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8/2/02 Filed: 9/20/02 49th Day: 180th Day: 1/29/03 Staff: MV-LB Staff Report: 8/22/02 9/10/02 Hearing Date: **Commission Action:**

STAFF REPORT: REGULAR CALENDAR

APPLICATION NUMBER: 5-02-217

APPLICANT:	Three Arch Bay Community Services District Cecil Spearman, Chairman
AGENT:	Greg Crews, Boyle Engineering Jene Lyle, Exponent
PROJECT LOCATION:	Bay Drive Southwest of Intersection of Bay Drive & So. La Senda and within the adjacent Community Park, Laguna Beach, Orange County

PROJECT DESCRIPTION: Modifications to an existing storm drain system including realigning an existing storm drain pipe segment and undergrounding a segment that currently sheet flows within the road. Total length of the pipe replacement and installation is approximately 378 feet. The existing pipes to be replaced are a variety of sizes. All new project pipes will be 18" PVC pipes. Also proposed are two new curb opening catch basins with associated local depressions and a new junction structure which will tie into the existing storm drain system.

LOCAL APPROVALS RECEIVED: Three Arch Bay Community Services District Approval in Concept.

SUBSTANTIVE FILE DOCUMENTS: Bay Drive Storm Drain Improvements Mitigated **Negative Declaration.**

SUMMARY OF STAFF RECOMMENDATION:

Staff is recommending approval of the proposed project subject to six special conditions which are necessary to assure that the project is consistent with the water quality policies The recommended special conditions are: 1) incorporation of of the Coastal Act. construction related Best Management Practices; 2) incorporation on non-structural Best Management Practices; 3) Installation of trash racks on storm drain inlets and catch basins; 4) installation of a Continuous Deflective Separation (CDS) unit within the project's junction structure; 5) recognition that tie in to a low flow diversion in the future shall not be precluded by the proposed project; and 6) all BMPs shall be subject to routine monitoring and maintenance for the life of the project.

STAFF RECOMMENDATION:

I. MOTION, STAFF RECOMMENDATION AND RESOLUTION FOR 5-02-217:

Staff recommends that the Commission make the following motion and adopt the following resolution:

<u>MOTION</u>: I move that the Commission approve Coastal Development Permit #5-02-217 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 permit, subject to the conditions below, for the proposed development and adopts the findings set forth below on grounds that the development as conditioned will be in conformity with the provisions of Chapter 3 of the California 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 alternative that would substantially lessen any significant adverse of the development on the environment.

II. STANDARD CONDITIONS:

- 1. <u>Notice of Receipt and Acknowledgment.</u> 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. <u>Expiration</u>. 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. <u>Interpretation.</u> Any questions of intent or interpretation of any term or condition will be resolved by the Executive Director or the Commission.

- 4. <u>Assignment.</u> 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. <u>Terms and Conditions Run with the Land.</u> 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. 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 air 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.

2. Non-Structural Best Management Practices

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

- a) A community water quality education program shall be included in the community newsletter.
- b) All catch basins and storm drain inlets shall be stenciled to indicate that contents flow to the stream and ocean.
- c) A regular (at least weekly) street sweeping program shall be maintained within the community.

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3. Trash Rack Installation

- A. PRIOR TO ISSUANCE OF THE PERMIT, the applicant shall submit, for the review and approval of the Executive Director, plans indicating that trash racks have been incorporated into the project's catch basins and storm drain inlets.
- **B.** 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.

4. CDS Unit Installation

- A. **PRIOR TO ISSUANCE OF THE PERMIT**, the applicant shall submit, for the review and approval of the Executive Director, plans indicating that a Continuous Deflective Separation (CDS) unit has been incorporated into the project's junction structure.
- **B.** 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.

5. Low Flow Diversion Tie-In

BY ACCEPTANCE OF THIS PERMIT the applicant agrees that connection of the development approved herein to the low flow diversion shall be established in the future when said low flow diversion becomes available.

6. Monitoring and Maintenance

- 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 the onset of the rainy season (October 15th each year); (2) after every major storm, (3) at least twice during the dry season (between April 16 and October 14).
- a) Debris and other water pollutants removed from structural BMP(s) during clean-out shall be contained and disposed of in a proper manner.
- b) It is the applicant's responsibility to maintain the drainage system and the associated structures and BMPs according to manufacturer's specification.

IV. FINDINGS AND DECLARATIONS:

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The Commission hereby finds and declares:

A. <u>Project Description and Location</u>

The applicant proposes to modify an existing storm drain line within a portion of the private, gated community of Three Arch Bay. An existing storm drain is proposed to be replaced that is located within a park that serves the residents of the private community. A new storm drain line is proposed within the portion of Bay Drive where drainage from the park currently outlets onto the street and flows above ground until it reaches an existing inlet structure and existing storm drain pipe. The total length of the new and replaced storm drain pipe will be approximately 378 feet.

The existing storm drain system was constructed in the 1920s and 1930s. The pipe replacement within the park is proposed to correct existing alignment and pipe size deficiencies. The existing alignment makes a number of awkward turns and the pipe sizes range from 8" PVC pipe to 12" and 15" RCP pipe. The 12" pipe currently flows into the 8" pipe. The existing alignment will be abandoned in place. The proposed alignment will be more direct, with only a slight bend, and will eliminate sharp turns. The pipe replacement in Bay Drive is proposed to underground the drainage and eliminate the surface flow. All of the new storm drain pipes are proposed to be 18" PVC pipes.

Also proposed as part of the project are two new curb opening catch basins with associated, adjacent local depressions adjacent and a new junction structure to tie into the existing storm drain system downstream.

The existing storm drain system, after tying into the existing storm drain pipe within lower Bay Drive, ultimately outlets into a stream. No changes are proposed in the area of the outlet.

B. PRIOR COMMISSION ACTIONS

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 an existing 24 inch outfall which passes through 8 and 10 N. La Senda. The major issue outlined in the staff report at that time was the potential for growth inducing effects through enlarging the capacity of the storm drain system with subsequent adverse impacts upon public access. Coastal development permit 5-86-720 was approved without special conditions. The approved permit was extended nine times. However, the improvements were not constructed and the permit expired.

In 2000 the applicant submitted coastal development permit application 5-00-011 (known as the Vista del Sol storm drain system), for a new storm drain system and ocean outfall which was similar to the 1986 project in the area to be drained. However, the more recent application proposed a new location for the ocean outfall. Commission staff expressed concerns with the proposed outfall location due to impacts to tide pools and the potential that there were less environmentally damaging, feasible alternatives available. A staff report recommending denial was prepared. The project was withdrawn by the applicant on May 4, 2001 prior to Commission action.

The project proposed under coastal development permit application 5-00-011 did not include the development proposed under this application 5-02-217. The proposed project is separate and distinct from the Vista del Sol project in that it does not drain the same area as the Vista del Sol drainage project. The proposed project will not tie into that larger system. The subject area of the proposed Bay Drive storm drain replacement is located at the downcoast border of the private community.

C. <u>Water Quality</u>

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. Although the proposed storm drain replacement project will not increase the existing capacity of the storm drain system or change the location of the existing outlet, the existing outlet drains into a small stream and ultimately to the ocean. If measures are applied to this segment of the storm drain system, the quality of water that is ultimately discharged downstream would be demonstrably improved. The water quality of the stream and ocean are required by Section 30231 to be restored where feasible. The proposed project presents an opportunity to restore, to a degree, water quality within the stream and ocean by incorporating water quality Best Management Practices (BMPs) into the project.

1. Construction Impacts

Storage or placement of construction materials, debris, or waste in a location which ultimately drains into the stream and ocean via storm water runoff would result in adverse impacts upon water quality. In addition, the use of machinery in areas that drain into the

stream and ocean may result in the release of lubricants or oils that adversely impact water quality. In addition, discharges of sediment laden water from construction activities would also decrease water quality.

The applicant has proposed the placement of sandbags or straw waddles at the catch basins to prevent construction related debris from entering the storm drains during construction. Additional construction related BMPs are available which would further reduce adverse impacts on water quality during construction. These include: timely removal of construction debris, prevention of fuel or oily waste discharge from heavy machinery, enclosure of construction materials, storage of construction materials away from drain inlets, and trash and debris collection at the end of each work day. These measures must be incorporated into the proposed project's construction methods to assure that water quality protection is maximized.

In order to minimize adverse construction-related impacts to water quality arising from the proposed project, the Commission imposes a special condition which requires the applicant to incorporate these construction related BMPs which assure maximum protection of water quality. Only as conditioned to incorporate these construction related BMPs does the Commission find that the proposed development is consistent with Section 30231 of the Coastal Act as it pertains to construction related activities.

2. Runoff Discharged into the Proposed Project

Both the existing storm drain system and the modified system drain a portion of an existing developed residential area. 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 grease, motor oil, heavy metals, and pesticides. This runoff is collected into the storm drains and ultimately discharged into the stream and ocean, and if untreated, would have significant adverse impacts on water quality.

The storm waters that will be discharged through the revised storm drain and outlet to the stream and ultimately to the ocean are of the same type and quantity as that presently discharged into the ocean by the existing system. 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. Rather, the proposed storm drain improvements will eliminate outdated and ill-aligned pipes and underground flow that currently sheet flows on Bay Drive.

While the proposed revisions to the storm drain system would not increase the existing capacity, pollutants carried in the existing runoff affect the water quality of the stream and ocean. Section 30231 of the Coastal Act requires that water quality be restored where feasible. In addition, the cumulative impacts on water quality resulting from continued entry of existing pollutants into the stream and ocean must be minimized. Reductions in

the amount of pollutants in the existing runoff would be one step toward reducing cumulative adverse impacts to water quality in the stream and ocean.

The applicant has identified several non-structural BMPs which would assist in reducing pollutant loads in storm water discharges. The BMPs proposed by the applicant 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 proposed by the applicant are appropriate and will help to reduce storm water pollutants. A special condition is imposed which requires the non-structural BMPs to be carried out s proposed. Only as conditioned does the Commission find the proposed project consistent with Section 30231 of the Coastal Act.

Structural BMPs such as trash racks at inlets and catch basins, screens, settlement chambers or storm drain filters also assist in reducing pollutants in storm water discharge. Installation of structural BMPs can reduce pollutants, such as trash, motor oil, or grease, that are normally carried into coastal waters via storm drains. By catching the pollutants before they enter the storm drains, structural BMPs can reduce pollutant levels in runoff entering the stream and ocean, thus minimizing cumulative adverse impacts upon water quality. The applicant has indicated that one BMP that was considered was installation of catch basin filters. However, the applicant has not proposed the catch basin filters because the applicant feels they have shown only limited success in pollutant removal. However, trash racks at the inlets and catch basins would be useful. These devices would remove large debris before it could enter the storm drain system, thereby preventing it from being discharged into the stream and ocean. As a condition of approval the applicant shall install trash racks on proposed catch basins and storm drain inlets. Only as conditioned does the Commission find the proposed project consistent with Section 30231 of the Coastal Act.

In addition, there is a device known as a Continuous Deflective Separation (CDS) unit which provides effective storm water pollutant removal. CDS unit's storm water gross pollutant traps (GPTs) capture gross solids as well as sediments considerably smaller than the screen aperture. Thus, effective protection from such gross pollutants as plastic, paper, leaves, cigarette butts, and packaging, as well as from much of the sediment load that is transported by storm water is provided. CDS units work by creating a whirlpool which forces pollutants to settle out within the unit's structure. CDS units are available in a range capacities (treating from 1-30 cubic foot per second flow ranges) so that it will be possible to match the unit with the project needs. The CDS unit should be installed at the junction structure proposed at the terminus of the project. The junction structure will tie into the existing storm drain pipes which then flow on to the outlet. Placing the CDS unit in this location would provide pollutant removal from drainage for the upper reaches of the Bay Drive system, as well as the stretch proposed to be modified. As a condition of approval the Commission requires installation of a CDS unit within the proposed junction structure. Only as conditioned can the Commission find that the proposed project is

consistent with Section 30231 of the Coastal Act which requires that water quality be protected and enhanced.

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 also reduce the impact such low flows have upon water quality in the ocean. However, the applicant is not currently proposing a low flow diversion component as part of the project. The applicant's reason for not proposing a low flow diversion in conjunction with the proposed project is based on an understanding that the low flow connection would be more effective in a downstream location. As described previously, the proposed storm drain revisions will drain into an existing outlet structure. The flow from the outlet structure enters into a stream, which then flows down the stream canvon and empties onto the beach and ocean. In addition to the drainage from the portion of the Three Arch Bay community that is drained through this storm drain outlet, this stream also carries runoff loads from surrounding areas including a portion of Dana Point, Monarch Bay Terrace, and a segment of Pacific Coast Highway. Based on preliminary discussions between the applicant and the South Coast Water District, it was determined that the low flow diversion structure would be more effective if located downstream of the proposed project. Compared with a diversion at the Bay Drive inlet, a diversion located downstream would target a larger runoff volume and a broader range of contaminants.

The applicant has indicated an intention to participate in a low flow diversion program when it is implemented (by South Coast Water District). The applicant has indicated that, should a low flow diversion connection become available, they will construct the low flow connection to the sanitary sewer as a separate project. The proposed project is not expected to preclude connection to a future low flow diversion, should one become available. However, to assure that that option is pursued when available, the Commission imposes a special condition which reiterates that nothing in the proposed project prevent future to connection to a low flow diversion connection.

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 the stream and ocean. Therefore, the Commission imposes special conditions requiring the implementation of the proposed 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. <u>Public Access</u>

Section 30604(c) of the Coastal Act requires that every coastal development permit issued for any development between the first public road and the sea include a specific finding regarding the conformity of the proposed development with the public access and recreation policies of Chapter 3 of the Coastal Act. The proposed development is located seaward of Coast Highway which is the first public road from the sea.

Section 30212 of the Coastal Act states, in relevant part:

(a) Public access from the nearest public roadway to the shoreline and along the coast shall be provided in new development projects except where:

(2) adequate access exists nearby.

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 will not affect the existing public access conditions. It is the locked gate community, not this storm drain system, that impedes public access. The proposed development will not result in any adverse impacts to existing public access in the area. Therefore the Commission finds that the project is consistent with the public access policies of the Coastal Act.

E. Local Coastal Program

The LCP for City of Laguna Beach was effectively certified in February 1993. However, the proposed development is occurring within an area of deferred certification. Consequently, the standard of review is the Coastal Act and the City's LCP is used as guidance. As conditioned, the proposed development is consistent with Chapter 3 of the Coastal Act and with the certified LCP for the area. Approval of the project, as conditioned, will not prejudice the ability of the local government to prepare a Local Coastal Program for this area that is in conformity with the provisions of Chapter 3.

F. California Environmental Quality Act

As conditioned, there are no feasible alternatives or feasible mitigation measures available which would substantially lessen any significant adverse effect which the activity may have on the environment. Therefore, the Commission finds that the proposed project, as conditioned to mitigate the identified impacts, is the least environmentally damaging feasible alternative and can be found consistent with the requirements of the Coastal Act to conform to CEQA.

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SOURCE: The Thomas Guide 2001, San Diego and Orange County



Exhibit 2 Regional Location Map

Bay Drive Storm Drain







Stormwater

Custom

Dry Weather Clean Outs

Which Unit?

Eng & Design

Construction

Click to Enter

CDS Web Site



CDS Technologies offers several stormwater units that will treat a 1 to 3(CFS flow range.

CDS Technologies, Inc. provides:

• site inspection and full hydraulic analysis

- optimal precast concrete components
- cost effective fiberglass systems

 innovative solutions for difficult conditions

- smallest footprint for flow treated
- various cleanout options

• installation flexibility to meet head requirement



High quality construction, short product lead times, and safe installation techniques mean our units are installed quickly and efficiently.

Worldwide Application

CDS Technologies has installed storm water units throughout the United States, Australia and New Zealand in a wide range of sizes to suit most situations. Click on any of the country names to access sample installations.

Adaptable Design

The technology is so adaptable in its design structure that we can custon design units to fit your specific application. Because of this adaptability, dry weather nuisance flows are effectively dealt with and maintenance ar cleaning of CDS units are quickly and easily carried out.

There are many articles, papers and reports that have been written abou the CDS technology. Visit <u>www.stormwater-resources.com</u> the website o: "Stormwater News" to access further papers written on the CDS technology. Two papers, numbers 065B "The use of a CDS Unit for Sediment Control in Brevard County", written by John Royal and Gordon England, and 034B "Continuous Deflective Separation - Its mechanism a



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