0	0	58	0	222
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
FinalVolume:	0	2	52	200	0	0	0	0	0	58	0	222
Critical Gap Module:												
Critical Gp:	xxxxx	xxxx	xxxxx	4.1	xxxx	xxxxx	xxxxx	xxxx	xxxxx	6.4	6.5	6.2
FollowUpTim:	xxxxx	xxxx	xxxxx	2.2	xxxx	xxxxx	xxxxx	xxxx	xxxxx	3.5	4.0	3.3
Capacity Module:												
Cnflict Vol:	xxxx	xxxx	xxxxx	54	xxxx	xxxxx	xxxx	xxxx	xxxxx	428	428	28
Potent Cap.:	xxxx	xxxx	xxxxx	1565	xxxx	xxxxx	xxxx	xxxx	xxxxx	588	522	1053
Move Cap.:	xxxx	xxxx	xxxxx	1565	xxxx	xxxxx	xxxx	xxxx	xxxxx	530	456	1053
Volume/Cap:	xxxx	xxxx	xxxx	0.13	xxxx	xxxx	xxxx	xxxx	xxxx	0.11	0.00	0.21
Level Of Service Module:												
2Way95thQ:	xxxx	xxxx	xxxxx	0.4	xxxx	xxxxx	xxxx	xxxx	xxxxx	xxxx	xxxx	xxxxx
Control Del:	xxxxx	xxxx	xxxxx	7.6	xxxx	xxxxx	xxxxx	xxxx	xxxxx	xxxxx	xxxx	xxxxx
LOS by Move:	*	*	*	A	*	*	*	*	*	*	*	*
Movement:	LT	LTR	RT	LT	LTR	RT	LT	LTR	RT	LT	LTR	RT
Shared Cap.:	xxxx	xxxx	xxxxx	xxxx	xxxx	xxxxx	xxxx	xxxx	xxxxx	xxxx	875	xxxxx
SharedQueue:	xxxxx	xxxx	xxxxx	xxxxx	xxxx	xxxxx	xxxxx	xxxx	xxxxx	xxxxx	1.4	xxxxx
Shrd ConDel:	xxxxx	xxxx	xxxxx	xxxxx	xxxx	xxxxx	xxxxx	xxxx	xxxxx	xxxxx	11.0	xxxxx
Shared LOS:	*	*	*	*	*	*	*	*	*	*	B	*
ApproachDel:	xxxxxx			xxxxxx			xxxxxx			11.0		
ApproachLOS:	*			*			*			B		

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Half Moon Bay, California

Level Of Service Computation Report
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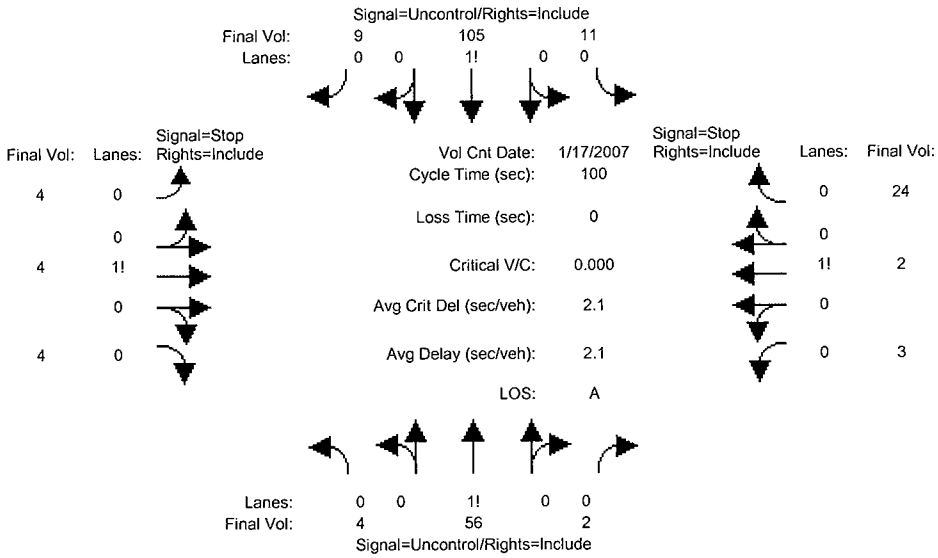
Intersection #3: Airport & Stanford/Cornell



Approach:	North Bound			South Bound			East Bound			West Bound		
Movement:	L	T	R	L	T	R	L	T	R	L	T	R
Volume Module: >> Count Date: 17 Jan 2007 << 7:30 - 8:30 AM												
Base Vol:	3	45	2	9	81	6	3	3	1	2	1	20
Growth Adj:	1.20	1.20	1.20	1.20	1.20	1.20	1.20	1.20	1.20	1.20	1.20	1.20
Initial Bse:	4	54	2	11	97	7	4	4	1	2	1	24
Added Vol:	0	0	0	0	0	0	0	0	0	0	0	0
ATI+Cumul:	0	2	0	0	8	2	0	0	3	1	1	0
Initial Fut:	4	56	2	11	105	9	4	4	4	3	2	24
User Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Volume:	4	56	2	11	105	9	4	4	4	3	2	24
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
FinalVolume:	4	56	2	11	105	9	4	4	4	3	2	24
Critical Gap Module:												
Critical Gp:	4.1	xxxx	xxxxx	4.1	xxxx	xxxxx	7.1	6.5	6.2	7.1	6.5	6.2
FollowUpTim:	2.2	xxxx	xxxxx	2.2	xxxx	xxxxx	3.5	4.0	3.3	3.5	4.0	3.3
Capacity Module:												
Cnflict Vol:	114	xxxx	xxxxx	58	xxxx	xxxxx	209	197	110	200	200	57
Potent Cap.:	1487	xxxx	xxxxx	1559	xxxx	xxxxx	753	702	949	763	699	1015
Move Cap.:	1487	xxxx	xxxxx	1559	xxxx	xxxxx	728	696	949	751	693	1015
Volume/Cap:	0.00	xxxx	xxxx	0.01	xxxx	xxxx	0.00	0.01	0.00	0.00	0.00	0.02
Level Of Service Module:												
2Way95thQ:	0.0	xxxx	xxxxx	0.0	xxxx	xxxxx	xxxx	xxxx	xxxxx	xxxx	xxxx	xxxxx
Control Del:	7.4	xxxx	xxxxx	7.3	xxxx	xxxxx	xxxxx	xxxx	xxxxx	xxxxx	xxxx	xxxxx
LOS by Move:	A	*	*	A	*	*	*	*	*	*	*	*
Movement:	LT	LTR	RT	LT	LTR	RT	LT	LTR	RT	LT	LTR	RT
Shared Cap.:	xxxx	xxxx	xxxxx	xxxx	xxxx	xxxxx	xxxx	784	xxxxx	xxxx	944	xxxxx
SharedQueue:	xxxxx	xxxx	xxxxx	xxxxx	xxxx	xxxxx	xxxxx	0.0	xxxxx	xxxxx	0.1	xxxxx
Shrd ConDel:	xxxxx	xxxx	xxxxx	xxxxx	xxxx	xxxxx	xxxxx	9.7	xxxxx	xxxxx	8.9	xxxxx
Shared LOS:	*	*	*	*	*	*	*	A	*	*	A	*
ApproachDel:	xxxxxx			xxxxxx			9.7			8.9		
ApproachLOS:	*			*			A			A		

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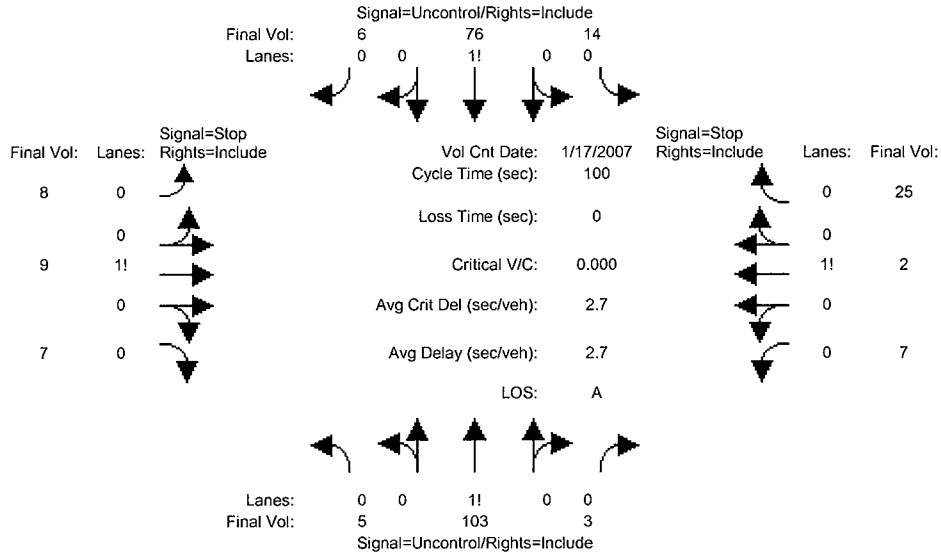
Intersection #3: Airport & Stanford/Cornell



Approach:	North Bound			South Bound			East Bound			West Bound		
Movement:	L	T	R	L	T	R	L	T	R	L	T	R
Volume Module: >> Count Date: 17 Jan 2007 << 4:15 - 5:15 PM												
Base Vol:	2	79	2	12	60	5	5	7	6	6	2	21
Growth Adj:	1.20	1.20	1.20	1.20	1.20	1.20	1.20	1.20	1.20	1.20	1.20	1.20
Initial Bse:	2	95	2	14	72	6	6	8	7	7	2	25
Added Vol:	0	0	0	0	0	0	0	0	0	0	0	0
ATI+Cumul:	3	8	1	0	4	0	2	1	0	0	0	0
Initial Fut:	5	103	3	14	76	6	8	9	7	7	2	25
User Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Volume:	5	103	3	14	76	6	8	9	7	7	2	25
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
FinalVolume:	5	103	3	14	76	6	8	9	7	7	2	25
Critical Gap Module:												
Critical Gp:	4.1	xxxx	xxxxx	4.1	xxxx	xxxxx	7.1	6.5	6.2	7.1	6.5	6.2
FollowUpTim:	2.2	xxxx	xxxxx	2.2	xxxx	xxxxx	3.5	4.0	3.3	3.5	4.0	3.3
Capacity Module:												
Cnflict Vol:	82	xxxx	xxxxx	106	xxxx	xxxxx	237	225	79	231	226	105
Potent Cap.:	1528	xxxx	xxxxx	1498	xxxx	xxxxx	722	678	987	728	677	956
Move Cap.:	1528	xxxx	xxxxx	1498	xxxx	xxxxx	694	669	987	707	668	956
Volume/Cap:	0.00	xxxx	xxxx	0.01	xxxx	xxxx	0.01	0.01	0.01	0.01	0.00	0.03
Level Of Service Module:												
2Way95thQ:	0.0	xxxx	xxxxx	0.0	xxxx	xxxxx	xxxx	xxxx	xxxxx	xxxx	xxxx	xxxxx
Control Del:	7.4	xxxx	xxxxx	7.4	xxxx	xxxxx	xxxxx	xxxx	xxxxx	xxxxx	xxxx	xxxxx
LOS by Move:	A	*	*	A	*	*	*	*	*	*	*	*
Movement:	LT	LTR	RT	LT	LTR	RT	LT	LTR	RT	LT	LTR	RT
Shared Cap.:	xxxx	xxxx	xxxxx	xxxx	xxxx	xxxxx	xxxx	748	xxxxx	xxxx	867	xxxxx
SharedQueue:	xxxxx	xxxx	xxxxx	xxxxx	xxxx	xxxxx	xxxxx	0.1	xxxxx	xxxxx	0.1	xxxxx
Shrd ConDel:	xxxxx	xxxx	xxxxx	xxxxx	xxxx	xxxxx	xxxxx	10.0	xxxxx	xxxxx	9.3	xxxxx
Shared LOS:	*	*	*	*	*	*	*	A	*	*	A	*
ApproachDel:	xxxxxx			xxxxxx			10.0			9.3		
ApproachLOS:	*			*			A			A		

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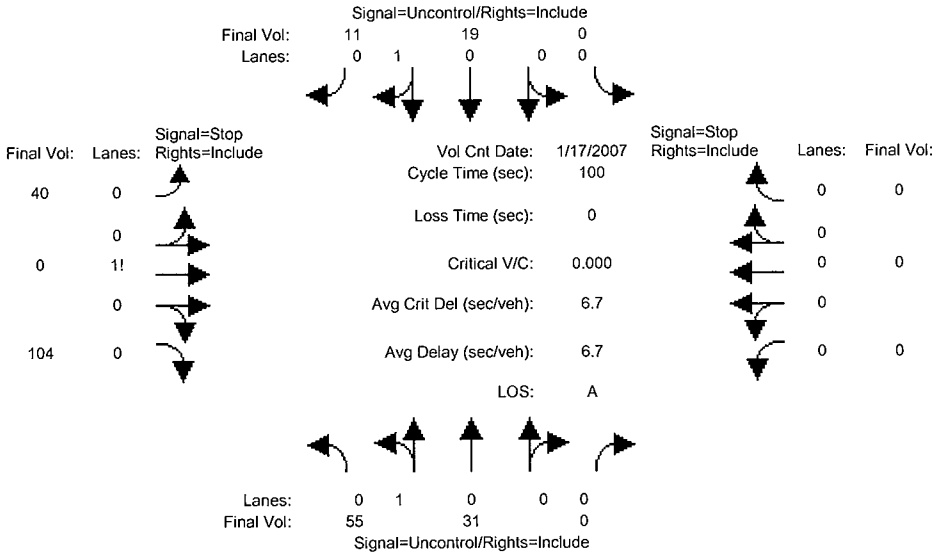
Intersection #4: Airport & La Granada



Approach:	North Bound			South Bound			East Bound			West Bound		
Movement:	L	T	R	L	T	R	L	T	R	L	T	R
Volume Module: >> Count Date: 17 Jan 2007 << 7:30 - 8:30 AM												
Base Vol:	45	24	0	0	11	9	33	0	84	0	0	0
Growth Adj:	1.20	1.20	1.20	1.20	1.20	1.20	1.20	1.20	1.20	1.20	1.20	1.20
Initial Bse:	54	29	0	0	13	11	40	0	101	0	0	0
Added Vol:	0	0	0	0	0	0	0	0	0	0	0	0
ATI+Cumul:	1	2	0	0	6	0	0	0	3	0	0	0
Initial Fut:	55	31	0	0	19	11	40	0	104	0	0	0
User Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Volume:	55	31	0	0	19	11	40	0	104	0	0	0
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
FinalVolume:	55	31	0	0	19	11	40	0	104	0	0	0
Critical Gap Module:												
Critical Gp:	4.1	xxxx	xxxxx	xxxxx	xxxx	xxxxx	6.4	6.5	6.2	xxxxx	xxxx	xxxxx
FollowUpTim:	2.2	xxxx	xxxxx	xxxxx	xxxx	xxxxx	3.5	4.0	3.3	xxxxx	xxxx	xxxxx
Capacity Module:												
Cnflict Vol:	30	xxxx	xxxxx	xxxx	xxxx	xxxxx	165	165	25	xxxx	xxxx	xxxxx
Potent Cap.:	1596	xxxx	xxxxx	xxxx	xxxx	xxxxx	830	731	1057	xxxx	xxxx	xxxxx
Move Cap.:	1596	xxxx	xxxxx	xxxx	xxxx	xxxxx	807	705	1057	xxxx	xxxx	xxxxx
Volume/Cap:	0.03	xxxx	xxxx	xxxx	xxxx	xxxx	0.05	0.00	0.10	xxxx	xxxx	xxxx
Level Of Service Module:												
2Way95thQ:	0.1	xxxx	xxxxx	xxxx	xxxx	xxxxx	xxxx	xxxx	xxxxx	xxxx	xxxx	xxxxx
Control Del:	7.3	xxxx	xxxxx	xxxxx	xxxx	xxxxx	xxxxx	xxxx	xxxxx	xxxxx	xxxx	xxxxx
LOS by Move:	A	*	*	*	*	*	*	*	*	*	*	*
Movement:	LT	LTR	RT	LT	LTR	RT	LT	LTR	RT	LT	LTR	RT
Shared Cap.:	xxxx	xxxx	xxxxx	xxxx	xxxx	xxxxx	xxxx	974	xxxxx	xxxx	xxxx	xxxxx
SharedQueue:	0.1	xxxx	xxxxx	xxxxx	xxxx	xxxxx	xxxxx	0.5	xxxxx	xxxxx	xxxx	xxxxx
Shrd ConDel:	7.3	xxxx	xxxxx	xxxxx	xxxx	xxxxx	xxxxx	9.3	xxxxx	xxxxx	xxxx	xxxxx
Shared LOS:	A	*	*	*	*	*	*	A	*	*	*	*
ApproachDel:		xxxxxx			xxxxxx			9.3			xxxxxx	
ApproachLOS:		*			*			A			*	

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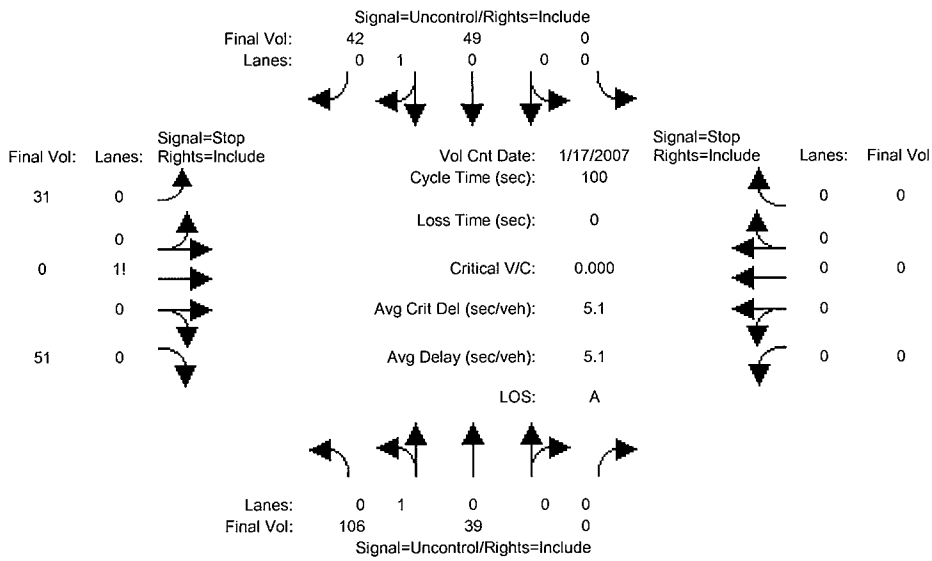
Intersection #4: Airport & La Granada



Approach:	North Bound			South Bound			East Bound			West Bound		
Movement:	L	T	R	L	T	R	L	T	R	L	T	R
Volume Module: >> Count Date: 17 Jan 2007 << 4:45 - 5:45 PM												
Base Vol:	86	26	0	0	39	35	26	0	42	0	0	0
Growth Adj:	1.20	1.20	1.20	1.20	1.20	1.20	1.20	1.20	1.20	1.20	1.20	1.20
Initial Bse:	103	31	0	0	47	42	31	0	50	0	0	0
Added Vol:	0	0	0	0	0	0	0	0	0	0	0	0
ATI+Cumul:	3	8	0	0	2	0	0	0	1	0	0	0
Initial Fut:	106	39	0	0	49	42	31	0	51	0	0	0
User Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Volume:	106	39	0	0	49	42	31	0	51	0	0	0
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
FinalVolume:	106	39	0	0	49	42	31	0	51	0	0	0
Critical Gap Module:												
Critical Gp:	4.1	xxxx	xxxxx	xxxxx	xxxx	xxxxx	6.4	6.5	6.2	xxxxx	xxxx	xxxxx
FollowUpTim:	2.2	xxxx	xxxxx	xxxxx	xxxx	xxxxx	3.5	4.0	3.3	xxxxx	xxxx	xxxxx
Capacity Module:												
Cnflict Vol:	91	xxxx	xxxxx	xxxx	xxxx	xxxxx	321	321	70	xxxx	xxxx	xxxxx
Potent Cap.:	1517	xxxx	xxxxx	xxxx	xxxx	xxxxx	676	599	999	xxxx	xxxx	xxxxx
Move Cap.:	1517	xxxx	xxxxx	xxxx	xxxx	xxxxx	638	554	999	xxxx	xxxx	xxxxx
Volume/Cap:	0.07	xxxx	xxxx	xxxx	xxxx	xxxx	0.05	0.00	0.05	xxxx	xxxx	xxxx
Level Of Service Module:												
2Way95thQ:	0.2	xxxx	xxxxx	xxxx	xxxx	xxxxx	xxxx	xxxx	xxxxx	xxxx	xxxx	xxxxx
Control Del:	7.6	xxxx	xxxxx	xxxxx	xxxx	xxxxx	xxxxx	xxxx	xxxxx	xxxxx	xxxx	xxxxx
LOS by Move:	A	*	*	*	*	*	*	*	*	*	*	*
Movement:	LT	LTR	RT	LT	LTR	RT	LT	LTR	RT	LT	LTR	RT
Shared Cap.:	xxxx	xxxx	xxxxx	xxxx	xxxx	xxxxx	xxxx	823	xxxxx	xxxx	xxxx	xxxxx
SharedQueue:	0.2	xxxx	xxxxx	xxxxx	xxxx	xxxxx	xxxxx	0.3	xxxxx	xxxxx	xxxx	xxxxx
Shrd ConDel:	7.6	xxxx	xxxxx	xxxxx	xxxx	xxxxx	xxxxx	9.9	xxxxx	xxxxx	xxxx	xxxxx
Shared LOS:	A	*	*	*	*	*	*	A	*	*	*	*
ApproachDel:	xxxxxx			xxxxxx			9.9			xxxxxx		
ApproachLOS:	*			*			A			*		

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Level Of Service Computation Report
2000 HCM Unsignalized (Future Volume Alternative)
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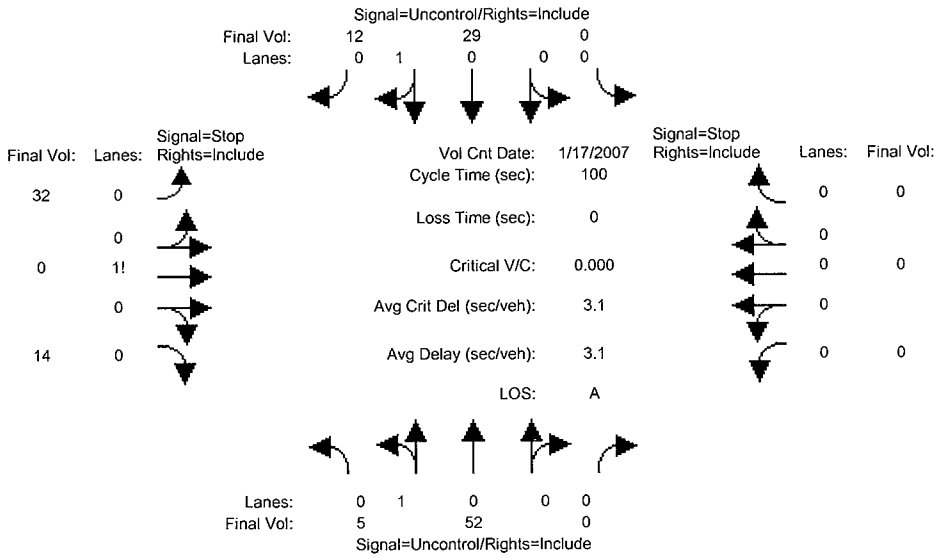
Intersection #5: Airport & Los Banos



Approach:	North Bound			South Bound			East Bound			West Bound		
Movement:	L	T	R	L	T	R	L	T	R	L	T	R
Volume Module: >> Count Date: 17 Jan 2007 << 7:45 - 8:45 AM												
Base Vol:	4	43	0	0	21	10	27	0	8	0	0	0
Growth Adj:	1.20	1.20	1.20	1.20	1.20	1.20	1.20	1.20	1.20	1.20	1.20	1.20
Initial Bse:	5	52	0	0	25	12	32	0	10	0	0	0
Added Vol:	0	0	0	0	0	0	0	0	0	0	0	0
ATI+Cumul:	0	0	0	0	4	0	0	0	4	0	0	0
Initial Fut:	5	52	0	0	29	12	32	0	14	0	0	0
User Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Volume:	5	52	0	0	29	12	32	0	14	0	0	0
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
FinalVolume:	5	52	0	0	29	12	32	0	14	0	0	0
Critical Gap Module:												
Critical Gp:	4.1	xxxx	xxxxx	xxxxx	xxxx	xxxxx	6.4	6.5	6.2	xxxxx	xxxx	xxxxx
FollowUpTim:	2.2	xxxx	xxxxx	xxxxx	xxxx	xxxxx	3.5	4.0	3.3	xxxxx	xxxx	xxxxx
Capacity Module:												
Cnflict Vol:	41	xxxx	xxxxx	xxxx	xxxx	xxxxx	96	96	35	xxxx	xxxx	xxxxx
Potent Cap.:	1581	xxxx	xxxxx	xxxx	xxxx	xxxxx	908	797	1043	xxxx	xxxx	xxxxx
Move Cap.:	1581	xxxx	xxxxx	xxxx	xxxx	xxxxx	906	795	1043	xxxx	xxxx	xxxxx
Volume/Cap:	0.00	xxxx	xxxx	xxxx	xxxx	xxxx	0.04	0.00	0.01	xxxx	xxxx	xxxx
Level Of Service Module:												
2Way95thQ:	0.0	xxxx	xxxxx	xxxx	xxxx	xxxxx	xxxx	xxxx	xxxxx	xxxx	xxxx	xxxxx
Control Del:	7.3	xxxx	xxxxx	xxxxx	xxxx	xxxxx	xxxxx	xxxx	xxxxx	xxxxx	xxxx	xxxxx
LOS by Move:	A	*	*	*	*	*	*	*	*	*	*	*
Movement:	LT	LTR	RT	LT	LTR	RT	LT	LTR	RT	LT	LTR	RT
Shared Cap.:	xxxx	xxxx	xxxxx	xxxx	xxxx	xxxxx	xxxx	942	xxxxx	xxxx	xxxx	xxxxx
SharedQueue:	0.0	xxxx	xxxxx	xxxxx	xxxx	xxxxx	xxxxx	0.2	xxxxx	xxxxx	xxxx	xxxxx
Shrd ConDel:	7.3	xxxx	xxxxx	xxxxx	xxxx	xxxxx	xxxxx	9.0	xxxxx	xxxxx	xxxx	xxxxx
Shared LOS:	A	*	*	*	*	*	*	A	*	*	*	*
ApproachDel:	xxxxxx			xxxxxx			9.0			xxxxxx		
ApproachLOS:	*			*			A			*		

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Half Moon Bay, California

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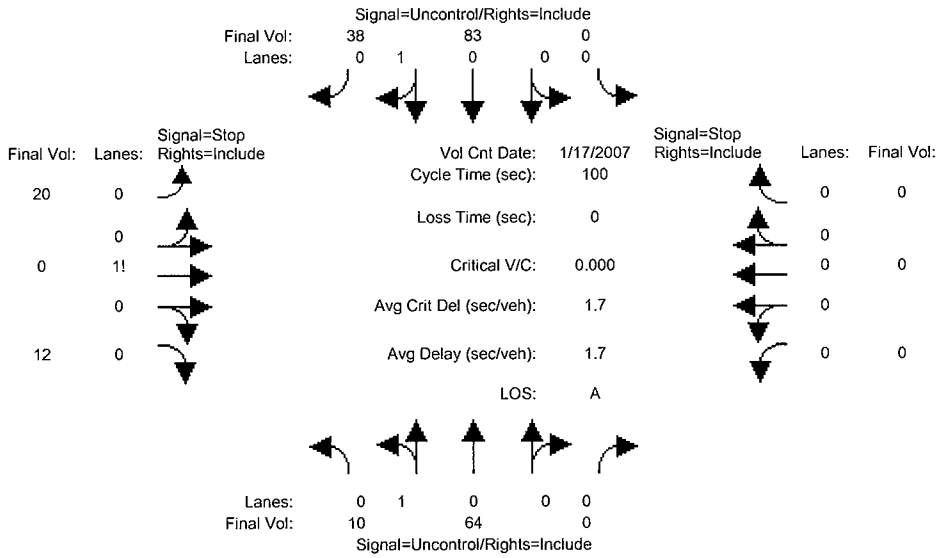
Intersection #5: Airport & Los Banos



Approach:	North Bound			South Bound			East Bound			West Bound		
Movement:	L	T	R	L	T	R	L	T	R	L	T	R
Volume Module: >> Count Date: 17 Jan 2007 << 4:15 - 5:15 PM												
Base Vol:	5	50	0	0	68	32	17	0	9	0	0	0
Growth Adj:	1.20	1.20	1.20	1.20	1.20	1.20	1.20	1.20	1.20	1.20	1.20	1.20
Initial Bse:	6	60	0	0	82	38	20	0	11	0	0	0
Added Vol:	0	0	0	0	0	0	0	0	0	0	0	0
ATI+Cumul:	4	4	0	0	1	0	0	0	1	0	0	0
Initial Fut:	10	64	0	0	83	38	20	0	12	0	0	0
User Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Volume:	10	64	0	0	83	38	20	0	12	0	0	0
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
FinalVolume:	10	64	0	0	83	38	20	0	12	0	0	0
Critical Gap Module:												
Critical Gp:	4.1	xxxx	xxxxx	xxxxx	xxxx	xxxxx	6.4	6.5	6.2	xxxxx	xxxx	xxxxx
FollowUpTim:	2.2	xxxx	xxxxx	xxxxx	xxxx	xxxxx	3.5	4.0	3.3	xxxxx	xxxx	xxxxx
Capacity Module:												
Cnflict Vol:	121	xxxx	xxxxx	xxxx	xxxx	xxxxx	186	186	102	xxxx	xxxx	xxxxx
Potent Cap.:	1479	xxxx	xxxxx	xxxx	xxxx	xxxxx	808	712	959	xxxx	xxxx	xxxxx
Move Cap.:	1479	xxxx	xxxxx	xxxx	xxxx	xxxxx	804	707	959	xxxx	xxxx	xxxxx
Volume/Cap:	0.01	xxxx	xxxx	xxxx	xxxx	xxxx	0.03	0.00	0.01	xxxx	xxxx	xxxx
Level Of Service Module:												
2Way95thQ:	0.0	xxxx	xxxxx	xxxx	xxxx	xxxxx	xxxx	xxxx	xxxxx	xxxx	xxxx	xxxxx
Control Del:	7.5	xxxx	xxxxx	xxxxx	xxxx	xxxxx	xxxxx	xxxx	xxxxx	xxxxx	xxxx	xxxxx
LOS by Move:	A	*	*	*	*	*	*	*	*	*	*	*
Movement:	LT	LTR	RT	LT	LTR	RT	LT	LTR	RT	LT	LTR	RT
Shared Cap.:	xxxx	xxxx	xxxxx	xxxx	xxxx	xxxxx	xxxx	854	xxxxx	xxxx	xxxx	xxxxx
SharedQueue:	0.0	xxxx	xxxxx	xxxxx	xxxx	xxxxx	xxxxx	0.1	xxxxx	xxxxx	xxxx	xxxxx
Shrd ConDel:	7.5	xxxx	xxxxx	xxxxx	xxxx	xxxxx	xxxxx	9.4	xxxxx	xxxxx	xxxx	xxxxx
Shared LOS:	A	*	*	*	*	*	*	A	*	*	*	*
ApproachDel:	xxxxxx			xxxxxx			9.4			xxxxxx		
ApproachLOS:	*			*			A			*		

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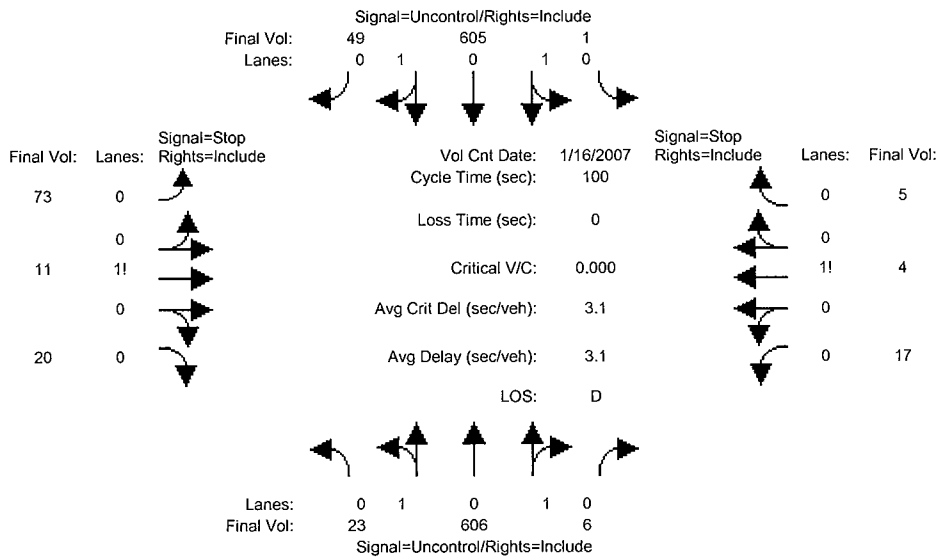
Intersection #6: Hwy 1 & Cypress



Approach:	North Bound			South Bound			East Bound			West Bound		
Movement:	L	T	R	L	T	R	L	T	R	L	T	R
Volume Module: >> Count Date: 16 Jan 2007 << 7:45 - 8:45 AM												
Base Vol:	19	505	5	1	504	41	61	9	17	14	3	4
Growth Adj:	1.20	1.20	1.20	1.20	1.20	1.20	1.20	1.20	1.20	1.20	1.20	1.20
Initial Bse:	23	606	6	1	605	49	73	11	20	17	4	5
Added Vol:	0	0	0	0	0	0	0	0	0	0	0	0
ATI+Cumul:	0	0	0	0	0	0	0	0	0	0	0	0
Initial Fut:	23	606	6	1	605	49	73	11	20	17	4	5
User Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Volume:	23	606	6	1	605	49	73	11	20	17	4	5
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
FinalVolume:	23	606	6	1	605	49	73	11	20	17	4	5
Critical Gap Module:												
Critical Gp:	4.1	xxxx	xxxxx	4.1	xxxx	xxxxx	7.5	6.5	6.9	7.5	6.5	6.9
FollowUpTim:	2.2	xxxx	xxxxx	2.2	xxxx	xxxxx	3.5	4.0	3.3	3.5	4.0	3.3
Capacity Module:												
Cnflict Vol:	654	xxxx	xxxxx	612	xxxx	xxxxx	982	1289	327	965	1311	306
Potent Cap.:	943	xxxx	xxxxx	977	xxxx	xxxxx	206	165	675	212	160	696
Move Cap.:	943	xxxx	xxxxx	977	xxxx	xxxxx	197	161	675	192	156	696
Volume/Cap:	0.02	xxxx	xxxx	0.00	xxxx	xxxx	0.37	0.07	0.03	0.09	0.02	0.01
Level Of Service Module:												
2Way95thQ:	0.1	xxxx	xxxxx	0.0	xxxx	xxxxx	xxxx	xxxx	xxxxx	xxxx	xxxx	xxxxx
Control Del:	8.9	xxxx	xxxxx	8.7	xxxx	xxxxx	xxxxx	xxxx	xxxxx	xxxxx	xxxx	xxxxx
LOS by Move:	A	*	*	A	*	*	*	*	*	*	*	*
Movement:	LT	LTR	RT	LT	LTR	RT	LT	LTR	RT	LT	LTR	RT
Shared Cap.:	xxxx	xxxx	xxxxx	xxxx	xxxx	xxxxx	xxxx	223	xxxxx	xxxx	214	xxxxx
SharedQueue:	0.1	xxxx	xxxxx	0.0	xxxx	xxxxx	xxxxx	2.3	xxxxx	xxxxx	0.4	xxxxx
Shrd ConDel:	8.9	xxxx	xxxxx	8.7	xxxx	xxxxx	xxxxx	34.6	xxxxx	xxxxx	24.0	xxxxx
Shared LOS:	A	*	*	A	*	*	*	D	*	*	C	*
ApproachDel:	xxxxxx			xxxxxx			34.6			24.0		
ApproachLOS:	*			*			D			C		

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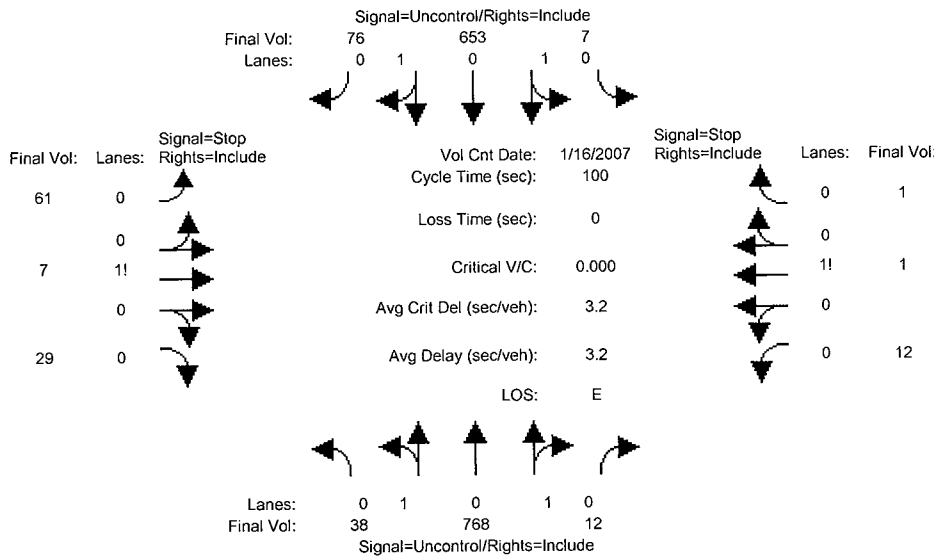
Intersection #6: Hwy 1 & Cypress



Approach:	North Bound			South Bound			East Bound			West Bound		
Movement:	L	T	R	L	T	R	L	T	R	L	T	R
Volume Module: >> Count Date: 16 Jan 2007 << 4:15 - 5:15 PM												
Base Vol:	32	640	10	6	544	63	51	6	24	10	1	1
Growth Adj:	1.20	1.20	1.20	1.20	1.20	1.20	1.20	1.20	1.20	1.20	1.20	1.20
Initial Bse:	38	768	12	7	653	76	61	7	29	12	1	1
Added Vol:	0	0	0	0	0	0	0	0	0	0	0	0
ATI+Cumul:	0	0	0	0	0	0	0	0	0	0	0	0
Initial Fut:	38	768	12	7	653	76	61	7	29	12	1	1
User Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Volume:	38	768	12	7	653	76	61	7	29	12	1	1
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
FinalVolume:	38	768	12	7	653	76	61	7	29	12	1	1
Critical Gap Module:												
Critical Gp:	4.1	xxxx	xxxxx	4.1	xxxx	xxxxx	7.5	6.5	6.9	7.5	6.5	6.9
FollowUpTim:	2.2	xxxx	xxxxx	2.2	xxxx	xxxxx	3.5	4.0	3.3	3.5	4.0	3.3
Capacity Module:												
Cnflict Vol:	728	xxxx	xxxxx	780	xxxx	xxxxx	1166	1562	364	1195	1594	390
Potent Cap.:	884	xxxx	xxxxx	846	xxxx	xxxxx	151	113	638	144	108	614
Move Cap.:	884	xxxx	xxxxx	846	xxxx	xxxxx	144	107	638	125	102	614
Volume/Cap:	0.04	xxxx	xxxx	0.01	xxxx	xxxx	0.43	0.07	0.05	0.10	0.01	0.00
Level Of Service Module:												
2Way95thQ:	0.1	xxxx	xxxxx	0.0	xxxx	xxxxx	xxxx	xxxx	xxxxx	xxxx	xxxx	xxxxx
Control Del:	9.3	xxxx	xxxxx	9.3	xxxx	xxxxx	xxxxx	xxxx	xxxxx	xxxxx	xxxx	xxxxx
LOS by Move:	A	*	*	A	*	*	*	*	*	*	*	*
Movement:	LT	LTR	RT	LT	LTR	RT	LT	LTR	RT	LT	LTR	RT
Shared Cap.:	xxxx	xxxx	xxxxx	xxxx	xxxx	xxxxx	xxxx	181	xxxxx	xxxx	132	xxxxx
SharedQueue:	0.1	xxxx	xxxxx	0.0	xxxx	xxxxx	xxxxx	2.8	xxxxx	xxxxx	0.4	xxxxx
Shrd ConDel:	9.3	xxxx	xxxxx	9.3	xxxx	xxxxx	xxxxx	46.0	xxxxx	xxxxx	35.7	xxxxx
Shared LOS:	A	*	*	A	*	*	*	E	*	*	E	*
ApproachDel:	xxxxxx			xxxxxx			46.0			35.7		
ApproachLOS:	*			*			E			E		

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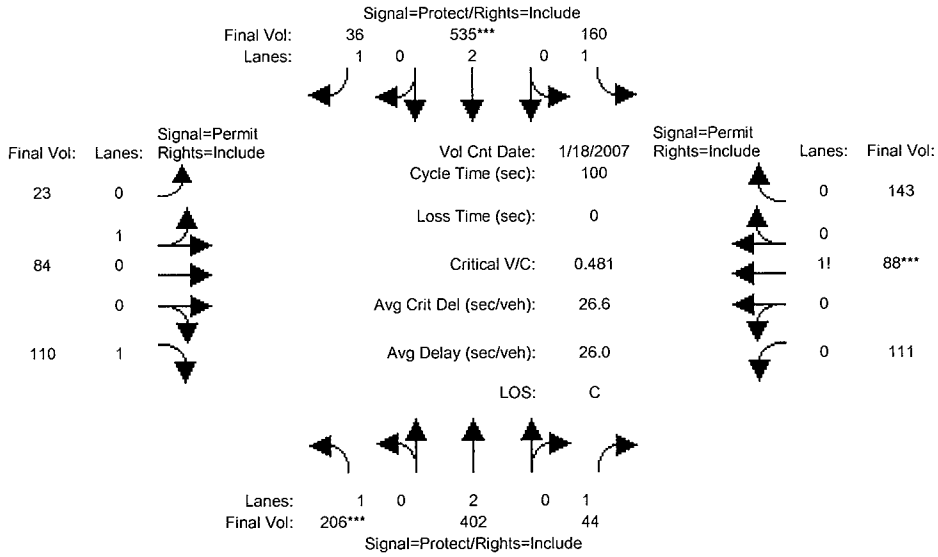
Intersection #7: Hwy 1 & Capistrano (S)



Approach:	North Bound			South Bound			East Bound			West Bound		
Movement:	L	T	R	L	T	R	L	T	R	L	T	R
Min. Green:	7	10	10	7	10	10	0	0	0	0	0	0
Volume Module: >> Count Date: 18 Jan 2007 << 7:45 - 8:45 AM												
Base Vol:	116	340	38	67	452	13	6	67	69	95	61	120
Growth Adj:	1.20	1.20	1.20	1.20	1.20	1.20	1.20	1.20	1.20	1.20	1.20	1.20
Initial Bse:	139	408	46	80	542	16	7	80	83	114	73	144
Added Vol:	0	0	0	0	0	0	0	0	0	0	0	0
ATI+Cumul:	67	-6	-2	80	-7	20	16	4	27	-3	15	-1
Initial Fut:	206	402	44	160	535	36	23	84	110	111	88	143
User Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Volume:	206	402	44	160	535	36	23	84	110	111	88	143
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:	206	402	44	160	535	36	23	84	110	111	88	143
PCE Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
MLF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
FinalVolume:	206	402	44	160	535	36	23	84	110	111	88	143
Saturation Flow Module:												
Sat/Lane:	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Adjustment:	0.95	0.95	0.85	0.95	0.95	0.85	0.91	0.91	0.85	0.82	0.82	0.82
Lanes:	1.00	2.00	1.00	1.00	2.00	1.00	0.22	0.78	1.00	0.32	0.26	0.42
Final Sat.:	1805	3610	1615	1805	3610	1615	372	1352	1615	507	403	654
Capacity Analysis Module:												
Vol/Sat:	0.11	0.11	0.03	0.09	0.15	0.02	0.06	0.06	0.07	0.22	0.22	0.22
Crit Moves:	****				****						****	
Green/Cycle:	0.24	0.30	0.30	0.24	0.31	0.31	0.45	0.45	0.45	0.45	0.45	0.45
Volume/Cap:	0.48	0.37	0.09	0.37	0.48	0.07	0.14	0.14	0.15	0.48	0.48	0.48
Delay/Veh:	33.7	27.5	25.0	32.0	28.4	24.5	15.9	15.9	16.1	19.6	19.6	19.6
User DelAdj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
AdjDel/Veh:	33.7	27.5	25.0	32.0	28.4	24.5	15.9	15.9	16.1	19.6	19.6	19.6
LOS by Move:	C	C	C	C	C	C	B	B	B	B	B	B
HCM2kAvgQ:	6	5	1	4	7	1	2	2	2	8	8	8

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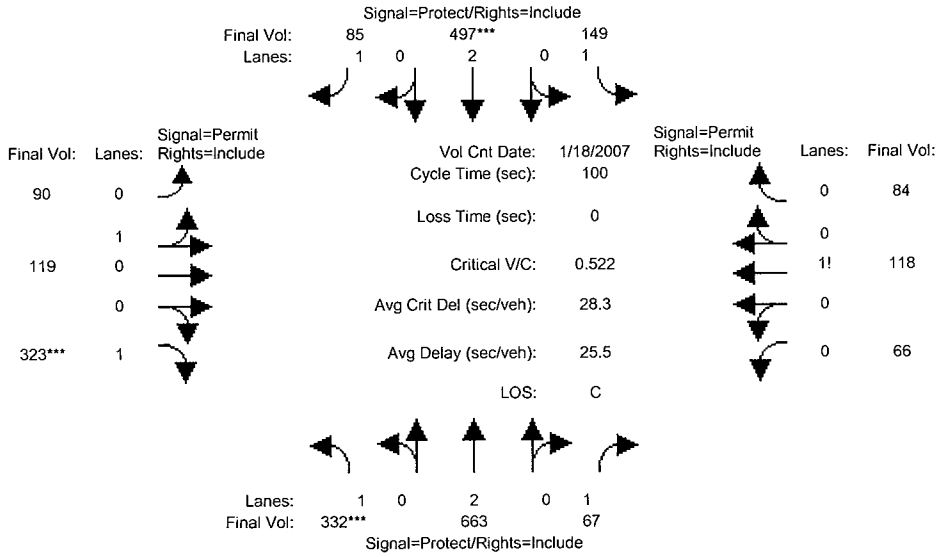
Intersection #7: Hwy 1 & Capistrano (S)



Approach:	North Bound			South Bound			East Bound			West Bound		
Movement:	L	T	R	L	T	R	L	T	R	L	T	R
Min. Green:	7	10	10	7	10	10	0	0	0	0	0	0
Volume Module: >> Count Date: 18 Jan 2007 << 4:15 - 5:15 PM												
Base Vol:	182	568	60	126	430	24	42	72	173	61	68	72
Growth Adj:	1.20	1.20	1.20	1.20	1.20	1.20	1.20	1.20	1.20	1.20	1.20	1.20
Initial Bse:	218	682	72	151	516	29	50	86	208	73	82	86
Added Vol:	0	0	0	0	0	0	0	0	0	0	0	0
ATI+Cumul:	114	-19	-5	-2	-19	56	40	33	115	-7	36	-2
Initial Fut:	332	663	67	149	497	85	90	119	323	66	118	84
User Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Volume:	332	663	67	149	497	85	90	119	323	66	118	84
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:	332	663	67	149	497	85	90	119	323	66	118	84
PCE Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
MLF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
FinalVolume:	332	663	67	149	497	85	90	119	323	66	118	84
Saturation Flow Module:												
Sat/Lane:	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Adjustment:	0.95	0.95	0.85	0.95	0.95	0.85	0.75	0.75	0.85	0.85	0.85	0.85
Lanes:	1.00	2.00	1.00	1.00	2.00	1.00	0.43	0.57	1.00	0.25	0.44	0.31
Final Sat.:	1805	3610	1615	1805	3610	1615	613	810	1615	398	706	507
Capacity Analysis Module:												
Vol/Sat:	0.18	0.18	0.04	0.08	0.14	0.05	0.15	0.15	0.20	0.17	0.17	0.17
Crit Moves:	****				****				****			
Green/Cycle:	0.35	0.43	0.43	0.19	0.26	0.26	0.38	0.38	0.38	0.38	0.38	0.38
Volume/Cap:	0.52	0.43	0.10	0.43	0.52	0.20	0.38	0.38	0.52	0.43	0.43	0.43
Delay/Veh:	26.4	20.4	17.3	36.5	31.9	28.8	22.8	22.8	24.6	23.3	23.3	23.3
User DelAdj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
AdjDel/Veh:	26.4	20.4	17.3	36.5	31.9	28.8	22.8	22.8	24.6	23.3	23.3	23.3
LOS by Move:	C	C	B	D	C	C	C	C	C	C	C	C
HCM2kAvgQ:	8	8	1	4	7	2	5	5	8	6	6	6

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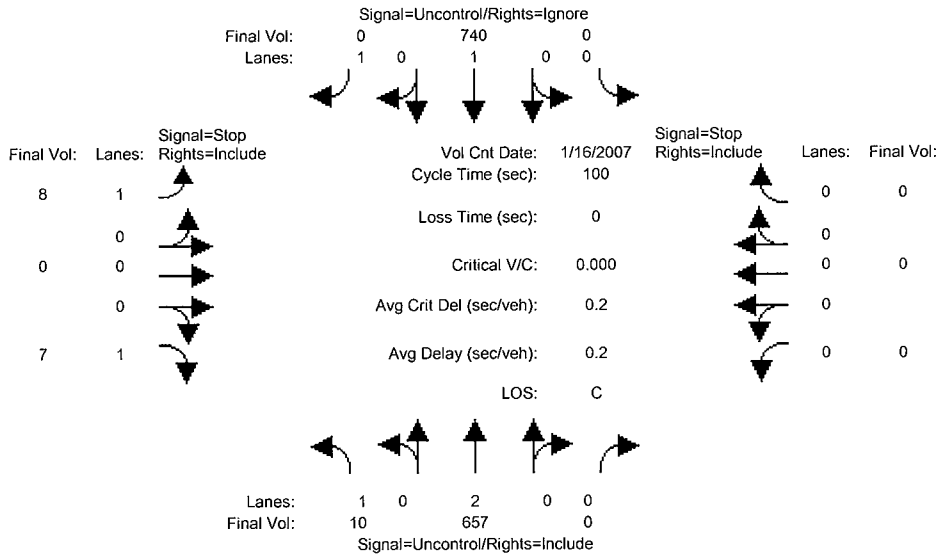
Big Wave Office Park and Wellness Center
Half Moon Bay, California

Level Of Service Computation Report
2000 HCM Unsignalized (Future Volume Alternative)
Cumulative w/o Project AM

Intersection #17: Hwy 1 & Capistrano (N)



Approach:	North Bound			South Bound			East Bound			West Bound		
Movement:	L	T	R	L	T	R	L	T	R	L	T	R
Volume Module: >> Count Date: 16 Jan 2007 << 8:00 - 9:00 AM												
Base Vol:	8	543	0	0	539	27	5	0	6	0	0	0
Growth Adj:	1.20	1.20	1.20	1.20	1.20	1.20	1.20	1.20	1.20	1.20	1.20	1.20
Initial Bse:	10	652	0	0	647	32	6	0	7	0	0	0
Added Vol:	0	0	0	0	0	0	0	0	0	0	0	0
ATI+Cumul:	0	5	0	0	93	4	2	0	0	0	0	0
Initial Fut:	10	657	0	0	740	36	8	0	7	0	0	0
User Adj:	1.00	1.00	1.00	1.00	1.00	0.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Adj:	1.00	1.00	1.00	1.00	1.00	0.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Volume:	10	657	0	0	740	0	8	0	7	0	0	0
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
FinalVolume:	10	657	0	0	740	0	8	0	7	0	0	0
Critical Gap Module:												
Critical Gp:	4.1	xxxx	xxxxx	xxxxx	xxxx	xxxxx	6.4	xxxx	6.2	xxxxx	xxxx	xxxxx
FollowUpTim:	2.2	xxxx	xxxxx	xxxxx	xxxx	xxxxx	3.5	xxxx	3.3	xxxxx	xxxx	xxxxx
Capacity Module:												
Cnflict Vol:	740	xxxx	xxxxx	xxxx	xxxx	xxxxx	1087	xxxx	740	xxxx	xxxx	xxxxx
Potent Cap.:	876	xxxx	xxxxx	xxxx	xxxx	xxxxx	241	xxxx	420	xxxx	xxxx	xxxxx
Move Cap.:	876	xxxx	xxxxx	xxxx	xxxx	xxxxx	239	xxxx	420	xxxx	xxxx	xxxxx
Volume/Cap:	0.01	xxxx	xxxx	xxxx	xxxx	xxxx	0.03	xxxx	0.02	xxxx	xxxx	xxxx
Level Of Service Module:												
2Way95thQ:	0.0	xxxx	xxxxx	xxxx	xxxx	xxxxx	0.1	xxxx	0.1	xxxx	xxxx	xxxxx
Control Del:	9.2	xxxx	xxxxx	xxxxx	xxxx	xxxxx	20.6	xxxx	13.7	xxxxx	xxxx	xxxxx
LOS by Move:	A	*	*	*	*	*	C	*	B	*	*	*
Movement:	LT	LTR	RT	LT	LTR	RT	LT	LTR	RT	LT	LTR	RT
Shared Cap.:	xxxx	xxxx	xxxxx	xxxx	xxxx	xxxxx	xxxx	xxxx	xxxxx	xxxx	xxxx	xxxxx
SharedQueue:	xxxxx	xxxx	xxxxx	xxxxx	xxxx	xxxxx	xxxxx	xxxx	xxxxx	xxxxx	xxxx	xxxxx
Shrd ConDel:	xxxxx	xxxx	xxxxx	xxxxx	xxxx	xxxxx	xxxxx	xxxx	xxxxx	xxxxx	xxxx	xxxxx
Shared LOS:	*	*	*	*	*	*	*	*	*	*	*	*
ApproachDel:	xxxxxx			xxxxxx			17.3			xxxxxx		
ApproachLOS:	*			*			C			*		

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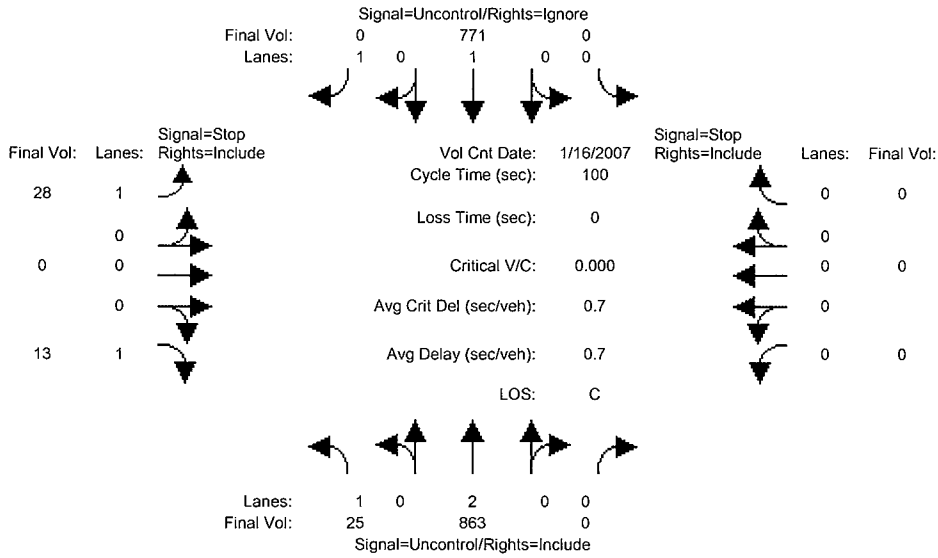
Big Wave Office Park and Wellness Center
Half Moon Bay, California

Level Of Service Computation Report
2000 HCM Unsignalized (Future Volume Alternative)
Cumulative w/o Project PM

Intersection #17: Hwy 1 & Capistrano (N)



Approach:	North Bound			South Bound			East Bound			West Bound		
Movement:	L	T	R	L	T	R	L	T	R	L	T	R
Volume Module: >> Count Date: 16 Jan 2007 << 4:30 - 5:30 PM												
Base Vol:	21	711	0	0	613	20	14	0	11	0	0	0
Growth Adj:	1.20	1.20	1.20	1.20	1.20	1.20	1.20	1.20	1.20	1.20	1.20	1.20
Initial Bse:	25	853	0	0	736	24	17	0	13	0	0	0
Added Vol:	0	0	0	0	0	0	0	0	0	0	0	0
ATI+Cumul:	0	10	0	0	35	10	11	0	0	0	0	0
Initial Fut:	25	863	0	0	771	34	28	0	13	0	0	0
User Adj:	1.00	1.00	1.00	1.00	1.00	0.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Adj:	1.00	1.00	1.00	1.00	1.00	0.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Volume:	25	863	0	0	771	0	28	0	13	0	0	0
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
FinalVolume:	25	863	0	0	771	0	28	0	13	0	0	0
Critical Gap Module:												
Critical Gp:	4.1	xxxx	xxxxx	xxxxx	xxxx	xxxxx	6.4	xxxx	6.2	xxxxx	xxxx	xxxxx
FollowUpTim:	2.2	xxxx	xxxxx	xxxxx	xxxx	xxxxx	3.5	xxxx	3.3	xxxxx	xxxx	xxxxx
Capacity Module:												
Cnflict Vol:	771	xxxx	xxxxx	xxxx	xxxx	xxxxx	1253	xxxx	771	xxxx	xxxx	xxxxx
Potent Cap.:	853	xxxx	xxxxx	xxxx	xxxx	xxxxx	192	xxxx	403	xxxx	xxxx	xxxxx
Move Cap.:	853	xxxx	xxxxx	xxxx	xxxx	xxxxx	188	xxxx	403	xxxx	xxxx	xxxxx
Volume/Cap:	0.03	xxxx	xxxx	xxxx	xxxx	xxxx	0.15	xxxx	0.03	xxxx	xxxx	xxxx
Level Of Service Module:												
2Way95thQ:	0.1	xxxx	xxxxx	xxxx	xxxx	xxxxx	0.5	xxxx	0.1	xxxx	xxxx	xxxxx
Control Del:	9.3	xxxx	xxxxx	xxxxx	xxxx	xxxxx	27.5	xxxx	14.2	xxxxx	xxxx	xxxxx
LOS by Move:	A	*	*	*	*	*	D	*	B	*	*	*
Movement:	LT	LTR	RT	LT	LTR	RT	LT	LTR	RT	LT	LTR	RT
Shared Cap.:	xxxx	xxxx	xxxxx	xxxx	xxxx	xxxxx	xxxx	xxxx	xxxxx	xxxx	xxxx	xxxxx
SharedQueue:	xxxxx	xxxx	xxxxx	xxxxx	xxxx	xxxxx	xxxxx	xxxx	xxxxx	xxxxx	xxxx	xxxxx
Shrd ConDel:	xxxxx	xxxx	xxxxx	xxxxx	xxxx	xxxxx	xxxxx	xxxx	xxxxx	xxxxx	xxxx	xxxxx
Shared LOS:	*	*	*	*	*	*	*	*	*	*	*	*
ApproachDel:	xxxxxx			xxxxxx			23.2			xxxxxx		
ApproachLOS:	*			*			C			*		

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Approved Developments

Table 2
Big Wave -- Related Projects
January 2007

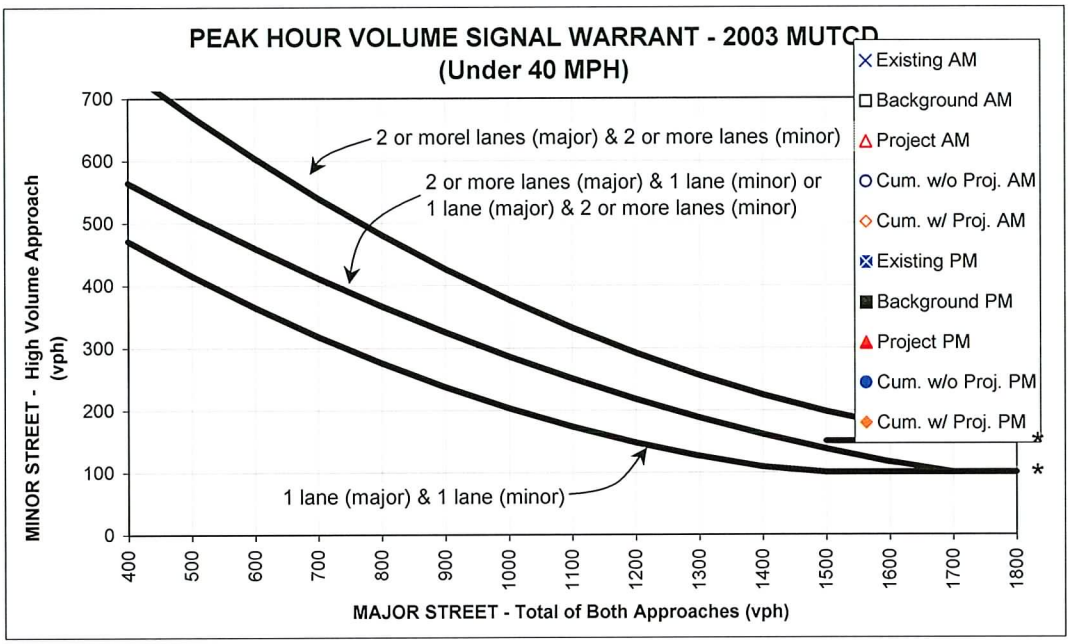
No.	Address	Land Use	Size	Status
San Mateo County Midcoast Area				
1	214 Princeton Ave.	Restaurant addition	1,600 s.f.	Planning Approval
2	179 Harvard Ave.	Boat and machine storage	3,163 s.f.	Under Construction
3	175 Harvard Ave.	Warehouse/office	3,625 s.f.	Under Construction
4	141 California Ave.	Warehouse	4,346 s.f.	Under Construction
5	121 California Ave.	Warehouse/office	4,346 s.f.	Under Construction
6	215 Mirada Rd.	Resort (B & B)	3 guest rooms, with manager's unit	Under Construction
7	131 Mirada Rd.	Restaurant addition	2,267 s.f.	Planning Approval, Pending Coastal Commission Approval
8	240 Capistrano Rd.	Hotel/meeting/extended stay	84 short stay rooms & 11 extended stay rooms, meeting rooms	Under Construction
9	240 Capistrano Rd.	Restaurant and retail	8,694 s. f. restaurant, 40,000 s.f. retail	Under Construction
City of Half Moon Bay				
10	925 Main Street	Senior recreation, day health facility	22,284 s.f.	Pending City Approval

San Mateo County – All in Princeton

Map No.	Project Name	Project Type	Address	Size	Status
	Stebbins Building: 1,745 sq/ft warehouse & garage & a 500 sq/ft office.	Commercial/ Industrial	249 Princeton (PLN2005-00553)	2,245 sq/ft building	Construction Completed in March 2009
	Turner Building: Marine-related sales & other compatible uses, including 3 parking spaces; includes approx. 50 c/y of grading.	Commercial	West Point Avenue (pln2006-00286)	3,450 sq/ft commercial building	Approved 9/2008
	Kissick Building: 3-story commercial building comprised parking, storage, office and 1-bedroom vacation rental; includes removal of 5 cypress trees	Commercial	Princeton at Columbia (PLN2007-00006)	3,425 sq. ft.	Approved 5/2008
	Ruben Building: Marine use indoor storage facility	Industrial	151 Vassar Ave (PLN2008-00113)	3,155 sq/ft	Approved 10/08
	Foss Project: 4 new buildings and removal of boat ramp.	Commercial	264, 268, 272, 276 & 280 Princeton Ave. (PLN2005-00349)	17,147 sq/ft.	Proposed (on appeal)
	Shook Project: 2 mixed-use buildings including studio space & dwelling unit in each building. Total parking 9 spaces under shared parking agreement. One 20" Cypress tree to be removed.	Commercial/ Residential	Princeton at Broadway (PLN2006-00287)	1,622 s.f. building.	Proposed (continued to date uncertain at hearing on 2/09)
	Johnson building: 3-story mixed-use building.	Commercial/ Residential	358 Princeton Ave. (PLN2006-00522)	2,374 sq/ft	Approved, pending Coastal Commission appeal period
	Stebbins Building: 2 story warehouse & office building.	Commercial/ Industrial	102 California Ave. (PLN2007-00061)	1,982 sq. ft.	Approved, Building plans submitted for permit

Signal Warrants

Airport and La Granada



* NOTE: 150 vph applies as the lower threshold volume for a minor street approach with 2 or more lanes and 100 vph applies as the lower threshold volume for a minor street approach with 1 lane.

Peak Hour Volume Warrant Per 2003 MUTCD- Under 40 MPH

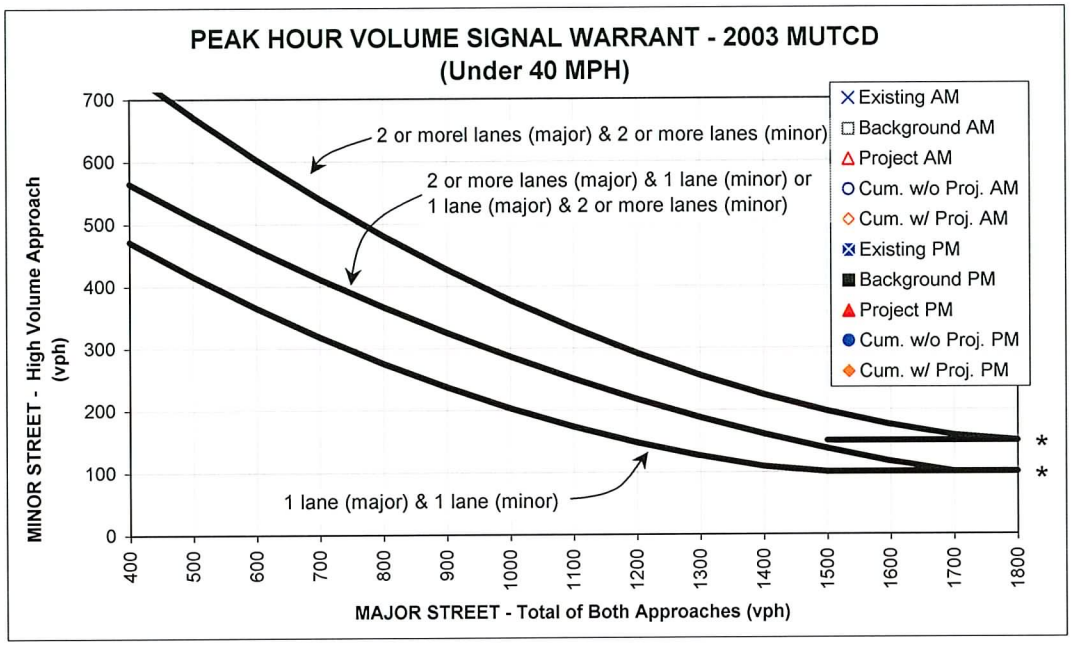
AM Peak Hour Volumes

		Approach Lanes: One	Approach Lanes: 2 or More	Existing AM	Background AM	Project AM	Cum. w/o Proj. AM	Cum. w/ Proj. AM		
Major Street - Both Approaches	Airport	x		89	96	224	116	244		
Minor Street - Highest Approach	La Granada	x		117	119	128	144	153		
Warrant Met?				No	No	No	No	No		

PM Peak Hour Volumes

		Approach Lanes: One	Approach Lanes: 2 or More	Existing PM	Background PM	Project PM	Cum. w/o Proj. PM	Cum. w/ Proj. PM		
Major Street - Both Approaches	Airport	x		186	196	318	236	358		
Minor Street - Highest Approach	La Granada	x		68	69	72	82	85		
Warrant Met?				No	No	No	No	No		

Airport and Los Banos



* NOTE: 150 vph applies as the lower threshold volume for a minor street approach with 2 or more lanes and 100 vph applies as the lower threshold volume for a minor street approach with 1 lane.

Peak Hour Volume Warrant Per 2003 MUTCD- Under 40 MPH

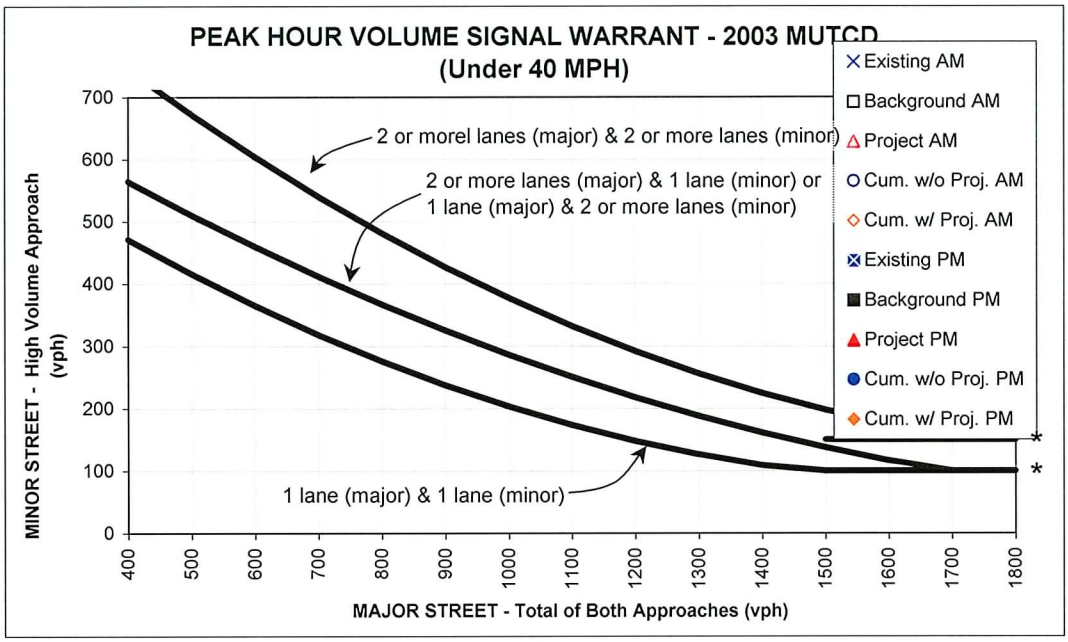
AM Peak Hour Volumes

		Approach Lanes: One	Approach Lanes: 2 or More	Existing AM	Background AM	Project AM	Cum. w/o Proj. AM	Cum. w/ Proj. AM		
Major Street - Both Approaches	Airport	x		78	81	190	98	207		
Minor Street - Highest Approach	Los Banos	x		35	38	53	46	61		
	Warrant Met?			No	No	No	No	No		

PM Peak Hour Volumes

		Approach Lanes: One	Approach Lanes: 2 or More	Existing PM	Background PM	Project PM	Cum. w/o Proj. PM	Cum. w/ Proj. PM		
Major Street - Both Approaches	Airport	x		155	162	274	195	307		
Minor Street - Highest Approach	Los Banos	x		26	27	31	32	36		
	Warrant Met?			No	No	No	No	No		

Airport and Stanford/Cornell



* NOTE: 150 vph applies as the lower threshold volume for a minor street approach with 2 or more lanes and 100 vph applies as the lower threshold volume for a minor street approach with 1 lane.

Peak Hour Volume Warrant Per 2003 MUTCD- Under 40 MPH

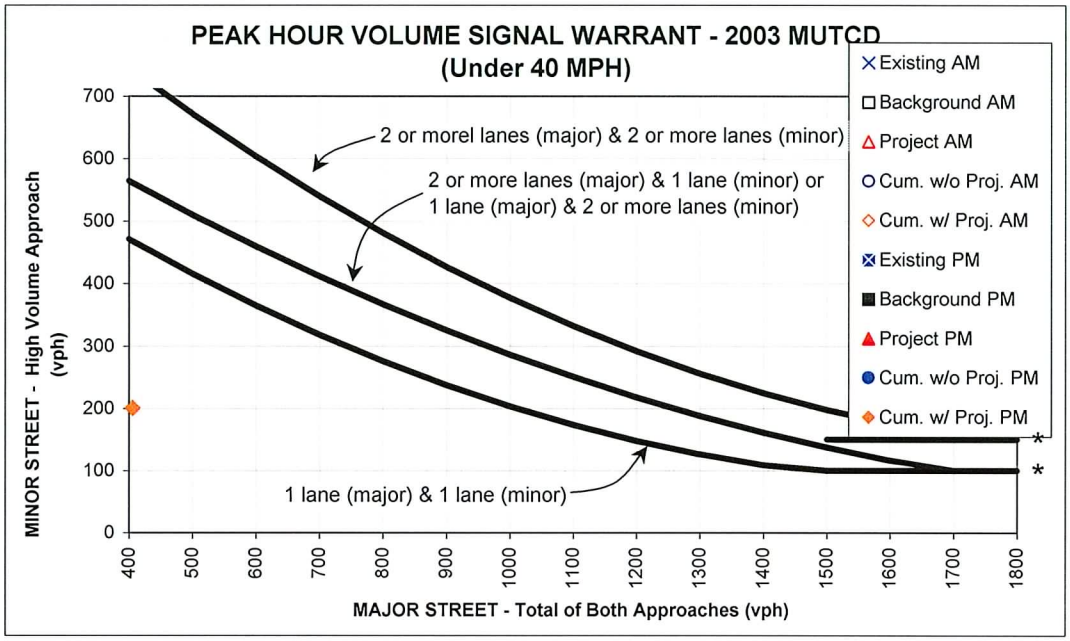
AM Peak Hour Volumes

		Approach Lanes: One	Approach Lanes: 2 or More	Existing AM	Background AM	Project AM	Cum. w/o Proj. AM	Cum. w/ Proj. AM		
Major Street - Both Approaches	Airport	x		146	155	179	187	211		
Minor Street - Highest Approach	Stanford/Cornell	x		23	25	136	29	140		
Warrant Met?				No	No	No	No	No		

PM Peak Hour Volumes

		Approach Lanes: One	Approach Lanes: 2 or More	Existing PM	Background PM	Project PM	Cum. w/o Proj. PM	Cum. w/ Proj. PM		
Major Street - Both Approaches	Airport	x		160	172	272	207	307		
Minor Street - Highest Approach	Stanford/Cornell	x		29	29	58	34	63		
Warrant Met?				No	No	No	No	No		

Broadway and Prospect



* NOTE: 150 vph applies as the lower threshold volume for a minor street approach with 2 or more lanes and 100 vph applies as the lower threshold volume for a minor street approach with 1 lane.

Peak Hour Volume Warrant Per 2003 MUTCD- Under 40 MPH

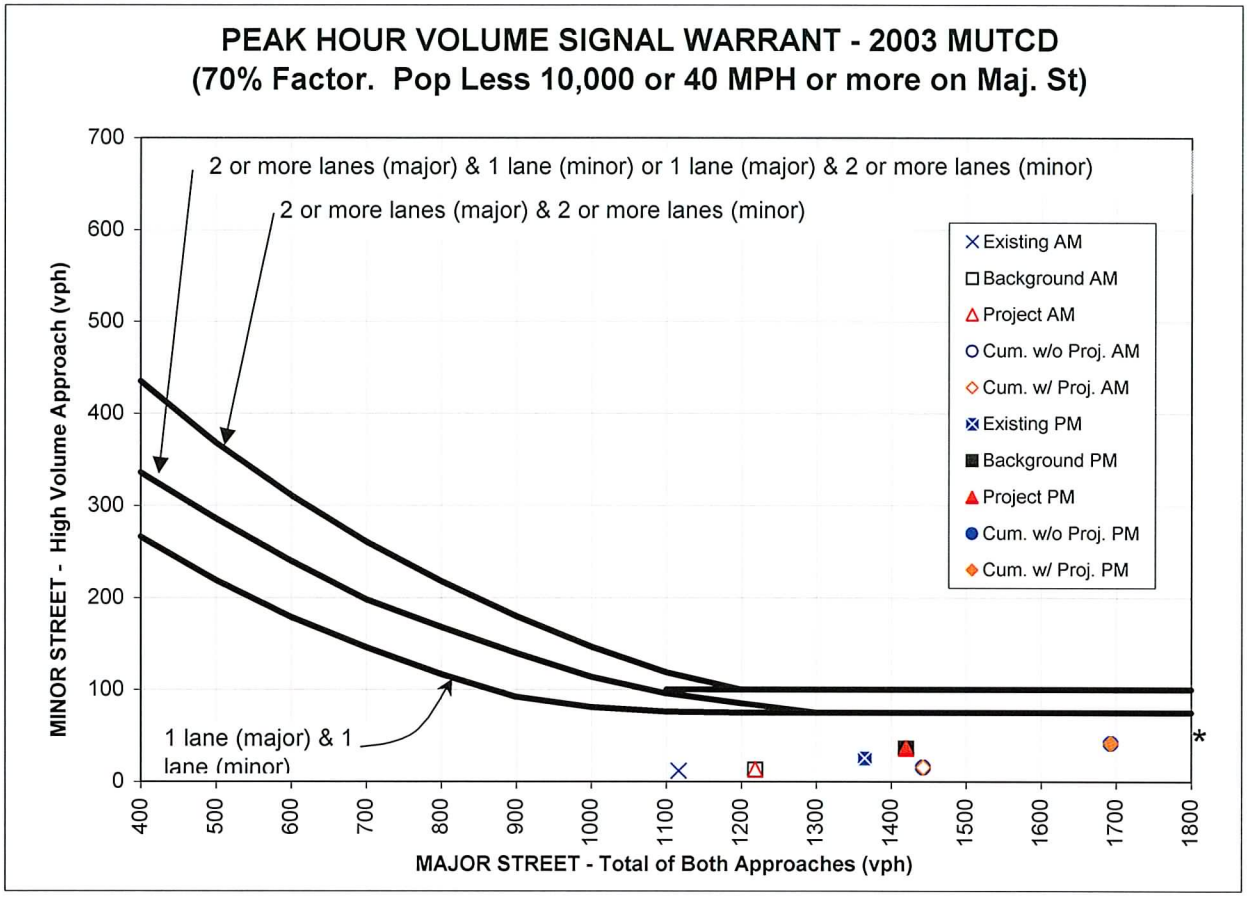
AM Peak Hour Volumes

		Approach Lanes: One	Approach Lanes: 2 or More	Existing AM	Background AM	Project AM	Cum. w/o Proj. AM	Cum. w/ Proj. AM		
Major Street - Both Approaches	Prospect	x		150	155	289	186	320		
Minor Street - Highest Approach	Broadway	x		118	120	120	144	144		
Warrant Met?				No	No	No	No	No		

PM Peak Hour Volumes

		Approach Lanes: One	Approach Lanes: 2 or More	Existing PM	Background PM	Project PM	Cum. w/o Proj. PM	Cum. w/ Proj. PM		
Major Street - Both Approaches	Prospect	x		227	234	360	280	406		
Minor Street - Highest Approach	Broadway	x		164	167	167	200	200		
Warrant Met?				No	No	No	No	No		

Highway 1 and Capistrano (N)



* NOTE: 100 vph applies as the lower threshold volume for a minor street approach with 2 or more lanes and 75 vph applies as the lower threshold volume for a minor street approach with 1 lane.

Peak Hour Volume Warrant Per 2003 MUTCD - Over 40 MPH

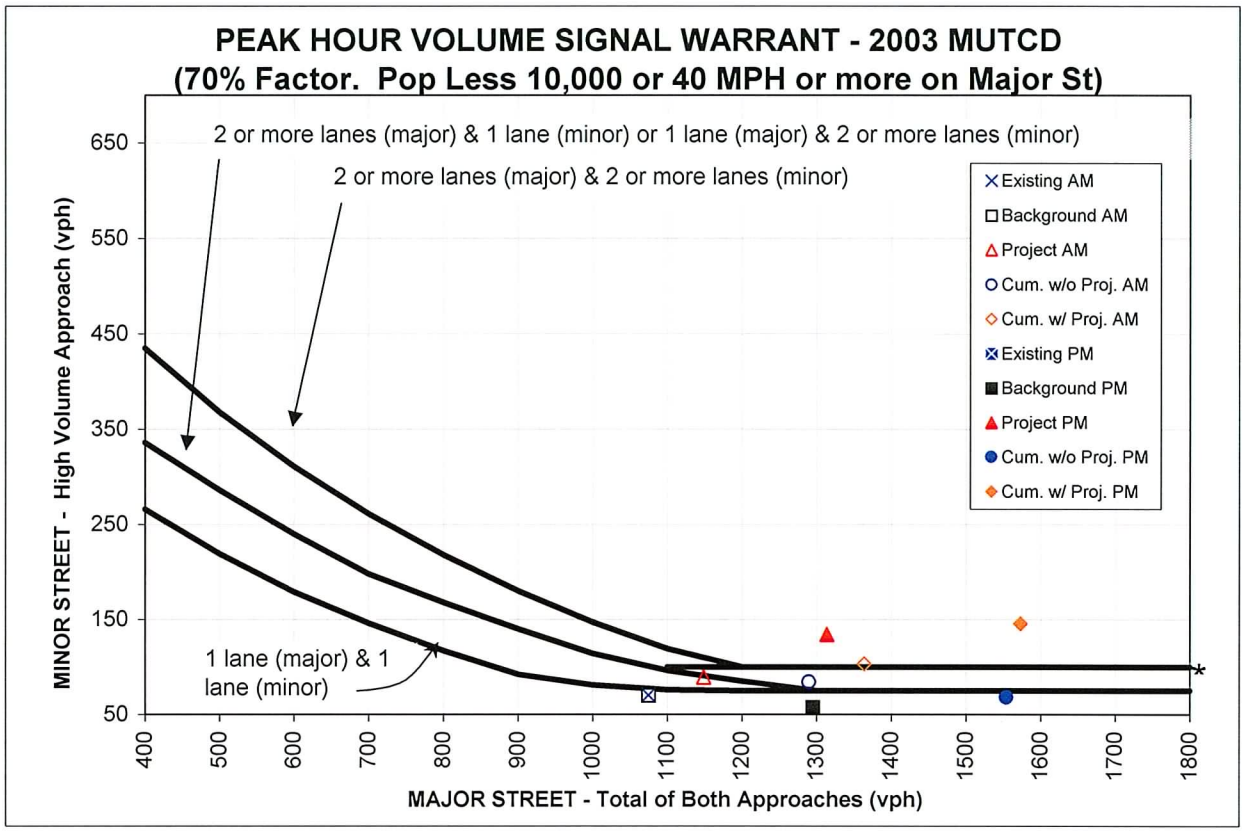
AM Peak Hour Volumes

		Approach Lanes: One	Approach Lanes: 2 or More	Existing AM	Background AM	Project AM	Cum. w/o Proj. AM	Cum. w/ Proj. AM		
Major Street - Both Approaches	Hwy 1		x	1117	1219	1219	1443	1443		
Minor Street - Highest Approach	Capistrano (N)	x		11	13	13	15	15		
	Warrant Met?			No	No	No	No	No		

PM Peak Hour Volumes

		Approach Lanes: One	Approach Lanes: 2 or More	Existing PM	Background PM	Project PM	Cum. w/o Proj. PM	Cum. w/ Proj. PM		
Major Street - Both Approaches	Hwy 1		x	1365	1420	1420	1693	1693		
Minor Street - Highest Approach	Capistrano (N)	x		25	36	36	41	41		
	Warrant Met?			No	No	No	No	No		

Highway 1 and Cypress



* NOTE: 100 vph applies as the lower threshold volume for a minor street approach with 2 or more lanes and 75 vph applies as the lower threshold volume for a minor street approach with 1 lane.

Peak Hour Volume Warrant Per 2003 MUTCD - Over 40 MPH

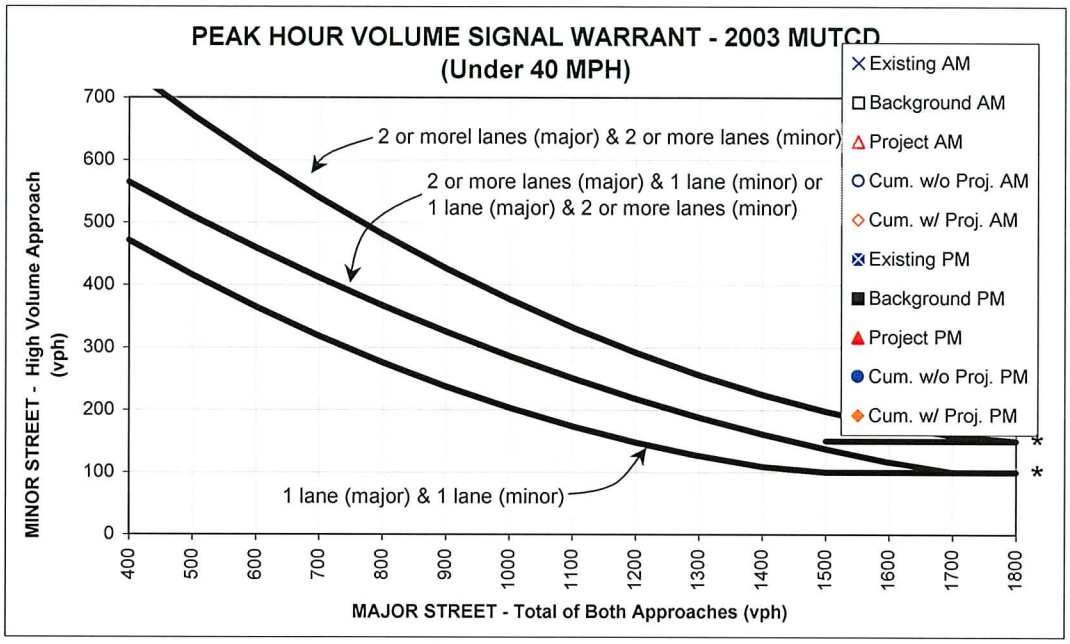
AM Peak Hour Volumes

		Approach Lanes: One	Approach Lanes: 2 or More	Existing AM	Background AM	Project AM	Cum. w/o Proj. AM	Cum. w/ Proj. AM		
Major Street - Both Approaches	Hwy 1		x	1075	1075	1149	1290	1364		
Minor Street - Highest Approach	Cypress	x		70	70	89	84	103		
	Warrant Met?			No	No	Yes	Yes	Yes		

PM Peak Hour Volumes

		Approach Lanes: One	Approach Lanes: 2 or More	Existing PM	Background PM	Project PM	Cum. w/o Proj. PM	Cum. w/ Proj. PM		
Major Street - Both Approaches	Hwy 1		x	1295	1295	1314	1554	1573		
Minor Street - Highest Approach	Cypress	x		57	57	134	68	145		
	Warrant Met?			No	No	Yes	Yes	Yes		

Prospect and Capistrano



* NOTE: 150 vph applies as the lower threshold volume for a minor street approach with 2 or more lanes and 100 vph applies as the lower threshold volume for a minor street approach with 1 lane.

Peak Hour Volume Warrant Per 2003 MUTCD- Under 40 MPH

AM Peak Hour Volumes

		Approach Lanes: One	Approach Lanes: 2 or More	Existing AM	Background AM	Project AM	Cum. w/o Proj. AM	Cum. w/ Proj. AM		
Major Street - Both Approaches	Capistrano	x		182	192	303	230	341		
Minor Street - Highest Approach	Prospect	x		127	129	152	155	178		
Warrant Met?				No	No	No	No	No		

PM Peak Hour Volumes

		Approach Lanes: One	Approach Lanes: 2 or More	Existing PM	Background PM	Project PM	Cum. w/o Proj. PM	Cum. w/ Proj. PM		
Major Street - Both Approaches	Capistrano	x		284	311	340	367	396		
Minor Street - Highest Approach	Prospect	x		198	206	303	247	344		
Warrant Met?				No	No	No	No	No		

MEMORANDUM

TO: Geoff Reilly, Christopher A. Joseph & Associates

FROM: Sandi Domingue

DATE: Updated October 8, 2009

SUBJECT: ***Additional Intersection Analysis for the Proposed Big Wave Office Park and Wellness Center***

Hexagon Transportation Consultants, Inc. has analyzed two additional intersections as part of the traffic impact analysis completed June 24, 2009 for the Big Wave Office Park and Wellness Center on Airport Street, north of the Princeton/Pillar Point Harbor area in unincorpated San Mateo County.

The two additional intersections analyzed are as follows:

Highway 92 at Highway 1
Highway 92 at Main Street

These intersections were added to the analysis in order to determine whether the project would be beneficial by reducing the traffic that currently travels over the hill on Highway 92 for employment. This potential benefit is based on the idea that the new office development would provide jobs for Half Moon Bay residents who curently travel outside the project area to work. These two study intersections were analyzed for the existing, background, project and cumulative conditions for both the AM and PM peak period. Existing AM and PM peak hour turning-movement counts for the study intersections were obtained from the City/County Association of Governments of San Mateo County (C/CAG) and lane configurations were determined from aerial photographs. A signal cycle length of 90 seconds was assumed for both study intersections.

Traffic Volumes

Existing AM and PM turning-movement counts were obtained from the C/CAG of San Mateo County (see Appendix). These counts were taken on 3/25/09. Background volumes were determined by adding to existing volumes the estimated traffic from approved but not yet constructed developments. The approved development list was obtained from the County of San Mateo. The traffic added to the study intersections from approved but not yet constructed developments was estimated by distributing and assigning trips generated by these developments to the roadway network. Traffic volumes under cumulative conditions were estimated by applying to the existing volumes an annual growth rate of one percent for twenty years based on standard traffic engineering practice, then adding the trips from approved developments and the project.

Project Traffic Estimates

The office use portion of the project would add a service not currently available in the project vicinity, potentially providing employment for residents who typically travel to jobs in other areas. Thus, this land use could reduce traffic currently traveling southbound on Highway 1 to Highway 92 and then over the hill to I-

Table 1
Intersection Level of Service Summary

Intersection	Peak Hour	Existing		Background		Project		Cumulative w/o Project		Cumulative w/ Project	
		Delay	LOS	Delay	LOS	Delay	LOS	Delay	LOS	Delay	LOS
Highway 1 at Highway 92	AM	25.9	C	26.1	C	25.4	C	31.8	C	29.3	C
	PM	29.6	C	29.9	C	30.9	C	34.6	C	35.9	D
Highway 92 at Main Street	AM	48.3	D	51.0	D	44.2	D	96.6	F	81.2	F
	PM	52.3	D	54.9	D	50.0	D	100.6	F	88.7	F

280. The trip distribution pattern for the proposed project was estimated based on existing travel patterns on the surrounding roadway system and the locations of complementary land uses. The office, R&D and Light Manufacturing portions of the Big Wave project was distributed through the two new study intersections. The difference between the trip distribution in this memorandum and the traffic impact analysis completed June 24, 2009 can be attributed to the distance between the intersections studied in this analysis and the project site (approximately four miles).

According to the Year 2000 U.S. Census, 53 percent of employees in the project vicinity travel from outside the area to work in the Half Moon Bay area and 47 percent of employees in the project vicinity live *within* the Half Moon Bay area. Hexagon applied these percentages to the office portion of the proposed project. There are 214 AM trips and 191 PM trips projected for the office land use. Therefore, it was assumed that 101 (47 percent) employee trips in the AM and 90 (47 percent) employee trips in the PM would be attributed to residents of Half Moon Bay. As a result, these employees of the proposed project would no longer have to travel outside of the Half Moon Bay area for employment. For purposes of this analysis, these trips were then subtracted from existing trips travelling out of the project vicinity via Highway 92 and northbound Highway 1. As outlined in the traffic impact analysis completed June 24, 2009, approximately 39 percent of the project trips are traveling to/from the south on Highway 1. See Figure 1 for the project trip assignment.

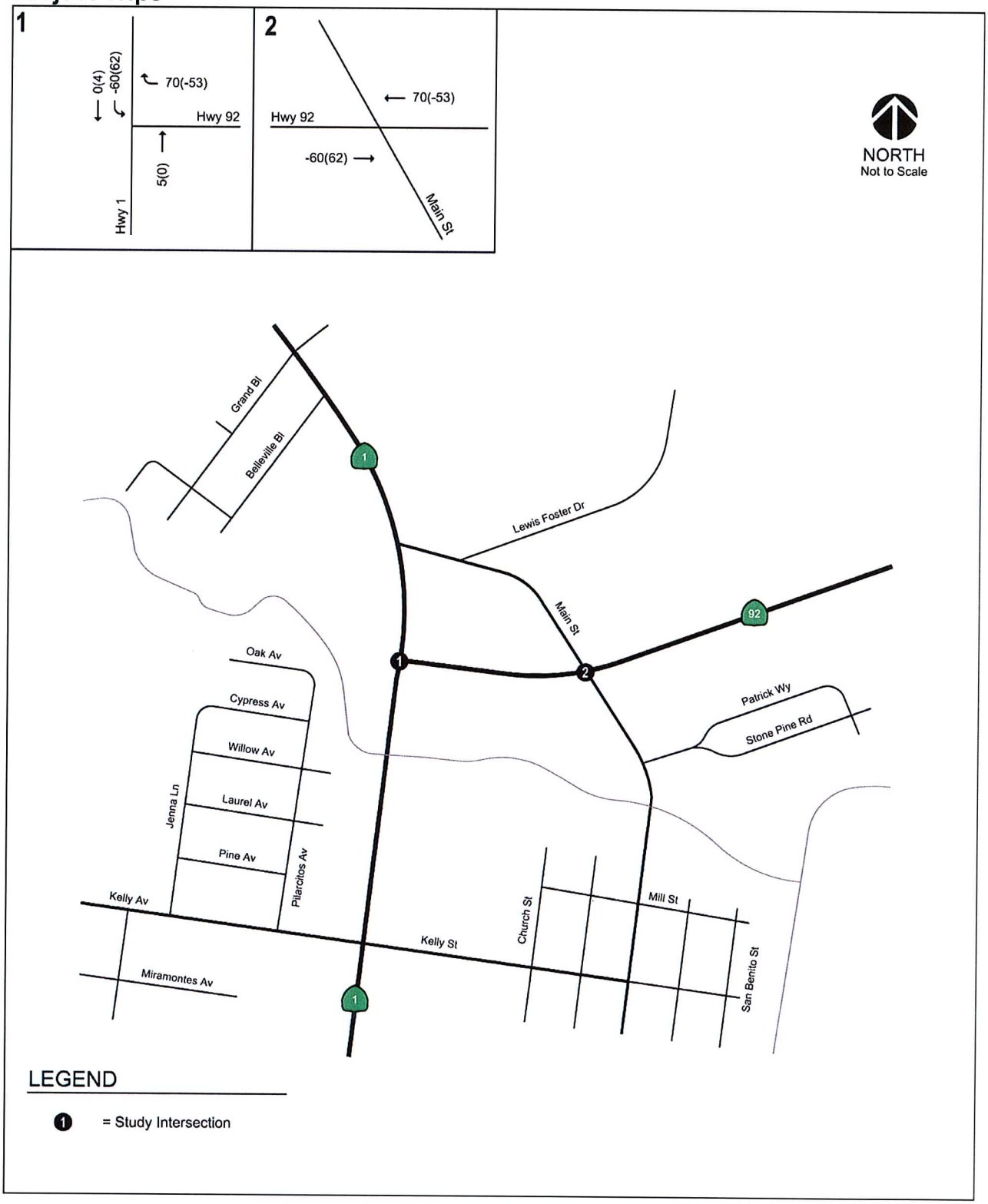
Intersection Impacts

The two study intersections will operate at acceptable levels of service under project conditions. The intersection of Highway 92 and Highway 1 operates at LOS C under project conditions during both peak hours (AM and PM). The intersection of Highway 92 at Main Street operates at LOS D during both the AM and PM peak hour. Under cumulative conditions with and without the project, the Highway 1/Highway 92 intersection will operate at LOS C during the AM peak hour. During the PM peak hour, this intersection will operate at LOS C without the project and LOS D with the project under cumulative conditions. The intersection of Highway 92 at Main Street operates at LOS F both with and without the project under both peak hours.

Conclusion

The proposed project will reduce traffic traveling over the hill on Highway 92 for employment by 60 eastbound trips in the AM peak hour and 53 westbound trips in the PM peak hour. The two study intersections will operate at acceptable levels of service under project conditions.

Figure 1
Project Trips



Appendix

All Traffic Data

(916)771-8700

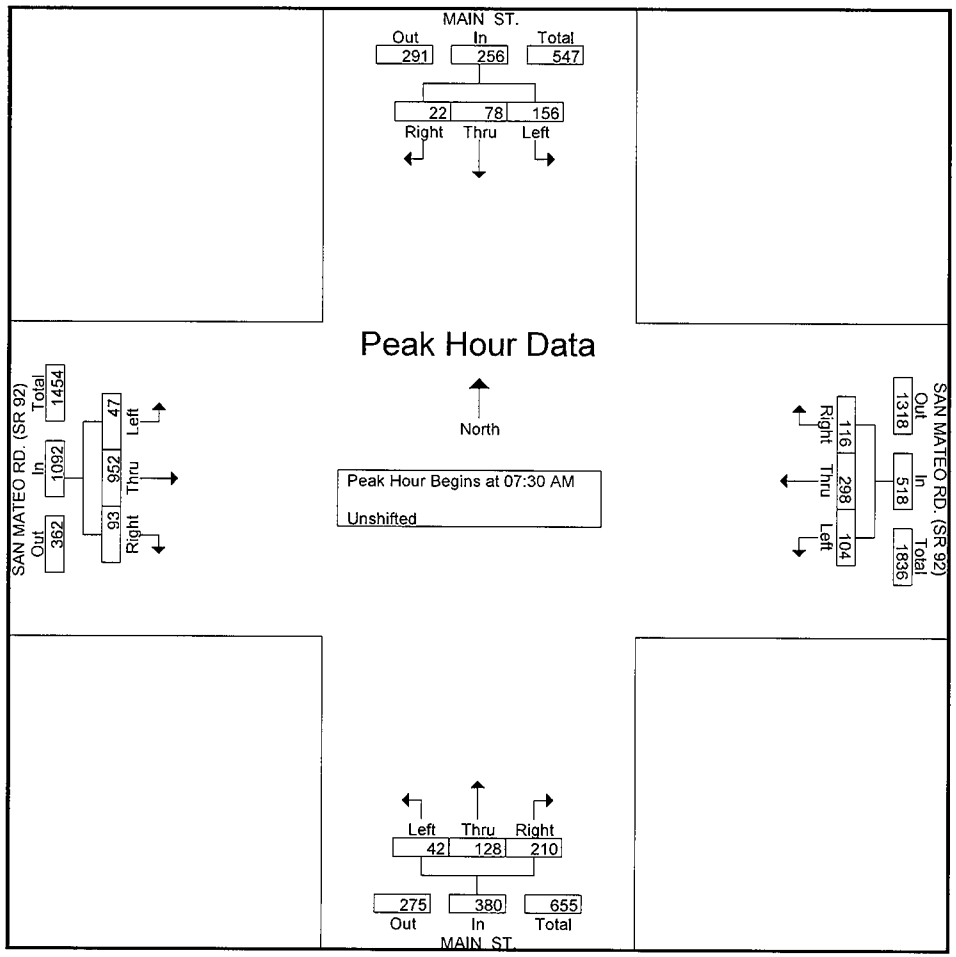
SAN MATEO

File Name : 17-MAIN-SR 92
Site Code : 00000000
Start Date : 3/25/2009
Page No : 1

Groups Printed- Unshifted

	MAIN ST. From North				SAN MATEO RD. (SR 92) From East				MAIN ST. From South				SAN MATEO RD. (SR 92) From West				
Start Time	Right	Thru	Left	App. Total	Right	Thru	Left	App. Total	Right	Thru	Left	App. Total	Right	Thru	Left	App. Total	Int. Total
07:00 AM	4	5	53	62	17	56	10	83	39	15	5	59	43	198	4	245	449
07:15 AM	5	14	37	56	31	81	22	134	47	44	7	98	12	257	11	280	568
07:30 AM	6	24	46	76	35	99	27	161	41	46	7	94	14	260	30	304	635
07:45 AM	4	18	39	61	22	57	21	100	45	21	12	78	19	227	4	250	489
Total	19	61	175	255	105	293	80	478	172	126	31	329	88	942	49	1079	2141
08:00 AM	5	16	37	58	26	74	26	126	63	25	9	97	27	211	8	246	527
08:15 AM	7	20	34	61	33	68	30	131	61	36	14	111	33	254	5	292	595
08:30 AM	13	23	50	86	23	69	17	109	45	29	8	82	16	210	8	234	511
08:45 AM	6	25	30	61	23	75	24	122	34	21	9	64	19	170	8	197	444
Total	31	84	151	266	105	286	97	488	203	111	40	354	95	845	29	969	2077
04:00 PM	7	39	37	83	79	146	51	276	47	35	29	111	22	118	12	152	622
04:15 PM	10	31	31	72	93	176	45	314	40	44	22	106	20	99	9	128	620
04:30 PM	9	25	29	63	81	177	66	324	36	37	22	95	21	105	11	137	619
04:45 PM	8	39	28	75	92	138	48	278	31	50	27	108	30	125	11	166	627
Total	34	134	125	293	345	637	210	1192	154	166	100	420	93	447	43	583	2488
05:00 PM	8	34	41	83	77	168	44	289	47	66	25	138	34	137	9	180	690
05:15 PM	10	31	48	89	86	164	53	303	51	45	23	119	21	113	9	143	654
05:30 PM	3	28	45	76	93	153	43	289	50	49	13	112	22	122	6	150	627
05:45 PM	6	26	27	59	101	185	55	341	31	41	27	99	20	120	11	151	650
Total	27	119	161	307	357	670	195	1222	179	201	88	468	97	492	35	624	2621
Grand Total	111	398	612	1121	912	1886	582	3380	708	604	259	1571	373	2726	156	3255	9327
Apprch %	9.9	35.5	54.6		27	55.8	17.2		45.1	38.4	16.5		11.5	83.7	4.8		
Total %	1.2	4.3	6.6	12	9.8	20.2	6.2	36.2	7.6	6.5	2.8	16.8	4	29.2	1.7	34.9	

	MAIN ST. From North				SAN MATEO RD. (SR 92) From East				MAIN ST. From South				SAN MATEO RD. (SR 92) From West				
Start Time	Right	Thru	Left	App. Total	Right	Thru	Left	App. Total	Right	Thru	Left	App. Total	Right	Thru	Left	App. Total	Int. Total
Peak Hour Analysis From 07:00 AM to 08:45 AM - Peak 1 of 1																	
Peak Hour for Entire Intersection Begins at 07:30 AM																	
07:30 AM	6	**24**	**46**	**76**	**35**	**99**	27	**161**	41	**46**	7	94	14	**260**	**30**	**304**	**635**
07:45 AM	4	18	39	61	22	57	21	100	45	21	12	78	19	227	4	250	489
08:00 AM	5	16	37	58	26	74	26	126	**63**	25	9	97	27	211	8	246	527
08:15 AM	**7**	20	34	61	33	68	**30**	131	61	36	**14**	**111**	**33**	254	5	292	595
Total Volume	22	78	156	256	116	298	104	518	210	128	42	380	93	952	47	1092	2246
% App. Total	8.6	30.5	60.9		22.4	57.5	20.1		55.3	33.7	11.1		8.5	87.2	4.3		



Peak Hour Analysis From 04:00 PM to 05:30 PM - Peak 1 of 1
Peak Hour for Entire Intersection Begins at 04:45 PM

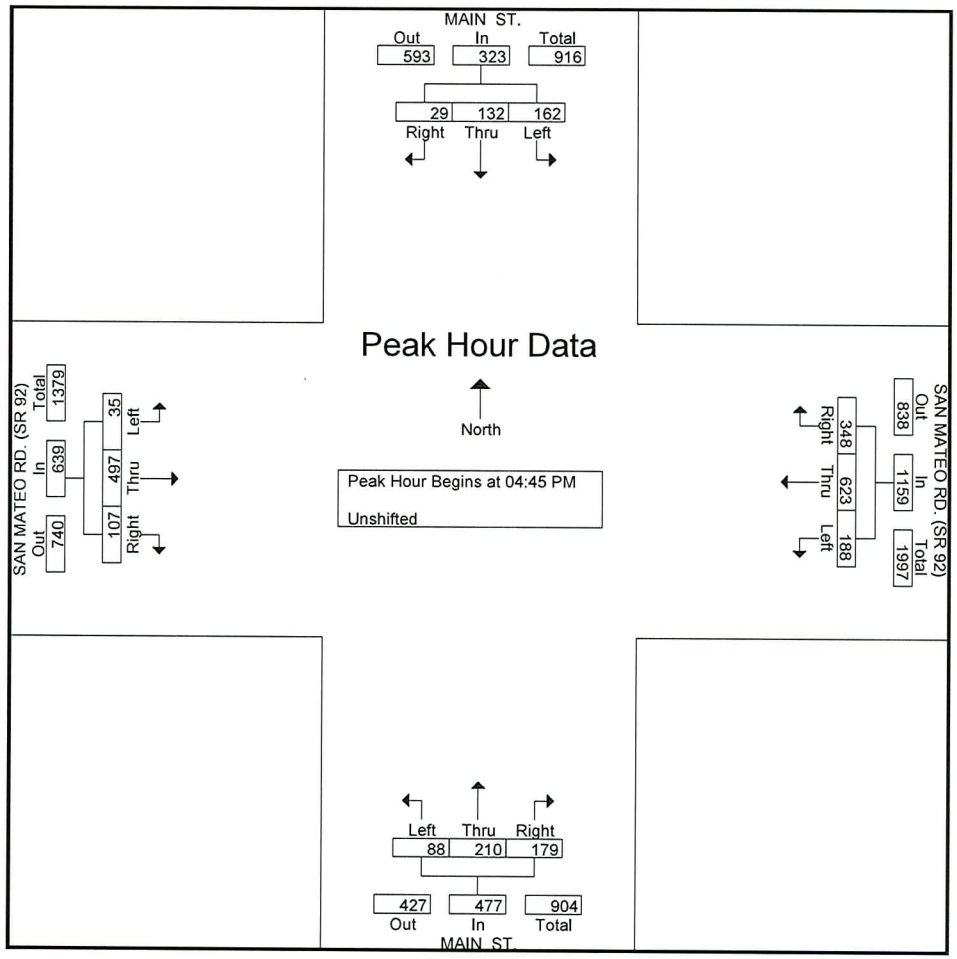
04:45 PM	8	**39**	28	75	92	138	48	278	31	50	**27**	108	30	125	**11**	166	627
05:00 PM	8	34	41	83	77	**168**	44	289	47	**66**	25	**138**	**34**	**137**	9	**180**	**690**
05:15 PM	**10**	31	**48**	**89**	86	164	**53**	**303**	**51**	45	23	119	21	113	9	143	654
05:30 PM	3	28	45	76	**93**	153	43	289	50	49	13	112	22	122	6	150	627
Total Volume	29	132	162	323	348	623	188	1159	179	210	88	477	107	497	35	639	2598
% App. Total	9	40.9	50.2		30	53.8	16.2		37.5	44	18.4		16.7	77.8	5.5		
PHF	.725	.846	.844	.907	.935	.927	.887	.956	.877	.795	.815	.864	.787	.907	.795	.888	.941

All Traffic Data

(916)771-8700

SAN MATEO

File Name : 17-MAIN-SR 92
Site Code : 00000000
Start Date : 3/25/2009
Page No : 3



All Traffic Data

(916)771-8700

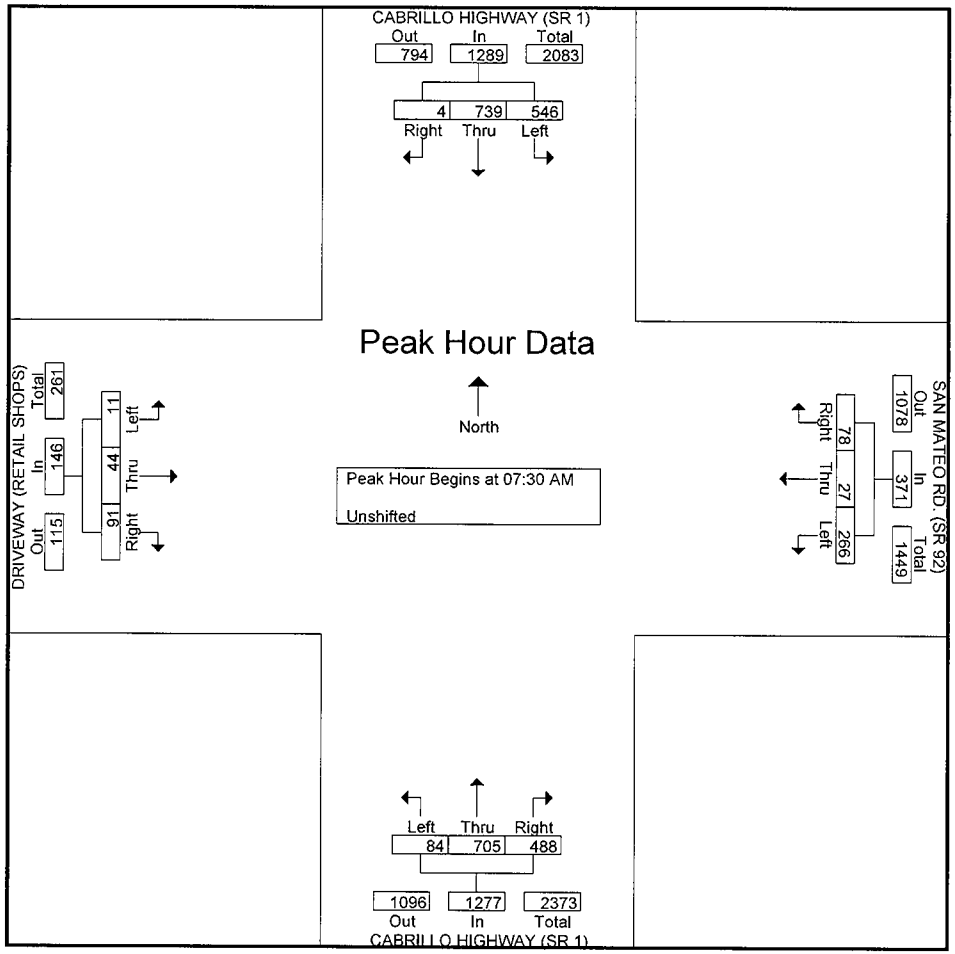
SAN MATEO

File Name : 16-SR 1-SR 92
Site Code : 00000000
Start Date : 3/25/2009
Page No : 1

Groups Printed- Unshifted

	CABRILLO HIGHWAY (SR 1) From North				SAN MATEO RD. (SR 92) From East				CABRILLO HIGHWAY (SR 1) From South				DRIVEWAY (RETAIL SHOPS) From West				
Start Time	Right	Thru	Left	App. Total	Right	Thru	Left	App. Total	Right	Thru	Left	App. Total	Right	Thru	Left	App. Total	Int. Total
07:00 AM	1	95	126	222	13	6	45	64	106	92	6	204	19	14	1	34	524
07:15 AM	1	113	147	261	28	5	57	90	131	145	14	290	19	14	2	35	676
07:30 AM	0	146	162	308	28	4	74	106	115	202	14	331	18	10	3	31	776
07:45 AM	2	231	127	360	19	5	61	85	118	158	18	294	28	13	3	44	783
Total	4	585	562	1151	88	20	237	345	470	597	52	1119	84	51	9	144	2759
08:00 AM	0	185	129	314	18	8	67	93	120	174	20	314	18	8	2	28	749
08:15 AM	2	177	128	307	13	10	64	87	135	171	32	338	27	13	3	43	775
08:30 AM	3	111	121	235	22	7	70	99	120	130	13	263	12	9	1	22	619
08:45 AM	0	109	93	202	21	7	59	87	95	119	12	226	26	11	3	40	555
Total	5	582	471	1058	74	32	260	366	470	594	77	1141	83	41	9	133	2698
04:00 PM	2	134	64	200	43	20	122	185	72	184	43	299	38	7	14	59	743
04:15 PM	5	124	53	182	66	17	130	213	80	210	37	327	46	5	17	68	790
04:30 PM	1	162	65	228	74	25	102	201	61	165	27	253	47	9	11	67	749
04:45 PM	1	190	79	270	35	33	125	193	88	191	37	316	59	8	7	74	853
Total	9	610	261	880	218	95	479	792	301	750	144	1195	190	29	49	268	3135
05:00 PM	2	164	76	242	56	30	120	206	90	217	39	346	52	8	11	71	865
05:15 PM	3	158	61	222	50	22	116	188	72	209	52	333	43	8	20	71	814
05:30 PM	4	157	62	223	58	18	115	191	76	197	31	304	64	11	15	90	808
05:45 PM	6	126	56	188	64	20	139	223	74	177	42	293	76	13	8	97	801
Total	15	605	255	875	228	90	490	808	312	800	164	1276	235	40	54	329	3288
Grand Total	33	2382	1549	3964	608	237	1466	2311	1553	2741	437	4731	592	161	121	874	11880
Apprch %	0.8	60.1	39.1		26.3	10.3	63.4		32.8	57.9	9.2		67.7	18.4	13.8		
Total %	0.3	20.1	13	33.4	5.1	2	12.3	19.5	13.1	23.1	3.7	39.8	5	1.4	1	7.4	

	CABRILLO HIGHWAY (SR 1) From North				SAN MATEO RD. (SR 92) From East				CABRILLO HIGHWAY (SR 1) From South				DRIVEWAY (RETAIL SHOPS) From West				
Start Time	Right	Thru	Left	App. Total	Right	Thru	Left	App. Total	Right	Thru	Left	App. Total	Right	Thru	Left	App. Total	Int. Total
Peak Hour Analysis From 07:00 AM to 08:45 AM - Peak 1 of 1																	
Peak Hour for Entire Intersection Begins at 07:30 AM																	
07:30 AM	0	146	**162**	308	**28**	4	**74**	**106**	115	**202**	14	331	18	10	**3**	31	776
07:45 AM	**2**	**231**	127	**360**	19	5	61	85	118	158	18	294	**28**	**13**	3	**44**	**783**
08:00 AM	0	185	129	314	18	8	67	93	120	174	20	314	18	8	2	28	749
08:15 AM	2	177	128	307	13	**10**	64	87	**135**	171	**32**	**338**	27	13	3	43	775
Total Volume	4	739	546	1289	78	27	266	371	488	705	84	1277	91	44	11	146	3083
% App. Total	0.3	57.3	42.4		21	7.3	71.7		38.2	55.2	6.6		62.3	30.1	7.5		



Peak Hour Analysis From 04:00 PM to 05:45 PM - Peak 1 of 1
Peak Hour for Entire Intersection Begins at 04:45 PM

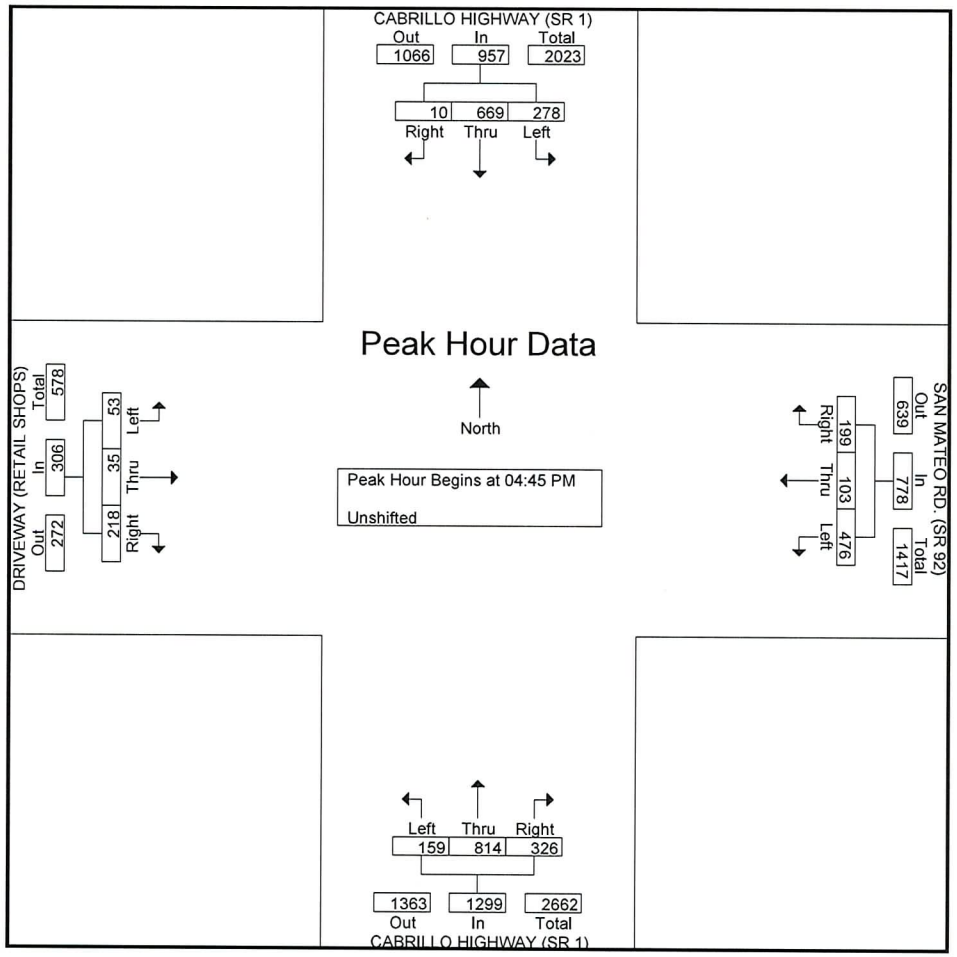
04:45 PM	1	**190**	**79**	**270**	35	**33**	**125**	193	88	191	37	316	59	8	7	74	853
05:00 PM	2	164	76	242	56	30	120	**206**	**90**	**217**	39	**346**	52	8	11	71	**865**
05:15 PM	3	158	61	222	50	22	116	188	72	209	**52**	333	43	8	**20**	71	814
05:30 PM	**4**	157	62	223	**58**	18	115	191	76	197	31	304	**64**	**11**	15	**90**	808
Total Volume	10	669	278	957	199	103	476	778	326	814	159	1299	218	35	53	306	3340
% App. Total	1	69.9	29		25.6	13.2	61.2		25.1	62.7	12.2		71.2	11.4	17.3		
PHF	.625	.880	.880	.886	.858	.780	.952	.944	.906	.938	.764	.939	.852	.795	.663	.850	.965

All Traffic Data

(916)771-8700

SAN MATEO

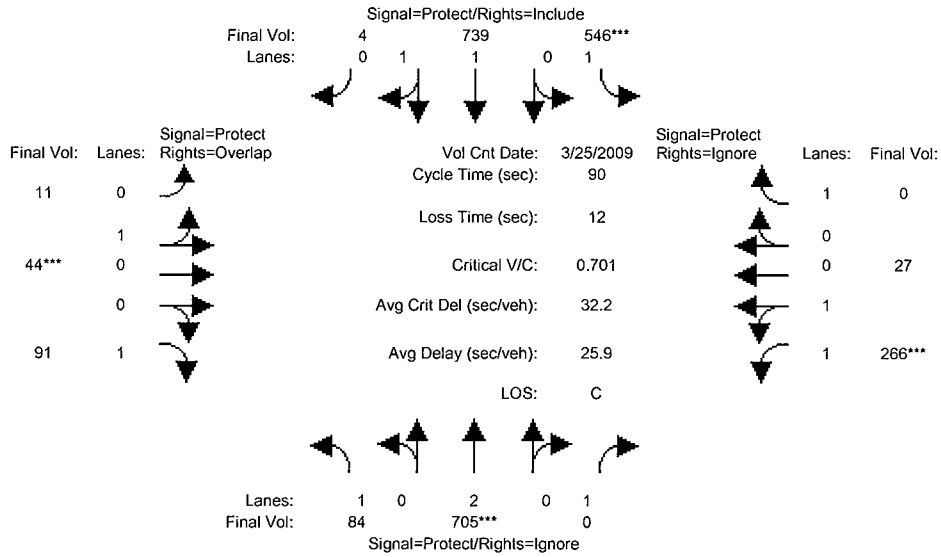
File Name : 16-SR 1-SR 92
Site Code : 00000000
Start Date : 3/25/2009
Page No : 3



Big Wave Office Park and Wellness Center
Half Moon Bay, California

Level Of Service Computation Report
2000 HCM Operations (Future Volume Alternative)
Existing AM

Intersection #34: Highway 1 at Highway 92



Street Name:	Highway 1						Highway 92					
Approach:	North Bound			South Bound			East Bound			West Bound		
Movement:	L	T	R	L	T	R	L	T	R	L	T	R
Min. Green:	0	0	0	0	0	0	0	0	0	0	0	0
Volume Module: >> Count Date: 25 Mar 2009 << AM Peak												
Base Vol:	84	705	488	546	739	4	11	44	91	266	27	78
Growth Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Initial Bse:	84	705	488	546	739	4	11	44	91	266	27	78
Added Vol:	0	0	0	0	0	0	0	0	0	0	0	0
PasserByVol:	0	0	0	0	0	0	0	0	0	0	0	0
Initial Fut:	84	705	488	546	739	4	11	44	91	266	27	78
User Adj:	1.00	1.00	0.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	0.00
PHF Adj:	1.00	1.00	0.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	0.00
PHF Volume:	84	705	0	546	739	4	11	44	91	266	27	0
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:	84	705	0	546	739	4	11	44	91	266	27	0
PCE Adj:	1.00	1.00	0.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	0.00
MLF Adj:	1.00	1.00	0.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	0.00
FinalVolume:	84	705	0	546	739	4	11	44	91	266	27	0
Saturation Flow Module:												
Sat/Lane:	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Adjustment:	0.95	0.95	1.00	0.95	0.95	0.95	0.99	0.99	0.85	0.96	0.96	1.00
Lanes:	1.00	2.00	1.00	1.00	1.99	0.01	0.20	0.80	1.00	1.82	0.18	1.00
Final Sat.:	1805	3610	1900	1805	3587	19	376	1505	1615	3301	335	1900
Capacity Analysis Module:												
Vol/Sat:	0.05	0.20	0.00	0.30	0.21	0.21	0.03	0.03	0.06	0.08	0.08	0.00
Crit Moves:		****		****				****		****		
Green/Cycle:	0.13	0.28	0.00	0.43	0.58	0.58	0.04	0.04	0.17	0.11	0.11	0.00
Volume/Cap:	0.36	0.70	0.00	0.70	0.36	0.36	0.70	0.70	0.33	0.70	0.70	0.00
Delay/Veh:	36.6	31.3	0.0	23.7	10.1	10.1	67.2	67.2	33.3	43.6	43.6	0.0
User DelAdj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
AdjDel/Veh:	36.6	31.3	0.0	23.7	10.1	10.1	67.2	67.2	33.3	43.6	43.6	0.0
LOS by Move:	D	C	A	C	B	B	E	E	C	D	D	A
HCM2kAvgQ:	2	10	0	13	6	6	3	3	2	5	5	0

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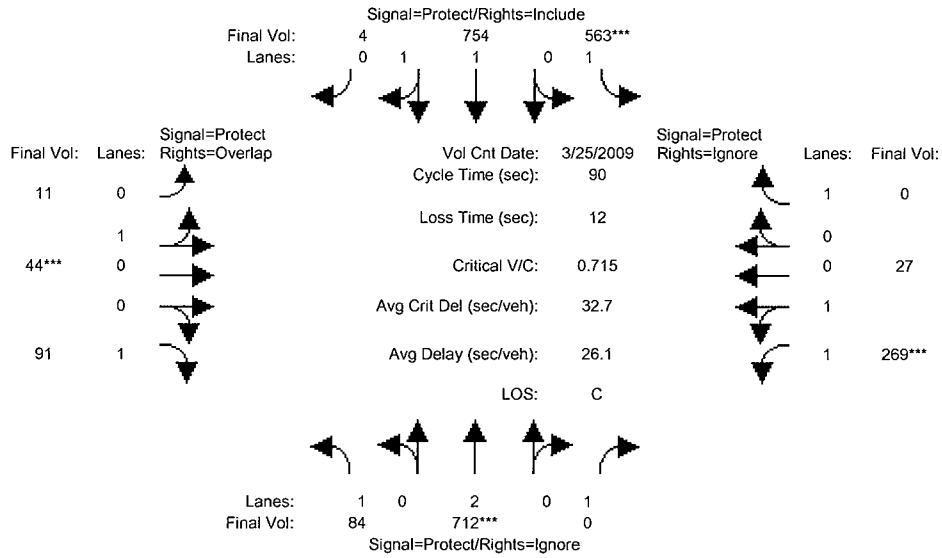
Big Wave Office Park and Wellness Center
Half Moon Bay, California

Level Of Service Computation Report
2000 HCM Operations (Future Volume Alternative)
Background AM

Intersection #34: Highway 1 at Highway 92



Street Name:	Highway 1						Highway 92					
Approach:	North Bound			South Bound			East Bound			West Bound		
Movement:	L	T	R	L	T	R	L	T	R	L	T	R
Min. Green:	0	0	0	0	0	0	0	0	0	0	0	0
Volume Module: >> Count Date: 25 Mar 2009 << AM Peak												
Base Vol:	84	705	488	546	739	4	11	44	91	266	27	78
Growth Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Initial Bse:	84	705	488	546	739	4	11	44	91	266	27	78
Added Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Approved Tr:	0	7	9	17	15	0	0	0	0	3	0	6
Initial Fut:	84	712	497	563	754	4	11	44	91	269	27	84
User Adj:	1.00	1.00	0.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	0.00
PHF Adj:	1.00	1.00	0.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	0.00
PHF Volume:	84	712	0	563	754	4	11	44	91	269	27	0
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:	84	712	0	563	754	4	11	44	91	269	27	0
PCE Adj:	1.00	1.00	0.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	0.00
MLF Adj:	1.00	1.00	0.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	0.00
FinalVolume:	84	712	0	563	754	4	11	44	91	269	27	0
Saturation Flow Module:												
Sat/Lane:	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Adjustment:	0.95	0.95	1.00	0.95	0.95	0.95	0.99	0.99	0.85	0.96	0.96	1.00
Lanes:	1.00	2.00	1.00	1.00	1.99	0.01	0.20	0.80	1.00	1.82	0.18	1.00
Final Sat.:	1805	3610	1900	1805	3587	19	376	1505	1615	3305	332	1900
Capacity Analysis Module:												
Vol/Sat:	0.05	0.20	0.00	0.31	0.21	0.21	0.03	0.03	0.06	0.08	0.08	0.00
Crit Moves:		****		****				****		****		
Green/Cycle:	0.13	0.28	0.00	0.44	0.58	0.58	0.04	0.04	0.17	0.11	0.11	0.00
Volume/Cap:	0.36	0.72	0.00	0.72	0.36	0.36	0.72	0.72	0.33	0.72	0.72	0.00
Delay/Veh:	36.8	31.9	0.0	23.9	10.0	10.0	69.8	69.8	33.6	44.3	44.3	0.0
User DelAdj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
AdjDel/Veh:	36.8	31.9	0.0	23.9	10.0	10.0	69.8	69.8	33.6	44.3	44.3	0.0
LOS by Move:	D	C	A	C	B	B	E	E	C	D	D	A
HCM2kAvgQ:	2	11	0	14	6	6	3	3	2	6	6	0

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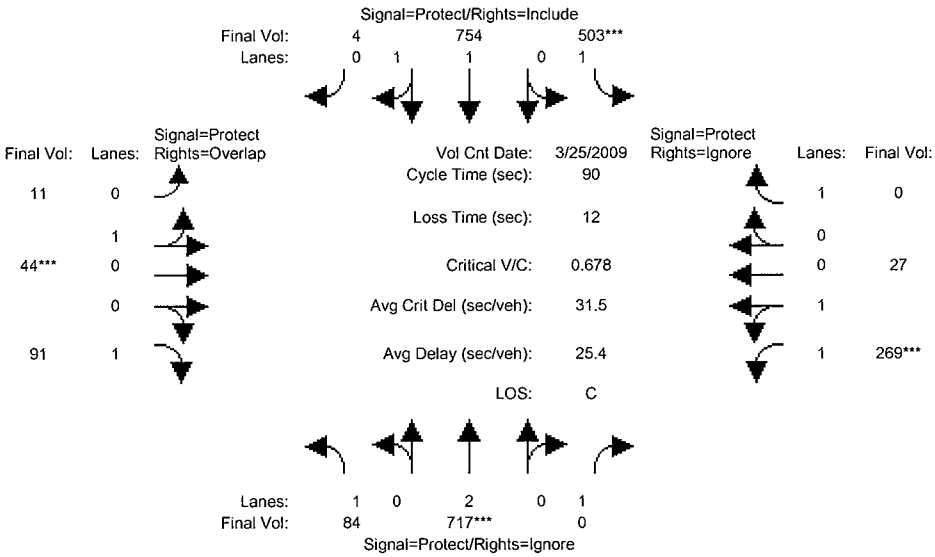
Big Wave Office Park and Wellness Center
Half Moon Bay, California

Level Of Service Computation Report
2000 HCM Operations (Future Volume Alternative)
Project AM

Intersection #34: Highway 1 at Highway 92



Street Name:	Highway 1						Highway 92					
Approach:	North Bound			South Bound			East Bound			West Bound		
Movement:	L	T	R	L	T	R	L	T	R	L	T	R
Min. Green:	0	0	0	0	0	0	0	0	0	0	0	0
Volume Module: >> Count Date: 25 Mar 2009 << AM Peak												
Base Vol:	84	712	497	563	754	4	11	44	91	269	27	84
Growth Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Initial Bse:	84	712	497	563	754	4	11	44	91	269	27	84
Added Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Project Tri:	0	5	0	-60	0	0	0	0	0	0	0	70
Initial Fut:	84	717	497	503	754	4	11	44	91	269	27	154
User Adj:	1.00	1.00	0.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	0.00
PHF Adj:	1.00	1.00	0.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	0.00
PHF Volume:	84	717	0	503	754	4	11	44	91	269	27	0
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:	84	717	0	503	754	4	11	44	91	269	27	0
PCE Adj:	1.00	1.00	0.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	0.00
MLF Adj:	1.00	1.00	0.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	0.00
FinalVolume:	84	717	0	503	754	4	11	44	91	269	27	0
Saturation Flow Module:												
Sat/Lane:	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Adjustment:	0.95	0.95	1.00	0.95	0.95	0.95	0.99	0.99	0.85	0.96	0.96	1.00
Lanes:	1.00	2.00	1.00	1.00	1.99	0.01	0.20	0.80	1.00	1.82	0.18	1.00
Final Sat.:	1805	3610	1900	1805	3587	19	376	1505	1615	3305	332	1900
Capacity Analysis Module:												
Vol/Sat:	0.05	0.20	0.00	0.28	0.21	0.21	0.03	0.03	0.06	0.08	0.08	0.00
Crit Moves:		****		****				****		****		
Green/Cycle:	0.13	0.29	0.00	0.41	0.58	0.58	0.04	0.04	0.17	0.12	0.12	0.00
Volume/Cap:	0.36	0.68	0.00	0.68	0.36	0.36	0.68	0.68	0.33	0.68	0.68	0.00
Delay/Veh:	36.9	29.9	0.0	24.2	10.4	10.4	63.1	63.1	33.5	42.2	42.2	0.0
User DelAdj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
AdjDel/Veh:	36.9	29.9	0.0	24.2	10.4	10.4	63.1	63.1	33.5	42.2	42.2	0.0
LOS by Move:	D	C	A	C	B	B	E	E	C	D	D	A
HCM2kAvgQ:	2	10	0	12	6	6	3	3	2	5	5	0

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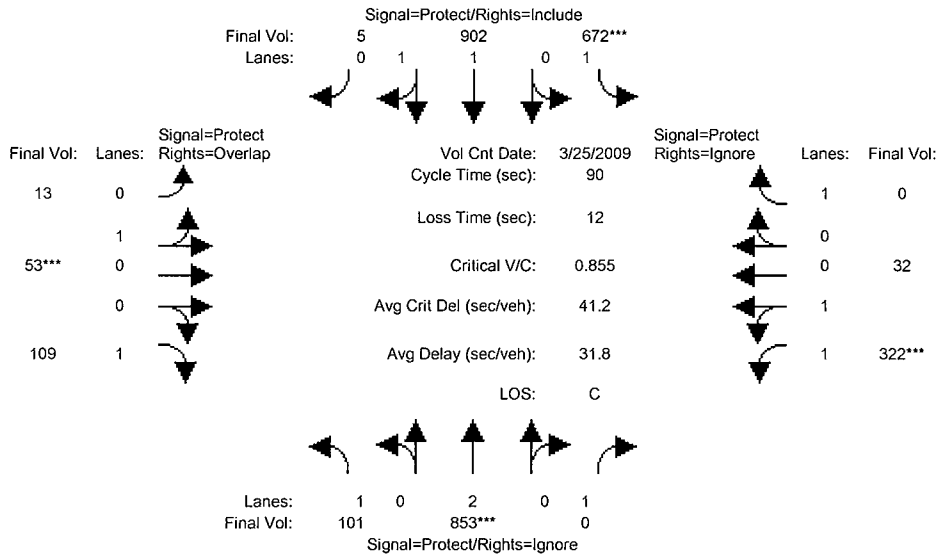
Big Wave Office Park and Wellness Center
Half Moon Bay, California

Level Of Service Computation Report
2000 HCM Operations (Future Volume Alternative)
Cumulative w/o Project AM

Intersection #34: Highway 1 at Highway 92



Street Name:	Highway 1						Highway 92					
Approach:	North Bound			South Bound			East Bound			West Bound		
Movement:	L	T	R	L	T	R	L	T	R	L	T	R
Min. Green:	0	0	0	0	0	0	0	0	0	0	0	0
Volume Module: >> Count Date: 25 Mar 2009 << AM Peak												
Base Vol:	84	705	488	546	739	4	11	44	91	266	27	78
Growth Adj:	1.20	1.20	1.20	1.20	1.20	1.20	1.20	1.20	1.20	1.20	1.20	1.20
Initial Bse:	101	846	586	655	887	5	13	53	109	319	32	94
Added Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Approved Tr:	0	7	9	17	15	0	0	0	0	3	0	6
Initial Fut:	101	853	595	672	902	5	13	53	109	322	32	100
User Adj:	1.00	1.00	0.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	0.00
PHF Adj:	1.00	1.00	0.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	0.00
PHF Volume:	101	853	0	672	902	5	13	53	109	322	32	0
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:	101	853	0	672	902	5	13	53	109	322	32	0
PCE Adj:	1.00	1.00	0.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	0.00
MLF Adj:	1.00	1.00	0.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	0.00
FinalVolume:	101	853	0	672	902	5	13	53	109	322	32	0
Saturation Flow Module:												
Sat/Lane:	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Adjustment:	0.95	0.95	1.00	0.95	0.95	0.95	0.99	0.99	0.85	0.96	0.96	1.00
Lanes:	1.00	2.00	1.00	1.00	1.99	0.01	0.20	0.80	1.00	1.82	0.18	1.00
Final Sat.:	1805	3610	1900	1805	3587	19	376	1505	1615	3304	332	1900
Capacity Analysis Module:												
Vol/Sat:	0.06	0.24	0.00	0.37	0.25	0.25	0.04	0.04	0.07	0.10	0.10	0.00
Crit Moves:		****		****				****		****		
Green/Cycle:	0.13	0.28	0.00	0.44	0.58	0.58	0.04	0.04	0.17	0.11	0.11	0.00
Volume/Cap:	0.43	0.86	0.00	0.86	0.43	0.43	0.86	0.86	0.40	0.86	0.86	0.00
Delay/Veh:	37.4	38.2	0.0	32.0	10.6	10.6	99.6	99.6	34.2	55.0	55.0	0.0
User DelAdj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
AdjDel/Veh:	37.4	38.2	0.0	32.0	10.6	10.6	99.6	99.6	34.2	55.0	55.0	0.0
LOS by Move:	D	D	A	C	B	B	F	F	C	E	E	A
HCM2kAvgQ:	3	15	0	20	7	7	4	4	3	8	8	0

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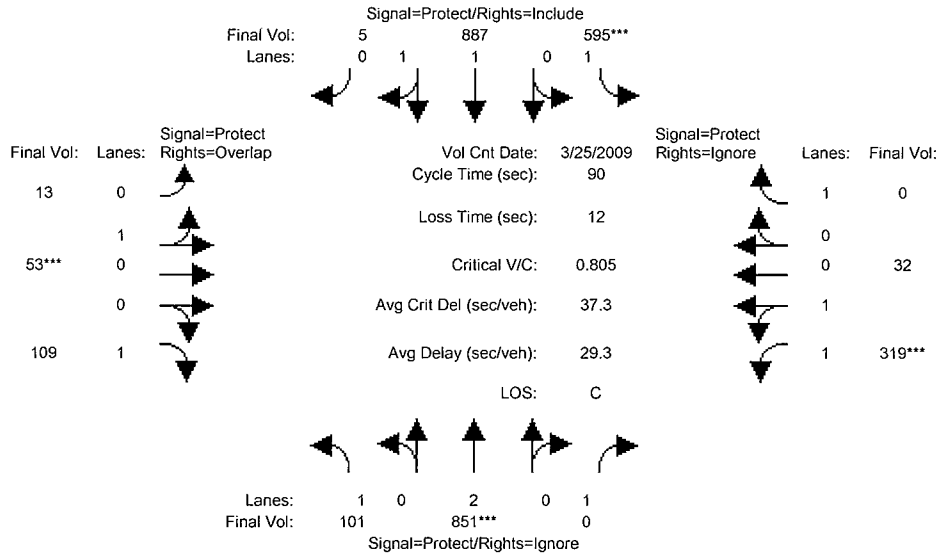
Big Wave Office Park and Wellness Center
Half Moon Bay, California

Level Of Service Computation Report
2000 HCM Operations (Future Volume Alternative)
Cumulative Project AM

Intersection #34: Highway 1 at Highway 92



Street Name:	Highway 1						Highway 92					
Approach:	North Bound			South Bound			East Bound			West Bound		
Movement:	L	T	R	L	T	R	L	T	R	L	T	R
Min. Green:	0	0	0	0	0	0	0	0	0	0	0	0
Volume Module: >> Count Date: 25 Mar 2009 << AM Peak												
Base Vol:	84	705	488	546	739	4	11	44	91	266	27	78
Growth Adj:	1.20	1.20	1.20	1.20	1.20	1.20	1.20	1.20	1.20	1.20	1.20	1.20
Initial Bse:	101	846	586	655	887	5	13	53	109	319	32	94
Added Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Project Tri:	0	5	0	-60	0	0	0	0	0	0	0	70
Initial Fut:	101	851	586	595	887	5	13	53	109	319	32	164
User Adj:	1.00	1.00	0.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	0.00
PHF Adj:	1.00	1.00	0.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	0.00
PHF Volume:	101	851	0	595	887	5	13	53	109	319	32	0
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:	101	851	0	595	887	5	13	53	109	319	32	0
PCE Adj:	1.00	1.00	0.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	0.00
MLF Adj:	1.00	1.00	0.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	0.00
FinalVolume:	101	851	0	595	887	5	13	53	109	319	32	0
Saturation Flow Module:												
Sat/Lane:	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Adjustment:	0.95	0.95	1.00	0.95	0.95	0.95	0.99	0.99	0.85	0.96	0.96	1.00
Lanes:	1.00	2.00	1.00	1.00	1.99	0.01	0.20	0.80	1.00	1.82	0.18	1.00
Final Sat.:	1805	3610	1900	1805	3587	19	376	1505	1615	3301	335	1900
Capacity Analysis Module:												
Vol/Sat:	0.06	0.24	0.00	0.33	0.25	0.25	0.04	0.04	0.07	0.10	0.10	0.00
Crit Moves:		****		****				****		****		
Green/Cycle:	0.13	0.29	0.00	0.41	0.57	0.57	0.04	0.04	0.17	0.12	0.12	0.00
Volume/Cap:	0.43	0.80	0.00	0.80	0.43	0.43	0.80	0.80	0.39	0.80	0.80	0.00
Delay/Veh:	37.4	34.0	0.0	29.8	11.0	11.0	84.7	84.7	33.9	49.0	49.0	0.0
User DelAdj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
AdjDel/Veh:	37.4	34.0	0.0	29.8	11.0	11.0	84.7	84.7	33.9	49.0	49.0	0.0
LOS by Move:	D	C	A	C	B	B	F	F	C	D	D	A
HCM2kAvgQ:	3	14	0	17	7	7	4	4	3	7	7	0

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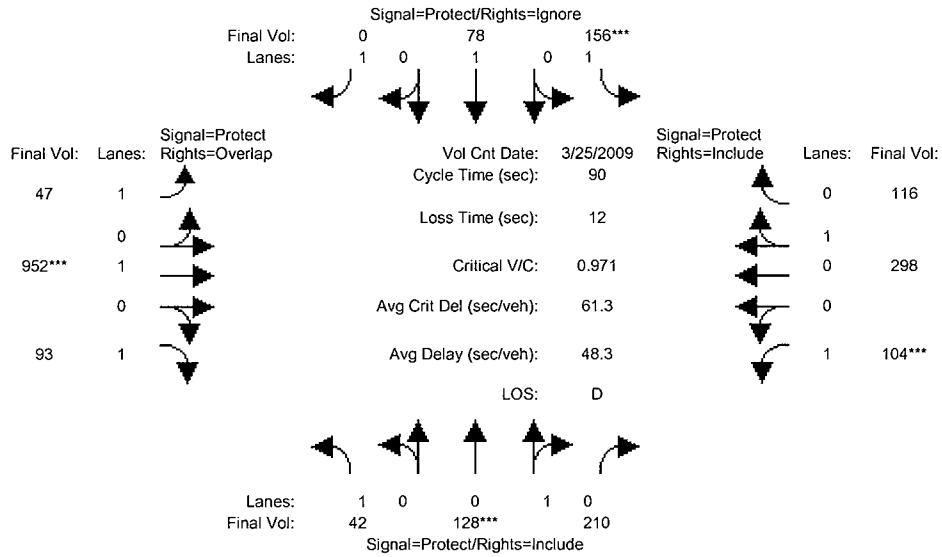
Big Wave Office Park and Wellness Center
Half Moon Bay, California

Level Of Service Computation Report
2000 HCM Operations (Future Volume Alternative)
Existing AM

Intersection #35: Highway 92 at Main Street



Street Name:	Main Street						Highway 92					
Approach:	North Bound			South Bound			East Bound			West Bound		
Movement:	L	T	R	L	T	R	L	T	R	L	T	R
Min. Green:	0	0	0	0	0	0	0	0	0	0	0	0
Volume Module: >> Count Date: 25 Mar 2009 << AM Peak												
Base Vol:	42	128	210	156	78	22	47	952	93	104	298	116
Growth Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Initial Bse:	42	128	210	156	78	22	47	952	93	104	298	116
Added Vol:	0	0	0	0	0	0	0	0	0	0	0	0
PasserByVol:	0	0	0	0	0	0	0	0	0	0	0	0
Initial Fut:	42	128	210	156	78	22	47	952	93	104	298	116
User Adj:	1.00	1.00	1.00	1.00	1.00	0.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Adj:	1.00	1.00	1.00	1.00	1.00	0.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Volume:	42	128	210	156	78	0	47	952	93	104	298	116
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:	42	128	210	156	78	0	47	952	93	104	298	116
PCE Adj:	1.00	1.00	1.00	1.00	1.00	0.00	1.00	1.00	1.00	1.00	1.00	1.00
MLF Adj:	1.00	1.00	1.00	1.00	1.00	0.00	1.00	1.00	1.00	1.00	1.00	1.00
FinalVolume:	42	128	210	156	78	0	47	952	93	104	298	116
Saturation Flow Module:												
Sat/Lane:	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Adjustment:	0.95	0.91	0.91	0.95	1.00	1.00	0.95	1.00	0.85	0.95	0.96	0.96
Lanes:	1.00	0.38	0.62	1.00	1.00	1.00	1.00	1.00	1.00	1.00	0.72	0.28
Final Sat.:	1805	653	1071	1805	1900	1900	1805	1900	1615	1805	1310	510
Capacity Analysis Module:												
Vol/Sat:	0.02	0.20	0.20	0.09	0.04	0.00	0.03	0.50	0.06	0.06	0.23	0.23
Crit Moves:		****		****				****		****		
Green/Cycle:	0.11	0.20	0.20	0.09	0.19	0.00	0.06	0.52	0.62	0.06	0.52	0.52
Volume/Cap:	0.22	0.97	0.97	0.97	0.22	0.00	0.44	0.97	0.09	0.97	0.44	0.44
Delay/Veh:	37.5	75.9	75.9	102.9	31.4	0.0	43.8	42.9	6.9	119.5	14.0	14.0
User DelAdj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
AdjDel/Veh:	37.5	75.9	75.9	102.9	31.4	0.0	43.8	42.9	6.9	119.5	14.0	14.0
LOS by Move:	D	E	E	F	C	A	D	D	A	F	B	B
HCM2kAvgQ:	1	14	14	8	2	0	2	32	1	6	7	7

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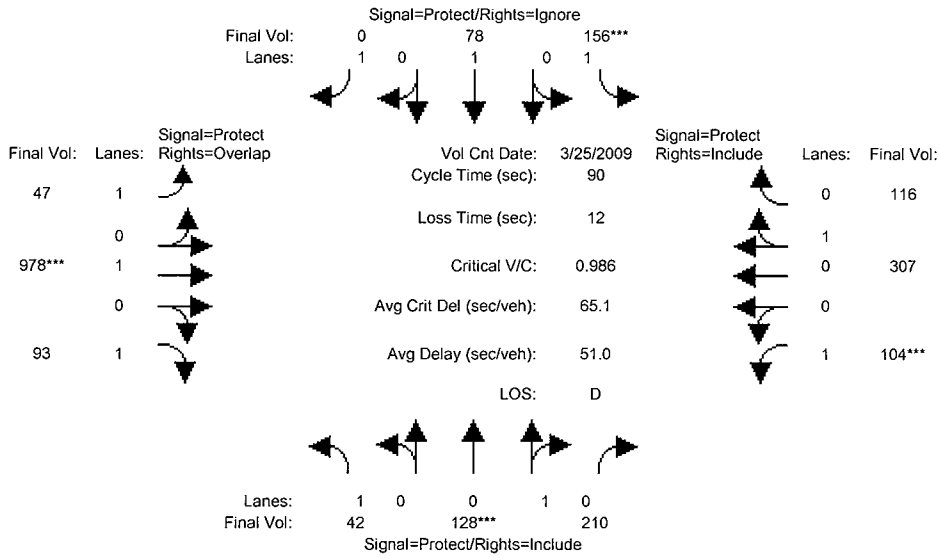
Big Wave Office Park and Wellness Center
Half Moon Bay, California

Level Of Service Computation Report
2000 HCM Operations (Future Volume Alternative)
Background AM

Intersection #35: Highway 92 at Main Street



Street Name:	Main Street						Highway 92					
Approach:	North Bound			South Bound			East Bound			West Bound		
Movement:	L	T	R	L	T	R	L	T	R	L	T	R
Min. Green:	0	0	0	0	0	0	0	0	0	0	0	0
Volume Module:	>> Count Date: 25 Mar 2009 << AM Peak											
Base Vol:	42	128	210	156	78	22	47	952	93	104	298	116
Growth Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Initial Bse:	42	128	210	156	78	22	47	952	93	104	298	116
Added Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Approved Tr:	0	0	0	0	0	0	0	26	0	0	9	0
Initial Fut:	42	128	210	156	78	22	47	978	93	104	307	116
User Adj:	1.00	1.00	1.00	1.00	1.00	0.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Adj:	1.00	1.00	1.00	1.00	1.00	0.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Volume:	42	128	210	156	78	0	47	978	93	104	307	116
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:	42	128	210	156	78	0	47	978	93	104	307	116
PCE Adj:	1.00	1.00	1.00	1.00	1.00	0.00	1.00	1.00	1.00	1.00	1.00	1.00
MLF Adj:	1.00	1.00	1.00	1.00	1.00	0.00	1.00	1.00	1.00	1.00	1.00	1.00
FinalVolume:	42	128	210	156	78	0	47	978	93	104	307	116
Saturation Flow Module:												
Sat/Lane:	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Adjustment:	0.95	0.91	0.91	0.95	1.00	1.00	0.95	1.00	0.85	0.95	0.96	0.96
Lanes:	1.00	0.38	0.62	1.00	1.00	1.00	1.00	1.00	1.00	1.00	0.73	0.27
Final Sat.:	1805	653	1071	1805	1900	1900	1805	1900	1615	1805	1322	500
Capacity Analysis Module:												
Vol/Sat:	0.02	0.20	0.20	0.09	0.04	0.00	0.03	0.51	0.06	0.06	0.23	0.23
Crit Moves:		****		****				****		****		
Green/Cycle:	0.10	0.20	0.20	0.09	0.18	0.00	0.06	0.52	0.63	0.06	0.52	0.52
Volume/Cap:	0.22	0.99	0.99	0.99	0.22	0.00	0.44	0.99	0.09	0.99	0.44	0.44
Delay/Veh:	37.6	80.7	80.7	108.3	31.7	0.0	43.9	46.4	6.7	125.4	13.7	13.7
User DelAdj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
AdjDel/Veh:	37.6	80.7	80.7	108.3	31.7	0.0	43.9	46.4	6.7	125.4	13.7	13.7
LOS by Move:	D	F	F	F	C	A	D	D	A	F	B	B
HCM2kAvgQ:	1	15	15	8	2	0	2	34	1	6	7	7

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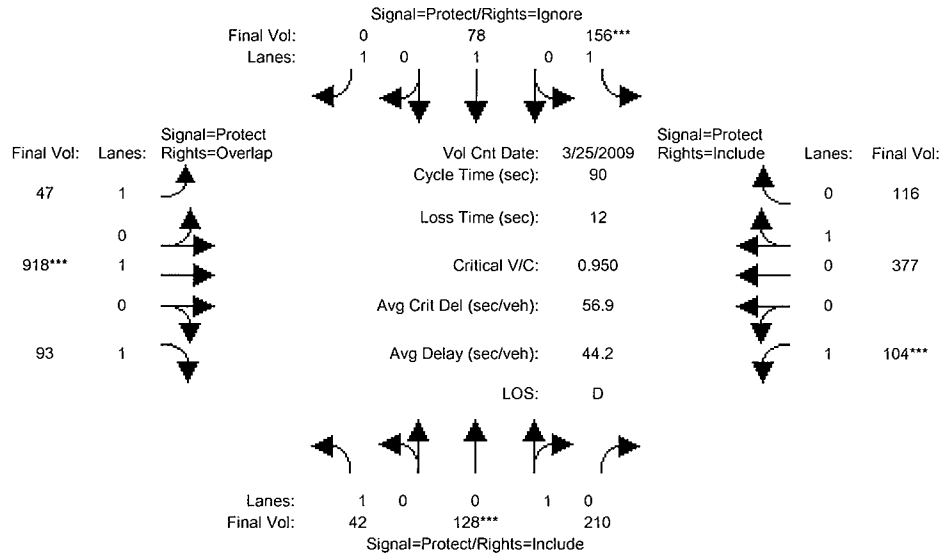
Big Wave Office Park and Wellness Center
Half Moon Bay, California

Level Of Service Computation Report
2000 HCM Operations (Future Volume Alternative)
Project AM

Intersection #35: Highway 92 at Main Street



Street Name:	Main Street						Highway 92					
Approach:	North Bound			South Bound			East Bound			West Bound		
Movement:	L - T - R			L - T - R			L - T - R			L - T - R		
Min. Green:	0	0	0	0	0	0	0	0	0	0	0	0
Volume Module: >> Count Date: 25 Mar 2009 << AM Peak												
Base Vol:	42	128	210	156	78	22	47	978	93	104	307	116
Growth Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Initial Bse:	42	128	210	156	78	22	47	978	93	104	307	116
Added Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Project Tri:	0	0	0	0	0	0	0	-60	0	0	70	0
Initial Fut:	42	128	210	156	78	22	47	918	93	104	377	116
User Adj:	1.00	1.00	1.00	1.00	1.00	0.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Adj:	1.00	1.00	1.00	1.00	1.00	0.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Volume:	42	128	210	156	78	0	47	918	93	104	377	116
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:	42	128	210	156	78	0	47	918	93	104	377	116
PCE Adj:	1.00	1.00	1.00	1.00	1.00	0.00	1.00	1.00	1.00	1.00	1.00	1.00
MLF Adj:	1.00	1.00	1.00	1.00	1.00	0.00	1.00	1.00	1.00	1.00	1.00	1.00
FinalVolume:	42	128	210	156	78	0	47	918	93	104	377	116
Saturation Flow Module:												
Sat/Lane:	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Adjustment:	0.95	0.91	0.91	0.95	1.00	1.00	0.95	1.00	0.85	0.95	0.97	0.97
Lanes:	1.00	0.38	0.62	1.00	1.00	1.00	1.00	1.00	1.00	1.00	0.76	0.24
Final Sat.:	1805	653	1071	1805	1900	1900	1805	1900	1615	1805	1402	431
Capacity Analysis Module:												
Vol/Sat:	0.02	0.20	0.20	0.09	0.04	0.00	0.03	0.48	0.06	0.06	0.27	0.27
Crit Moves:		****		****				****		****		
Green/Cycle:	0.11	0.21	0.21	0.09	0.19	0.00	0.05	0.51	0.62	0.06	0.52	0.52
Volume/Cap:	0.22	0.95	0.95	0.95	0.22	0.00	0.52	0.95	0.09	0.95	0.52	0.52
Delay/Veh:	37.3	70.0	70.0	96.1	31.1	0.0	46.9	39.1	7.1	112.1	14.7	14.7
User DelAdj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
AdjDel/Veh:	37.3	70.0	70.0	96.1	31.1	0.0	46.9	39.1	7.1	112.1	14.7	14.7
LOS by Move:	D	E	E	F	C	A	D	D	A	F	B	B
HCM2kAvgQ:	1	14	14	8	2	0	2	30	1	6	9	9

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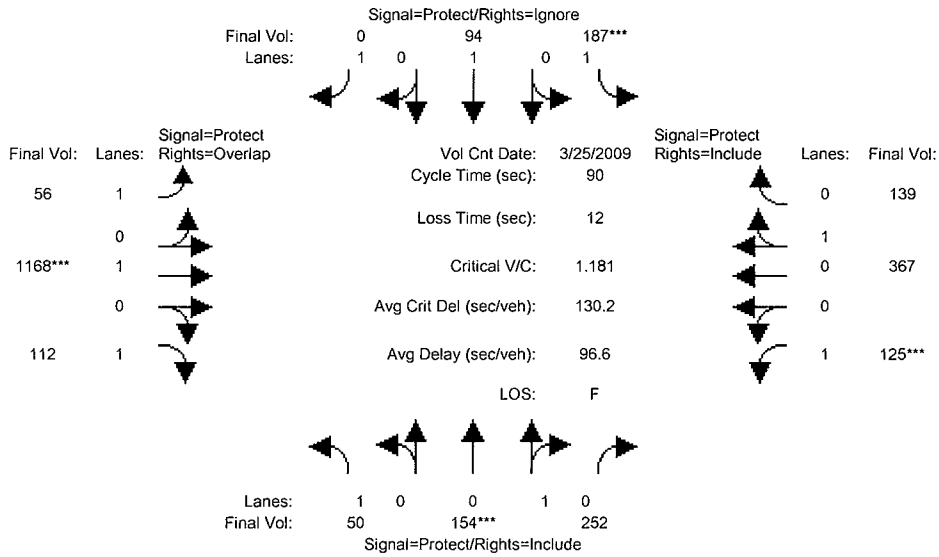
Big Wave Office Park and Wellness Center
Half Moon Bay, California

Level Of Service Computation Report
2000 HCM Operations (Future Volume Alternative)
Cumulative w/o Project AM

Intersection #35: Highway 92 at Main Street



Street Name:	Main Street						Highway 92					
Approach:	North Bound			South Bound			East Bound			West Bound		
Movement:	L -	T -	R	L -	T -	R	L -	T -	R	L -	T -	R
Min. Green:	0	0	0	0	0	0	0	0	0	0	0	0
Volume Module: >> Count Date: 25 Mar 2009 << AM Peak												
Base Vol:	42	128	210	156	78	22	47	952	93	104	298	116
Growth Adj:	1.20	1.20	1.20	1.20	1.20	1.20	1.20	1.20	1.20	1.20	1.20	1.20
Initial Bse:	50	154	252	187	94	26	56	1142	112	125	358	139
Added Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Approved Tr:	0	0	0	0	0	0	0	26	0	0	9	0
Initial Fut:	50	154	252	187	94	26	56	1168	112	125	367	139
User Adj:	1.00	1.00	1.00	1.00	1.00	0.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Adj:	1.00	1.00	1.00	1.00	1.00	0.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Volume:	50	154	252	187	94	0	56	1168	112	125	367	139
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:	50	154	252	187	94	0	56	1168	112	125	367	139
PCE Adj:	1.00	1.00	1.00	1.00	1.00	0.00	1.00	1.00	1.00	1.00	1.00	1.00
MLF Adj:	1.00	1.00	1.00	1.00	1.00	0.00	1.00	1.00	1.00	1.00	1.00	1.00
FinalVolume:	50	154	252	187	94	0	56	1168	112	125	367	139
Saturation Flow Module:												
Sat/Lane:	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Adjustment:	0.95	0.91	0.91	0.95	1.00	1.00	0.95	1.00	0.85	0.95	0.96	0.96
Lanes:	1.00	0.38	0.62	1.00	1.00	1.00	1.00	1.00	1.00	1.00	0.72	0.28
Final Sat.:	1805	653	1071	1805	1900	1900	1805	1900	1615	1805	1321	501
Capacity Analysis Module:												
Vol/Sat:	0.03	0.24	0.24	0.10	0.05	0.00	0.03	0.61	0.07	0.07	0.28	0.28
Crit Moves:		****		****				****		****		
Green/Cycle:	0.10	0.20	0.20	0.09	0.18	0.00	0.06	0.52	0.62	0.06	0.52	0.52
Volume/Cap:	0.27	1.18	1.18	1.18	0.27	0.00	0.53	1.18	0.11	1.18	0.53	0.53
Delay/Veh:	37.9	143	143.2	169.3	32.0	0.0	46.3	113	6.9	186.4	14.9	14.9
User DelAdj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
AdjDel/Veh:	37.9	143	143.2	169.3	32.0	0.0	46.3	113	6.9	186.4	14.9	14.9
LOS by Move:	D	F	F	F	C	A	D	F	A	F	B	B
HCM2kAvgQ:	2	22	22	12	2	0	2	57	1	8	10	10

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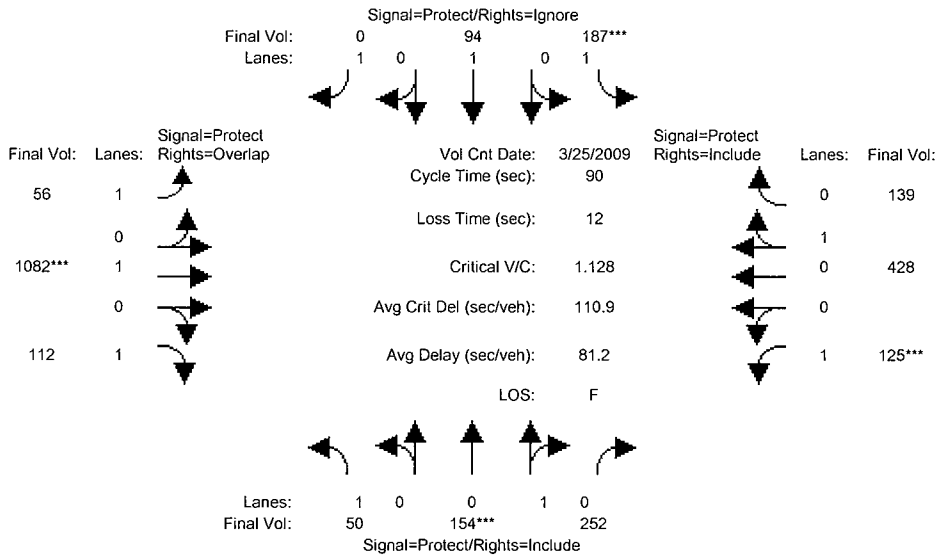
Big Wave Office Park and Wellness Center
Half Moon Bay, California

Level Of Service Computation Report
2000 HCM Operations (Future Volume Alternative)
Cumulative Project AM

Intersection #35: Highway 92 at Main Street



Street Name:	Main Street						Highway 92					
Approach:	North Bound			South Bound			East Bound			West Bound		
Movement:	L - T - R			L - T - R			L - T - R			L - T - R		
Min. Green:	0	0	0	0	0	0	0	0	0	0	0	0
Volume Module: >> Count Date: 25 Mar 2009 << AM Peak												
Base Vol:	42	128	210	156	78	22	47	952	93	104	298	116
Growth Adj:	1.20	1.20	1.20	1.20	1.20	1.20	1.20	1.20	1.20	1.20	1.20	1.20
Initial Bse:	50	154	252	187	94	26	56	1142	112	125	358	139
Added Vol:	0	0	0	0	0	0	0	0	0	0	0	0
ProjectTrip:	0	0	0	0	0	0	0	-60	0	0	70	0
Initial Fut:	50	154	252	187	94	26	56	1082	112	125	428	139
User Adj:	1.00	1.00	1.00	1.00	1.00	0.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Adj:	1.00	1.00	1.00	1.00	1.00	0.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Volume:	50	154	252	187	94	0	56	1082	112	125	428	139
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:	50	154	252	187	94	0	56	1082	112	125	428	139
PCE Adj:	1.00	1.00	1.00	1.00	1.00	0.00	1.00	1.00	1.00	1.00	1.00	1.00
MLF Adj:	1.00	1.00	1.00	1.00	1.00	0.00	1.00	1.00	1.00	1.00	1.00	1.00
FinalVolume:	50	154	252	187	94	0	56	1082	112	125	428	139
Saturation Flow Module:												
Sat/Lane:	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Adjustment:	0.95	0.91	0.91	0.95	1.00	1.00	0.95	1.00	0.85	0.95	0.96	0.96
Lanes:	1.00	0.38	0.62	1.00	1.00	1.00	1.00	1.00	1.00	1.00	0.75	0.25
Final Sat.:	1805	653	1071	1805	1900	1900	1805	1900	1615	1805	1380	449
Capacity Analysis Module:												
Vol/Sat:	0.03	0.24	0.24	0.10	0.05	0.00	0.03	0.57	0.07	0.07	0.31	0.31
Crit Moves:		****		****				****		****		
Green/Cycle:	0.11	0.21	0.21	0.09	0.19	0.00	0.05	0.50	0.61	0.06	0.51	0.51
Volume/Cap:	0.26	1.13	1.13	1.13	0.26	0.00	0.60	1.13	0.11	1.13	0.60	0.60
Delay/Veh:	37.5	123	122.6	149.4	31.3	0.0	52.3	93.4	7.3	166.5	16.5	16.5
User DelAdj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
AdjDel/Veh:	37.5	123	122.6	149.4	31.3	0.0	52.3	93.4	7.3	166.5	16.5	16.5
LOS by Move:	D	F	F	F	C	A	D	F	A	F	B	B
HCM2kAvgQ:	1	21	21	11	2	0	3	49	1	8	11	11

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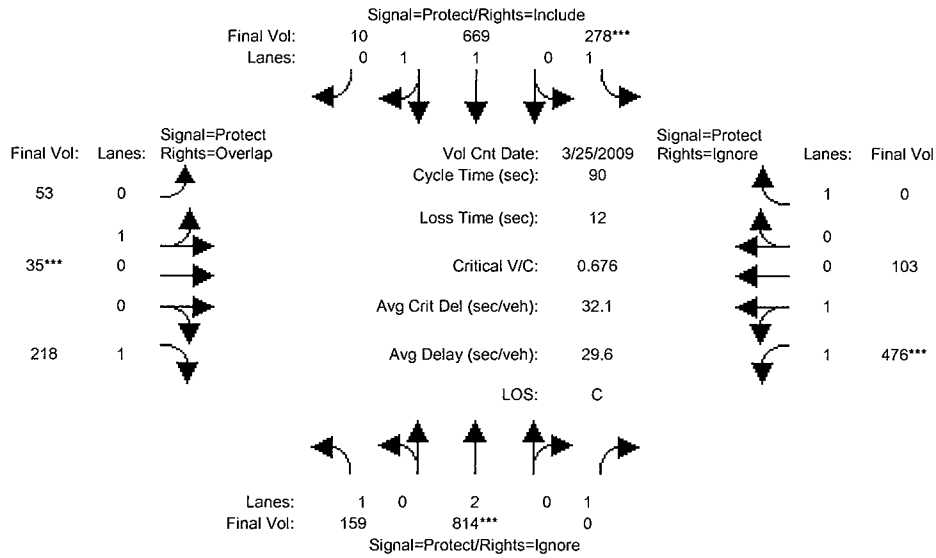
Half Moon Bay, California

Level Of Service Computation Report
2000 HCM Operations (Future Volume Alternative)
Existing PM

Intersection #34: Highway 1 at Highway 92



Street Name:	Highway 1						Highway 92					
Approach:	North Bound			South Bound			East Bound			West Bound		
Movement:	L	T	R	L	T	R	L	T	R	L	T	R
Min. Green:	0	0	0	0	0	0	0	0	0	0	0	0
Volume Module: >> Count Date: 25 Mar 2009 << PM Peak												
Base Vol:	159	814	326	278	669	10	53	35	218	476	103	199
Growth Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Initial Bse:	159	814	326	278	669	10	53	35	218	476	103	199
Added Vol:	0	0	0	0	0	0	0	0	0	0	0	0
PasserByVol:	0	0	0	0	0	0	0	0	0	0	0	0
Initial Fut:	159	814	326	278	669	10	53	35	218	476	103	199
User Adj:	1.00	1.00	0.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	0.00
PHF Adj:	1.00	1.00	0.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	0.00
PHF Volume:	159	814	0	278	669	10	53	35	218	476	103	0
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:	159	814	0	278	669	10	53	35	218	476	103	0
PCE Adj:	1.00	1.00	0.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	0.00
MLF Adj:	1.00	1.00	0.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	0.00
FinalVolume:	159	814	0	278	669	10	53	35	218	476	103	0
Saturation Flow Module:												
Sat/Lane:	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Adjustment:	0.95	0.95	1.00	0.95	0.95	0.95	0.97	0.97	0.85	0.96	0.96	1.00
Lanes:	1.00	2.00	1.00	1.00	1.97	0.03	0.60	0.40	1.00	1.64	0.36	1.00
Final Sat.:	1805	3610	1900	1805	3550	53	1111	734	1615	3002	650	1900
Capacity Analysis Module:												
Vol/Sat:	0.09	0.23	0.00	0.15	0.19	0.19	0.05	0.05	0.13	0.16	0.16	0.00
Crit Moves:		****		****				****		****		
Green/Cycle:	0.18	0.33	0.00	0.23	0.38	0.38	0.07	0.07	0.25	0.23	0.23	0.00
Volume/Cap:	0.49	0.68	0.00	0.68	0.49	0.49	0.68	0.68	0.54	0.68	0.68	0.00
Delay/Veh:	34.5	27.3	0.0	36.2	21.4	21.4	54.1	54.1	30.8	33.5	33.5	0.0
User DelAdj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
AdjDel/Veh:	34.5	27.3	0.0	36.2	21.4	21.4	54.1	54.1	30.8	33.5	33.5	0.0
LOS by Move:	C	C	A	D	C	C	D	D	C	C	C	A
HCM2kAvgQ:	5	11	0	8	8	8	4	4	6	8	8	0

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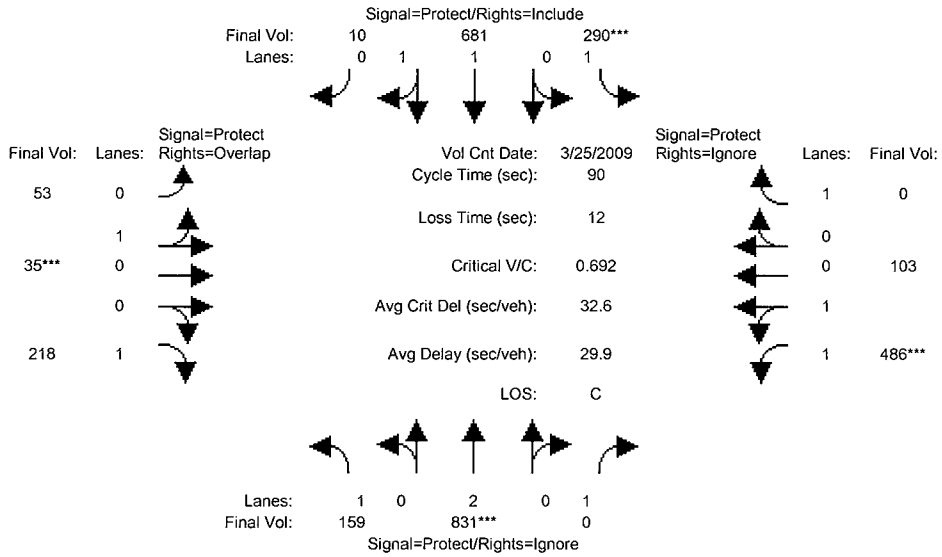
Big Wave Office Park and Wellness Center
Half Moon Bay, California

Level Of Service Computation Report
2000 HCM Operations (Future Volume Alternative)
Background PM

Intersection #34: Highway 1 at Highway 92



Street Name:	Highway 1						Highway 92					
Approach:	North Bound			South Bound			East Bound			West Bound		
Movement:	L	T	R	L	T	R	L	T	R	L	T	R
Min. Green:	0	0	0	0	0	0	0	0	0	0	0	0
Volume Module: >> Count Date: 25 Mar 2009 << PM Peak												
Base Vol:	159	814	326	278	669	10	53	35	218	476	103	199
Growth Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Initial Bse:	159	814	326	278	669	10	53	35	218	476	103	199
Added Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Approved Tr:	0	17	6	12	12	0	0	0	0	10	0	20
Initial Fut:	159	831	332	290	681	10	53	35	218	486	103	219
User Adj:	1.00	1.00	0.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	0.00
PHF Adj:	1.00	1.00	0.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	0.00
PHF Volume:	159	831	0	290	681	10	53	35	218	486	103	0
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:	159	831	0	290	681	10	53	35	218	486	103	0
PCE Adj:	1.00	1.00	0.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	0.00
MLF Adj:	1.00	1.00	0.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	0.00
FinalVolume:	159	831	0	290	681	10	53	35	218	486	103	0
Saturation Flow Module:												
Sat/Lane:	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Adjustment:	0.95	0.95	1.00	0.95	0.95	0.95	0.97	0.97	0.85	0.96	0.96	1.00
Lanes:	1.00	2.00	1.00	1.00	1.97	0.03	0.60	0.40	1.00	1.65	0.35	1.00
Final Sat.:	1805	3610	1900	1805	3551	52	1111	734	1615	3010	638	1900
Capacity Analysis Module:												
Vol/Sat:	0.09	0.23	0.00	0.16	0.19	0.19	0.05	0.05	0.13	0.16	0.16	0.00
Crit Moves:		****		****				****		****		
Green/Cycle:	0.18	0.33	0.00	0.23	0.39	0.39	0.07	0.07	0.25	0.23	0.23	0.00
Volume/Cap:	0.50	0.69	0.00	0.69	0.50	0.50	0.69	0.69	0.55	0.69	0.69	0.00
Delay/Veh:	34.6	27.8	0.0	36.5	21.2	21.2	56.1	56.1	31.1	34.0	34.0	0.0
User DelAdj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
AdjDel/Veh:	34.6	27.8	0.0	36.5	21.2	21.2	56.1	56.1	31.1	34.0	34.0	0.0
LOS by Move:	C	C	A	D	C	C	E	E	C	C	C	A
HCM2kAvgQ:	5	12	0	9	8	8	4	4	6	9	9	0

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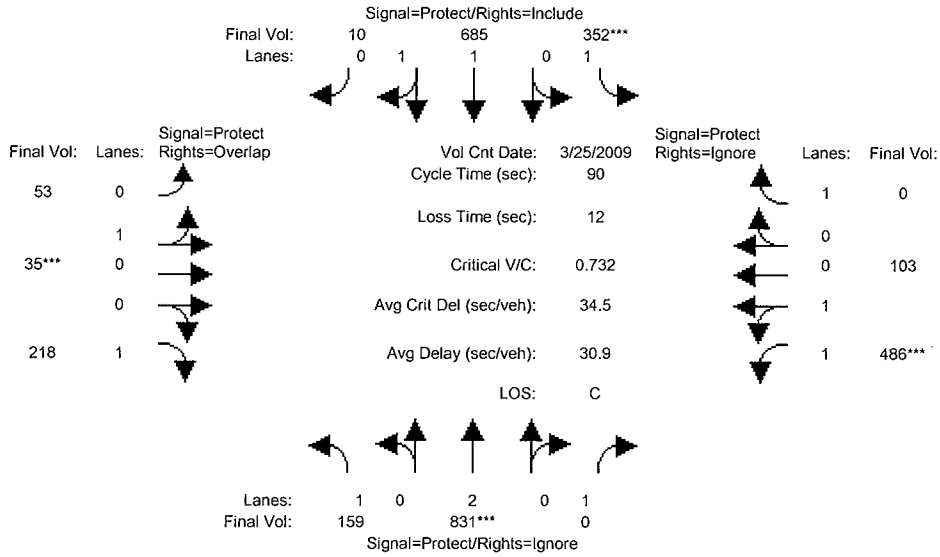
Big Wave Office Park and Wellness Center
Half Moon Bay, California

Level Of Service Computation Report
2000 HCM Operations (Future Volume Alternative)
Project PM

Intersection #34: Highway 1 at Highway 92



Street Name:	Highway 1						Highway 92					
Approach:	North Bound			South Bound			East Bound			West Bound		
Movement:	L	T	R	L	T	R	L	T	R	L	T	R
Min. Green:	0	0	0	0	0	0	0	0	0	0	0	0
Volume Module: >> Count Date: 25 Mar 2009 << PM Peak												
Base Vol:	159	831	332	290	681	10	53	35	218	486	103	219
Growth Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Initial Bse:	159	831	332	290	681	10	53	35	218	486	103	219
Added Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Project Tri:	0	0	0	62	4	0	0	0	0	0	0	-53
Initial Fut:	159	831	332	352	685	10	53	35	218	486	103	166
User Adj:	1.00	1.00	0.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	0.00
PHF Adj:	1.00	1.00	0.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	0.00
PHF Volume:	159	831	0	352	685	10	53	35	218	486	103	0
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:	159	831	0	352	685	10	53	35	218	486	103	0
PCE Adj:	1.00	1.00	0.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	0.00
MLF Adj:	1.00	1.00	0.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	0.00
FinalVolume:	159	831	0	352	685	10	53	35	218	486	103	0
Saturation Flow Module:												
Sat/Lane:	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Adjustment:	0.95	0.95	1.00	0.95	0.95	0.95	0.97	0.97	0.85	0.96	0.96	1.00
Lanes:	1.00	2.00	1.00	1.00	1.97	0.03	0.60	0.40	1.00	1.65	0.35	1.00
Final Sat.:	1805	3610	1900	1805	3551	52	1111	734	1615	3010	638	1900
Capacity Analysis Module:												
Vol/Sat:	0.09	0.23	0.00	0.20	0.19	0.19	0.05	0.05	0.13	0.16	0.16	0.00
Crit Moves:		****		****				****		****		
Green/Cycle:	0.18	0.31	0.00	0.27	0.40	0.40	0.07	0.07	0.25	0.22	0.22	0.00
Volume/Cap:	0.48	0.73	0.00	0.73	0.48	0.48	0.73	0.73	0.55	0.73	0.73	0.00
Delay/Veh:	34.1	30.0	0.0	35.8	20.4	20.4	61.7	61.7	31.1	36.1	36.1	0.0
User DelAdj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
AdjDel/Veh:	34.1	30.0	0.0	35.8	20.4	20.4	61.7	61.7	31.1	36.1	36.1	0.0
LOS by Move:	C	C	A	D	C	C	E	E	C	D	D	A
HCM2kAvgQ:	4	12	0	10	8	8	4	4	6	9	9	0

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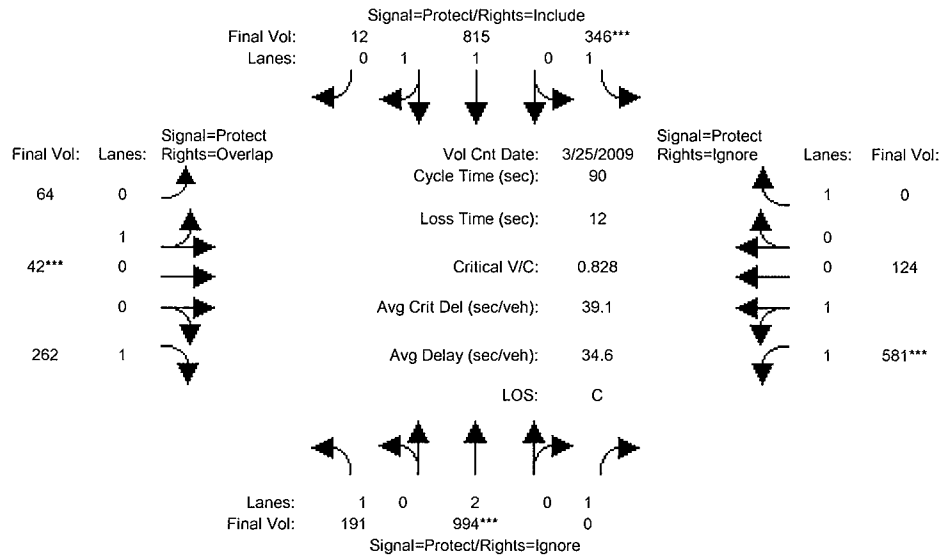
Big Wave Office Park and Wellness Center
Half Moon Bay, California

Level Of Service Computation Report
2000 HCM Operations (Future Volume Alternative)
Cumulative w/o Project PM

Intersection #34: Highway 1 at Highway 92



Street Name:	Highway 1						Highway 92					
Approach:	North Bound			South Bound			East Bound			West Bound		
Movement:	L - T - R			L - T - R			L - T - R			L - T - R		
Min. Green:	0	0	0	0	0	0	0	0	0	0	0	0
Volume Module: >> Count Date: 25 Mar 2009 << PM Peak												
Base Vol:	159	814	326	278	669	10	53	35	218	476	103	199
Growth Adj:	1.20	1.20	1.20	1.20	1.20	1.20	1.20	1.20	1.20	1.20	1.20	1.20
Initial Bse:	191	977	391	334	803	12	64	42	262	571	124	239
Added Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Approved Tr:	0	17	6	12	12	0	0	0	0	10	0	20
Initial Fut:	191	994	397	346	815	12	64	42	262	581	124	259
User Adj:	1.00	1.00	0.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	0.00
PHF Adj:	1.00	1.00	0.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	0.00
PHF Volume:	191	994	0	346	815	12	64	42	262	581	124	0
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:	191	994	0	346	815	12	64	42	262	581	124	0
PCE Adj:	1.00	1.00	0.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	0.00
MLF Adj:	1.00	1.00	0.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	0.00
FinalVolume:	191	994	0	346	815	12	64	42	262	581	124	0
Saturation Flow Module:												
Sat/Lane:	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Adjustment:	0.95	0.95	1.00	0.95	0.95	0.95	0.97	0.97	0.85	0.96	0.96	1.00
Lanes:	1.00	2.00	1.00	1.00	1.97	0.03	0.60	0.40	1.00	1.65	0.35	1.00
Final Sat.:	1805	3610	1900	1805	3550	52	1111	734	1615	3008	640	1900
Capacity Analysis Module:												
Vol/Sat:	0.11	0.28	0.00	0.19	0.23	0.23	0.06	0.06	0.16	0.19	0.19	0.00
Crit Moves:		****		****				****		****		
Green/Cycle:	0.18	0.33	0.00	0.23	0.39	0.39	0.07	0.07	0.25	0.23	0.23	0.00
Volume/Cap:	0.59	0.83	0.00	0.83	0.59	0.59	0.83	0.83	0.66	0.83	0.83	0.00
Delay/Veh:	37.0	32.6	0.0	45.7	22.7	22.7	75.4	75.4	34.4	39.5	39.5	0.0
User DelAdj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
AdjDel/Veh:	37.0	32.6	0.0	45.7	22.7	22.7	75.4	75.4	34.4	39.5	39.5	0.0
LOS by Move:	D	C	A	D	C	C	E	E	C	D	D	A
HCM2kAvgQ:	6	16	0	12	10	10	5	5	8	12	12	0

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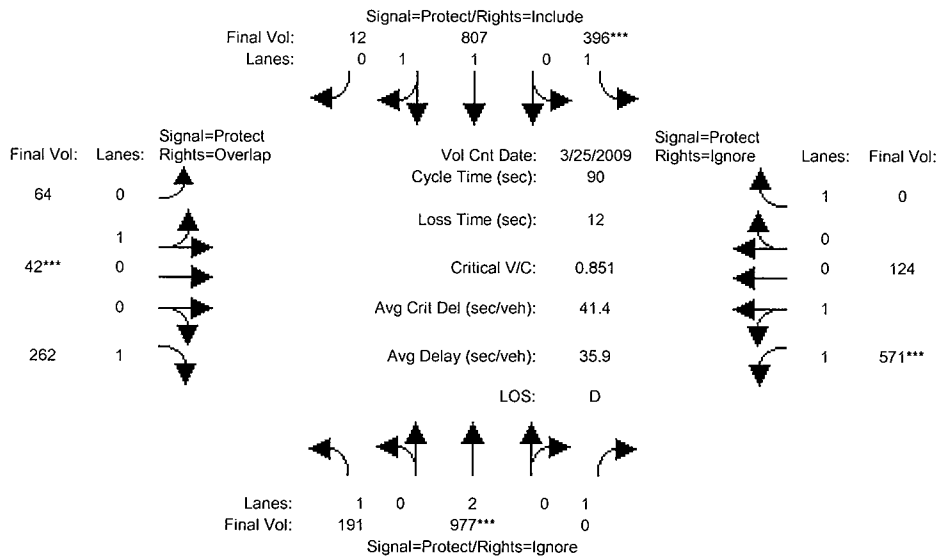
Big Wave Office Park and Wellness Center
Half Moon Bay, California

Level Of Service Computation Report
2000 HCM Operations (Future Volume Alternative)
Cumulative Project PM

Intersection #34: Highway 1 at Highway 92



Street Name:	Highway 1						Highway 92					
Approach:	North Bound			South Bound			East Bound			West Bound		
Movement:	L	T	R	L	T	R	L	T	R	L	T	R
Min. Green:	0	0	0	0	0	0	0	0	0	0	0	0
Volume Module: >> Count Date: 25 Mar 2009 << PM Peak												
Base Vol:	159	814	326	278	669	10	53	35	218	476	103	199
Growth Adj:	1.20	1.20	1.20	1.20	1.20	1.20	1.20	1.20	1.20	1.20	1.20	1.20
Initial Bse:	191	977	391	334	803	12	64	42	262	571	124	239
Added Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Project Tri:	0	0	0	62	4	0	0	0	0	0	0	-53
Initial Fut:	191	977	391	396	807	12	64	42	262	571	124	186
User Adj:	1.00	1.00	0.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	0.00
PHF Adj:	1.00	1.00	0.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	0.00
PHF Volume:	191	977	0	396	807	12	64	42	262	571	124	0
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:	191	977	0	396	807	12	64	42	262	571	124	0
PCE Adj:	1.00	1.00	0.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	0.00
MLF Adj:	1.00	1.00	0.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	0.00
FinalVolume:	191	977	0	396	807	12	64	42	262	571	124	0
Saturation Flow Module:												
Sat/Lane:	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Adjustment:	0.95	0.95	1.00	0.95	0.95	0.95	0.97	0.97	0.85	0.96	0.96	1.00
Lanes:	1.00	2.00	1.00	1.00	1.97	0.03	0.60	0.40	1.00	1.64	0.36	1.00
Final Sat.:	1805	3610	1900	1805	3550	53	1111	734	1615	3002	650	1900
Capacity Analysis Module:												
Vol/Sat:	0.11	0.27	0.00	0.22	0.23	0.23	0.06	0.06	0.16	0.19	0.19	0.00
Crit Moves:		****		****				****		****		
Green/Cycle:	0.18	0.32	0.00	0.26	0.39	0.39	0.07	0.07	0.25	0.22	0.22	0.00
Volume/Cap:	0.58	0.85	0.00	0.85	0.58	0.58	0.85	0.85	0.65	0.85	0.85	0.00
Delay/Veh:	36.2	34.9	0.0	45.7	22.1	22.1	81.1	81.1	33.9	42.0	42.0	0.0
User DelAdj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
AdjDel/Veh:	36.2	34.9	0.0	45.7	22.1	22.1	81.1	81.1	33.9	42.0	42.0	0.0
LOS by Move:	D	C	A	D	C	C	F	F	C	D	D	A
HCM2kAvgQ:	6	16	0	13	10	10	5	5	8	12	12	0

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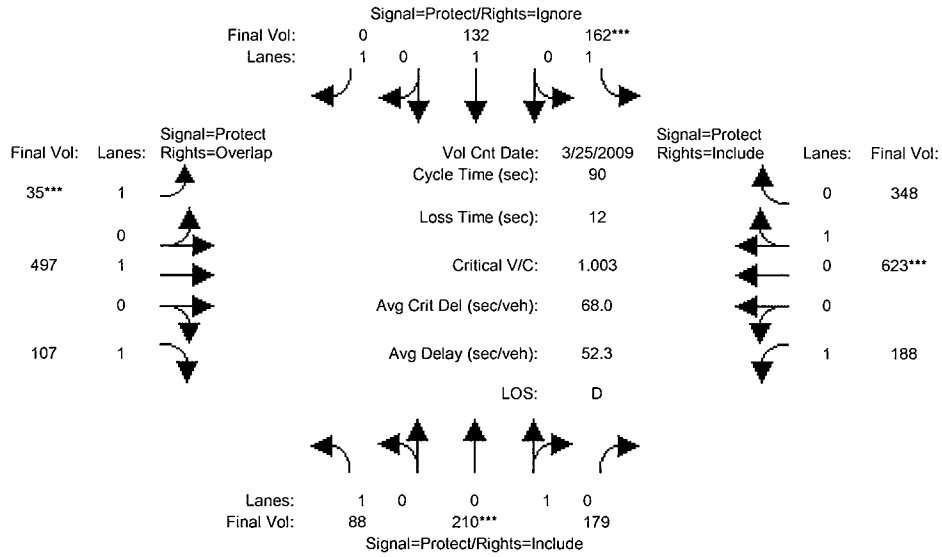
Big Wave Office Park and Wellness Center
Half Moon Bay, California

Level Of Service Computation Report
2000 HCM Operations (Future Volume Alternative)
Existing PM

Intersection #35: Highway 92 at Main Street



Street Name:	Main Street						Highway 92					
Approach:	North Bound			South Bound			East Bound			West Bound		
Movement:	L	T	R	L	T	R	L	T	R	L	T	R
Min. Green:	0	0	0	0	0	0	0	0	0	0	0	0
Volume Module: >> Count Date: 25 Mar 2009 << PM Peak												
Base Vol:	88	210	179	162	132	29	35	497	107	188	623	348
Growth Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Initial Bse:	88	210	179	162	132	29	35	497	107	188	623	348
Added Vol:	0	0	0	0	0	0	0	0	0	0	0	0
PasserByVol:	0	0	0	0	0	0	0	0	0	0	0	0
Initial Fut:	88	210	179	162	132	29	35	497	107	188	623	348
User Adj:	1.00	1.00	1.00	1.00	1.00	0.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Adj:	1.00	1.00	1.00	1.00	1.00	0.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Volume:	88	210	179	162	132	0	35	497	107	188	623	348
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:	88	210	179	162	132	0	35	497	107	188	623	348
PCE Adj:	1.00	1.00	1.00	1.00	1.00	0.00	1.00	1.00	1.00	1.00	1.00	1.00
MLF Adj:	1.00	1.00	1.00	1.00	1.00	0.00	1.00	1.00	1.00	1.00	1.00	1.00
FinalVolume:	88	210	179	162	132	0	35	497	107	188	623	348
Saturation Flow Module:												
Sat/Lane:	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Adjustment:	0.95	0.93	0.93	0.95	1.00	1.00	0.95	1.00	0.85	0.95	0.95	0.95
Lanes:	1.00	0.54	0.46	1.00	1.00	1.00	1.00	1.00	1.00	1.00	0.64	0.36
Final Sat.:	1805	955	814	1805	1900	1900	1805	1900	1615	1805	1153	644
Capacity Analysis Module:												
Vol/Sat:	0.05	0.22	0.22	0.09	0.07	0.00	0.02	0.26	0.07	0.10	0.54	0.54
Crit Moves:		****		****			****				****	
Green/Cycle:	0.13	0.22	0.22	0.09	0.18	0.00	0.02	0.40	0.53	0.16	0.54	0.54
Volume/Cap:	0.38	1.00	1.00	1.00	0.38	0.00	1.00	0.66	0.13	0.66	1.00	1.00
Delay/Veh:	37.1	81.6	81.6	112.6	33.1	0.0	197.4	24.1	10.9	40.9	50.4	50.4
User DelAdj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
AdjDel/Veh:	37.1	81.6	81.6	112.6	33.1	0.0	197.4	24.1	10.9	40.9	50.4	50.4
LOS by Move:	D	F	F	F	C	A	F	C	B	D	D	D
HCM2kAvgQ:	3	17	17	9	4	0	3	12	2	6	35	35

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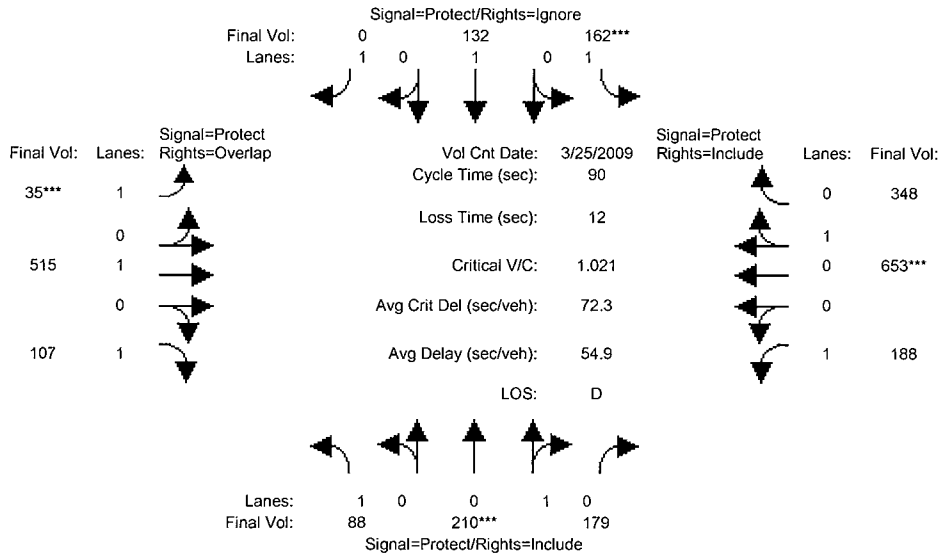
Big Wave Office Park and Wellness Center
Half Moon Bay, California

Level Of Service Computation Report
2000 HCM Operations (Future Volume Alternative)
Background PM

Intersection #35: Highway 92 at Main Street



Street Name:	Main Street						Highway 92					
Approach:	North Bound			South Bound			East Bound			West Bound		
Movement:	L - T - R			L - T - R			L - T - R			L - T - R		
Min. Green:	0	0	0	0	0	0	0	0	0	0	0	0
Volume Module: >> Count Date: 25 Mar 2009 << PM Peak												
Base Vol:	88	210	179	162	132	29	35	497	107	188	623	348
Growth Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Initial Bse:	88	210	179	162	132	29	35	497	107	188	623	348
Added Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Approved Tr:	0	0	0	0	0	0	0	18	0	0	30	0
Initial Fut:	88	210	179	162	132	29	35	515	107	188	653	348
User Adj:	1.00	1.00	1.00	1.00	1.00	0.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Adj:	1.00	1.00	1.00	1.00	1.00	0.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Volume:	88	210	179	162	132	0	35	515	107	188	653	348
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:	88	210	179	162	132	0	35	515	107	188	653	348
PCE Adj:	1.00	1.00	1.00	1.00	1.00	0.00	1.00	1.00	1.00	1.00	1.00	1.00
MLF Adj:	1.00	1.00	1.00	1.00	1.00	0.00	1.00	1.00	1.00	1.00	1.00	1.00
FinalVolume:	88	210	179	162	132	0	35	515	107	188	653	348
Saturation Flow Module:												
Sat/Lane:	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Adjustment:	0.95	0.93	0.93	0.95	1.00	1.00	0.95	1.00	0.85	0.95	0.95	0.95
Lanes:	1.00	0.54	0.46	1.00	1.00	1.00	1.00	1.00	1.00	1.00	0.65	0.35
Final Sat.:	1805	955	814	1805	1900	1900	1805	1900	1615	1805	1175	626
Capacity Analysis Module:												
Vol/Sat:	0.05	0.22	0.22	0.09	0.07	0.00	0.02	0.27	0.07	0.10	0.56	0.56
Crit Moves:		****		****			****				****	
Green/Cycle:	0.13	0.22	0.22	0.09	0.18	0.00	0.02	0.41	0.53	0.16	0.54	0.54
Volume/Cap:	0.39	1.02	1.02	1.02	0.39	0.00	1.02	0.67	0.12	0.67	1.02	1.02
Delay/Veh:	37.3	86.8	86.8	118.1	33.4	0.0	204.2	23.9	10.6	41.7	54.6	54.6
User DelAdj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
AdjDel/Veh:	37.3	86.8	86.8	118.1	33.4	0.0	204.2	23.9	10.6	41.7	54.6	54.6
LOS by Move:	D	F	F	F	C	A	F	C	B	D	D	D
HCM2kAvgQ:	3	17	17	9	4	0	3	12	1	6	38	38

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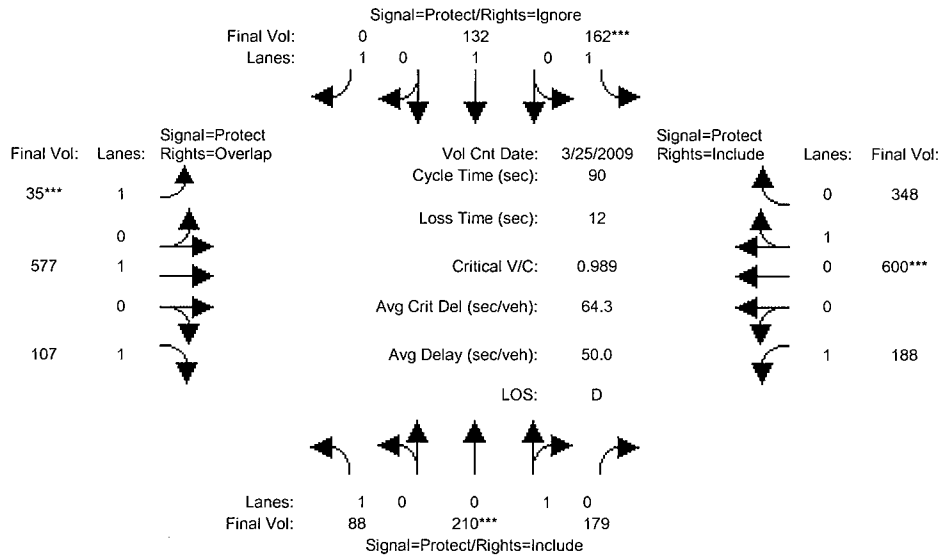
Big Wave Office Park and Wellness Center
Half Moon Bay, California

Level Of Service Computation Report
2000 HCM Operations (Future Volume Alternative)
Project PM

Intersection #35: Highway 92 at Main Street



Street Name:	Main Street						Highway 92					
Approach:	North Bound			South Bound			East Bound			West Bound		
Movement:	L - T - R			L - T - R			L - T - R			L - T - R		
Min. Green:	0	0	0	0	0	0	0	0	0	0	0	0
Volume Module:	>> Count Date: 25 Mar 2009 << PM Peak											
Base Vol:	88	210	179	162	132	29	35	515	107	188	653	348
Growth Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Initial Bse:	88	210	179	162	132	29	35	515	107	188	653	348
Added Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Project Tri:	0	0	0	0	0	0	0	62	0	0	-53	0
Initial Fut:	88	210	179	162	132	29	35	577	107	188	600	348
User Adj:	1.00	1.00	1.00	1.00	1.00	0.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Adj:	1.00	1.00	1.00	1.00	1.00	0.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Volume:	88	210	179	162	132	0	35	577	107	188	600	348
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:	88	210	179	162	132	0	35	577	107	188	600	348
PCE Adj:	1.00	1.00	1.00	1.00	1.00	0.00	1.00	1.00	1.00	1.00	1.00	1.00
MLF Adj:	1.00	1.00	1.00	1.00	1.00	0.00	1.00	1.00	1.00	1.00	1.00	1.00
FinalVolume:	88	210	179	162	132	0	35	577	107	188	600	348
Saturation Flow Module:												
Sat/Lane:	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Adjustment:	0.95	0.93	0.93	0.95	1.00	1.00	0.95	1.00	0.85	0.95	0.95	0.95
Lanes:	1.00	0.54	0.46	1.00	1.00	1.00	1.00	1.00	1.00	1.00	0.63	0.37
Final Sat.:	1805	955	814	1805	1900	1900	1805	1900	1615	1805	1136	659
Capacity Analysis Module:												
Vol/Sat:	0.05	0.22	0.22	0.09	0.07	0.00	0.02	0.30	0.07	0.10	0.53	0.53
Crit Moves:		****		****			****				****	
Green/Cycle:	0.13	0.22	0.22	0.09	0.18	0.00	0.02	0.41	0.54	0.14	0.53	0.53
Volume/Cap:	0.38	0.99	0.99	0.99	0.38	0.00	0.99	0.74	0.12	0.74	0.99	0.99
Delay/Veh:	36.9	77.2	77.2	107.7	32.9	0.0	190.7	26.0	10.2	47.7	47.0	47.0
User DelAdj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
AdjDel/Veh:	36.9	77.2	77.2	107.7	32.9	0.0	190.7	26.0	10.2	47.7	47.0	47.0
LOS by Move:	D	E	E	F	C	A	F	C	B	D	D	D
HCM2kAvgQ:	3	16	16	8	3	0	3	15	1	7	34	34

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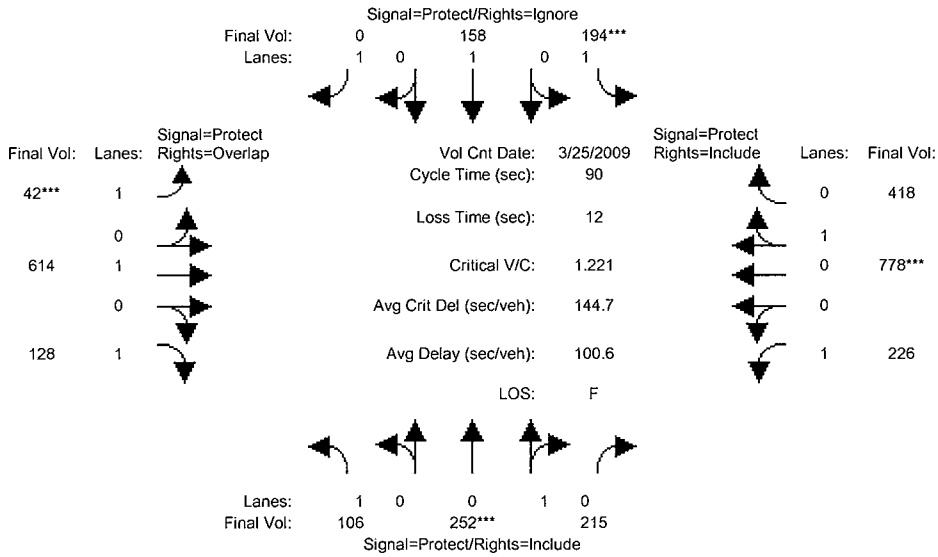
Big Wave Office Park and Wellness Center
Half Moon Bay, California

Level Of Service Computation Report
2000 HCM Operations (Future Volume Alternative)
Cumulative w/o Project PM

Intersection #35: Highway 92 at Main Street



Street Name:	Main Street						Highway 92					
Approach:	North Bound			South Bound			East Bound			West Bound		
Movement:	L -	T -	R	L -	T -	R	L -	T -	R	L -	T -	R
Min. Green:	0	0	0	0	0	0	0	0	0	0	0	0
Volume Module: >> Count Date: 25 Mar 2009 << PM Peak												
Base Vol:	88	210	179	162	132	29	35	497	107	188	623	348
Growth Adj:	1.20	1.20	1.20	1.20	1.20	1.20	1.20	1.20	1.20	1.20	1.20	1.20
Initial Bse:	106	252	215	194	158	35	42	596	128	226	748	418
Added Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Approved Tr:	0	0	0	0	0	0	0	18	0	0	30	0
Initial Fut:	106	252	215	194	158	35	42	614	128	226	778	418
User Adj:	1.00	1.00	1.00	1.00	1.00	0.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Adj:	1.00	1.00	1.00	1.00	1.00	0.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Volume:	106	252	215	194	158	0	42	614	128	226	778	418
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:	106	252	215	194	158	0	42	614	128	226	778	418
PCE Adj:	1.00	1.00	1.00	1.00	1.00	0.00	1.00	1.00	1.00	1.00	1.00	1.00
MLF Adj:	1.00	1.00	1.00	1.00	1.00	0.00	1.00	1.00	1.00	1.00	1.00	1.00
FinalVolume:	106	252	215	194	158	0	42	614	128	226	778	418
Saturation Flow Module:												
Sat/Lane:	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Adjustment:	0.95	0.93	0.93	0.95	1.00	1.00	0.95	1.00	0.85	0.95	0.95	0.95
Lanes:	1.00	0.54	0.46	1.00	1.00	1.00	1.00	1.00	1.00	1.00	0.65	0.35
Final Sat.:	1805	955	814	1805	1900	1900	1805	1900	1615	1805	1172	629
Capacity Analysis Module:												
Vol/Sat:	0.06	0.26	0.26	0.11	0.08	0.00	0.02	0.32	0.08	0.12	0.66	0.66
Crit Moves:		****		****			****				****	
Green/Cycle:	0.13	0.22	0.22	0.09	0.18	0.00	0.02	0.41	0.53	0.16	0.54	0.54
Volume/Cap:	0.47	1.22	1.22	1.22	0.47	0.00	1.22	0.80	0.15	0.80	1.22	1.22
Delay/Veh:	38.1	156	156.2	184.0	34.1	0.0	270.7	29.3	10.8	51.1	129	129.4
User DelAdj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
AdjDel/Veh:	38.1	156	156.2	184.0	34.1	0.0	270.7	29.3	10.8	51.1	129	129.4
LOS by Move:	D	F	F	F	C	A	F	C	B	D	F	F
HCM2kAvgQ:	3	26	26	12	4	0	4	17	2	8	62	62

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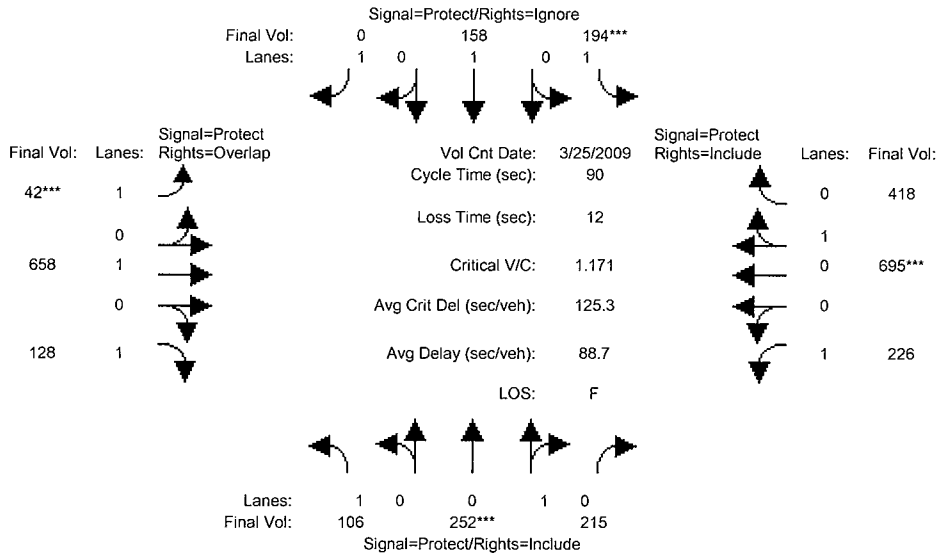
Big Wave Office Park and Wellness Center
Half Moon Bay, California

Level Of Service Computation Report
2000 HCM Operations (Future Volume Alternative)
Cumulative Project PM

Intersection #35: Highway 92 at Main Street



Street Name:	Main Street						Highway 92					
Approach:	North Bound			South Bound			East Bound			West Bound		
Movement:	L	T	R	L	T	R	L	T	R	L	T	R
Min. Green:	0	0	0	0	0	0	0	0	0	0	0	0
Volume Module: >> Count Date: 25 Mar 2009 << PM Peak												
Base Vol:	88	210	179	162	132	29	35	497	107	188	623	348
Growth Adj:	1.20	1.20	1.20	1.20	1.20	1.20	1.20	1.20	1.20	1.20	1.20	1.20
Initial Bse:	106	252	215	194	158	35	42	596	128	226	748	418
Added Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Project Tri:	0	0	0	0	0	0	0	62	0	0	-53	0
Initial Fut:	106	252	215	194	158	35	42	658	128	226	695	418
User Adj:	1.00	1.00	1.00	1.00	1.00	0.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Adj:	1.00	1.00	1.00	1.00	1.00	0.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Volume:	106	252	215	194	158	0	42	658	128	226	695	418
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:	106	252	215	194	158	0	42	658	128	226	695	418
PCE Adj:	1.00	1.00	1.00	1.00	1.00	0.00	1.00	1.00	1.00	1.00	1.00	1.00
MLF Adj:	1.00	1.00	1.00	1.00	1.00	0.00	1.00	1.00	1.00	1.00	1.00	1.00
FinalVolume:	106	252	215	194	158	0	42	658	128	226	695	418
Saturation Flow Module:												
Sat/Lane:	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Adjustment:	0.95	0.93	0.93	0.95	1.00	1.00	0.95	1.00	0.85	0.95	0.94	0.94
Lanes:	1.00	0.54	0.46	1.00	1.00	1.00	1.00	1.00	1.00	1.00	0.62	0.38
Final Sat.:	1805	955	814	1805	1900	1900	1805	1900	1615	1805	1120	673
Capacity Analysis Module:												
Vol/Sat:	0.06	0.26	0.26	0.11	0.08	0.00	0.02	0.35	0.08	0.12	0.62	0.62
Crit Moves:		****		****			****				****	
Green/Cycle:	0.13	0.23	0.23	0.09	0.19	0.00	0.02	0.40	0.53	0.15	0.53	0.53
Volume/Cap:	0.45	1.17	1.17	1.17	0.45	0.00	1.17	0.86	0.15	0.86	1.17	1.17
Delay/Veh:	37.5	136	135.5	164.2	33.4	0.0	249.7	34.0	10.7	61.0	109	109.5
User DelAdj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
AdjDel/Veh:	37.5	136	135.5	164.2	33.4	0.0	249.7	34.0	10.7	61.0	109	109.5
LOS by Move:	D	F	F	F	C	A	F	C	B	E	F	F
HCM2kAvgQ:	3	25	25	12	4	0	4	20	2	9	54	54

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APPENDIX K

UTILITIES DATA

MBAS
MONTEREY BAY ANALYTICAL SERVICES
PRECISION • ACCURACY • DEPENDABILITY

4 Justin Court Suite D, Monterey, CA 93940
831.375.MBAS
montereybayanalytical@usa.net
ELAP Certification Number: 2385

WILKINSON ENTERPRISES
Kathrine
P.O. Box 3218
Half Moon Bay, CA 94019

 Wednesday, July 08, 2009

Lab Number: AA58212

Collection Date/Time:	6/30/2009	9:05	Sample Collector:	AMARAL R
Submittal Date/Time:	7/1/2009	10:00	Sample ID	

Sample Description: HMB Airport

Analyte	Method	Unit	Result	Qual	PQL	MCL	Date Analyzed
Coliform E coli	9223	#/100ml	**Absent**		1	1	7/1/2009
Coliform Total	9223	#/100ml	**Absent**		1	1	7/1/2009

Sample Comments: Retest

Report Approved by:

Sigrid Weidner-Holland, Laboratory Director

mg/L: Milligrams per liter ug/L : Micrograms per liter PQL : Practical Quantitation Limit MCL: Maximum Contamination Level
H = Analyzed ouside of hold time E = Analysis performed by External Laboratory; See External Laboratory Report attachments.

MONTEREY BAY ANALYTICAL SERVICES
PRECISION • ACCURACY • DEPENDABILITY

4 Justin Court Suite D, Monterey, CA 93940
831.375.MBAS
montereybayanalytical@usa.net
ELAP Certification Number: 2385

WILKINSON ENTERPRISES
Kathrine
P.O. Box 3218
Half Moon Bay, CA 94019

Lab Number: AA57890

Collection Date/Time: 6/17/2009 13:15 Sample Collector: GRIPPI, J
Submittal Date/Time: 6/18/2009 10:25 Sample ID

Sample Description: Blue Wave, HMB Airport Well

Analyte	Method	Unit	Result	Qual	PQL	MCL	Date Analyzed
Alkalinity, Total (as CaCO3)	2320B	mg/L	**153**		2		6/19/2009
Aluminum, Total	200.8	ug/L	**13**		10	1000	6/26/2009
Antimony, Total	200.8	ug/L	**Not detected**		1	6	6/26/2009
Arsenic, Total	200.8	ug/L	**3**		1	10	6/26/2009
Barium, Total	200.8	ug/L	**56**		10	1000	6/26/2009
Beryllium, Total	200.8	ug/L	**Not detected**		1	4	6/26/2009
Bicarbonate (as HCO3-)	2320B	mg/L	**187**		10		6/22/2009
Bromide	300.0	mg/L	**Not detected**		0.2		6/18/2009
Cadmium, Total	200.8	ug/L	**Not detected**		0.5	5	6/26/2009
Calcium	3111B	mg/L	**25**		1		6/25/2009
Carbonate as CaCO3	2320B	mg/L	**Not detected**		10		6/19/2009
Chloride	300.0	mg/L	**66**		1	250	6/18/2009
Chromium, Total	200.8	ug/L	**Not detected**		2	50	6/26/2009
Coliform E coli	9223	#/100ml	**Absent**		1	1	6/18/2009
Coliform Total	9223	#/100ml	**Absent**		1	1	6/18/2009
Color, Apparent (Unfiltered)	2120B	Color Units	**20**		3	15	6/18/2009
Copper, Total	200.8	ug/L	**4**		4	1300	6/26/2009
Cyanide	QuikChem 10-20	ug/L	**Not detected**		5	200	6/29/2009
Fluoride	300.0	mg/L	**0.85**		0.10	2.0	6/18/2009
Hardness (as CaCO3)	2340B	mg/L	**124**		10		7/4/2009
Hydroxide	2320B	mg/L	**Not detected**		5		6/19/2009
Iron, Total	3111B	ug/L	**452**		50	300	6/29/2009
Langlier Index (15 deg. C)	2330B		**-0.82**				6/25/2009
Langlier Index (60 deg. C)	2330B		**-0.22**				6/25/2009
Lead, Total	200.8	ug/L	**Not detected**		5	15	6/26/2009
Magnesium	3111B	mg/L	**15**		1		6/25/2009
Manganese, Total	200.8	ug/L	**380**		10	50	6/26/2009
MBAS (Surfactants)	5540C	mg/L	**Not detected**		0.05	0.50	6/18/2009
Mercury, Total	200.8	ug/L	**Not detected**		0.5	2	6/26/2009
Nickel, Total	200.8	ug/L	**Not detected**		10	100	6/26/2009
Nitrate as NO3	300.0	mg/L	**1**		1	45	6/18/2009
Nitrite as Nitrogen	300.0	mg/L	**Not detected**		0.1	1.00	6/18/2009
Odor Threshold at 60 C	2150B	TON	**1**		1	3	6/18/2009

mg/L: Milligrams per liter ug/L : Micrograms per liter PQL : Practical Quantitation Limit MCL: Maximum Contamination Level
H = Analyzed ouside of hold time E = Analysis performed by External Laboratory; See External Laboratory Report attachments.

Lab Number: AA57890

Collection Date/Time: 6/17/2009 13:15 Sample Collector: GRIPPI, J
Submittal Date/Time: 6/18/2009 10:25 Sample ID

Sample Description: Blue Wave, HMB Airport Well

Analyte	Method	Unit	Result	Qual	PQL	MCL	Date Analyzed
o-Phosphate-P	300.0	mg/L	**0.2**		0.1		6/18/2009
pH (Laboratory)	4500-H+B	STD. Units	**7.1**				6/18/2009
Potassium	3111B	mg/L	**1.1**		0.5		6/25/2009
QC Anion Sum x 100	Calculaltion	%	**94%**				6/26/2009
QC Anion-Cation Balance	Calculaltion	%	**-2**				7/4/2009
QC Cation Sum x 100	Calculaltion	%	**92%**				7/4/2009
QC Ratio TDS/SEC	Calculation		**0.64**				6/26/2009
Selenium, Total	200.8	ug/L	**Not detected**		2	50	6/26/2009
Silver, Total	200.8	ug/L	**Not detected**		10		6/26/2009
Sodium	3111B	mg/L	**59**		1		6/25/2009
Specific Conductance (E.C)	2510B	umhos/cm	**554**		1	900	6/25/2009
Sulfate	300.0	mg/L	**14**		1	250	6/18/2009
Thallium, Total	200.8	ug/L	**Not detected**		1	2	6/26/2009
Total Diss. Solids	2540C	mg/L	**353**		10	500	6/23/2009
Turbidity	180.1	NTU	**1.8**		0.05	5.0	6/19/2009
Zinc, Total	200.8	ug/L	**27**		10	5000	6/26/2009

Sample Comments:

Report Approved by:

Sigrid Weidner-Holland, Laboratory Director

mg/L: Milligrams per liter ug/L : Micrograms per liter PQL : Practical Quantitation Limit MCL: Maximum Contamination Level
H = Analyzed ouside of hold time E = Analysis performed by External Laboratory; See External Laboratory Report attachments.

ENVIRONMENTAL HEALTH
SAN MATEO COUNTY

San Mateo County
PUMP TEST FORM

A fee and application for the pump test must be submitted to Environmental Health.
Call (650) 363 – 4305 for more information, or to schedule an appointment.

Page 1 3

OWNER'S NAME Jeff Peck - Big Wave PHONE 650-560-9825
SITE ADDRESS Airport Street
PARCEL NUMBER 47-311-060 DATE 6-16-09
PERFORMED BY Wilkinson, Enterprises PHONE 650-726-4212
HYDROSTATIC WATER LEVEL 8-2" PUMP DEPTH 60' WELL DEPTH 120'
STABILIZED WATER LEVEL 26-6" TIME TEST STARTED 8:30 AM
RECHARGE START TIME 4:30 PM
ENVIRONMENTAL HEALTH SPECIALIST Pamela Chea, REHS
REHS COMMENTS

ALL DEPTH MEASUREMENTS ARE TO BE FROM THE SURFACE OF THE GROUND – BELOW GROUND SURFACE (BGS)

#	WATER DEPTH (BGS)	TIME (15 minute intervals)	RATE GPM	#	WATER DEPTH (BGS)	TIME (15 minute intervals)	RATE GPM
1	8'-2"	8:30 AM (start)	40	22	25'-6"	10:50	36.5
2	18'-11"	8:31	40	23	25'-4"	11:00	36.5
3	20'-7"		40	24	25'-4"	11:15	36.5
4	21'-5"		40	25	23'-5"	11:30	~~36.5~~ 35
5	21'-9"		40	26	25'-7"	11:45	34
6	22'-1"		40	27	25'-7"	12:00	34
7	22'-3"		40	28	25'-7"	12:15	34
8	22'-6"		40	29	25'-8"	12:30	34
9	22'-6"		40	30	25'-10"	12:45	34
10	22'-9"		40	31	25'-10"	1:00	33.5
11	22'-10"	8:40	39	32	25'-10"	1:15	33
12	23'-9"	8:55	37	33	26-2	1:30	33
13	23'-10"	9:10	37	34	26-2	1:45	32 1/2
14	24'-3"	9:25	37	35	26-3	2:00	32 1/2
15	24'-7"	9:40	37	36	26-3	2:15	32.5
16	24'-8"	9:50	37	37	26'-4"	2:30	32.5
17	24'-10"	10:00	37	38	26'-6"	2:45	32.5
18	25'-0	10:10	37	39	26-7	3:00	33
19	25'-1	10:20	37	40	26-6	3:15	33
20	25'-3	10:30	36.5	41	26'-6"	~~3:30~~ ~~3:45~~	~~33~~ 32 1/2 33
21	25'-4	10:40	36.5	42	26-6"	3:45 ~~4:00~~	33

PUMP TEST FOR MIDCOAST *(unincorporated County north of Highway 92 and east of 280):*

All pumping tests shall be performed by, or under the supervision of a California Registered Geologist (R.E.) or Registered Civil Engineer (R.C.E.), and certified by signature of the same and the water level within the well shall be monitored until it recovers to 80%, or greater, of the hydrostatic level, as determined by a California Registered Geologist, or Registered Civil Engineer, immediately following the completion of the pumping test. Recovery time shall be equal to the time taken to perform the pumping test, but not less than four hours. The potable water sample shall be drawn from the pump at the conclusion of the pump test and shall be transported to a State of California certified laboratory under chain-of-custody. Water treatment will not be considered in order to be certified if either the State Upper Secondary Maximum Contaminant Level for specific conductance or chlorides are exceeded. Signature below certifies compliance with Midcoast rules.

R.G. OR R.C.E. NAME Scott Holmes *REGISTRATION #* C 28972
SIGNATURE Scott Holmes *PHONE* 650-775-1870

ENVIRONMENTAL HEALTH
SAN MATEO COUNTY

San Mateo County PUMP TEST FORM

A fee and application for the pump test must be submitted to Environmental Health.
Call (650) 363 – 4305 for more information, or to schedule an appointment.

OWNER'S NAME Jeff Peck - Big Wave PHONE 650-560-9825
SITE ADDRESS Airport Street
PARCEL NUMBER 47-311-060 DATE 6-16-09
PERFORMED BY Wilkinson Enterprise PHONE (650) 726-4212
HYDROSTATIC WATER LEVEL 8'-2" PUMP DEPTH 60' WELL DEPTH 120'
STABILIZED WATER LEVEL 26'6" TIME TEST STARTED
RECHARGE START TIME 4:30 PM
ENVIRONMENTAL HEALTH SPECIALIST Tanaka Chea, REHS
REHS COMMENTS

ALL DEPTH MEASUREMENTS ARE TO BE FROM THE SURFACE OF THE GROUND BELOW GROUND SURFACE (BGS)

#	WATER DEPTH (BGS)	TIME (15 minute intervals)	RATE GPM	#	WATER DEPTH (BGS)	TIME (15 minute intervals)	RATE GPM
43 1	26-6"	4:00 PM	33	~~22~~ 64	11-5"	5:15	PM
44 2	26-6"	4:15 PM	33	~~23~~ 65	11-4"	5:20	
45 3	26-6"	4:30 PM	33 1/2	~~24~~ 66	11-2"	5:25	
46 4		Recovery 4:30 PM		~~25~~ 67	11-1"	5:30	
47 5	14'-11"	4:34 ~~4:34~~		~~26~~ 68	11-0"	5:35	
48 6	14-1"	4:35		~~27~~ 69	10-11"	5:40	
49 7	13-10"	4:36		~~28~~ 70	10-10"	5:45	
50 8	13'-7"	4:37		~~29~~ 71	10'-9"	5:50	
51 9	13-3"	4:38		~~30~~ 72	10'-9"	5:55	
52 ~~10~~	13-1"	4:39		~~31~~ 73	10'-8"	6:00	
53 ~~11~~	13'-0	4:40		~~32~~ 74	10-7"	6:05	
54 ~~12~~	12'-11"	4:41		~~33~~ 75	10'-6"	6:10	
55 ~~13~~	12-10"	4:42		~~34~~ 76	10'-5"	6:15	
56 ~~14~~	12-8"	4:43		~~35~~ 77	10'-5"	6:20	
57 ~~15~~	12-7"	4:44		~~36~~ 78	10'-4 1/2"	6:25	
58 ~~16~~	12'-6"	4:45		~~37~~ 79	10'-4"	6:30	
59 ~~17~~	12'-3"	4:50		~~38~~ 80	10'-3"	6:35	
60 ~~18~~	12'-0"	4:55 ~~4:55~~		~~39~~ 81	10'-3"	6:40	
61 ~~19~~	11'-10"	5:00		~~40~~ 82		~~6:45~~	
62 ~~20~~	11-8"	5:05		~~41~~ 83	10'-3"	6:50	
63 ~~21~~	11-6"	5:10		~~42~~ 84		~~6:55~~	

PUMP TEST FOR MIDCOAST *(unincorporated County north of Highway 92 and east of 280):*
All pumping tests shall be performed by, or under the supervision of a California Registered Geologist (R.E.) or Registered Civil Engineer (R.C.E.), and certified by signature of the same and the water level within the well shall be monitored until it recovers to 80%, or greater, of the hydrostatic level, as determined by a California Registered Geologist, or Registered Civil Engineer, immediately following the completion of the pumping test. Recovery time shall be equal to the time taken to perform the pumping test, but not less than four hours. The potable water sample shall be drawn from the pump at the conclusion of the pump test and shall be transported to a State of California certified laboratory under chain-of-custody. Water treatment will not be considered in order to be certified if either the State Upper Secondary Maximum Contaminant Level for specific conductance or chlorides are exceeded. Signature below certifies compliance with Midcoast rules.

R.G. OR R.C.E. NAME Scott Holmes REGISTRATION # RCE C28972
SIGNATURE Scott Holmes PHONE 650-773-1870

ENVIRONMENTAL HEALTH
SAN MATEO COUNTY

San Mateo County PUMP TEST FORM

A fee and application for the pump test must be submitted to Environmental Health.
Call (650) 363 – 4305 for more information, or to schedule an appointment.

OWNER'S NAME Jeff Peck - Big Wave PHONE (650) 560-9825
SITE ADDRESS Airport Street, Princeton
PARCEL NUMBER 47-311-060 DATE 6-16-09
PERFORMED BY Wilkinson Enterprise PHONE (650) 726-4212
HYDROSTATIC WATER LEVEL 8'-2" PUMP DEPTH 60' WELL DEPTH 120'
STABILIZED WATER LEVEL 26'-6" TIME TEST STARTED
RECHARGE START TIME 4:30 P.M.
ENVIRONMENTAL HEALTH SPECIALIST Ponaka Chea, REHS
REHS COMMENTS

ALL DEPTH MEASUREMENTS ARE TO BE FROM THE SURFACE OF THE GROUND - BELOW GROUND SURFACE (BGS)

#	WATER DEPTH (BGS)	TIME (15 minute intervals)	RATE GPM	#	WATER DEPTH (BGS)	TIME (15 minute intervals)	RATE GPM
85	10'-2"	7:00	P.M.				
86	10'-0"	7:10					
87	10'-0"	7:20					
88	9'-10 3/4"	7:30					
89	9'-9 3/4	7:45					
90	9'-9"	8:00					
91	9'-8"	8:15					
92	9'-6 3/4"	8:30					
93	9'-6"	8:45					
94	9'-5 3/4	9:00					
95	9'-5"	9:15	✓				
96	9'-4 1/2"	9:30					
97	9'-4"	9:45					
98	9'-3 1/2	10:00					
99	9'-2 1/4	10:15					
100	9'-2 1/4"	9'-2 1/4 10:30 ← 9'-2 1/4					
101	9'-1 3/4"	10:45					
102	9'-1"	11:00					
103	9'-1/2"	11:15					
		final					

PUMP TEST FOR MIDCOAST (unincorporated County north of Highway 92 and east of 280):
All pumping tests shall be performed by, or under the supervision of a California Registered Geologist (R.E.) or Registered Civil Engineer (R.C.E.), and certified by signature of the same and the water level within the well shall be monitored until it recovers to 80%, or greater, of the hydrostatic level, as determined by a California Registered Geologist, or Registered Civil Engineer, immediately following the completion of the pumping test. Recovery time shall be equal to the time taken to perform the pumping test, but not less than four hours. The potable water sample shall be drawn from the pump at the conclusion of the pump test and shall be transported to a State of California certified laboratory under chain-of-custody. Water treatment will not be considered in order to be certified if either the State Upper Secondary Maximum Contaminant Level for specific conductance or chlorides are exceeded. Signature below certifies compliance with Midcoast rules.

R.G. OR R.C.E. NAME Scott Holmes *REGISTRATION #* RCE C28972
SIGNATURE Scott Holmes *PHONE* 650 - 773 - 1870

EPA 625/1-80-012

DESIGN MANUAL

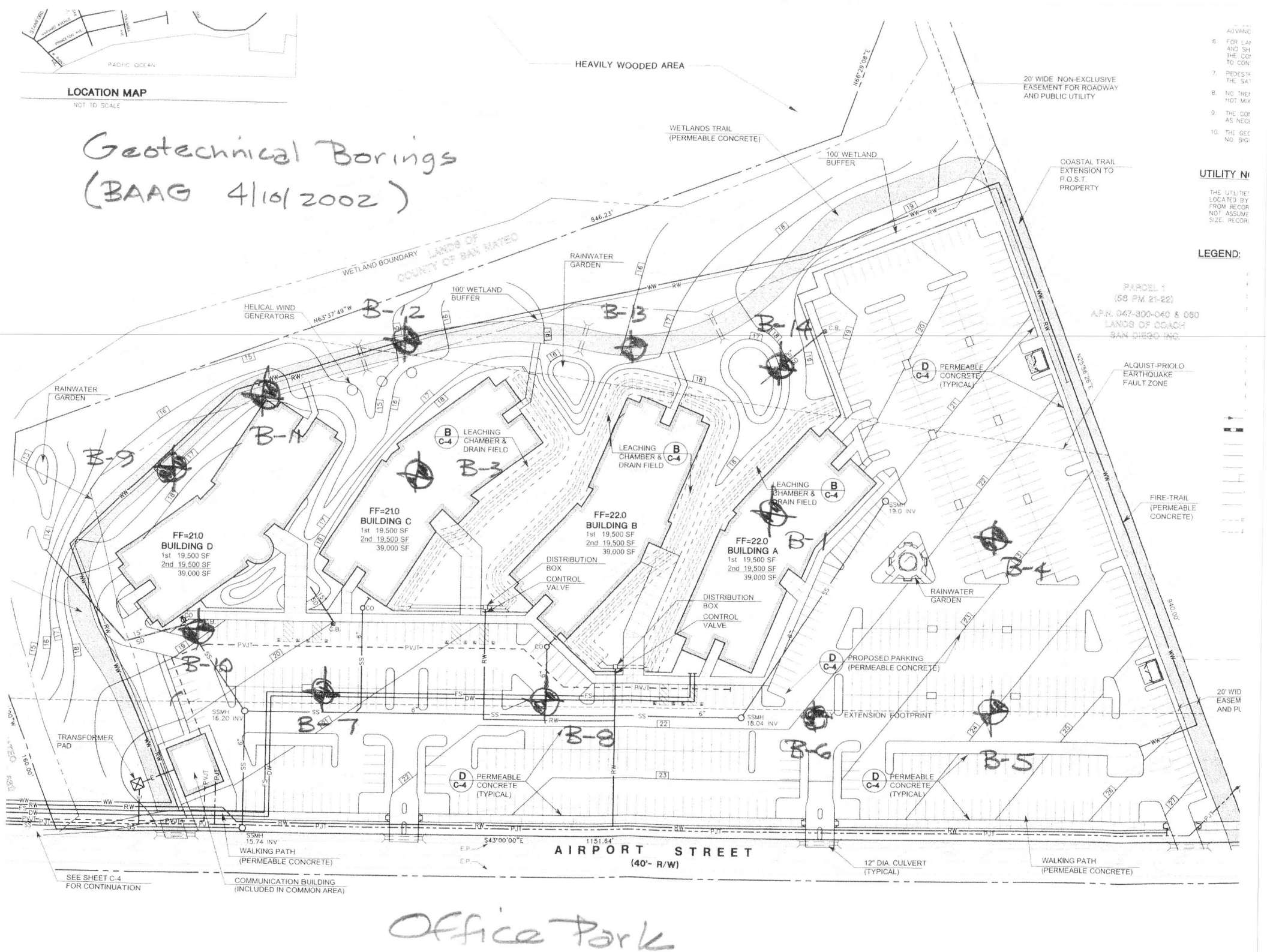
ONSITE WASTEWATER TREATMENT AND DISPOSAL SYSTEMS

U.S. ENVIRONMENTAL PROTECTION AGENCY

Office of Water Program Operations

Office of Research and Development
Municipal Environmental Research Laboratory

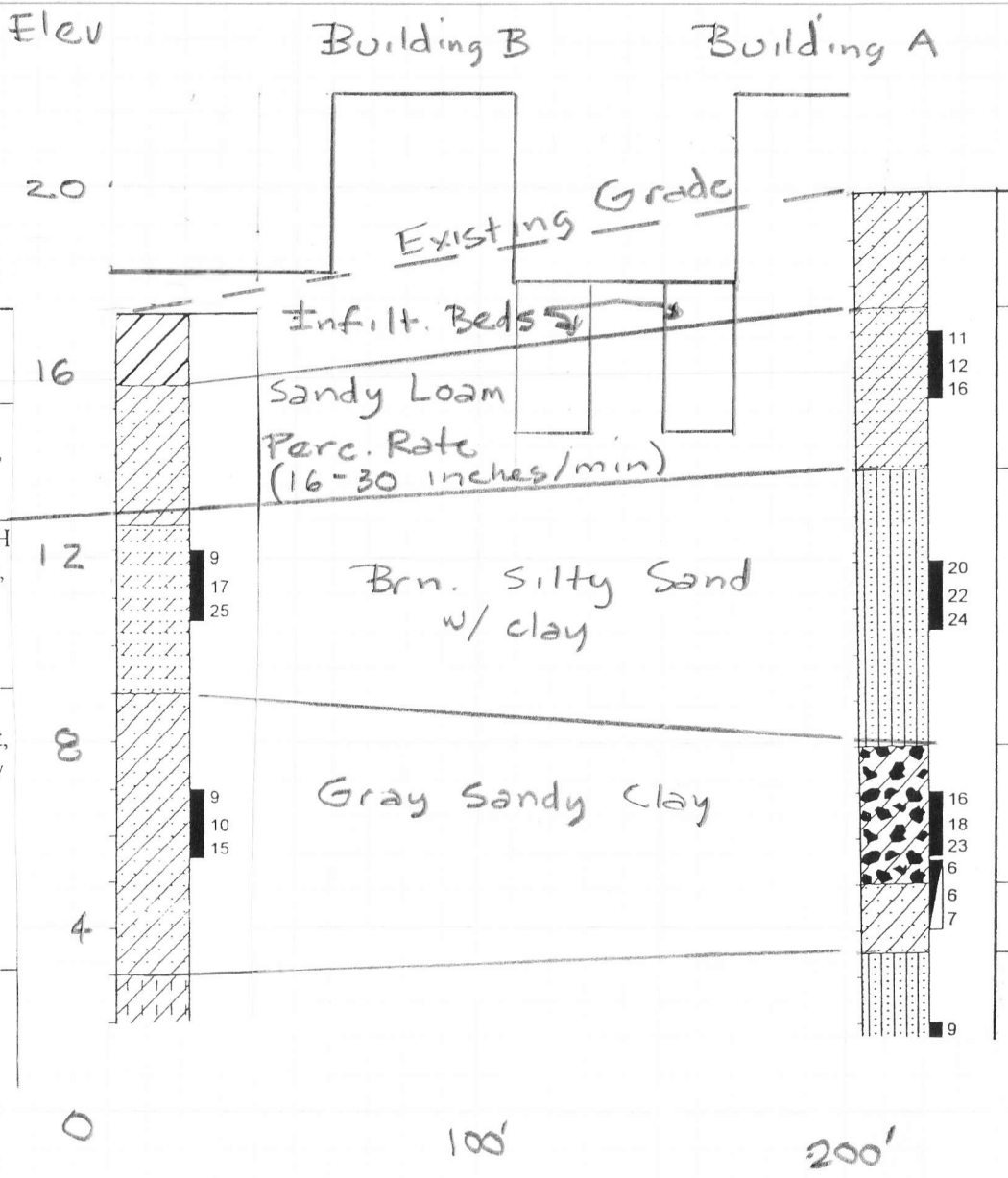
October 1980


LOCATION MAP
NOT TO SCALE
PACIFIC OCEAN
Geotechnical Borings
(BAAG 4/10/2002)
HEAVILY WOODED AREA
N66°29'08"E
20' WIDE NON-EXCLUSIVE EASEMENT FOR ROADWAY AND PUBLIC UTILITY
WETLANDS TRAIL (PERMEABLE CONCRETE)
100' WETLAND BUFFER
COASTAL TRAIL EXTENSION TO P.O.S.T. PROPERTY
UTILITY NO
LEGEND:
WETLAND BOUNDARY
LANDS OF COUNTY OF SAN MATEO
946.23'
RAINWATER GARDEN
HELICAL WIND GENERATORS
N63°37'49"W
B-12
B-13
B-14
100' WETLAND BUFFER
PARCEL 1
(58 PM 21-22)
A.P.N. 047-300-040 & 080
LANDS OF COACH SAN DIEGO INC.
D C-4 PERMEABLE CONCRETE (TYPICAL)
ALQUIST-PRIOLO EARTHQUAKE FAULT ZONE
N25°56'26"E
B-11
B-9
B-3
B C-4 LEACHING CHAMBER & DRAIN FIELD
FF=21.0
BUILDING D
1st 19,500 SF
2nd 19,500 SF
39,000 SF
FF=21.0
BUILDING C
1st 19,500 SF
2nd 19,500 SF
39,000 SF
FF=22.0
BUILDING B
1st 19,500 SF
2nd 19,500 SF
39,000 SF
FF=22.0
BUILDING A
1st 19,500 SF
2nd 19,500 SF
39,000 SF
B-1
SSMH 19.0 INV
FIRE-TRAIL (PERMEABLE CONCRETE)
B-4
DISTRIBUTION BOX
CONTROL VALVE
RAINWATER GARDEN
B-10
B-7
B-8
B-6
B-5
D C-4 PROPOSED PARKING (PERMEABLE CONCRETE)
EXTENSION FOOTPRINT
TRANSFORMER PAD
SSMH 16.20 INV
SSMH 18.04 INV
D C-4 PERMEABLE CONCRETE (TYPICAL)
S43°00'00"E
1151.64'
AIRPORT STREET
(40'- R/W)
SSMH 15.74 INV
WALKING PATH (PERMEABLE CONCRETE)
12" DIA. CULVERT (TYPICAL)
WALKING PATH (PERMEABLE CONCRETE)
SEE SHEET C-4 FOR CONTINUATION
COMMUNICATION BUILDING (INCLUDED IN COMMON AREA)
Office Park

National Brand
13-782 500 SHEETS, FILLER, 5 SQUARE
42-381 50 SHEETS EYE-EASE® 5 SQUARE
42-382 100 SHEETS EYE-EASE® 5 SQUARE
42-389 200 SHEETS EYE-EASE® 5 SQUARE
42-392 100 RECYCLED WHITE 5 SQUARE
42-399 200 RECYCLED WHITE 5 SQUARE
Made in U.S.A.

Boring No. B-13

CL/ CH	LEAN TO FAT CLAY, dark gray, moist, stiff, medium to high plasticity
CL	SANDY LEAN CLAY, brown and orange brown, moist, hard, medium plasticity
SW-SC	WELL GRADED SAND WITH CLAY, brown to orange brown, moist, dense
CL	SANDY LEAN CLAY, gray with orang-brown mottling, wet, medium stiff, medium plasticity
CL-ML	SILTY LEAN CLAY WITH SAND, brown with orange-brown mottling, wet, very stiff, low plasticity
SW-	



Boring No. B-1

CL	FINE SANDY LEAN CLAY, dark gray, moist, medium stiff, medium plasticity
SC	CLAYEY SAND, trace of white gravels, brown with black, white specks, moist, medium dense
SM	SILTY SAND WITH GRAVEL, brown, wet, dense (quartz, feldspar fragments, granitic source)
GC	CLAYEY GRAVEL WITH SAND, gray, wet, dense (granitic source)
CL	SANDY LEAN CLAY, gray and orange brown, wet, stiff, medium plasticity
SM	SILTY SAND WITH GRAVEL, red brown, wet, medium dense

Soil Profile - Infiltration Bed 3

(Between Building A and B - Office Park)

National Brand
13-782 500 SHEETS, FILLER, 5 SQUARE
42-381 50 SHEETS EYE-EASE® 5 SQUARE
42-382 100 SHEETS EYE-EASE® 5 SQUARE
42-389 200 SHEETS EYE-EASE® 5 SQUARE
42-392 100 RECYCLED WHITE 5 SQUARE
42-399 200 RECYCLED WHITE 5 SQUARE
Made in U. S. A.

Elev. Building C

Building B

Boring No. B-8

Boring No. B-3

Finished Grade

Existing Grade

Infiltration Beds

Infiltr. Rate Sandy Loam: 16-30"/min

Brn. Sandy Silt

Silt

Brn. Clayey Sand w/ silt and gravel

CL/CH	LEAN TO FAT CLAY, dark gray, moist, medium stiff, medium to high plasticity
SC	CLAYEY COARSE SAND, brown to orange brown mottled, with black oxide specks, moist, medium dense (granitic detritus)
SW	WELL GRADED SAND, brown, wet, medium dense (granitic detritus)
ML	FINE SANDY SILT, light brown, wet, medium stiff, low plasticity, micaceous
SW-SM	WELL GRADED SAND WITH SILT AND GRAVEL, brown to red brown, wet, medium dense, unconsolidated (granitic detritus) flowing sands
SM	SILTY SAND WITH GRAVEL, light gray, wet, medium dense (granitic detritus)

CL/CH	LEAN TO FAT CLAY, dark gray, moist, very stiff, medium to high plasticity
CL	SANDY LEAN CLAY WITH GRAVEL, brown to orange brown, mottled, moist, very stiff medium plasticity
SW-SM	WELL GRADED SAND WITH SILT, mostly coarse, brown, wet, medium dense (granitic detritus)
SW-SC	WELL GRADED SAND WITH CLAY, brown to orange brown mottled, wet, medium dense
	dense

100' 200' 260'

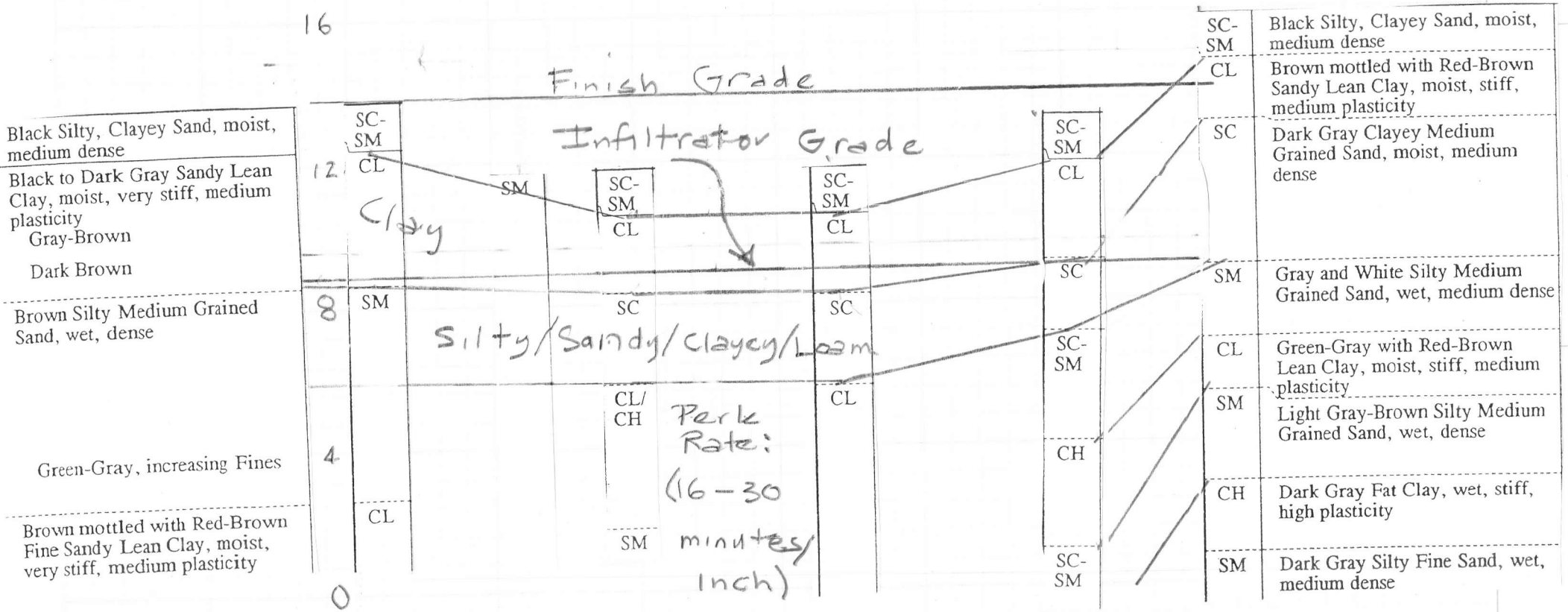
Soil Profile Infiltration Bed 2

(Between Building B and C, Office Park)

Geotechnical Borings
(BAAG 5/7/2000)
PROJECT SITE
WATER RECYCLING PLANT
FIRE-TRAIL
HEAVILY WOODED AREA
N42°03'19"W
276.20'
B5
B6
B9
B7
B8
B4
B3
B2
B1
FF=18.0
PROPOSED WELLNESS CENTER BUILDINGS
LEACHING CHAMBER & DRAINFIELD
POOL
PROPOSED WELLNESS CENTER BUILDING
FIRE-TRAIL
CONTROL VALVE
DISTRIBUTION BOX
FEDERAL WETLAND BOUNDARY
S13°40'48"E
392.00'
CALIFORNIA COASTAL COMMISION WETLANDS BOUNDARY
BUFFER 100' WETLAND
RUNWAY EXTENSION FOOTPRINT
PROPOSED PARKING
PERMEABLE CONCRETE (TYPICAL)
PROPOSED STORAGE BUILDING
FF=18.0
(SLAB ON GRADE)
LEACHING CHAMBER AND DRAINFIELD
RIPARIAN RESTORATION ZONE
100' WETLAND BUFFER
8' WALKING PATH
AIRPORT STREET
(40'- R/W)
S43°00'00"E
538.62'
SEE SHEET C-4 FOR CONTINUATION
12" DIA CULVERT (TYPICAL)
PROPOSED SWALE
APPROX. LOCATION OF EXISTING WATER MAIN
PROPOSED 8" WATER MAIN EXTENSION
GENER
UTILITY
LEGEND:
Wellness Center

National® Brand
13-782 500 SHEETS, FILLER 5 SQUARE
42-381 50 SHEETS EYE-EASE® 5 SQUARE
42-382 100 SHEETS EYE-EASE® 5 SQUARE
42-389 200 SHEETS EYE-EASE® 5 SQUARE
42-392 100 RECYCLED WHITE 5 SQUARE
42-399 200 RECYCLED WHITE 5 SQUARE
Made in U. S. A.

Boring No. B-5 | Boring No. B-6 | Boring No. B-9 | Boring No. B-7 | Boring No. B-8 | Boring No. B-1



Soil Profile - Infiltration Bed 1

(West of Wellness Center)

United States
Environmental Protection
Agency

Office of Water Program
Operations
Washington DC 20460

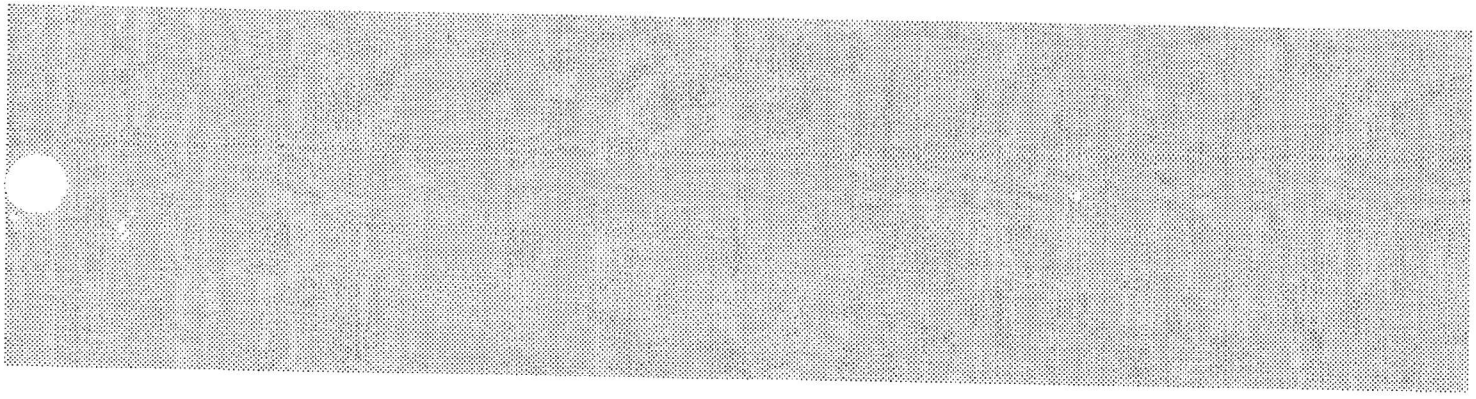
Office of Research and
Development
Municipal Environmental
Research Laboratory
Cincinnati OH 45268

Technology Transfer

EPA

Design Manual

Onsite Wastewater Treatment and Disposal Systems



EPA 625/1-80-012

DESIGN MANUAL

ONSITE WASTEWATER TREATMENT AND DISPOSAL SYSTEMS

U.S. ENVIRONMENTAL PROTECTION AGENCY

Office of Water Program Operations

Office of Research and Development
Municipal Environmental Research Laboratory

October 1980

FIGURE 7-2

TYPICAL BED SYSTEM

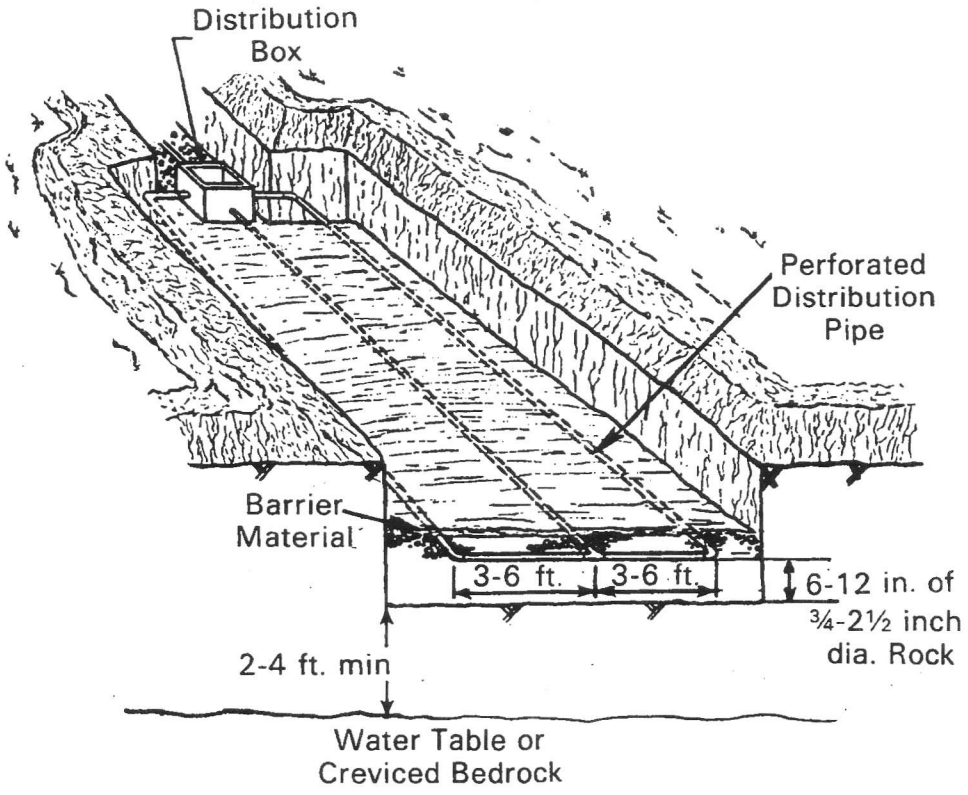


TABLE 7-2

RECOMMENDED RATES OF WASTEWATER APPLICATION
FOR TRENCH AND BED BOTTOM AREAS (4)(11)(12)[a]

Soil Texture	Percolation Rate min/in.	Application Rate[b] gpd/ft^2
Gravel, coarse sand	<1	Not suitable[c]
Coarse to medium sand	1 - 5	1.2
Fine sand, loamy sand	6 - 15	0.8
Sandy loam, loam	16 - 30	0.6
Loam, porous silt loam	31 - 60	0.45
Silty clay loam, clay loam[d]	61 - 120	0.2[e]

[a] May be suitable estimates for sidewall infiltration rates.

[b] Rates based on septic tank effluent from a domestic waste source. A factor of safety may be desirable for wastes of significantly different character.

[c] Soils with percolation rates <1 min/in. can be used if the soil is replaced with a suitably thick (>2 ft) layer of loamy sand or sand.

[d] Soils without expandable clays.

[e] These soils may be easily damaged during construction.

Department of Health Service
PUBLIC HEALTH DIVISION — Environmental Health

BOARD OF SUPERVISORS
ANNA G. ESHOO
TOM NOLAN
WILLIAM J. SCHUMACHER
K. JACQUELINE SPEIER
JOHN M. WARD

COUNTY OF SAN MATEO

MARGARET TAYLOR
DIRECTOR OF HEALTH SERVICES

590 HAMILTON STREET • REDWOOD CITY • CALIFORNIA 94063 363-4305

February 25, 1987

Mr. Chester W. Lebsack
525 Marshall Street
Redwood City, Ca. 94064

Re: Agricultural Well-Airport Street
El Granada, Ca. 94018, APN #047-311-030.

Dear Mr. Lebsack:

This office has reviewed the above described well's log, pump test and chemical, bacterial analysis to determine the potability of the water. The level of the constituents in the well water as submitted are well below the maximum contaminant range as specified by the California Domestic Water Quality and Monitoring Regulations.

The construction of the well was also reviewed by this office. This construction meets the regulations as specified by the San Mateo County Well Ordinance Code Chapter 5, Wells, for agricultural, single family residential and commercial, industrial use.

Therefore, this well water can be considered potable for these uses. Additional chemical analysis may be required as deemed necessary by this office for use as a public non-community water supply or public community water supply as defined by the California Safe Drinking Water Act.

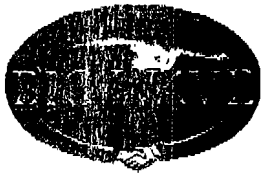
If there are any questions, please feel free to contact me at (415) 363-4716.

Yours very truly

Richard Wilson
Senior Sanitarian

RW/so

cc: George M. Nakamura, District Supervisor



PO Box 1901
El Granada, CA 94018
650.560.9588

To: Jennie Anderson

From: Nicole DeMartini

Pages: 18 (including cover)

Notes: Well Log from San Mateo County

LAW OFFICE OF
CHESTER W. LEBSACK
A PROFESSIONAL CORPORATION
885 MARSHALL STREET
POST OFFICE BOX 130
REDWOOD CITY, CALIFORNIA 94064

TELEPHONE
(415) 366-6411

April 21, 1988

Mr. Brian Zamora
Department of Environmental Health
San Mateo County Government Center
Redwood City, California 94063

RE: WELL APPLICATION FOR PARCEL DESCRIBED AS ASSESSOR'S PARCEL NUMBER 047-312-010.

Dear Mr. Zamora:

In August 1986, I, as representative of the owners of the above-referenced parcel, filed the attached Well Construction Application. On September 8, 1986, the Department of Environmental Health issued receipt numbers 11999 and 12000 acknowledging payment for the Well Applications, one of which was for the above-parcel. A permit was duly issued for the parcel described as Assessor's Parcel Number 047-311-030. However, no permit has been issued for the parcel 047-312-010. The proposed Well location is contained in the attachment to the application for the parcel numbered ~~040~~ 047-312-010.

As you no doubt know, Government Code §65950 at that time provided that the permit must either be approved or disapproved within six months if no environmental impact report was involved, or within one year if an environmental impact report was required. Although certain amendments to the Government Code §65950 became effective on January 2, 1988, those amendments do not apply in this instance case, since my application was automatically approved by operation of law pursuant to the then operative Government Code §65956 (h). Accordingly, the County is requested to issue the appropriate permit within the next few days as it is desired that the Well be drilled as soon as possible. I understand the County has recently issued several permits approved by operation of the law. You may wish to verify this information with the County Planning Director, Ms. Gouig.

Please let me hear from you relative to the issuance of the permit.

Yours very truly,

CWL/cmm
encls. (copy of receipts and copy of application)
cc: Ms. Christine M. Gouig (with enclosure)
Planning Director

CHESTER W. LEBSACK

ORIGINAL

File with DWR

STATE OF CALIFORNIA
THE RESOURCES AGENCY
DEPARTMENT OF WATER RESOURCES

WATER WELL DRILLERS REPORT

Do not fill in
No. 154360

Notice of Intent No. 219805

Local Permit No. or Date W-66-26 Thelma Lovelace estate

State Well No.

Other Well No. 25S/2W-14L

(1) OWNER: Name Chester Lobaugh Estate (executor)
Address P.O. Box 1770
City El Granada Zip 94018

(2) LOCATION OF WELL (See instructions): Tab #
County San Mateo Owner's Well Number 47-34-030
Well address if different from above
Township Range Section
Distance from cities, roads, railroads, fences, etc. Highway 1 & Coronado St
El Granada

(3) TYPE OF WORK:
New Well ☒ Deepening ☐
Reconstruction ☐
Reconditioning ☐
Horizontal Well ☐
Destruction ☐ (Describe destruction materials and procedures in Item 12)

(4) PROPOSED USE:
Domestic ☐
Irrigation ☒
Industrial ☐
Test Well ☐
Stock ☐
Municipal ☐
Other ☐

WELL LOCATION SKETCH

(5) EQUIPMENT:
Rotary ☒ Reverse ☐
Cable ☐ Air ☒
Other ☐ Bucket ☐

(6) GRAVEL PACK:
Yes ☒ No ☐ Size 1/4" Pea Gravel
Diameter of bore 10 in.
Packed from 20 ft. to 100 ft.

(7) CASING INSTALLED:
Steel ☐ Plastic ☒ Concrete ☐

From ft.	To ft.	Dia. in.	Gage or Wall	Type
0	100	6	200	PVC

(8) PERFORATIONS:
Type of perforation or size of screen

From ft.	To ft.	Slot size
20	40	.040"
60	100	.040"

(9) WELL SEAL:
Was surface sanitary seal provided? Yes ☒ No ☐ If yes, to depth 20 ft.
Were strata sealed against pollution? Yes ☐ No ☒ Interval ft.
Method of sealing Concrete Lobaugh Estate

(10) WATER LEVELS:
Depth of first water, if known 75 ft.
Standing level after well completion 22 ft.

(11) WELL TESTS:
Was well test made? Yes ☐ No ☒ If yes, by whom?
Type of test Pump ☐ Bailer ☐ Air lift ☐
Depth to water at start of test ft. At end of test ft.
Discharge gal/min after hours Water temperature
Chemical analysis made? Yes ☐ No ☒ If yes, by whom?
Was electric log made? Yes ☐ No ☒ If yes, attach copy to this report

(12) WELL LOG: Total depth 102 ft. Depth of completed well 100 ft.

from ft.	to ft.	Formation (Describe by color, character, size or material)
0	3	Soft, dark, loam
3	20	Soft, brown, clay (Boxed Sand)
20	78	Soft, gray, sand (Clay seams)
78	81	Fine to med, blue gray sand stone
81	102	Fine, clay sand (Very Muddy Sand)

Work started 9-1 19 82 Completed 9-9 19 82

WELL DRILLER'S STATEMENT:
This well was drilled under my jurisdiction and this report is true to the best of my knowledge and belief.
SIGNED (Well Driller)
NAME Earth Exploration Drilling Co. (Person, firm, or corporation) (Typed or printed)
Address 2600 Soscol Ave. Ste. 2
City Santa Rosa Zip 95407
License No. 330 Date of this report 9-15-82

DWR 188 (REV. 7-76) IF ADDITIONAL SPACE IS NEEDED, USE NEXT CONSECUTIVELY NUMBERED FORM

File

LAW OFFICE OF
CHESTER W. LEBSACK
A PROFESSIONAL CORPORATION
525 MARSHALL STREET
POST OFFICE BOX 130
REDWOOD CITY, CALIFORNIA 94064
(415) 368-8411

MAY 18 11 26 AM '88
ENVIRONMENTAL
HEALTH

May 17, 1988

Mr. Brian Zamora
Department of Environmental Health
San Mateo County Government Center
Redwood City, California 94063

Dear Mr. Zamora:

On April 21, 1988, I forwarded to you a letter (copy of which is enclosed) relating to the failure to receive the permit for the agricultural well applied for by the undersigned as executor of the Will of Thelma Doelger in 1986.

Since that time I have had no reply and would appreciate receiving from you information as to the issuance of the permit in conformity with that letter.

For your convenience, I enclose a copy of the same letter which relates to an application for a well permit on Assessor's Parcel Number 047-312-010.

If there is further information you require, please contact me immediately.

Yours very truly,

Chester W. Lebsack

CWL/cmb

CHESTER W. LEBSACK

Encls. (copy of letter of April 21)

refer mailed (no signed letter) May 17, 1988
TJC Chester Lebsack Original Letter Retained

5/19/88

Department of Health Services
PUBLIC HEALTH DIVISION — Environmental Health

BOARD OF SUPERVISORS
ANNA G. ESHOO
TOM HOLAN
WILLIAM J. SCHUMACHER
K. JACQUELINE SPEIER
JOHN M. WARD

COUNTY OF SAN MATEO

MARGARET TAYLOR
DIRECTOR OF HEALTH SERVICES

580 HAMILTON STREET • REDWOOD CITY • CALIFORNIA 94063 363-4305

February 25, 1987

Mr. Chester W. Lebsack
525 Marshall Street
Redwood City, Ca. 94064

Re: Agricultural Well-Airport Street
El Granada, Ca. 94018, APN #047-311-030.

Dear Mr. Lebsack:

This office has reviewed the above described well's log, pump test and chemical, bacterial analysis to determine the potability of the water. The level of the constituents in the well water as submitted are well below the maximum contaminant range as specified by the California Domestic Water Quality and Monitoring Regulations.

The construction of the well was also reviewed by this office. This construction meets the regulations as specified by the San Mateo County Well Ordinance Code Chapter 5, Wells, for agricultural, single family residential and commercial, industrial use.

Therefore, this well water can be considered potable for these uses. Additional chemical analysis may be required as deemed necessary by this office for use as a public non-community water supply or public community water supply as defined by the California Safe Drinking Water Act.

If there are any questions, please feel free to contact me at (415) 363-4716.

Yours very truly

Richard Wilson
Senior Sanitarian

RW/so

cc: George H. Nakamura, District Supervisor

S.W
338-3053

SOIL AND WATER LABORATORY
14072 W. PARK AVENUE
BOULDER CREEK, CA 95006

FROM

J. L. Johnston
P.O.BOX 1203
El Grenada, Ca. 94018

FEE | TIME | DATE | REPORT NO.

1/10/87 | 008-7

TYPE OF SAMPLE: ☒ DRINKING WATER (ANY SOURCE) ☐ SEWAGE ☐ RAW SURFACE WATER ☐ OTHER (SPECIFY)

COLLECTED BY

DATE AND HOUR COLLECTED 1/8/87

ANALYSES DESIRED AND REMARKS

☒ COLIFORM ☐ FECAL COLIFORM

SAMPLING POINT Fahey Off 92 030

TUBE NUMBER OF DILUTIONS		1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20
POSITIVE IN ML. TUBES		10	1	0	1	0	1	0													
PRESUMPTIVE TEST	10ML	2X																			
	1ML	2X																			
CONFIRMED TEST	1ML	2X																			
	1ML	1X																			
E. C.	1ML	2X																			

RESULTS

COLIFORM/100ml
☒ MPN
☐ MF

FECAL COLIFORM/100ml
☐ MPN
☐ MF

SPC/ml @ 35C	Cl_2 RES. mg/liter

ANALYST

LABORATORY REMARKS
☐ LEAKED IN TRANSIT
☐ INSUFFICIENT SAMPLE

S.W
338-3053

SOIL AND WATER LABORATORY
14072 W. PARK AVENUE
BOULDER CREEK, CA 95006

From

J. L. Johnston
P.O.BOX 1203
El Grenada, CA 94018

FEE | TIME | DATE | REPORT NO.

12/5/86 | 337-3

TYPE OF SAMPLE: Well- Fahey paragit

ANALYSES DESIRED AND REMARKS: Water Quality 12/3/86

Bacteriology	MPN	per 100 ml	
	M F	per 100 ml	
Chemistry	Iron	ppm	.75
	Manganese	ppm	.45
	Chloride	ppm	52
	Nitrate	ppm	1
	Total Dissolved Solids	ppm	
	Conductivity	μ mhos/cm	300

Initials

SEPTIC AND WELL CHECK-OFF LIST

Building Site Location: Airport St. El Granada, Ca. 94018

Applicant: Thelma Doelger (executor of state Lebsack Chester)

A P Number: 047-311-030

____ Application Form

____ Fee

____ Two Plot Plans

____ Water Company Letter

____ Well Report

____ Chem. Analysis

____ Bact. Analysis

____ Pump Test

____ Special Conditions

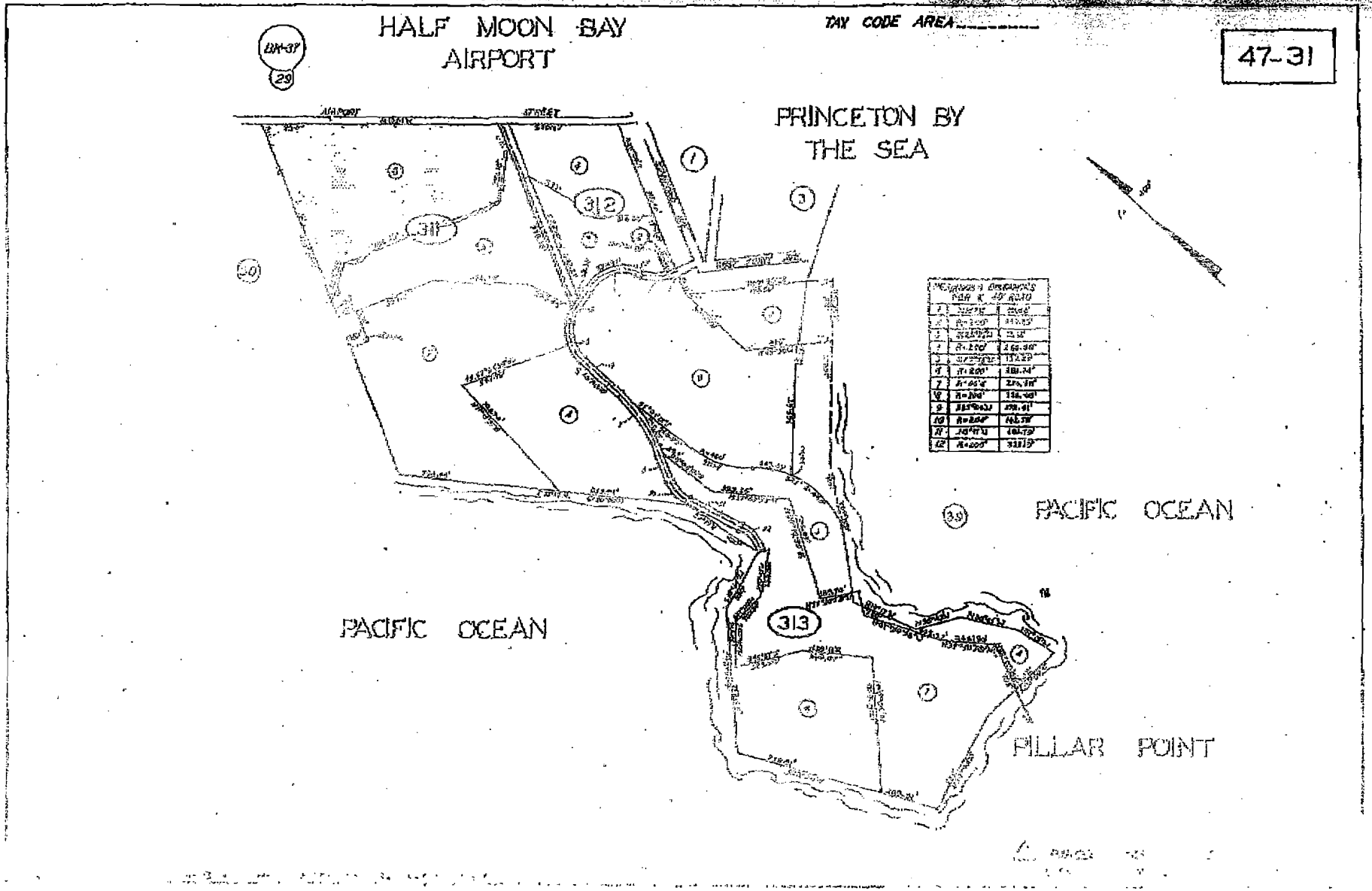
ISSUE WELL PERMIT
DATE

ISSUE SEPTIC PERMIT
DATE

ISSUE CCR 15
DATE

ISSUE CCR 15 a
DATE

DATE	STATUS


HALF MOON BAY
AIRPORT
TAX CODE AREA
47-31
PRINCETON BY
THE SEA
PACIFIC OCEAN
PACIFIC OCEAN
PILLAR POINT
311
312
313

LAW OFFICE OF
CHESTER W. LEBSACK
A PROFESSIONAL CORPORATION
325 MARSHALL STREET
POST OFFICE BOX 130
REDWOOD CITY, CALIFORNIA 94064
TELEPHONE

APR 22 11 25 AM '88

April 21, 1988

Mr. Brian Zamora
Department of Environmental Health
San Mateo County Government Center
Redwood City, California 94063

RE: WELL APPLICATION FOR PARCEL DESCRIBED AS ASSESSOR'S PARCEL NUMBER 047-312-010.

Dear Mr. Zamora:

In August 1986, I, as representative of the owners of the above-referenced parcel, filed the attached Well Construction Application. On September 8, 1986, the Department of Environmental Health issued receipt numbers 11999 and 12000 acknowledging payment for the Well Applications, one of which was for the above-parcel. A permit was duly issued for the parcel described as Assessor's Parcel Number 047-311-030. However, no permit has been issued for the parcel 047-312-010. The proposed Well location is contained in the attachment to the application for the parcel numbered 040-312-010.

As you no doubt know, Government Code §65950 at that time provided that the permit must either be approved or disapproved within six months if no environmental impact report was involved, or within one year if an environmental impact report was required. Although certain amendments to the Government Code §65950 became effective on January 2, 1988, those amendments do not apply in this instance case, since my application was automatically approved by operation of law pursuant to the then operative Government Code §65956 (b). Accordingly, the County is requested to issue the appropriate permit within the next few days as it is desired that the Well be drilled as soon as possible. I understand the County has recently issued several permits approved by operation of the law. You may wish to verify this information with the County Planning Director, Ms. Gouig.

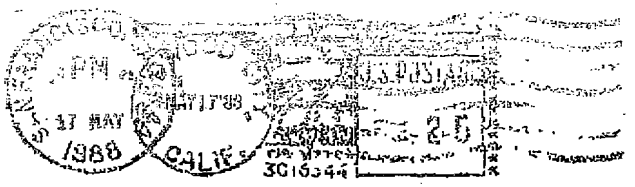
Please let me hear from you relative to the issuance of the permit.

Yours very truly,

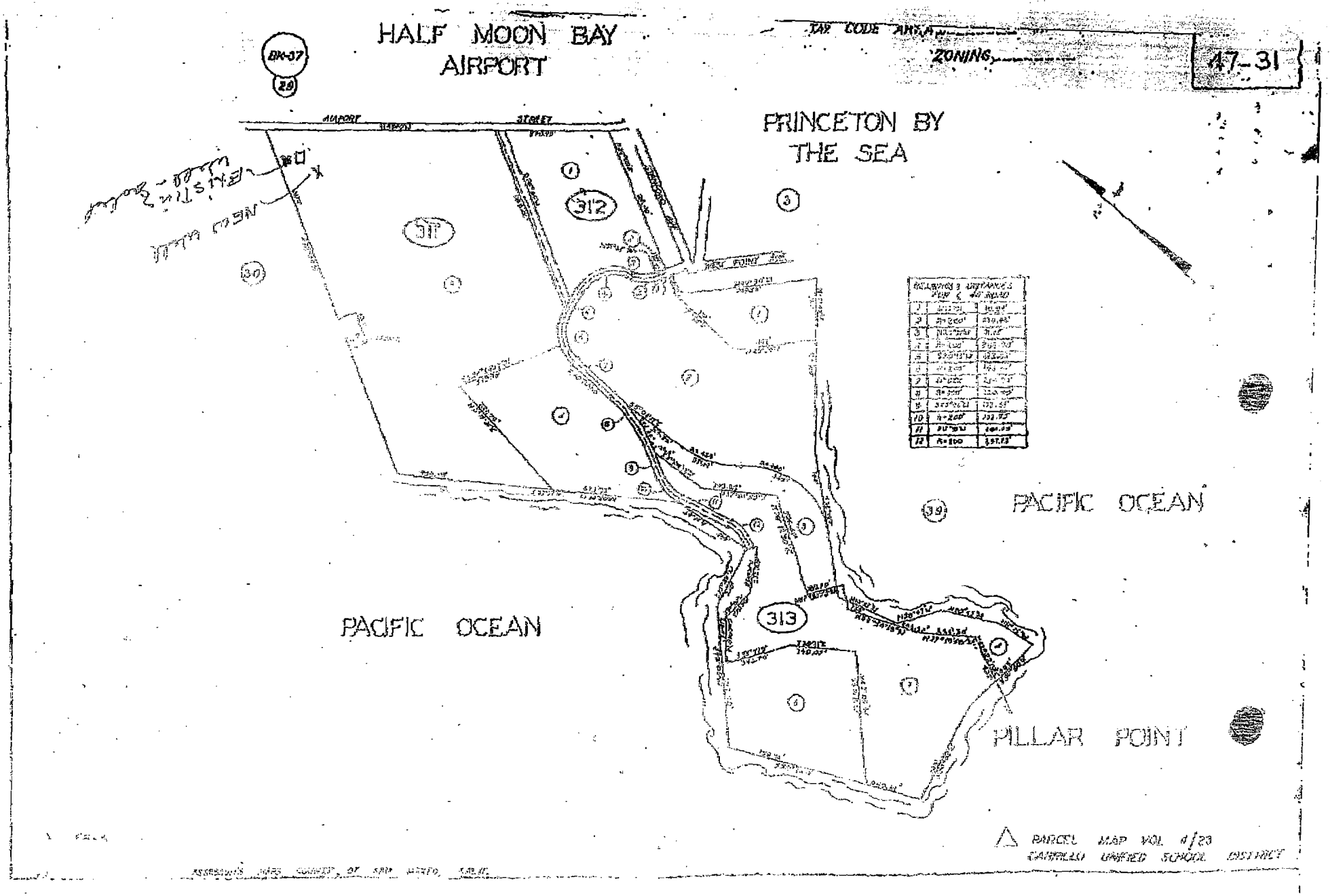
CHESTER W. LEBSACK

CWL/cmm
encls. (copy of receipts and copy of application)
cc: Ms. Christine M. Gouig (with enclosure)
Planning Director

LAW OFFICE OF
CHESTER W. LEBSACK
A PROFESSIONAL CORPORATION
525 MARSHALL STREET
POST OFFICE BOX 130
REDWOOD CITY, CALIFORNIA 94064



MR BRIAN ZAMORA
DEPARTMENT OF ENVIRONMENTAL HEALTH
SAN MATEO COUNTY GOVERNMENTAL CENTER
REDWOOD CITY CALIFORNIA 94063


HALF MOON BAY
AIRPORT
TAX CODE AREA
ZONING
47-31
PRINCETON BY
THE SEA
PACIFIC OCEAN
PACIFIC OCEAN
PILLAR POINT
312
313
PARCEL MAP VOL 4/23
CABRILLO UNIFIED SCHOOL DISTRICT

SOIL AND WATER LABORATORY
1573 W. PARK AVENUE
BOULDER CREEK, CA 95006
338-3063

From:

J.L. Johnston
P.O.Box 1209
El Granada, CA 94018

TYPE OF SAMPLE	DATE	REPORT NO.
	12/5/86	337-3

ANALYSIS REQUESTED AND RESULTS

Well- Fahey parcel

Water Quality 12/3/86

Bacteriology	MPN	per 100 ml	
	M F	per 100 ml	
Chemistry	Iron	ppm	.75
	Manganese	ppm	.45
	Chloride	ppm	52
	Nitrate	ppm	1
	Total Dissolved Solids	ppm	
	Conductivity	micromhos	900

Technician

San Mateo County Department of Public Health & Welfare
303 Hamilton Street, Redwood City, California 94063

No. W-116-86

Replacement for Agric Well
Abandoned Well PERMIT

Permit to construct or install Well

At Airport Street El Granada, Ca. 94018

Parcel No. 047-311-030

This certifies that approval has been granted to:

Chester Lobsack, executor of estate for
Thelma Doelger
525 Marshall Street
Redwood City, Ca. 94063

Contractor Earth Flow Drilling PERMIT ISSUED BY RICHARD WILSON

Earth Flow Drilling
2600 Smith Grade
Santa Cruz, Ca. 95060

Date 9/5/86

Fee paid 142.00

paid on 9/23/86

Lot No.

Block No.

Ordinance No.
Environmental Health
San Mateo County

For the Director
Department of Public Health and Welfare

Public Health Engineer

Permit shall be void if construction is not started within 90 days of date of this permit.

5/28-31

THIS PERMIT IS NON-TRANSFERABLE

OFFICE OF ENVIRONMENTAL HEALTH
SAN MATEO COUNTY DEPARTMENT OF HEALTH SERVICES

WELL CONSTRUCTION APPLICATION

COUNTY GOVERNMENT CENTER
590 HAMILTON STREET
REDWOOD CITY, CALIF. 94063
(415) 363-4305

DATE
PERMIT ISSUED: ____
PERMIT NO.: ____
FEE: 142.00
RECEIPT NO.: ____
ASSIGNED TO: ____

TO BE COMPLETED BY OWNER AND DRILLER

Property Owner: ESTATE OF THELMA BOLLING Chester Lebsack, executor	Well Owner (if different):	Driller's Co.: Earth Flow Drilling
Address: 525 Marshall Street	Address of Well Site: Alameda	Driller's Contractor's License Number: 320231
City, State, Zip: Redwood City, CA 94063	City, State, Zip: El Granada	Address: 2500 Smith Grade
Telephone No.: 366-8411	Telephone No.:	City, State, Zip: Santa Cruz, CA 95060
Assessor's Parcel No. of Well Site: 047-311-030	Owner's Consultant's Well No.:	Telephone No.: 408/423-3268

Estimate depth of completed well: ☐ Less than 50 feet ☒ 50 to 300 feet ☐ Over 300 feet

Purpose of Well: ☐ Domestic ☐ Municipal/Industrial ☒ Agricultural replacement ☐ Monitoring ☐ Cathodic Protection

* Monitoring wells are those constructed for the purpose of obtaining representative water level measurements and/or representative water samples for analysis. This includes wells constructed for general exploration and investigation purposes as well as those to be constructed in conformance with the Hazardous Materials Storage Permit Ordinance for site-specific groundwater monitoring of existing underground hazardous material storage tanks.

THIS SECTION TO BE COMPLETED IF THIS APPLICATION IS FOR A MONITORING WELL

Purpose of Monitoring Well: ☐ To comply with City or County Hazardous Materials Ordinance ☐ Exploration Studies

☐ Other (specify): ____

Name of Business: ____ Business License No.: ____

If proposed well is to meet specifications of a Hazardous Materials Storage Permit Ordinance has the City or County been contacted? ☐ Yes ☐ No

If yes, give name of City or County: ____

Consultant's Name (company): ____

Address: ____

City, State, Zip: ____

Name of Driller: ____ Telephone No.: ____

Type of monitoring device: ☐ Groundwater ☐ Vadose

Monitoring well used: ☐ Depth ☐ Quality ☐ Depth and Quality

Vadose device installed: ☐ Vacuum ☐ Lysimeter ☐ Suction pan sampler

SIGNATURE OF PROFESSIONAL ENGINEER

REGISTRATION NO. CIVIL ENGINEER — OR — CERTIFICATE NO. ENGINEERING GEOLOGIST

TOPOGRAPHIC FEATURES

Is well to be constructed: ☐ In a public sidewalk ☐ In a public road ☐ On public property ☒ On private property

Within 50 feet of the top of a creek bank: ☐ Yes ☒ No

Within 50 feet of any existing well: ☐ Yes ☒ No

Within 50 feet of a sanitary sewer: ☐ Yes ☒ No

Within 150 feet of a proposed leachfield: ☐ Yes ☒ No

Within 100 feet of a pit privy, septic tank, leachfield: ☐ Yes ☒ No

CERTIFICATION BY WELL OWNER/AGENT AND DRILLER/AGENT:

I certify that the information given above is correct to the best of my knowledge. I certify that the well will be constructed in compliance with the conditions of this permit, the San Mateo Co. Ordinance Code, and, if applicable, the Hazardous Materials Storage Permit Ordinance of the County of San Mateo. It is my responsibility as the well owner to notify the County of any changes in the purpose of this well from that which is indicated on this application.

X Chester Lebsack, executor — DATE

WELL OWNER/AGENT

SIGNATURE OF DRILLER/AGENT — DATE 8-27-84

☐ I certify that in the performance of the work for which this permit is being issued I shall not employ any person in any manner so as to become subject to the Workman's Compensation laws of California.

☐ I certify that I have a valid Workmen's Compensation Coverage.

IMPORTANT: A minimum 24-hour notice must be given to Environmental Health prior to drilling.

OVER

 WELL PERMIT NO. [redacted]

WELL CONSTRUCTION APPLICATION

Based on information on the application and attachment(s) hereto (if any) and subject to approval noted below permission is hereby granted to construct/destroy the described well. Permission to start may be withheld until a field check verifies all statements made on application by Permittee and is also subject to the "General" and "Special" Conditions stated below.

See Attached Map

WELL LOCATION (Draw Accurately)
Recommend using Assessor's Map

1. Sketch well location to scale, show dimension to nearest foot.
2. Show a minimum of two dimensions at right angles. Dimensions shall be from the centerline of the closest named streets, roads or highways.

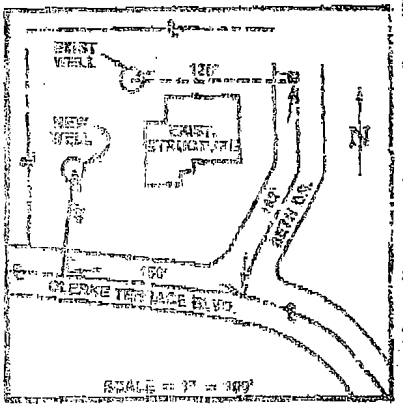


FIGURE 1

Scale: 1" = _____

GENERAL CONDITIONS:

A. Construction under this Permit is subject to any instructions by Health Department representative relative to the "Standards for the Construction of Wells in San Mateo County".
B. Permit may be voided before work begins if field check reveals any misrepresentation under "well location" or "Topographic Features" on application.
C. This Permit is valid only for the purpose specified herein. No change in construction procedure as prescribed on attached Standards and in Special Conditions below will be allowed except upon written permission of the County.
D. Permittee shall assume entire responsibility for all activities and uses under this Permit and shall indemnify, defend and save the County of San Mateo, its officers, agents and employees free and harmless from any and all expense, cost or liability in connection with or resulting from the exercise of this Permit including, but not limited to property damage, personal injury and wrongful death.
E. Compliance with "CAL/OSHA", California Labor Code Section 6930 (and following) is required.
F. Water quality and production from all wells to be used for domestic water supply must be approved by the Office of Environmental Health.
G. Permit will be automatically cancelled if not exercised or if extension is not requested by Permittee within 90 calendar days of above date.
H. Driller is to complete State DWR Form 188 and mail original to San Mateo County Health Services within 30 days of completion of well construction.
I. For the construction of water producing wells, a Permittee must be a licensed water well drilling contractor unless the work is to be done by the landowner or employees of the landowner. (See Business & Professions Code § 7026.3, 7028).
J. For monitoring wells refer to State Water Well Standards 74-81. Dry holes shall be backfilled within one week of drilling. Well destruction shall be done in accordance with State and County Standards.
K. *Each well site requires a separate Well Construction Application and permit.*

SPECIAL CONDITIONS:

_____

_____

_____

APPROVED: _____ DATE _____
(APPROVED)

LAW OFFICE OF
CHESTER W. LEBSACK
A PROFESSIONAL CORPORATION
525 MARSHALL STREET
POST OFFICE BOX 130
REDWOOD CITY, CALIFORNIA 94064

TELEPHONE
(415) 368-2611

January 15, 1987

Mr. Richard Wilson
Department of Environmental Health
San Mateo County Government Center
Redwood City, CA

RE: AGRICULTURAL WELL - AIRPORT STREET
EL GRANADA PARCEL #047-311-030

Dear Mr. Wilson:

The construction, log, chemistry, and bacterial analysis for the above described well has been submitted to you for review.

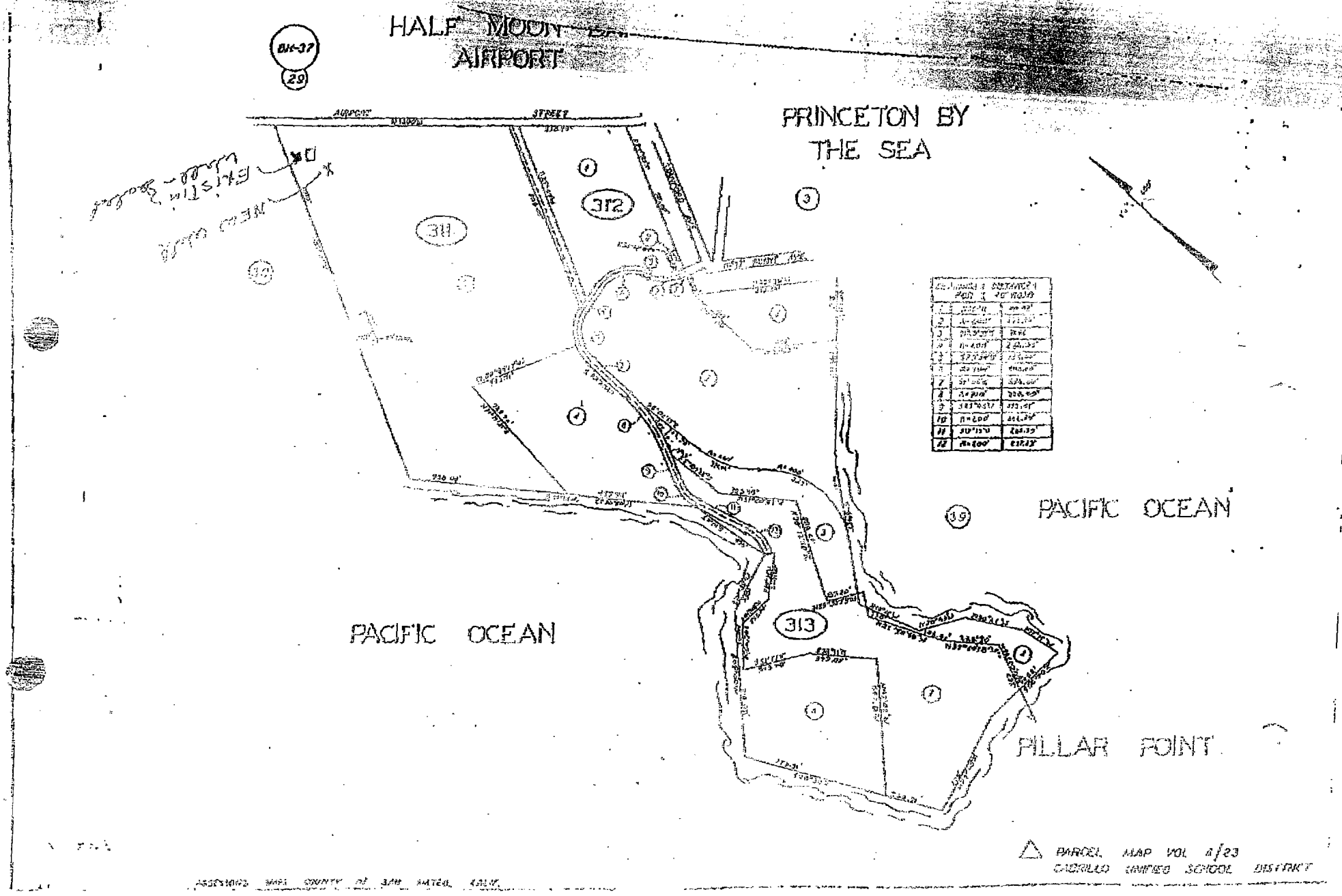
The undersigned requests certification of this Well relative to potability for commercial, industrial, and domestic (residential) uses.

Yours very truly,

Chester W. Lebsack

CWL/cmm

CHESTER W. LEBSACK


BK-37
29
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PARCEL MAP VOL 4/23
CABRILLO UNIFIED SCHOOL DISTRICT

Department of Health Services
PUBLIC HEALTH DIVISION -- Environmental Health

BOARD OF SUPERVISORS
ANNA G. ESHOO
TOM NOLAN
WILLIAM J. SCHUMACHER
K. JACQUELINE SPEIER
JOHN M. WARD

COUNTY OF SAN MATEO

MARGARET TAYLOR
DIRECTOR OF HEALTH SERVICES

590 HAMILTON STREET • REDWOOD CITY • CALIFORNIA 94063 363-4305

February 25, 1987

Mr. Chester W. Lebsack
525 Marshall Street
Redwood City, Ca. 9-064

Re: Agricultural Well-Airport Street
El Granada, Ca. 94018, APN #047-311-030.

Dear Mr. Lebsack:

This office has reviewed the above described well's log, pump test and chemical, bacterial analysis to determine the potability of the water. The level of the constituents in the well water as submitted are well below the maximum contaminant range as specified by the California Domestic Water Quality and Monitoring Regulations.

The construction of the well was also reviewed by this office. This construction meets the regulations as specified by the San Mateo County Well Ordinance Code Chapter 3, Wells, for agricultural, single family residential and commercial, industrial use.

Therefore, this well water can be considered potable for these uses. Additional chemical analysis may be required as deemed necessary by this office for use as a public non-community water supply or public community water supply as defined by the California Safe Drinking Water Act.

If there are any questions, please feel free to contact me at (415) 363-4716.

Yours very truly

Richard Wilson
Senior Sanitarian

RW/so

cc: George M. Nakamura, District Supervisor