

CALIFORNIA COASTAL COMMISSION

South Coast Area Office
200 Oceangate, Suite 1000
Long Beach, CA 90802-4302
(562) 590-5071



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Hearing Date: 8/10-12/05
Commission Action:

STAFF REPORT: REGULAR CALENDAR**APPLICATION NUMBER:** 5-04-089**APPLICANT:** Three Arch Bay Community Services District
Drew Harper, Executive Director**AGENTS:** Kent Norton, Michael Brandman Associates
Bill Lawson, J.M. Tettemer & Associates**PROJECT LOCATION:** Throughout the Three Arch Bay Community
Laguna Beach, Orange County

PROJECT DESCRIPTION: Construction of a new storm drain system within the Three Arch Bay Community including within Vista del Sol and La Senda streets, to replace the existing deteriorated community storm drain system. The project will include relocation of the ocean outlet. The project includes approximately 3,000 feet of new storm drain lines, 20 new catch basins, several new manholes, and abandonment of several older lines. A tunnel for the new ocean outlet location is proposed to be excavated by hand.

SUMMARY OF STAFF RECOMMENDATION:

Staff is recommending the Commission **approve** the proposed project subject to seven (7) special conditions which are necessary to assure that the project conforms with Section 30231 of the Coastal Act regarding protection and enhancement of water quality; Section 30253 of the Coastal Act regarding geology and hazards, and with Section 30251 regarding landform alteration and visual quality.

Special Condition No. 1 requires submittal of a revised Water Quality Drainage Plan; Special Condition No. 2 requires adherence to water quality best management practices during construction; Special Condition No. 3 requires that the concrete headwall be color tinted and contoured to match the surrounding natural rock; Special Condition No. 4 requires conformance with the geotechnical recommendations; Special Condition No. 5 prohibits future shoreline/bluff protection devices; Special Condition No. 6 requires that the applicant assume the risk of development; Special Condition No. 7 requires the applicant to record a deed restriction against the property, referencing all of the Special Conditions contained in this staff report.

The proposed project is located in the Three Arch Bay community in the City of Laguna Beach. Three Arch Bay is one of the areas of deferred certification in the otherwise certified City of Laguna Beach. Because the City's LCP is not certified for this area, the standard of review is consistency with the Chapter 3 policies of the Coastal Act.

LOCAL APPROVALS RECEIVED: None needed as the applicant, the Three Arch Bay Community Services District, is a quasi-governmental agency.

SUBSTANTIVE FILE DOCUMENTS: Coastal Development Permit application No. 5-00-011(TAB CSD); Coastal Development Permit No. 5-03-298 (TAB CSD); Coastal Development Permit No. 5-02-217 (TAB CSD); Coastal Development Permit No. 5-02-218 (TAB CSD); Coastal Development Permit No. 5-86-720 (TAB CSD); Biological Characterization of Proposed Stormwater Discharge Site, prepared by Marine Research Specialists, dated June 3, 2004; Marine Environmental Review of the Final Discharge Location for the Three Arch Bay (TAB) Storm Drainage System, prepared by Marine Research Specialists, dated June 17, 2002; City of Laguna Beach certified Local Coastal Program (as guidance only).

I. APPROVAL WITH CONDITIONS

STAFF RECOMMENDATION:

Staff recommends that the Commission **APPROVE** the permit application as conditioned.

MOTION: *I move that the Commission approve Coastal Development Permit No. 5-04-089 pursuant to the staff recommendation.*

STAFF RECOMMENDATION OF APPROVAL:

Staff recommends a **YES** vote. Passage of this motion will result in approval of the permit as conditioned and adoption of the following resolution and findings. The motion passes only by affirmative vote of a majority of the Commissioners present.

RESOLUTION TO APPROVE THE PERMIT:

The Commission hereby approves a coastal development permit for the proposed development and adopts the findings set forth below on grounds that the development as conditioned will be in conformity with the policies of Chapter 3 of the Coastal Act and will not prejudice the ability of the local government having jurisdiction over the area to prepare a Local Coastal Program conforming to the provisions of Chapter 3. Approval of the permit complies with the California Environmental Quality Act because either 1) feasible mitigation measures and/or alternatives have been incorporated to substantially lessen any significant adverse effects of the development on the environment, or 2) there are no further feasible mitigation measures or alternatives that would substantially lessen any significant adverse impacts of the development on the environment.

II. STANDARD CONDITIONS:

1. Notice of Receipt and Acknowledgment. The permit is not valid and development shall not commence until a copy of the permit, signed by the permittee or authorized agent, acknowledging receipt of the permit and acceptance of the terms and conditions, is returned to the Commission office.
2. Expiration. If development has not commenced, the permit will expire two years from the date this permit is reported to the Commission. Development shall be pursued in a diligent manner and completed in a reasonable period of time. Application for extension of the permit must be made prior to the expiration date.
3. Interpretation. Any questions of intent or interpretation of any condition will be resolved by the Executive Director or the Commission.
4. Assignment. The permit may be assigned to any qualified person, provided assignee files with the Commission an affidavit accepting all terms and Conditions of the permit.
5. Terms and Conditions Run with the Land. These terms and conditions shall be perpetual, and it is the intention of the Commission and the permittee to bind all future owners and possessors of the subject property to the terms and conditions.

III. SPECIAL CONDITIONS:**1. Revised Water Quality Drainage Plan**

- A. PRIOR TO ISSUANCE OF THE COASTAL DEVELOPMENT PERMIT, THE APPLICANT SHALL SUBMIT FOR THE REVIEW AND APPROVAL OF THE Executive Director, two (2) copies of a revised Water Quality/Drainage Plan (WQDP), prepared by a licensed water quality professional, and shall include plans, descriptions, and supporting calculations. In addition to the measures proposed by the applicant in the WQDP prepared by Michael Brandman Associates, dated October 7, 2004, the revised WQDP shall incorporate structural and non-structural Best Management Practices (BMPs) designed to reduce, to the maximum extent practicable, the volume, velocity and pollutant load of stormwater and dry weather flows discharged from the storm drain system. In addition, the revised WQDP shall include appropriate structural and non-structural BMPs (site design, source control and treatment control) designed and implemented to minimize water quality impacts to surrounding coastal waters. In addition to the specifications above, the plan shall provide the following:**
 - i. Installation of treatment control BMP(s) targeted at the contaminants of concern (i.e. vehicular fluids, particulates such as brake pad dust (heavy metals), animal waste, pesticides and herbicides). The required treatment control BMP(s) may include: installation of media filters, or, low flow connection to the sewer system, or equivalent BMP(s) as determined by the Executive Director.

- ii. A community water quality education program shall be included in the community newsletter. The required water quality education program shall appear a minimum of once per year in the newsletter; the Regional Water Quality Control Board's mail inserts shall be included with the newsletter. The education program shall discourage over-irrigation and the use of fertilizers and other landscaping chemicals within the community.
- iii. All community catch basins and storm drain inlets shall be stenciled to indicate that contents flow to the ocean.
- iv. A regular (at least weekly) street sweeping program shall be maintained within the community.
- v. Post-construction structural BMPs (or suites of BMPs) shall be designed to treat, infiltrate or filter the amount of stormwater runoff produced by all storms up to and including the 85th percentile, 24-hour storm event for volume-based BMPs, and/or the 85th percentile, 1-hour storm event, with appropriate safety factor (i.e., 2 or greater), for flow-based BMPs;
- vi. All BMPs shall be operated, monitored, and maintained for the life of the project and at a minimum, all structural BMPs shall be inspected, cleaned-out, and where necessary, repaired at the following minimum frequencies; (1) prior to October 15th each year; (2) during each month between October 15th and April 15th of each year and, (3) at least twice during the dry season.
- vii. Debris and other water pollutants removed from structural BMP(s) during clean-out shall be contained and disposed of in a proper manner;
- viii. It is the applicant's responsibility to maintain the drainage system and the associated structures and BMPs according to the manufacturer's specifications.

B. The WQDP shall be reviewed and approved by the project geotechnical consultant.

C. The permittee shall undertake development in accordance with the approved final plans. Any proposed changes to the approved final plans shall be reported to the Executive Director. No changes to the approved final plans shall occur without a Commission amendment to this coastal development permit unless the Executive Director determines that no amendment is required.

2. Construction Best Management Practices

The permittee shall comply with the following construction-related requirements:

- a) Any and all debris resulting from construction activities shall be removed from the site within 10 days of completion of construction.
- b) Reasonable and prudent measures shall be taken to prevent all discharge of fuel or oily waste from heavy machinery or construction equipment or power tools into

areas subject to runoff into the storm drains. The applicant and applicant's contractors shall have adequate equipment available to contain any such spill immediately.

- c) All stock piles and construction materials shall be covered, enclosed on all sides, shall be located as far away as possible from drain, and shall not be stored in contact with the soil.
- d) All debris and trash shall be disposed of in the proper trash and recycling receptacles at the end of each construction day.
- e) All storm drain inlets and catch basin shall be protected by sand bags and/or straw waddles during construction.

3. Implement Coloring and Contouring of Headwall as Proposed

A. Final Plans. **PRIOR TO ISSUANCE OF THE COASTAL DEVELOPMENT PERMIT**, the Permittee shall submit Final Plans (in full-size and 11" x 17" formats with a graphic scale (two sets of each)) to the Executive Director for review and approval. The Final Plans shall be prepared by a licensed civil engineer with experience in coastal structures and processes and shall be substantially in conformance with the plans submitted to the Coastal Commission dated 11/2/04 and 9/04 but shall show the following changes and clarifications to the project via plan notes and/or direct modification:

- i. Concrete Surfacing. All concrete surfaces that are exposed and/or are located on the bluff shall be faced with a sculpted concrete surface that mimics natural undulating bluff landforms in the vicinity in terms of integral mottled color, texture, and undulation. Any protruding concrete elements (e.g., corners, edges, etc.) shall be contoured in a non-linear manner designed to evoke natural bluff undulations.
- (ii) Drainage. All drainage within the sculpted concrete shall be camouflaged (e.g., hidden with overhanging or otherwise protruding sculpted concrete, etc.) so as to be hidden from view and/or inconspicuous as seen from the shoreline or ocean.

B. The approved color and texture treatments shall be maintained throughout the life of the approved development.

C. All requirements of this condition above shall be enforceable components of this coastal development permit. The Permittee shall undertake development in accordance with the approved Final Plans. Any proposed changes to the approved Final Plans shall be reported to the Executive Director. No changes to the approved Final Plans shall occur without a Commission amendment to this coastal development permit unless the Executive Director determines that no amendment is necessary.

4. **Conformance of Design and Construction Plans to Geotechnical Recommendations**

- A. All final design and construction plans, including grading, foundations, site plans, elevation plans, and drainage plans, shall be consistent with all recommendations contained in the Revised Preliminary Geotechnical Investigation, prepared by Leighton and Associates, Inc., dated August 25, 2003, and revised on October 9, 2003.
- B. **PRIOR TO THE ISSUANCE OF THE COASTAL DEVELOPMENT PERMIT**, the applicant shall submit, for the Executive Director's review and approval, evidence that the geotechnical consultant has reviewed and approved all final design and construction plans and certified that each of those final plans is consistent with all of the recommendations specified in the above-referenced geologic evaluation approved by the California Coastal Commission for the project site.
- C. The permittee shall undertake development in accordance with the approved final plans. Any proposed changes to the approved final plans shall be reported to the Executive Director. No changes to the approved final plans shall occur without a Commission amendment to this coastal development permit unless the Executive Director determines that no amendment is legally required.

5. **No Future Shoreline/Bluff Protective Device**

- A. By acceptance of this permit, the applicant agrees, on behalf of him/herself and all other successors and assigns, that no shoreline/bluff protective device(s) shall ever be constructed to protect the development at the subject site approved pursuant to Coastal Development Permit No. 5-04-089 including future improvements, in the event that the property is threatened with damage or destruction from bluff and slope instability, erosion, landslides or other natural hazards in the future. By acceptance of this permit, the applicant hereby waives, on behalf of him/herself and all successors and assigns, any rights to construct such devices that may exist under Public Resources Code Section 30235.
- B. By acceptance of this permit, the applicant further agrees, on behalf of him/herself and all successors and assigns, that the landowner shall remove the development authorized by this permit if any government agency has ordered that the structure is not to be operated due to any of the hazards identified above. In the event that any portion of the development is destroyed, the permittee shall remove all recoverable debris associated with the development from the beach and ocean and lawfully dispose of the material in an approved disposal site. Such removal shall require a coastal development permit.

6. Assumption of Risk, Waiver of Liability and Indemnity

By acceptance of this permit, the applicant acknowledges and agrees (i) that the site may be subject to hazards due to bluff and slope instability, erosion, landslides or other natural hazards associated with development on an ocean front, bluff site; (ii) to assume the risks to the applicant and the property that is the subject of this permit of injury and damage from such hazards in connection with this permitted development; (iii) to unconditionally waive any claim of damage or liability against the Commission, its officers, agents, and employees for injury or damage from such hazards; and (iv) to indemnify and hold harmless the Commission, its officers, agents, and employees with respect to the Commission's approval of the project against any and all liability, claims, demands, damages, costs (including costs and fees incurred in defense of such claims), expenses, and amounts paid in settlement arising from any injury or damage due to such hazards.

7. Legal Interest

PRIOR TO ISSUANCE OF THE COASTAL DEVELOPMENT PERMIT, the applicant shall submit, for the review and approval of the Executive Director, written documentation demonstrating that it has the legal ability to carry out the proposed project and all conditions of approval of this permit.

8. Recognition and Acceptance from Owner

PRIOR TO ISSUANCE OF THE COASTAL DEVELOPMENT PERMIT, the applicant (Community Services District) shall secure from the owner of the property on which most of the work will occur, Three Arch Bay Association (Association), and provide to the Executive Director of the Coastal Commission for review and approval:

- A. written acknowledgement of Special Condition Nos. 5 and 6 and an agreement by the Association that the Association is subject to those special conditions of this permit and that if the Community Services District is disbanded, or abandons its easement, or the Association otherwise takes over a possessory interest in the improvements approved by this permit, that the Association also would accede to the responsibilities of maintaining the water quality best management practices required in the special condition of this permit, pursuant to Special Condition No. 1; and
- B. a written agreement from the Association stating that, prior to the sale or transfer of any of its property or any interest in its property that is the subject of this permit, the Association shall execute and record a deed restriction, in a form and content acceptable to the Executive Director: (1) indicating that, pursuant to this permit, the California Coastal Commission has authorized development on the subject property, subject to terms and conditions that restrict the use and enjoyment of that property; (2) imposing the Special Conditions of this permit as covenants, conditions and restrictions on the use and enjoyment of the Property; (3) including a legal description of the owner's entire parcel or parcels; and (4)

indicating that, in the event of an extinguishment or termination of the deed restriction for any reason, the terms and conditions of this permit shall continue to restrict the use and enjoyment of the subject property so long as either this permit or the development it authorizes – or any part, modification, or amendment thereof – remains in existence on or with respect to the subject property.

IV. FINDINGS AND DECLARATIONS:

The Commission hereby finds and declares:

A. Project Description and Location

The applicant proposes to construct a new storm drain system within the Three Arch Bay Community. The proposed drain system will be located primarily within Vista del Sol street and will replace the existing deteriorated community storm drain system. The project will include relocation of the ocean outlet. The project includes approximately 3,000 feet of new storm drain lines, 20 new catch basins, several new manholes, and abandonment of several older lines. A tunnel for the new ocean outlet location is proposed to be excavated by hand.

The majority of the storm drain pipe will be installed by conventional cut and cover construction techniques from the upstream end of the storm drain system to Stonington street, and from Encino street to North La Senda street. The storm drain pipe is proposed to range in size from 18 inch to 48 inch diameter reinforced concrete pipe (RCP). A 36 inch reinforced concrete pipe already exists under Pacific Coast Highway, extending from 100 feet south of Stonington street to Encino street. This pipe, however, does not yet accept flow. The proposed project would link into the existing pipe under Pacific Coast Highway. In addition, laterals to the new catch basins will be constructed on Vista del Sol street, and laterals will also be constructed off the main storm drain line to catch basins on the following side streets: South La Senda street (Lateral B); South Portola street (Lateral C); South Alta Mira street (Lateral D); North Stonington street (Lateral F); North Vista de Catalina street (Laterals J and K); North Vista del Luna street (Laterals M and N); and Vista de San Clemente street (Lateral O and P). See exhibit C.

From North La Senda street to the ocean outlet, the storm drain pipe will be installed in a tunnel that will be constructed using hand excavation methods. The proposed storm drain tunnel will be 7 feet in diameter. The proposed alignment of the tunnel will pass under or adjacent to portions of the following three properties: 14, 16 and 18 North La Senda, but will not pass under any of the structures. In addition, a vertical shaft approximately 10 feet in diameter is proposed to be excavated to a depth of approximately 40 feet in North La Senda street. The shaft is to be used for access to the tunnel heading, and for installation and removal of all tunneling equipment and materials. Ultimately, the special manhole that

will accommodate maintenance access as well as the vertical drop portion of the storm drain is proposed to be constructed in this shaft. Upon completion of the tunneling work and construction of the special manhole, the shaft is to be completely backfilled with compacted earth materials to original street grade. Also, as part of the proposed tunnel construction, a short (approximately 20 feet), 7 foot diameter "tail tunnel" is proposed. The "tail tunnel" is proposed to accommodate pipe jacking and excavation equipment and facilitate the removal of cuttings. No excavated material will be disposed of into the ocean at the outlet end of the tunnel.

There are 20 catch basins and two desilter basin inlets included in the Vista del storm drain system. The 20 catch basin structures are located below the street curb and each would have a depth of approximately eight feet and a width of three-feet. The length of each catch basin, measured parallel to the curb line, varies from approximately 6 feet to 14 feet depending on the location of the basin. Some of these catch basins already exist, but may require modification for connection to the new storm drain. The two desilter basins also already exist. Modifications to the larger of the two desilter basins were approved under coastal development permit 5-03-298. The modifications to the desilter basin approved under 5-03-298 allowed expansion of the basin to accommodate 25 year return frequency storms and to prevent future flooding in the area, as well as allow debris in the storm water to settle out before entering the storm drain. No further work is proposed to this basin. The smaller desilter basin, located at the upstream terminus of the storm drain system and of Vista del Sol street, is proposed to be modified by replacing the existing 18 inch reinforced concrete pipe riser with a thirty inch ID CSP. The project would raise the inlet pipe (riser) so that the basin would be able to better accommodate increased levels of debris. No grading or vegetation removal will occur at this desilter basin, so no impacts to native or sensitive vegetation are anticipated.

The existing ocean outlet is proposed to remain in service, but will drain only two existing residential lots that already connect to it between South La Senda street and the outlet end of the pipe. It will also remain to provide emergency overflow capacity in the event of failure or obstruction of the new system. This pipe will be provided with a new, separate higher-level inlet and that allows it to serve as an emergency overflow outlet in case the sump catch basin in North La Senda becomes clogged or in case ponding in the street threatens to overflow onto adjacent private property. The pipe will no longer be connected to the existing catch basin. All storm drain lines to be abandoned will be left in place and plugged in accordance with Standard Specifications for Public Works Construction (Greenbook) requirements.

At the ocean end of the outlet pipe, a headwall is proposed to be constructed to seal the outlet end of the tunnel excavation and to finish the interface of the pipe end with the face of the bluff. The headwall is proposed to be constructed of reinforced concrete. The exposed surface of the concrete is proposed to be color tinted to match the surrounding rock materials and contoured to resemble the adjoining rock.

The proposed project will also include 4,200 cubic yards of cut and 3,300 cubic yards of fill to accommodate the placement of the new storm drain pipes. The excess cut material is

proposed to be disposed of at the County of Orange's Prima Deshecha landfill, which is located outside the coastal zone.

The subject site is located within the locked gate community of Three Arch Bay in the City of Laguna Beach. Laguna Beach has a certified Local Coastal Program (LCP) except for the four areas of deferred certification: Irvine Cove, Blue Lagoon, Hobo Canyon, and Three Arch Bay. Certification of the Three Arch Bay area was deferred due to access issues arising from the locked gate nature of the community. The proposed development needs a coastal development permit from the Coastal Commission because it is located in the Three Arch Bay area of deferred certification.

Because the site is located within a locked gate community, no public access exists in the immediate vicinity. The nearest public access exists at 1000 Steps County Beach approximately one half mile upcoast of the site.

Although the applicant for the proposed project is the Three Arch Bay Community Services District (CSD), the actual owner of the property upon which most of the development will occur is the Three Arch Bay Association (Association). The CSD is duly authorized to conduct the work per a County resolution creating the CSD. The CSD also owns an easement which allows it to perform the work within all areas owned by the Association. However, for purposes of applying and enforcing the special conditions regarding assuming the risks of development and waiving claims against and indemnifying the Commission, prohibiting future protection devices, and, continued maintenance of the required water quality best management practices (if the CSD were to cease to exist or to be able to do so), the underlying property owner must be made aware of and accept these responsibilities. Therefore, a special condition is imposed that requires the applicant to submit evidence that the property owner is aware of and accepts these responsibilities and restrictions and that it will take steps to make any future owners aware of them as well.

A portion of the proposed development will pass under private property (in the area where the tunnel is proposed to be constructed, between North La Senda and the bluff face). For this portion of the project site, the CSD has the legal ability to acquire the necessary easement via eminent domain. The CSD has indicated their intention to do so once the tunnel alignment is finalized (i.e. a coastal development permit for the project is approved). However, the legal ability to perform the work should be demonstrated before the permit is issued. Therefore, Special Condition No. 7 is imposed which requires the applicant to demonstrate that they have the legal ability to perform the work.

B. Storm Drain System Permit History

The proposed development will occur in the private, gated community of Three Arch Bay in Laguna Beach, Orange County (Exhibit A). Three Arch Bay has approximately 500 residential lots, with a drainage area that is approximately 280 acres. The development will occur within the seaward and inland portions of Three Arch Bay (which is bisected by Pacific Coast Highway). Elevations within the community range from 780 feet above sea level on the inland side to 60 feet at the top of the coastal bluff at the seaward side of the community.

The existing storm drain system was constructed in the 1920's and 1930s. This storm drain system was primarily constructed within shallow swales and depressions present at the time of initial development of the Three Arch Bay community. These existing facilities do not follow lot lines or street rights-of-way and in some cases cross beneath existing residential structures. The proposed system would re-route the facilities so that (excepting the ocean outfall) the storm drain system is within street rights of way or other common property within Three Arch Bay. In addition, video inspections of the existing system shows that some of the storm drain lines are leaking and are in need of repair or replacement. The proposed system would replace or repair selected storm drain lines. In addition, there are existing storm water conveyance problems associated with the existing storm drain system. For instance, the existing facilities allow storm water to sheet flow from the inland part of Three Arch Bay over Pacific Coast Highway causing hazardous conditions on the highway. The proposed system would re-direct these flows through an underground system under Pacific Coast Highway. These inland facilities would be designed to handle 25-year run-off.

Though the inland portions will be upgraded to handle the 25 year storm event, other sections will be upgraded to accommodate a 100 year storm event as storm flows in excess of the 25 year event pond on N. La Senda just north of Vista Del Sol causing flooding of the residential lots in the area.

On December 10, 1986, the Commission approved Coastal Development Permit 5-86-720 for the repair and replacement of existing storm drain pipes and the installation of new storm drains and catch basins within Vista del Sol, N. La Senda, S. La Senda and various roads within the community. The approval included a new ocean outfall in the alignment of the existing 24 inch outfall which passes through 8 and 10 N. La Senda. The major issue outlined in the staff report was the potential for growth inducing effects through enlarging the capacity of the storm drain system with subsequent adverse impacts upon public access. The primary concern was related to approximately 13 acres of undeveloped land in upper (inland) Three Arch Bay which could potentially be subdivided for new houses. However, the Commission found that although the new storm drain system would provide capacity for new development to occur, any new development would require a coastal development permit and that the impacts from such development would be mitigated at that time. In addition, it was found that the improved storm drain system would create a benefit to coastal resources by better accommodating existing runoff and preventing erosion. The approval was granted without special conditions.

The approved permit was extended nine times. However, the improvements were not constructed and the permit expired. The previously approved (but not constructed) outfall was located in the same alignment as the alignment of the existing 24 inch outfall.

A coastal development permit application (5-00-011) for a storm drain system replacement project was submitted in early 2000, and deemed complete on November 27, 2000. A significant difference between the existing storm drain system, as well as the one currently proposed, and the system proposed under coastal development permit application 5-00-011 was the location of the ocean outlet. The project approved under coastal development

permit 5-86-720 would have located the ocean outlet in essentially the same location as the existing ocean outlet. There is no indication in the 5-86-720 file that tide pools would have been impacted by that alignment. Under the proposal contained in coastal development permit application 5-00-011, the outlet relocation raised issue with regard to impacts to tide pools which are considered to be environmentally sensitive habitat area (ESHA). In addition, there appeared to be feasible alternatives to the ocean outlet location proposed under 5-00-011, that would have reduced adverse environmental effects upon the tidal pool ESHA. Based on these factors, staff expressed concern with the project proposed under application 5-00-011. Subsequently, the application was withdrawn by the applicant prior to Commission action.

In addition, the Commission has approved three related coastal development permits. Coastal development permit 5-03-298 allowed enlargement and improvement of an existing debris basin that collects upstream runoff from outside the Three Arch Bay Community, and then outlets into the community's storm drain system. Coastal development permit 5-02-217 allowed modifications to 378 feet of storm drain within Bay Drive. Coastal development permit 5-02-218 allowed an existing 24" storm drain to be re-aligned from under the residence at 58 N. La Senda to the property line between 58 and 68 N. La Senda.

C. Water Quality

Section 30231 of the Coastal Act states:

The biological productivity and the quality of coastal waters, streams, wetlands, estuaries, and lakes appropriate to maintain optimum populations of marine organisms and for the protection of human health shall be maintained and, where feasible, restored through, among other means, minimizing adverse effects of waste water discharges and entrainment, controlling runoff, preventing depletion of ground water supplies and substantial interference with surface water flow, encouraging waste water reclamation, maintaining natural vegetation buffer areas that protect riparian habitats, and minimizing alteration of natural streams.

Section 30231 of the Coastal Act requires that the quality of coastal waters and streams be protected and, where feasible, restored. The existing outlet drains into the ocean. If measures to improve water quality are applied to the proposed storm drain system, the quality of water that is ultimately discharged into the ocean would be demonstrably improved. The water quality of the ocean is required by Section 30231 to be restored where feasible. The proposed project presents an opportunity to restore, to a degree, water quality in the location of the ocean outlet by incorporating water quality Best Management Practices (BMPs) into the project.

The proposed storm drain system replacement would not result in a net increase in the quantity of runoff discharged to coastal waters. The runoff that will be discharged through the new storm drain and outlet to the ocean is the same type and quantity as that presently discharged into the ocean. The proposed storm drain improvements and additions would redistribute existing runoff within the community's storm drain system in order to allow

Three Arch Bay to abandon existing deteriorating portions of the storm drain system and prevent flooding of Pacific Coast Highway and residential property within the community.

The characteristics of the drainage area and the runoff will remain unchanged because the tributary area and land use remain unchanged. The area to be drained is not increasing. While the proposed storm drain system would only redistribute existing runoff and not increase it, the pollutants carried in the runoff affect the quality of the coastal waters at the ocean outlet. Because the existing drainage system was constructed in the 1920's and 1930's, no water quality best management practices were incorporated into the system. Section 30231 of the Coastal Act requires that, where feasible, the biological productivity and quality of coastal waters be restored by, among other methods, minimizing adverse effects of waste water discharges and controlling runoff. The Commission finds that it is necessary to minimize to the extent feasible within its jurisdiction the cumulative adverse impacts on water quality resulting from continued entry of existing pollutants into the ocean. Reductions in the amount of pollutants in the existing runoff would be one step to begin to reduce cumulative adverse impacts to coastal water quality. The proposed storm drain system replacement presents an appropriate opportunity to restore, to the extent feasible, the quality of the water discharged by the system into the ocean.

Existing development in the area, including roads, landscaping and homes, contributes pollutants to the area's runoff which is collected in the storm drain system. These pollutants include sediment or toxic substances such as debris, trash, oil, grease, vehicular fluids, particulates such as brake pad dust (heavy metals), animal waste, pesticides and herbicides. This polluted runoff is collected into the storm drains and ultimately discharged into the ocean, and if untreated, would have significant adverse impacts on water quality.

The Coastal Act requires that adverse effects of this project on coastal waters and the marine environment be minimized. In order to assure that these adverse effects are minimized, best management practices (BMPs) must be incorporated into the project. BMPs are used to control stormwater volumes and peak discharge rates, as well as to reduce the magnitude of pollutants.

Installation of BMPs would reduce pollutants such as those described above that are normally carried into coastal waters via storm drains. By reducing the amount of pollutants in the runoff before it enters the ocean, BMPs help minimize cumulative adverse impacts upon coastal water quality. In addition, low flow discharges tend to have a high concentration of pollutants because such flows tend to originate from non-storm-related discharges, such as landscape watering. Diverting low flows to the sewer system for sewer treatment would reduce the impact such low flows have upon water quality in the ocean.

The applicant has prepared a Water Quality/Drainage Plan (WQDP), dated October 7, 2004, which identifies certain BMPs to be incorporated into the proposed project. The WQDP includes both construction (i.e. short term) BMPs and operational (i.e. long term) BMPs. Proposed construction BMPs include: spill prevention and control, sanitary/septic waste management, vehicle and equipment cleaning; scheduling; dust controls, silt fence, and sand bag barriers, paving operations, and storm drain inlet protection. Following is a

more detailed description of some of the proposed construction BMPs. For example, the paving operations BMP would include: avoiding paving during wet weather, storing materials away from drainage courses to prevent storm water runoff from carrying the material into the drainage course, diverting runoff to sediment traps or filters, placing drip pans or absorbent materials under paving equipment when not in use, clean up of spills with absorbent material rather than burying, and covering catch basins and manholes when applying seal coat, etc. The spill prevention and control BMP includes storing hazardous materials in covered containers, keeping a stockpile of cleanup material where it is readily accessible, immediate clean up of spills and with as little water as possible. The vehicle and equipment cleaning BMP includes the use of off-site washing facilities. These are just a few of the applicable BMPs. More detailed descriptions are contained in the project WQDP.

Storage or placement of construction materials, debris, or waste in a location subject to dispersion or which may be discharged into coastal water via rain would result in adverse impacts to coastal waters. For instance, construction debris entering coastal waters may cover and displace rocky intertidal and soft bottom habitat. In addition, the use of machinery in coastal waters not designed for such use may result in the release of lubricants or oils that are toxic to marine life. Sediment discharged to coastal waters may cause turbidity which can shade and reduce the productivity of marine life and foraging avian and marine species ability to see food in the water column. Discharges of sediment laden water from construction clean-up activities can also cause turbidity.

In order to avoid adverse construction-related impacts upon marine resources, the Commission requires the applicant to conform with certain construction related requirements to provide for the safe storage of construction materials and the safe disposal of construction debris. Only as conditioned to avoid construction related water quality impacts could the Commission find that the proposed development is consistent with Section 30230 of the Coastal Act as it pertains to construction related activities.

The operational or long term BMPs proposed as part of the project, and described in greater detail in the WQDP, include the two desilting basins at the upstream end of the project, installation of a "Stormscreen" device, and an eventual low flow connection to the existing sewer system. Bioswales were considered during project design, but were determined to be infeasible due to the built out nature of the project area. The Three Arch Bay community has relatively narrow streets and little or no sidewalks, and minimal setback of residences from the community rights-of-way. Thus, no suitable locations for such swales could be accommodated.

The two desilting basins will be improved as part of the storm drain system upgrade (the larger basin's improvements were previously approved under coastal development permit 5-03-298) to better accommodate runoff from offsite native hillsides and retain sediment and plant debris contained in runoff from these areas. The basins will have improved standpipes and are expected to remove at least 90 percent of the sediment in the receiving water. The basin will also remove miscellaneous debris and trash that is carried by wind or runoff into the basin. The basins are proposed to be maintained regularly – sediment and debris will be removed on a regular basis so the basin can help provide flood

protection for the Three Arch Bay community. However, since these desilting basins are located at the top of the drainage area that is the subject of this permit, they do not provide treatment for runoff from the residential properties and most streets within Three Arch Bay.

The applicant is proposing the "StormScreen" device as the primary long-term water quality control device for the storm drain system. The device is a passive, high-flow screening system that removes trash, debris and some suspended solids (i.e. sediment), and some free oils and grease. The device uses a float-actuated siphonic, radial flow cartridge. It provides direct screening of inflow water that removes solids larger than the diameter of the screen perforations (2400 microns) regardless of flow rate through the system. The WQDP indicates that the proposed project would require a precast 10-foot by 24-foot concrete vault with a series of 26 screen cartridges. The device is designed to let flows higher than the design flow bypass the device (i.e. during major storms). The proposed device will also have Sorbet Hood Covers to collect free oils and greases. The StormScreen device is proposed to be installed just upstream of the drop-manhole in North La Senda street.

The StormScreen device will provide water quality benefits, however it will not treat all of the expected pollutants, such as some hydrocarbons, heavy metals, animal waste, pesticides and herbicides. In order to restore coastal water quality where feasible, as required by Section 30231 of the Coastal Act, there should be treatment BMPs in the proposed storm drain system that address these contaminants. To feasibly accomplish this objective, there are a few different options. One method to treat these expected pollutants would be the installation of a treatment control BMP(s) that uses media filters that specifically target these pollutants. Such a treatment BMP would work in conjunction with the proposed StormScreen device to filter the expected pollutants of concern.

Another option for treating these expected pollutants would be a low flow connection to the sewer treatment system. In order to be an effective treatment of the additional expected pollutants described above, the sewer connection would need to treat both low flows and first flush flows. Low flow discharges (also called nuisance flows) tend to have a high concentration of pollutants because such flows tend to originate from non-storm-related discharges, such as landscape watering. Likewise, the first flush (the runoff generated by the first part of a heavy storm) contains heightened concentrations of the pollutants. Diverting low flows to the sewer system for sewer treatment would reduce the impact such low flows have upon water quality in the ocean. The applicant has indicated that the proposed project will "eventually" include a "low-flow, one-way cross-connection between the proposed storm drain system and the existing sewer system in order to divert nuisance flows to the local sewer system" (South Coast Water District). The connection would be located near the knuckle in North La Senda street.

A letter to the applicant from the South Coast Water District, dated September 16, 2004, (see exhibit F) states:

"Per our meetings, the District would accept the nuisance water runoff from the two proposed dry weather diversion projects within the Three Arch Bay area. There is sufficient capacity in both the sewer collection system and the treatment plant. The

District can accept an estimated 10,000 gallons per day of nuisance water runoff from each of the proposed dry weather diversion projects."

The proposed project's plan indicates construction of a "low-flow-to-sewer diversion" installed near the knuckle in North La Senda (Sheet 4, Note 41). However, the project description and the proposed WQDP indicate that the connection will not occur at the time of the proposed project. Nevertheless, it appears, based on the project plans and the letter from the South Coast Water District (which is in charge of sewers in the project area), that a low flow connection to the sewer is feasible as part of the project currently proposed. In order for this to be an effective treatment option that meets the special condition, the low flow connection would need to be installed at the time of project construction and be functional at the same time as the storm drain system.

Other comparable methods of treating the additional expected pollutants that will not be treated by the proposed StormScreen are possible. If the applicant chooses a method other than either the media filter or the low flow connection, such a choice would be subject to review and approval of the Executive Director to make the final determination as to effectiveness.

Because Section 30231 of the Coastal Act requires that coastal water quality be enhanced where feasible, and because feasible methods do exist to accomplish this goal, a special condition is imposed which requires the applicant to submit a revised WQDP that, in addition to the BMPs proposed, also includes a method of treating all of the expected pollutants (including but not limited to, hydrocarbons, heavy metals, animal waste, pesticides and herbicides). Appropriate and feasible methods available to achieve the required treatment include: installation of a media filter treatment control, construction and implementation of the low flow sewer connection, or a comparable treatment method approved by the Executive Director. The required treatment BMP is required in addition to the proposed StormScreen device and other BMPs proposed by the applicant. By revising the proposed WQDP to include the additional BMP(s) virtually all expected pollutants of concern will effectively be filtered prior to their release into coastal waters at the ocean outlet. The Commission finds that only as conditioned is the proposed project consistent with the requirements of Section 30231 of the Coastal Act which requires that the quality of coastal waters be restored, where feasible.

In addition, there are several non-structural BMPs which would assist in reducing pollutant loads in storm water discharges. These BMPs include: a community education program to be included in the community newsletter, stenciling of catch basins and storm drain inlets, street sweeping, and regular maintenance and cleaning of the storm drain system's facilities. These non-structural BMPs are appropriate and will help to reduce storm water pollutants. A special condition is imposed which requires the non-structural BMPs to be included in the overall project and reflected in the revised WQDP. Only as conditioned does the Commission find the proposed project consistent with Section 30231 of the Coastal Act.

The proposed project cannot be found consistent with the water quality policies of the Coastal Act unless the project incorporates the BMPs described above. Structural water

quality BMPs are only effective when they are routinely and properly monitored and maintained. If collection devices are not routinely cleaned out and repaired and replaced as necessary, they will not provide effective water quality protection. Therefore the Commission imposes a special condition which requires that the structural BMPs be properly operated, monitored and maintained for the life of the structure. Only as conditioned can the proposed development be found consistent with Section 30231 of the Coastal Act which requires that water quality be maintained and enhanced.

The implementation of the BMPs described above are necessary to reduce the cumulative adverse impact polluted runoff from the project storm drain has upon coastal waters. Therefore, the Commission imposes special conditions requiring the implementation of all BMPs. Only as conditioned does the Commission find the proposed development consistent with Section 30231 of the Coastal Act as it pertains to storm drain discharge impacts upon water quality.

D. Biological Resources

Section 30230 of the Coastal Act states that:

Marine resources shall be maintained, enhanced, and where feasible, restored. Special protection shall be given to areas and species of special biological or economic significance. Uses of the marine environment shall be carried out in a manner that will sustain the biological productivity of coastal waters and that will maintain healthy populations of all species of marine organisms adequate for long-term commercial, recreational, scientific, and educational purposes.

Section 30231 of the Coastal Act states that:

The biological productivity and the quality of coastal waters, streams, wetlands, estuaries, and lakes appropriate to maintain optimum populations of marine organisms and for the protection of human health shall be maintained and, where feasible, restored through, among other means, minimizing adverse effects of waste water discharges and entrainment, controlling runoff, preventing depletion of ground water supplies and substantial interference with surface water flow, encouraging waste water reclamation, maintaining natural vegetation buffer areas that protect riparian habitats, and minimizing alteration of natural streams.

Section 30240 of the Coastal Act states that:

(a) Environmentally sensitive habitat areas shall be protected against any significant disruption of habitat values, and only uses dependent on those resources shall be allowed within those areas.

(b) Development in areas adjacent to environmentally sensitive habitat areas and parks and recreation areas shall be sited and designed to prevent impacts which would significantly degrade those areas, and shall be compatible with the continuance of those habitat and recreation areas.

The proposed storm drain project includes the relocation of the existing ocean outlet. The proposed storm drain will outlet at the terminus of a tunnel from North La Senda street, below existing residential lots, to the face of the bluff, approximately five feet above sea level. The proposed outlet will be located on a nearly vertical rock face immediately below a wave-cut terrace. The proposed outlet would discharge into an open water channel. The channel below the proposed outlet extends directly from the open ocean to the base of the bluff. Turbulent mixing as well as direct seawater exchange between the channel and the open ocean occurs within the channel.

A similar storm drain replacement project was proposed in 2000 (5-00-011, TAB CSD). However, under that iteration of the project, the ocean outlet would have been relocated such that it outletted directly onto rocky intertidal ESHA (environmentally sensitive habitat area). Commission staff expressed concern with the impacts to ESHA arising from the previously proposed outlet location and suggested consideration of alternative locations. Subsequently, the applicant withdrew the previous application and reviewed various outlet location alternatives and is now proposing a different outlet location than that proposed under the 2000 coastal development permit application.

Section 30230 of the Coastal Act requires that marine resources be maintained, enhanced, and where feasible, restored. In addition, Section 30230 requires that uses of the marine environment be carried out in a manner that will sustain the biological productivity of coastal waters and that will maintain healthy populations of all species of marine organisms adequate for, among other purposes, long-term scientific and educational purposes.

Section 30231 of the Coastal Act requires that the biological productivity and the quality of coastal waters be maintained or restored by, among other means, minimizing adverse effects of waste water discharges. Section 30240(a) of the Coastal Act requires that environmentally sensitive habitat areas be protected against any significant disruption of habitat values, and only uses dependent on those resources shall be allowed within those areas. Additionally, Section 30240(b) of the Coastal Act requires that development in areas adjacent to ESHA is sited and designed to prevent impacts which would significantly degrade these areas, and is compatible with the continuance of the habitat areas.

A number of alternate locations for the ocean outlet were considered in determining the most appropriate location. Factors that were considered included impacts to biological resources, geologic stability, engineering feasibility, and cost. The proposed location was chosen by the applicant because it meets each of the feasibility criteria, including being the least environmentally damaging alternative.

The applicant's biological consultant (Marine Research Specialists) surveyed six potential sites for the proposed outlet location. The applicant's basis for determining that the proposed location is the environmentally preferred alternative is described below. The description is taken from a document prepared by the applicant's biological consultant Marine Research Specialists, titled "Biological Characterization of Proposed Stormwater Discharge Site, dated June 3, 2004, which states:

"Of the six surveyed sites, the proposed outlet at B-1 is the environmentally preferred alternative insofar as minimizing impacts to marine resources within the rocky intertidal ESHA. The proposed B-1 outlet will be located on a nearly vertical rock face immediately below a wave-cut terrace. The discharge will directly mix with seawater within a deep turbulent channel that extends outward from the existing sewer adit. The advantages to this configuration are outlined below.

Vertical Discharge Minimizes the Area of Substrate Impacted. Discharge from a vertical wall directly into receiving waters reduces the area of substrate impacted compared to a discharge onto a wave-cut terrace such as at Site G-2 [previously proposed outlet location]. Discharge onto a rock shelf, as was originally considered for G-2, would spread horizontally over a wider area before entering the ocean. The 4-ft diameter outlet pipe proposed at B-1 [currently proposed outlet location] will be located on the vertical face approximately 10 ft above MLLW. During low-flow conditions, discharged water will travel approximately 5 ft down the vertical face before reaching the receiving ocean waters. The maximum horizontal swath of substrate impacted will be less than 20 square feet. If low flow and nuisance water is diverted to the sewer system, then the substrate area that is continuously impacted by the outflow will be negligible. High flow rates during episodic storms will carry enough momentum to eject the majority of outflow directly into the channel where its entry velocity will cause it to mix rapidly with ambient seawater. Discharge during intense rainstorms could impact an area covering approximately 130 square feet.

Vertical Discharge Avoids Impacts to Tide Pools. Because of their limited seawater exchange and the diversity of marine organisms that they support, tide pool habitats are particularly sensitive to impacts from freshwater input. The majority tide pools within the area are located along the margins of the wave-cut terrace near Site G-2 as it slopes downward to the intertidal zone. The horizontal terrace at the B-1 outlet site terminates in a vertical wall, and no tide pools are present below, or adjacent to the location of the outlet site as shown in Plates 3 and 4. These photographs were taken during low wave and tide conditions when most of the intertidal zone was exposed. The tide level at the time of the photographs was -0.35 ft based on the time stamp in Figure 4.

Locating the Discharge within a Turbulent Receiving-Water Channel will Maximize Dilution Rates. The channel below the proposed outlet at B-1 extends directly from the base of the bluff to the open ocean turbulent mixing within the channel and direct seawater exchange between the channel and the open ocean is enhanced by wave and tidal pumping. This contrasts with the narrow fissures in the rock shelf at G-2. Many of these fissures are aligned parallel to the coastline and their circuitous connection to the open ocean limits exchange thereby attenuating mixing and dispersion. In contrast, the size and orientation of the channel at B-1 enhances wave turbulence that will rapidly dilute discharged water to background concentrations beyond the mouth of the channel.

A Resilient Marine Community Resides within the Receiving-Water Channel. Because of the dynamic wave environment within the channel below B-1, its rock walls are relatively bare and populated by only a few epifaunal organisms that are relatively tolerant of environmental stresses. Dominant species found within the channel include coralline algae (Bossiella spp. And Corallina spp.), sea lettuce ((Ulva spp.), mussels (M. californianus), and barnacles (Balanus spp./Chthamalus spp.). Few of the more sensitive organisms, such as the solitary green anemone (Anthropleura xanthrogrammica), are found at B-1 compared to populations found in the more quiescent habitats at other survey sites. In addition, the channel below B-1 experiences high turbidity from the sand that is stirred up from the bottom. Consequently, any resident fish species would be more tolerant of suspended sediment loads than those found at the G-3 deepwater site, for example. Also, given the low average density of epifaunal organisms at B-1, and the 130 square foot maximum impact area, fewer organisms are likely to be initially disturbed by the proposed discharge. After the discharge begins, most mobile invertebrates, such as the striped shore crab (Pachygrapsus crassus), limpets, and periwinkles will probably avoid the area. Additionally, impacts to species at Site B-1 will be minimized over other sites since much of the 130 square foot impact area is bare rock.

A Continuous, Degraded Freshwater Discharge Already Exists Near B-1. Water quality measurements have established that the waters within the channel below the B-1 outlet location have been altered by an existing, degraded freshwater discharge. This discharge emanates from an existing sewer adit that extends from beneath N. La Senda Dr. to the bluff face near B-1. During the May 2004 survey, salinities were 50% lower and temperatures 1 degree C higher within the channel immediately below the existing sewer adit as compared to the open ocean. High amounts (greater than 1600) of fecal and total coliform were also found in waters from the sewer adit discharge. Because degradation of the intertidal habitat has probably already occurred as a result of adit discharge, additional incremental marine impacts from the proposed B-1 discharge will be less apparent than for discharges at the more-pristine alternative sites.

In summary, the proposed B-1 outlet site mitigates impacts to the intertidal environment because it is located on a vertical rock face devoid of tide pool, where the substrate area impacted by the discharge is minimized. In addition, the discharge is into the turbulent receiving waters within a wide, well flushed channel where it will rapidly disperse before flushing directly into the open ocean. Marine organisms inhabiting the site are lower in density than at other locations, and resilient to habitat disturbance. Finally, the propose discharge location is adjacent to an existing, impaired freshwater outflow that has already locally altered the intertidal environment."

The proposed outlet location avoids impacts to tide pools. The stormwater to be discharged from the outlet will be treated through water quality measures described earlier that will substantially lessen any potential impacts the discharge may have on the marine environment in the vicinity. In addition, the area of discharge will dilute rapidly due to the

turbulent nature of the channel and the existing exchange between the channel waters and the open ocean waters. The marine community within the discharge area is resilient and able to withstand the influx of discharge. The runoff to be discharged, as treated by the previously described water quality measures, will be similar to the receiving waters¹ in terms of temperature and salinity, and so the discharge in the proposed location will have less of an impact than any of the alternate locations. For these reasons the proposed ocean outlet location is the least environmentally damaging alternative. Moreover, the area of discharge from the outlet does not constitute ESHA and is expected to withstand the proposed discharge without significant disturbance. Likewise, the marine resources will be maintained and the biological productivity of coastal waters at the outlet location will be maintained. The project, as proposed and conditioned, will minimize adverse effects of waste water discharges. Therefore, the Commission finds that the project as conditioned is consistent with Sections 30230, 30231 and 30240 of the Coastal Act.

E. HAZARDS

Section 30235 of the Coastal Act states:

Revetments, breakwaters, groins, harbor channels, seawalls, cliff retaining walls, and other such construction that alters natural shoreline processes shall be permitted when required to serve coastal-dependent uses or to protect existing structures or public beaches in danger from erosion, and when designed to eliminate or mitigate adverse impacts on local shoreline sand supply. Existing marine structures causing water stagnation contributing to pollution problems and fish kills should be phased out or upgraded where feasible.

Section 30251 of the Coastal Act states:

The scenic and visual qualities of coastal areas shall be considered and protected as a resource of public importance. Permitted development shall be sited and designed to protect views to and along the ocean and scenic coastal areas, to minimize the alteration of natural land forms, to be visually compatible with the character of surrounding areas, and, where feasible, to restore and enhance visual quality in visually degraded areas. New development in highly scenic areas such as those designated in the California Coastline Preservation and Recreation Plan

¹ The sewer adit is a side tunnel that was excavated during the original 1950's construction of the existing South Coast Water District's tunnel which houses the Water District's Beach Interceptor Sewer. The adit was used for tunneling equipment and worker access to the main tunnel excavation, and was also used for the removal of the excavated materials (tailings). The Water District has checked and has found no leakage of the sewer line inside the main tunnel or in the adit; however, a fecal coliform test by MRS and included in Appendix D of their June 4, 2004 report, indicated a reportable level of fecal and total coliform in the free water exiting from the adit. The applicant has forwarded this information to the Water District for their attention and it was on the basis of this information that the Water District performed an inspection of the sewer tunnel in July 2004. It should be noted that in June 2003 the local sewer (drain) line which enters the top of the sewer adit opening was replaced and it is possible that the noted coliform reading may be the result of spillage that occurred before or during the pipe replacement work in 2003.

In any case, the sewer adit is not part of the proposed project and the applicant has no connection with it.

prepared by the Department of Parks and Recreation and by local government shall be subordinate to the character of its setting.

Section 30253 of the Coastal Act states, in part:

New development shall:

- (1) Minimize risks to life and property in areas of high geologic, flood, and fire hazard.*
- (2) Assure stability and structural integrity, and neither create nor contribute significantly to erosion, geologic instability, or destruction of the site or surrounding area or in any way require the construction of protective devices that would substantially alter natural landforms along bluffs and cliffs.*

The proposed development includes the installation of a new storm drain system including a new ocean outlet. The ocean outlet will consist of a tunnel from within La Senda street, below residential lots (though not under any structures), and outlet at the bluff face approximately 10 feet above sea level. A Revised Preliminary Geotechnical Investigation was prepared for the proposed project by Leighton and Associates, Inc., dated August 25, 2003, Revised October 9, 2003. In addition, a report titled Preliminary Geological Recommendations for the Proposed Three Arch Bay Storm Drain Tunnel Outlet, was prepared by Leighton and Associates, dated October 31, 2001. And a report titled Supplemental Geotechnical Bluff Studies for the Proposed Three Arch Bay Storm Drain Tunnel Outlet was prepared by Leighton and Associates, dated October 30, 2001.

The geologic investigations report that the study area is underlain by Miocene-age bedrock of the San Onofre Breccia. In the study area, the San Onofre consists of thickly bedded to massive sandstones and conglomerate, with occasional interbeds of siltstone and clayey siltstone.

From a geotechnical standpoint the preferred alternative was G-1, located approximately 200 feet south (downcoast) of the proposed stormdrain outlet location. However, the G-1 outlet location would have resulted in adverse impacts to tide pool ESHA, inconsistent with Section 30240 of the Coastal Act. Based on the impermissible biological impacts stemming from the geotechnically preferred location, additional sites were evaluated. The proposed location was determined by the geotechnical consultant to be the next best option.

The Revised Preliminary Geotechnical Investigation states: *"Based on our review of the existing data, field work and analysis, it is our opinion that the project is feasible from a geotechnical perspective, provided our recommendations are implemented during construction."*

Section 30253 of the Coastal Act requires that new development shall not require construction of protective devices that would substantially alter natural landforms along bluffs and cliffs. The proposed development could not be found consistent with Section

30253 of the Coastal Act if projected bluff retreat would affect the proposed development and necessitate construction of a shoreline protection device.

The Coastal Act limits construction of protective devices because they have a variety of negative impacts on coastal resources including adverse affects on sand supply, public access, coastal views, natural landforms, and overall shoreline beach dynamics on and off site, ultimately resulting in the loss of beach. Under Coastal Act Section 30235, a shoreline protective structure must be approved if: (1) there is an existing principal structure in imminent danger from erosion; (2) shoreline altering construction is required to protect the existing threatened structure; and (3) the required protection is designed to eliminate or mitigate the adverse impacts on shoreline sand supply.

The proposed project includes construction of a headwall at the outlet end of the pipe, on the bluff face. The headwall will be constructed of reinforced concrete. The exposed surface of the concrete will be color tinted to match the surrounding rock material and will be contoured to resemble the adjoining rock. All materials for the headwall construction work are proposed to be brought to the work area through the tunnel excavation. No access from the ocean side of the bluff is available for delivery of equipment or materials. The applicant has indicated that coastal erosion processes would not be accelerated by the presence of the headwall or discharge from the outlet. During rainstorms, most of the high-volume freshwater discharge from the outlet would extend directly into receiving waters of the channel, with minimal erosional impact to the vertical rock wall.

Consequently, no additional shoreline protective measures are expected to be necessary to limit shoreline erosion as a result of the proposed project. In addition, because the headwall would have a low profile similar to the current rock face, it would not significantly alter shoreline physical oceanographic processes that influence coastal erosion, such as wave refraction, sediment transport, or current flow. In addition, if the bluff were to become threatened, it is likely that the existing residences above the outlet would be jeopardized before any significant threat occurred to the stormdrain outlet. Therefore, the proposed development is consistent with Section 30253 of the Coastal Act which requires that new development not require construction of protective devices that would substantially alter natural landforms along bluffs and cliffs.

Because the proposed project is new development, it can only be found consistent with Section 30253 of the Coastal Act if a shoreline/bluff protective device is not expected to be needed in the future. The applicant's geotechnical consultant has indicated that the site is stable, that the project should be safe for the life of the project, and that no shoreline protection devices will be needed. If not for the information provided by the applicant that the site is safe for development, the Commission could not conclude that the proposed development will not in any way "require the construction of protective devices that would substantially alter natural landforms along bluffs and cliffs." However, the record of coastal development permit applications and Commission actions has also shown that geologic conditions change over time and that predictions based upon the geologic sciences are inexact. Even though there is evidence that geologic conditions change, the Commission must rely upon, and hold the applicant to their information which states that the site is safe for development without the need for protective devices. Therefore, the Commission imposes a special condition which prohibits the applicant and their successors in interest

from constructing shoreline/bluff protective devices to protect the proposed development and requiring that the applicant waive, on behalf of itself and all successors and assigns, any right to construct protective devices for the proposed project that may exist under 30235.

The geotechnical consultant has found that the proposed development is feasible provided the recommendations contained in the Geotechnical Investigation prepared by the consultant are implemented in design and construction of the project. The geotechnical recommendations address the outlet tunnel, earth pressures and hydrostatic loads, the vertical shaft, braced shoring, lateral earth pressures, cement type and corrosion measures, earthwork, excavation stability and shoring requirements, trench backfill, plan review, geotechnical observation and testing of earthwork operations, and, impact of proposed development on existing structures, among others. In order to assure that risks are minimized, the geologic consultant's recommendation should be incorporated into the design of the project. As a condition of approval the applicant shall submit plans, including grading and foundation plans, indicating that the recommendations contained in the Revised Preliminary Geotechnical Investigation, prepared for the proposed development by Leighton and Associates, Inc., dated August 25, 2003 (revised October 9, 2003) have been incorporated into the design of the proposed project.

Although adherence to the geotechnical consultant's recommendations will minimize the risks, the risks are not eliminated entirely. The site includes an ocean fronting bluff, which is inherently hazardous. Given that the applicant has chosen to implement the project despite potential risks from bluff erosion and landslide, the applicant must assume the risks. Therefore, the Commission imposes a special condition requiring the applicant to assume the risk of the development. In this way, the applicant is notified that the Commission is not liable for damage as a result of approving the permit for development. The condition also requires the applicant to indemnify the Commission in the event that third parties bring an action against the Commission as a result of the failure of the development to withstand the hazards. In addition, the condition ensures that future owners of the property will be informed of the risks and the Commission's immunity from liability. As conditioned, the Commission finds the proposed project is consistent with Section 30253 of the Coastal Act.

F. VISUAL QUALITY

Section 30251 of the Coastal Act states:

The scenic and visual qualities of coastal areas shall be considered and protected as a resource of public importance. Permitted development shall be sited and designed to protect views to and along the ocean and scenic coastal areas, to minimize the alteration of natural land forms, to be visually compatible with the character of surrounding areas, and, where feasible, to restore and enhance visual quality in visually degraded areas. New development in highly scenic areas such as those designated in the California Coastline Preservation and Recreation Plan prepared by the Department of Parks and Recreation and by local government shall be subordinate to the character of its setting.

The proposed project includes the construction of a new storm drain outlet in the face of a coastal bluff. If not sited appropriately, this structure would have adverse impacts upon views to and along the ocean and would be visually incompatible with the character of the surrounding area. Furthermore, appropriate siting can restore and enhance visual quality.

The proposed project is located in a private community (Three Arch Bay) that is between the first public road (Pacific Coast Highway in this area) and the sea. This existing, pre-Coastal Act private community is built upon a bluff top terrace which descends from PCH to the water. Several rows of homes and various other structures in the private community obstruct public views of the water from PCH. Upon completion of the development, the only significant visible structure would be the outlet at the bluff face. Public views to the shoreline from inland areas such as PCH will not be adversely affected by the proposed development.

The proposed development is occurring on a coastal bluff that is flanked on either side by rocky headlands which extend into the ocean. If the public wished to view the coastline in this area they would need to come around the headlands and view the bluffs from the water (i.e. from a boat). There is no beach from which to view the bluffs in this area. Therefore, due to physical and public access constraints, public enjoyment of views to and along the coast in this area is limited compared with other areas along the coast.

Nevertheless, while public views are limited compared to other areas, these views to and along the shoreline are available. Degradation of those views would be inconsistent with Section 30251 of the Coastal Act. Degradation of views can occur when development is not consistent with the character of surrounding development. For instance, if measures were not taken to disguise the storm drain outlet, significant visual impacts would occur.

The applicant has proposed to color-match the concrete to the color of the adjacent rock. In addition, the applicant has proposed to texture the headwall surrounding the outfall tunnel to mimic the look of rock. Since these measures are necessary to find the project consistent with Section 30251 of the Coastal Act, the Commission imposes a special condition requiring that the proposed color and texture treatment be implemented. Revised plans reflecting the final color and texture treatment plan must be submitted. Therefore, only as conditioned, is the proposed project consistent with Section 30251 of the Coastal Act which requires protection of scenic coastal views.

G. Public Access & Recreation

1. First Public Road

Section 30604(c) of the Coastal Act requires that every coastal development permit issued for any development between the nearest public road and the sea include a specific finding that the development is in conformity with the public access and public recreation policies of Chapter 3.

The proposed project is located within an existing locked gate community located between the sea and the first public road paralleling the sea. Public access through this community does not currently exist. The proposed development, replacement of a deteriorating storm drain system, will not affect the existing public access conditions. It is the locked gate community, not this project, which impedes public access. The proposed development, as conditioned, will not result in any significant adverse impacts to existing public access or recreation in the area. Therefore, the Commission finds that the project is consistent with the public access and recreation policies of the Coastal Act.

2. Growth Inducement

Section 30254 of the Coastal Act states, in relevant part:

New or expanded public works facilities shall be designed and limited to accommodate needs generated by development or uses permitted consistent with the provisions of this division...

The Mitigated Negative Declaration states that the proposed storm drain improvements will not increase the development potential of the area served by the proposed improvements. Rather, the proposed storm drain system improvements are designed to increase the capacity of the system to handle 25 to 100-year storm flows (varies throughout the system) in order to protect the existing residential development and Pacific Coast Highway. A letter report dated May 29, 1997 by John M. Tettemer and Associates states that the proposed system is being designed to handle 25 to 100-year storm flows (as opposed to the more common 10-year flow design standard) because many of the residential driveways in the community are at or below street grade and do not allow the streets to function as storm water detention areas as they do in other development areas. Therefore, the additional capacity is to provide flood protection and not to increase development density. In addition, the City of Laguna Beach designates the areas serviced by the proposed development for Single Family Residential. Increasing the capacity of the storm water system would not be pivotal to increasing development density in this area. Alternatively, other public works improvements, such as increased sewer capacity and roadway capacity would tend to be growth-inducing in this area. However, no such increase in sewer or roadway capacity is proposed. Therefore, the Commission finds the proposed development will not be growth-inducing and is consistent with Section 30254 of the Coastal Act.

H. Local Coastal Program

Section 30604(a) of the Coastal Act provides for the issuance of coastal development permits directly by the Commission in regions where the local government having jurisdiction does not have a certified local coastal program. The permit may only be issued if the Commission finds that the proposed development will not prejudice the ability of the local government to prepare a Local Coastal Program which conforms with the Chapter 3 policies of the Coastal Act.

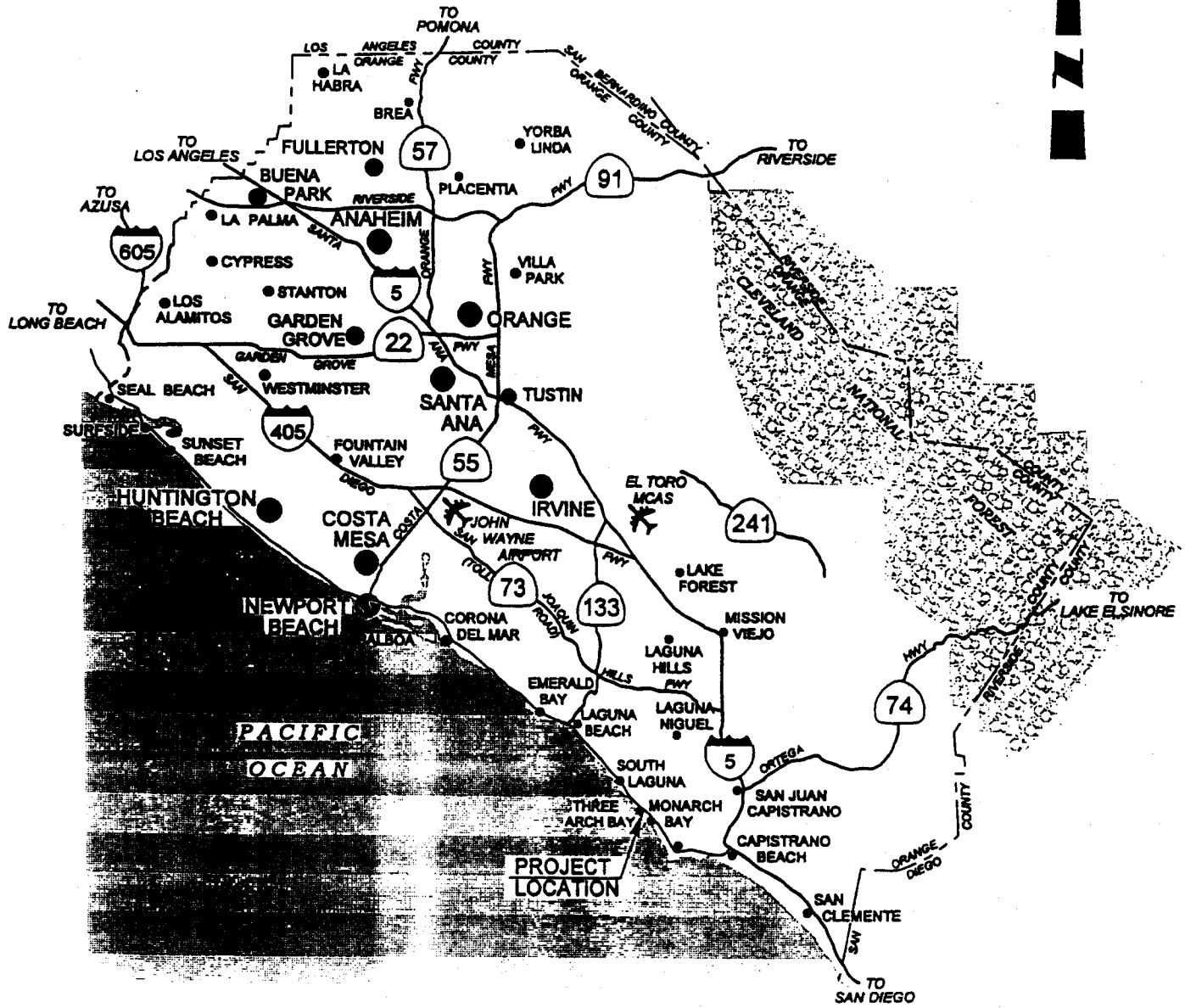
The City of Laguna Beach Local Coastal Program was certified with suggested modifications, except for the areas of deferred certification, in July 1992. In February 1993 the Commission concurred with the Executive Director's determination that the suggested modification had been properly accepted and the City assumed permit issuing authority at that time.

The subject site is located within the Three Arch Bay area of deferred certification. Certification in this area was deferred due to issues of public access arising from the locked gate nature of the community. However, as discussed above, the proposed development will not further decrease or impact public access within the existing locked gate community. Therefore the Commission finds that approval of this project, as conditioned, will not prevent the City of Laguna Beach from preparing a total Local Coastal Program for the areas of deferred certification that conforms with and is adequate to carry out the Chapter 3 policies of the Coastal Act.

I. California Environmental Quality Act

Section 13096 of the Commission's regulations requires Commission approval of Coastal Development Permit applications to be supported by a finding showing the application, as conditioned by any conditions of approval, to be consistent with any applicable requirements of the California Environmental Quality Act (CEQA). Section 21080.5(d)(2)(A) of CEQA prohibits a proposed development from being approved if there are feasible alternatives or feasible mitigation measures available which would substantially lessen any significant adverse effect which the activity may have on the environment.

The proposed project as conditioned has been found consistent with the water quality, hazard, and visual policies of the Coastal Act. As conditioned, there are no feasible alternatives or feasible mitigation measures available which would substantially lessen any significant adverse impact which the activity may have on the environment. Therefore, the Commission finds that the proposed project can be found consistent with the requirements of the Coastal Act to conform to CEQA.



5-04-089

EXHIBIT A

John M. Tetteh
 JOHN M. TETTEH & ASSOCIATES, INC.
 A DIVISION OF THE KEITH COMPANIES, INC.
 ENGINEERING · MANAGEMENT · PLANNING
 3151 Airway Avenue, Suite Q-1, Costa Mesa, California 92626

THREE ARCH BAY

VICINITY MAP

DATE
07/99

FIGURE
1

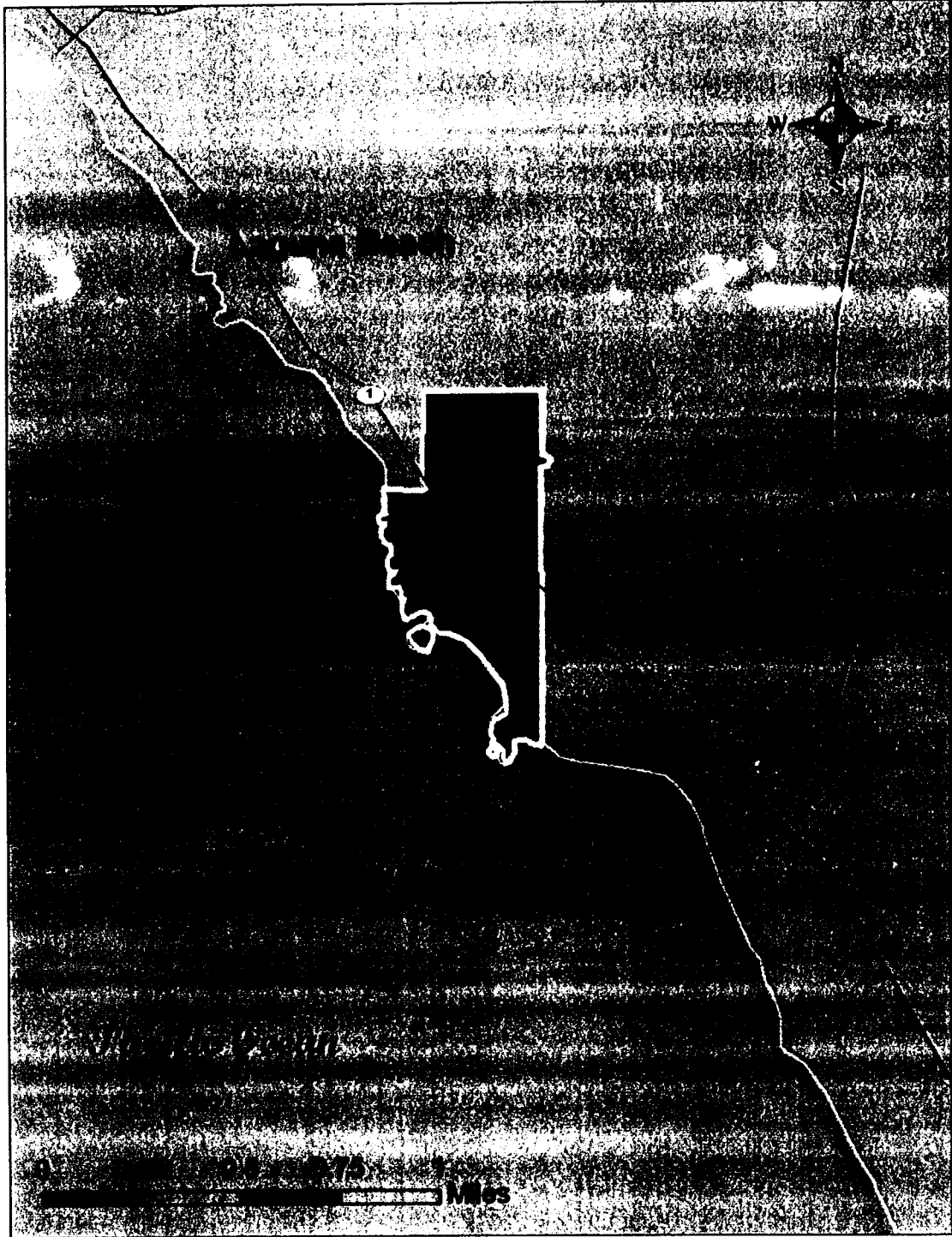


Exhibit B – Local Map


02/2004


Vista Del Sol Storm Drain Project * Three Arch Bay CSD, CA


5-04-089

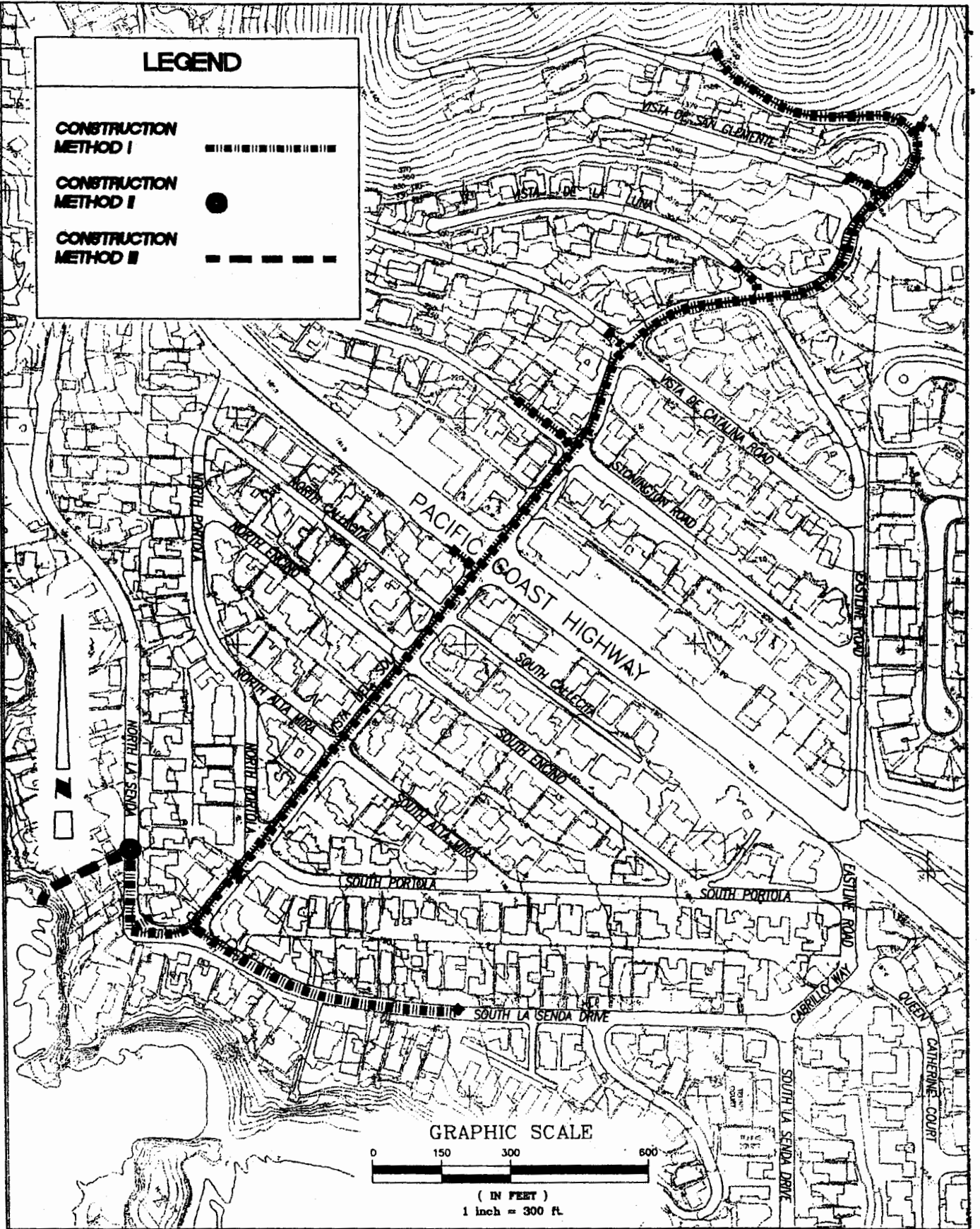
EXHIBIT B

LEGEND

CONSTRUCTION METHOD I 


CONSTRUCTION METHOD II 

CONSTRUCTION METHOD III 



LA 1100003.00.014 (M) 2003

REV. 11/03



Tetterer & Associates
 consulting engineers
 ENGINEERING - MANAGEMENT - PLANNING
 50 TECHNOLOGY DRIVE, IRVINE, CALIFORNIA 92618
 Tel: (949) 888-0277 Fax: (949) 888-0077
 a division of The Hill Companies, Inc.

THREE ARCH BAY
STORM DRAIN FACILITIES
ON-SITE CONSTRUCTION TYPE MAP

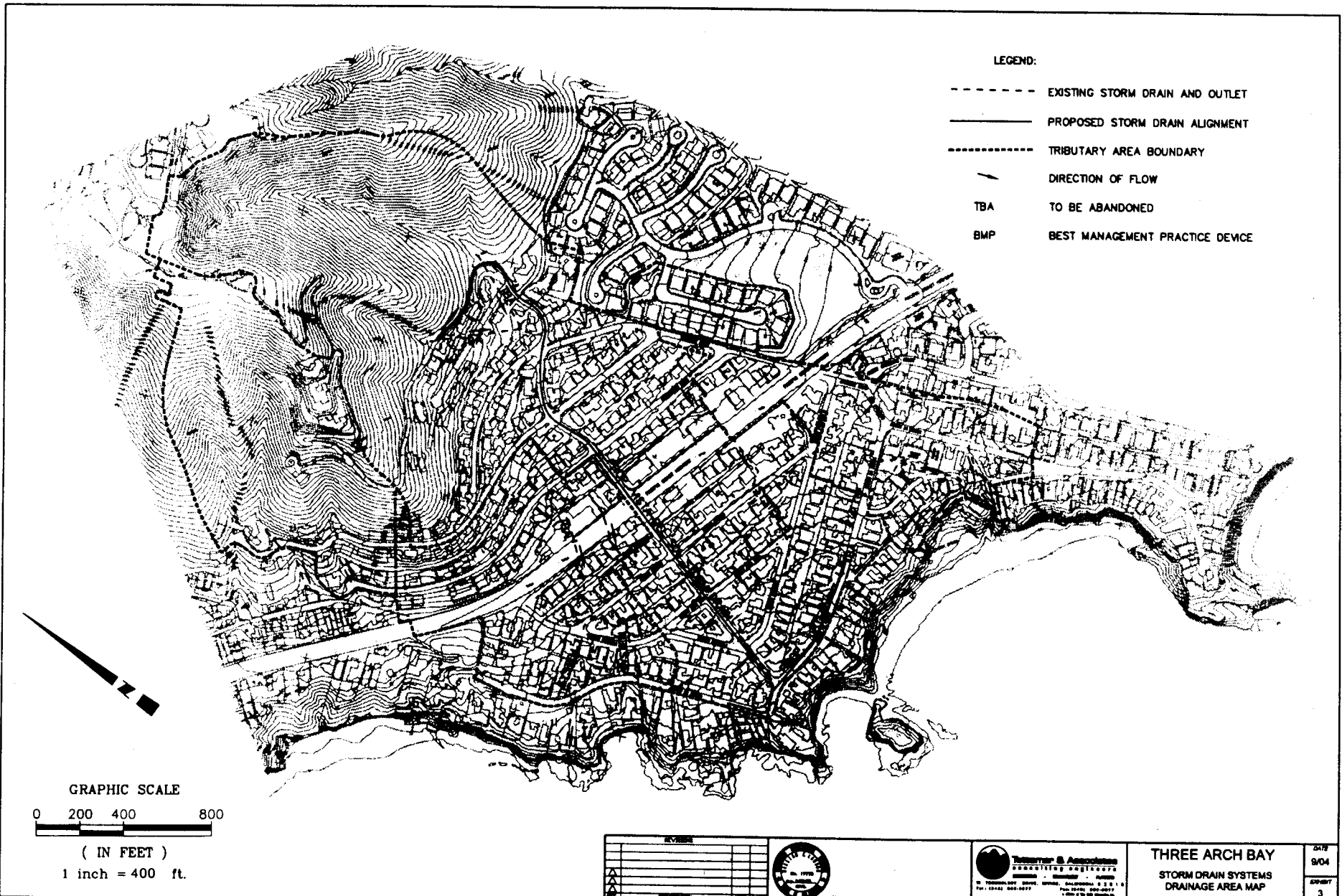
PROJECT NO.	110003.00.014
FIGURE	2
SHEET	1 OF 2

5-04-089

EXHIBIT C.

5-04-089

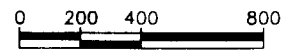
EXHIBIT D



LEGEND:

- EXISTING STORM DRAIN AND OUTLET
- PROPOSED STORM DRAIN ALIGNMENT
- TRIBUTARY AREA BOUNDARY
- DIRECTION OF FLOW
- TBA TO BE ABANDONED
- BMP BEST MANAGEMENT PRACTICE DEVICE

GRAPHIC SCALE



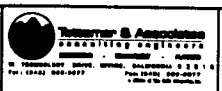
(IN FEET)

1 inch = 400 ft.

NO.	REVISION	DATE



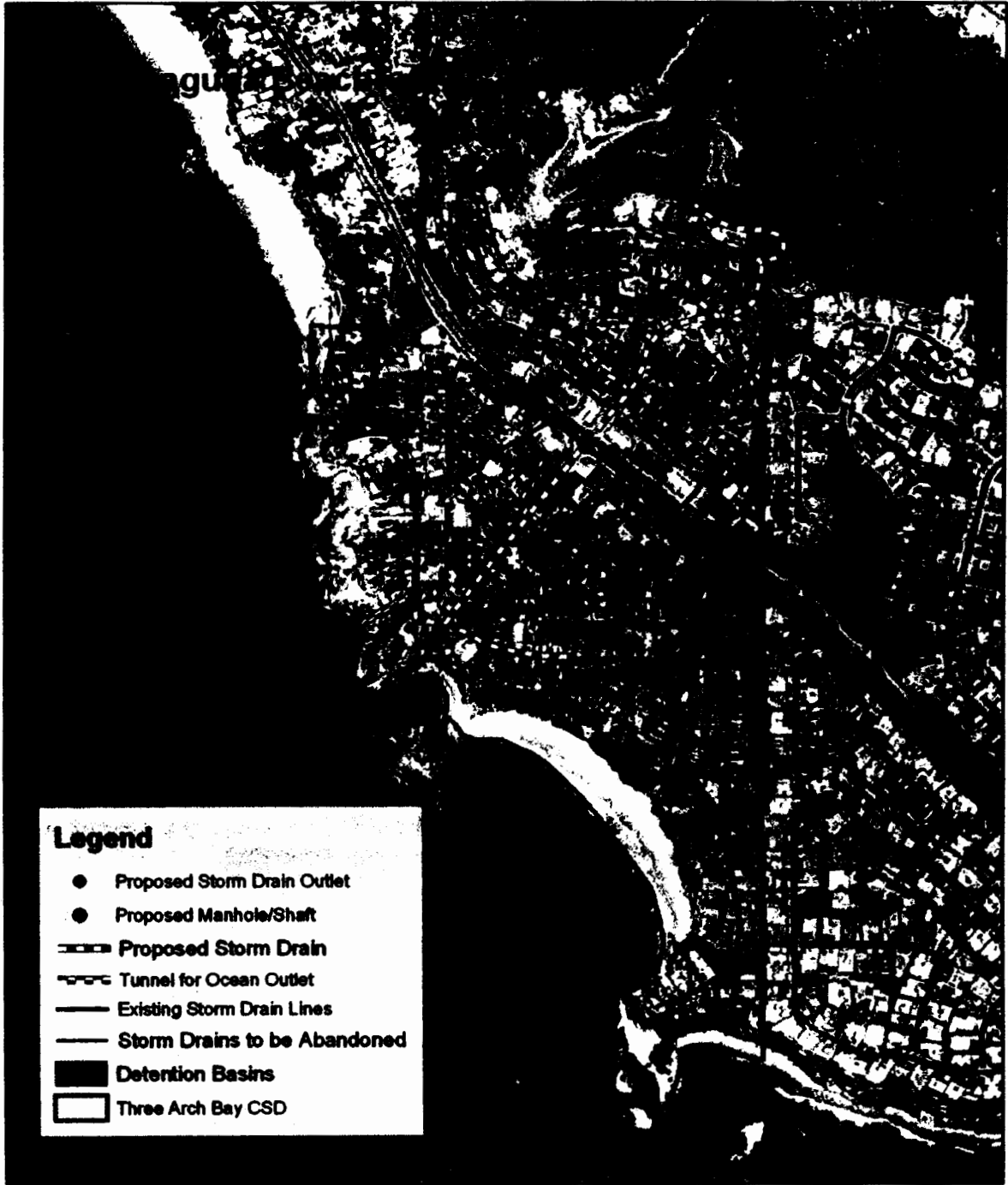
WILLIAM E. LARKIN, No. 17791 MARYLAND
 REGISTERED PROFESSIONAL ENGINEER



THREE ARCH BAY
 STORM DRAIN SYSTEMS
 DRAINAGE AREA MAP

DATE: 9/04
 SHEET: 3

REDUCED PRINT- NOT TO SCALE



- Legend**
- Proposed Storm Drain Outlet
 - Proposed Manhole/Shaft
 - ▬ Proposed Storm Drain
 - ▬ Tunnel for Ocean Outlet
 - ▬ Existing Storm Drain Lines
 - ▬ Storm Drains to be Abandoned
 - Detention Basins
 - Three Arch Bay CSD

0 250 500 1,000 1,500 2,000
Foot



Exhibit E - Proposed Project

02/2004

Vista Del Sol Storm Drain Project * Three Arch Bay CSD, CA

5-04-089

EXHIBIT E

SOUTH COAST

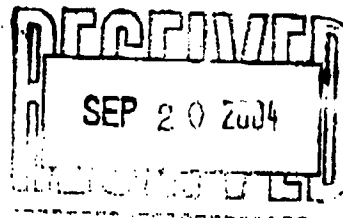


WATER DISTRICT

Providing Quality Water and Wastewater Services to the Coastal Communities

September 16, 2004

Mr. Drew Harper
Executive Director
Three Arch Bay
5 Bay Drive
Laguna Beach, CA 92651



SUBJECT: NUISANCE WATER RUNOFF
DRY WEATHER DIVERSION

Dear Mr. Harper:

The District has an ongoing and successful dry weather diversion program. Per our meetings, the District would accept the nuisance water runoff from the two proposed dry weather diversion projects within the Three Arch Bay area. There is sufficient capacity in both the sewer collection system and the treatment plant. The District can accept an estimated 10,000 gallons per day of nuisance water runoff from each of the proposed dry weather diversion projects.

The District has been very active in addressing water quality issues. We look forward to working with you on these important projects.

If you have any questions or require further information, please feel free to contact me.

Very truly yours,

SOUTH COAST WATER DISTRICT

Michael P. Dunbar
General Manager

MPD:rb

5-04-089

EXHIBIT F

Mailing Address: P.O. Box 30205, Laguna Niguel, CA 92607-0205

Street Address: 31592 West Street, Laguna Beach, CA 92651

Fax: (949) 499-4256

Phone: (949) 499-4555

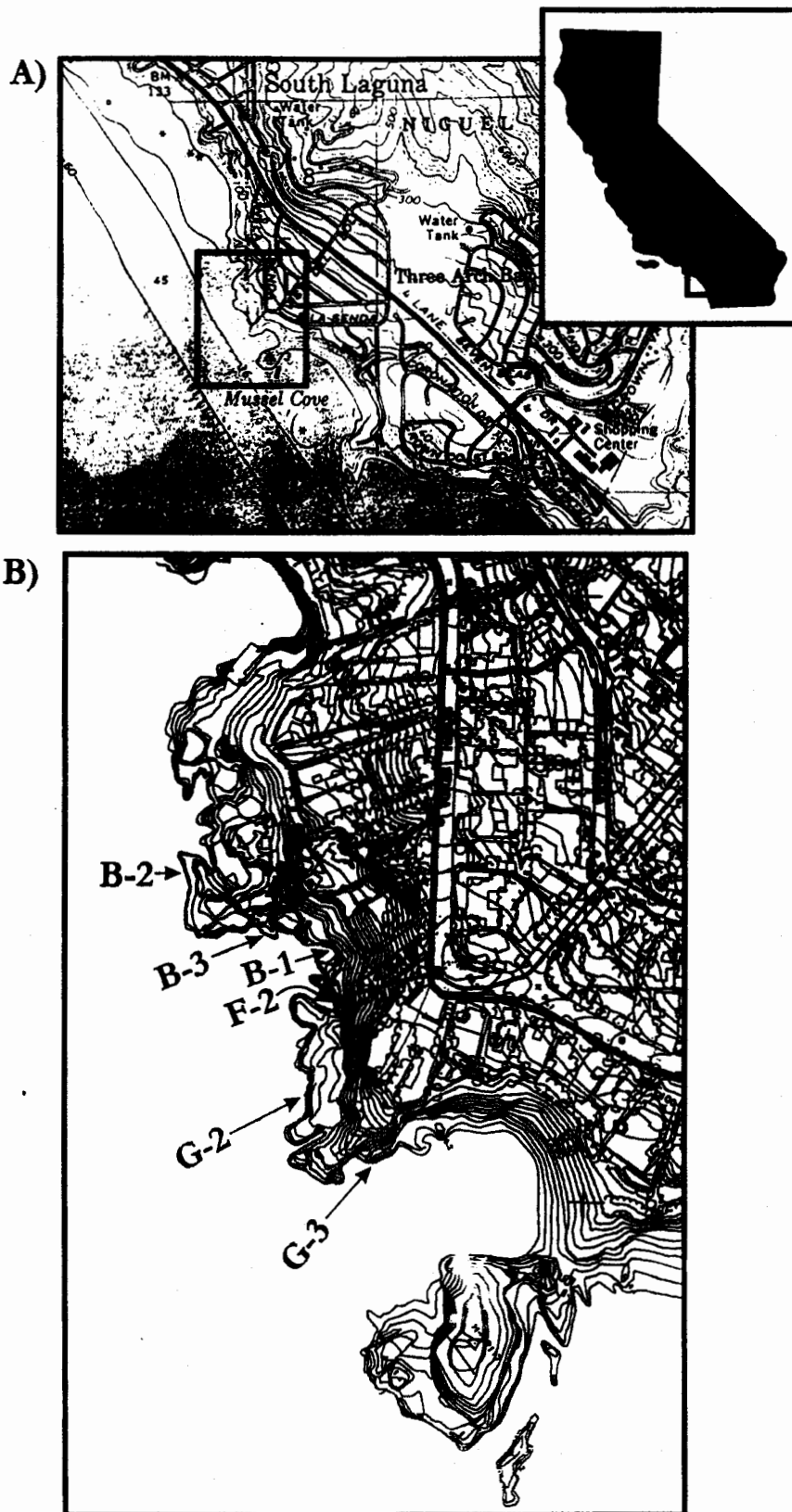
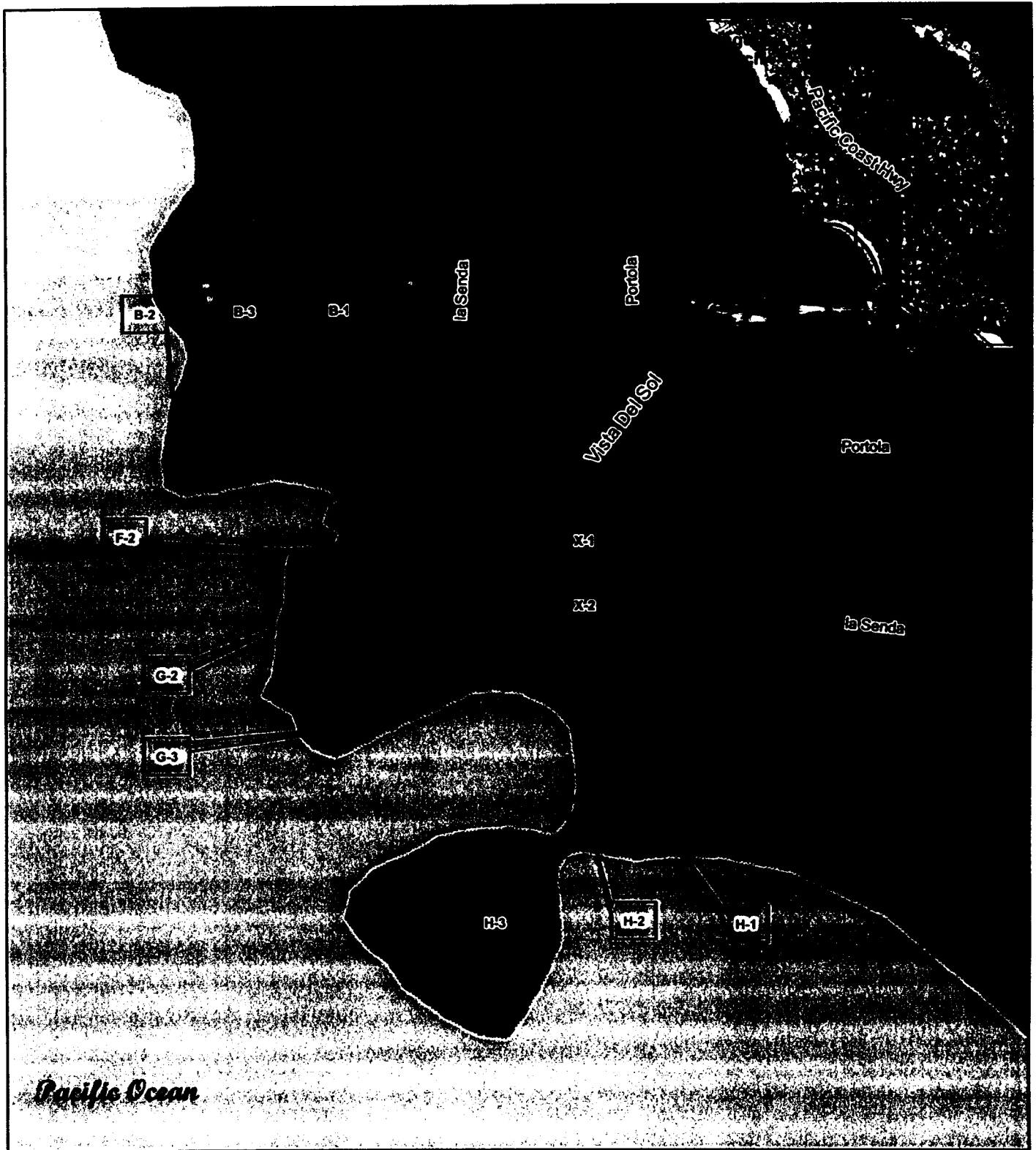


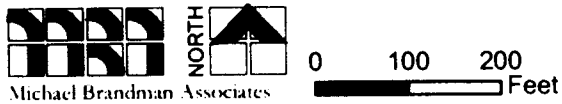
Figure 1. A) Location of Three-Arch Bay and Mussel Cove. B) Location of the Intertidal Sampling Sites.

EXHIBIT G,



Source: CA GIS Library, ESRI, and
 Marine Resource Specialists 2005

Exhibit 2



Alternative Ocean Outlet Locations

08130028 | AltOutletMap_Exh2.mxd | APR2005

PROPOSED VISTA DEL SOL STORMDRAIN PROJECT
 THREE ARCH BAY CSD, CA

5-04-089

EXHIBIT G2

ATTACHMENT 2



California Regional Water Quality Control Board
San Diego Region



Alan C. Lloyd, Ph.D.
Secretary for
Environmental
Protection

Over 50 Years Serving San Diego, Orange, and Riverside Counties
Recipient of the 2004 Environmental Award for Outstanding Achievement from USEPA

Arnold Schwarzenegger
Governor

9174 Sky Park Court, Suite 100, San Diego, California 92123-4340
(858) 467-2952 • Fax (858) 571-6972
[http:// www.waterboards.ca.gov/sandiego](http://www.waterboards.ca.gov/sandiego)

January 21, 2005

Kent Norton – DES
Michael Brandman Associates
621 Carnegie Drive, Suite 100
San Bernardino, CA 92408

THREE ARCH BAY – VISTA DEL SOL STORM DRAIN PROJECT

Dear Mr. Norton:

On November 2, 2004, you send us a Water Quality/Drainage Plan for the above-referenced project. The report was dated October 7, 2004 and you requested that the Regional Board staff review and comment on the report and the proposed BMPs for reducing pollutants in stormwater runoff. We have reviewed the document and have no objections to the proposal.

If you have any questions or comments, please e-mail me at bmorris@waterboards.ca.gov or call me at (858) 467-2962. As long as no major changes are made to the project or to the recommended BMPs, the Regional Board does not need to review the document or project again. Thank you for including the Regional Board in the planning process for this project.

Sincerely,

ROBERT MORRIS
Senior Water Resource Control Engineer

cc: Drew Harper – Three Arch Bay CSD

5-04-089

EXHIBIT H

CALIFORNIA STATE LANDS COMMISSION
100 Howe Avenue, Suite 100-South
Sacramento, CA 95825-8202



PAUL D. THAYER, Executive Officer
California Relay Service From TDD Phone 1-800-735-2922
from Voice Phone 1-800-735-2929

ATTACHMENT 3

Contact Phone: (916) 574-1892
Contact FAX: (916) 574-1925

April 26, 2000

File Ref: SD 00-02-09.4

Ms. Nancie Parker
Director of Planning
John M. Tettemer & Associates, Inc.
3151 Airway Avenue, Suite Q-1
Costa Mesa, CA 92626

Dear Ms. Parker:

SUBJECT: Coastal Development Project Review for the Proposed Vista del Sol Stormdrain Project, Laguna Beach, Orange County

This is in response to your request on behalf of your client, the Three Arch Bay Community Services District, for a determination by the California State Lands Commission (CSLC) whether it asserts a sovereign title interest in the property that the subject project will occupy and whether it asserts that the project will intrude into an area that is subject to the public easement in navigable waters.

The facts pertaining to your client's project, as we understand them, are these:

Your client proposes to realign and repair a storm drain system within an existing residential community in the Three Arch Bay Community Services District in Laguna Beach. The project will include lining portions of the existing pipelines and replacement of portions of the system with new pipe, as well as the construction of a new storm drain alignment with an ocean outlet. The project will be located entirely on top of and within an approximately 70-foot high bluff.

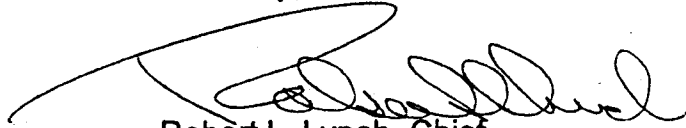
It does not appear that the project will intrude upon state sovereign lands or intrude into an area that is subject to the public easement in navigable waters. Accordingly, the CSLC presently asserts no claims that the project intrudes onto sovereign lands. This conclusion is without prejudice to any future assertion of state ownership or public rights, should circumstances change, or should additional information come to our attention.

5-04-089

EXHIBIT I

If you have any questions, please contact Jane E. Smith, Public Land Management Specialist, at (916) 574-1892.

Sincerely,

A handwritten signature in black ink, appearing to read "Robert L. Lynch", written in a cursive style.

Robert L. Lynch, Chief
Division of Land Management

5-04-089

EXHIBIT I₂