

CALIFORNIA COASTAL COMMISSION  
South Coast Area Office  
200 Oceangate, Suite 1000  
Laguna Beach, CA 90802-4302  
(714) 590-5071

Filed: 12/16/02  
49th Day: 2/3/03  
180th Day: 6/14/03  
Staff: MV-LBN  
Staff Report: 2/13/03  
Hearing Date: 3/4-7/03  
Commission Action:



RECORD PACKET COPY

**Tu 18 b**

**STAFF REPORT: REGULAR CALENDAR**

**APPLICATION NUMBER:** 5-02-218

**APPLICANT:** Three Arch Bay Community Services District

**AGENT:** Gene Lyle, Exponent

**PROJECT LOCATION:** 58/68 N. La Senda Drive, Laguna Beach, Orange County

**PROJECT DESCRIPTION:** An existing 24" storm drain will be re-aligned from under the residence at 58 N. La Senda to the property line between 58 and 68 N. La Senda. In addition, the open culvert extending from N. La Senda to the residence will be replaced underground with 24" storm drain pipe as well as relocated within the driveway. No change to the existing bluff top outlet is proposed.

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

**SUBSTANTIVE FILE DOCUMENTS:** Coastal Development Permit No. 5-02-217 (Three Arch Bay Community Services District); Coastal Development Permit Application No. 5-00-011 (Three Arch Bay Community Services District); Engineering Geologic Evaluation of Sea Cliff at Storm Drain Location, prepared by ViaGeos, dated November 29, 2002.

**SUMMARY OF STAFF RECOMMENDATION:**

Staff is recommending approval of the proposed project subject to four special conditions which are necessary to assure that the project is consistent with the water quality policies of the Coastal Act. The recommended special conditions are: 1) incorporation of construction related Best Management Practices; 2) incorporation of non-structural Best Management Practices; 3) installation of a Continuous Deflective Separation (CDS) unit, and, 4) 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 5-02-218:**

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

**MOTION:** *I move that the Commission approve Coastal Development Permit #5-02-218 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 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. **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.

2. **Non-Structural Best Management Practices**

The permittee shall comply with the following requirements:

- a) A community water quality education program shall be included in the community newsletter.
  - a. The required water quality education program shall appear a minimum of once per year in the newsletter;
  - b. The Regional Water Quality Control Board's mail inserts shall be included with the 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.

3. **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.
- 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. **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:**

The Commission hereby finds and declares:

A. **Project Description and Location**

The applicant proposes to modify an existing storm drain line that crosses one residential lot within a portion of the private, gated community of Three Arch Bay. The existing storm drain is proposed to be re-located from beneath the residence at 58 N. La Senda to the property line between 58 and 68 N. La Senda. In addition, the open, concrete and stone lined drainage culvert extending from N. La Senda Drive to the residence is proposed to be replaced underground with 24" storm drain pipe as well as relocated within the driveway (see exhibit B2). The total length of the storm drain replacement, which will extend from N. La Senda Drive to the existing outlet at the bluff top, will be approximately 282 feet. No change to the existing bluff top outlet is proposed. No catch basins exist within the project area and no new catch basins are proposed. The subject drain pipe drains an upstream area of approximately 7 to 8 acres. The proposed project will not result in any change to the area to be drained nor will it increase or decrease the capacity of the existing drainage system.

The existing storm drain system was constructed in the 1920s and 1930s. The original storm drain system was primarily constructed within shallow swales and depressions present at the time of initial development of the Three Arch Bay community. The drainage improvements are proposed because the existing open culvert is unsafe. In addition, the realignment to eliminate the portion of the drainage system beneath the residence is proposed to facilitate maintenance access, as well as for safety. The existing pipeline beneath the residence will be abandoned in place.

An Engineering Geologic Evaluation was prepared by ViaGeos (November 29, 2002) in conjunction with the proposed project to assess impacts of maintaining the storm drain outlet at the top of the bluff. The bluff is approximately 50 feet high measured from the crest of the bluff to the level rock shelf at the base. Regarding impacts from the outlet,

the Engineering Geologic Evaluation concludes: "The prognosis for the sea cliff at the storm drain outfall location is that it should remain grossly stable and should not be significantly affected by continued storm drain discharge over the cliff edge." No change is proposed to the outlet location and the proposed project will not change the amount or type of drainage exiting the outlet.

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.

#### **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. 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 5-02-218. 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 Three Arch Bay community storm drain system is comprised of three systems, the largest of which is the Vista del Sol system. The Bay Drive storm drain (improvements to which were approved under coastal

development permit No. 5-02-217), and the subject project, the La Senda Storm drain system, make up the two other systems within the community. The subject project drains approximately 7 to 8 upstream acres, including a portion inland of Coast Highway. The proposed project will not tie into the larger Vista del Sol system.

**C. Water Quality**

Section 30230 of the Coastal Act states:

*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:

*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.*

Sections 30230 and 30231 of the Coastal Act require the protection of biological productivity, public recreation, and marine resources. 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 over the bluff to the ocean below. If measures are applied to this segment of the storm drain system, the quality of water that is ultimately discharged would be demonstrably improved. The water quality of the ocean is required by Sections 30230 and 30231 to be restored where feasible. The proposed project presents an opportunity to restore, to a degree, water quality within the 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 drains to the 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 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 upstream 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 Sections 30230 and 30231 of the Coastal Act as it pertains to construction related activities.

## 2. Runoff Discharged into the Proposed Project

The subject storm drain system drains 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 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 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 runs through an open channel.

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. Sections 30230 and 30231 of the Coastal Act require that water quality be restored where feasible. In addition, the cumulative impacts on water quality resulting from continued entry of existing pollutants into the 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 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 as proposed. Only as conditioned does the Commission find the proposed project consistent with Sections 30230 and 30231 of the Coastal Act.

Structural BMPs 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 ocean, structural BMPs can reduce pollutant levels within the ocean at the outfall area, thus minimizing cumulative adverse impacts upon water quality. A device known as a Continuous Deflective Separation (CDS) unit provides effective storm water pollutant removal (see exhibit C). 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. Placing the CDS unit within the proposed project area would provide pollutant removal from drainage for the upper reaches of the La Senda Drive system, as well as the stretch proposed to be modified. As a condition of approval the Commission requires installation of a CDS. Only as conditioned can the Commission find that the proposed project is consistent with Sections 30230 and 30231 of the Coastal Act which require that water quality be protected and enhanced.

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 Sections 30230 and 30231 of the Coastal Act which require 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 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 Sections 30230 and 30231 of the Coastal Act as it pertains to storm drain discharge impacts upon water quality.



**D. Public Access**

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.

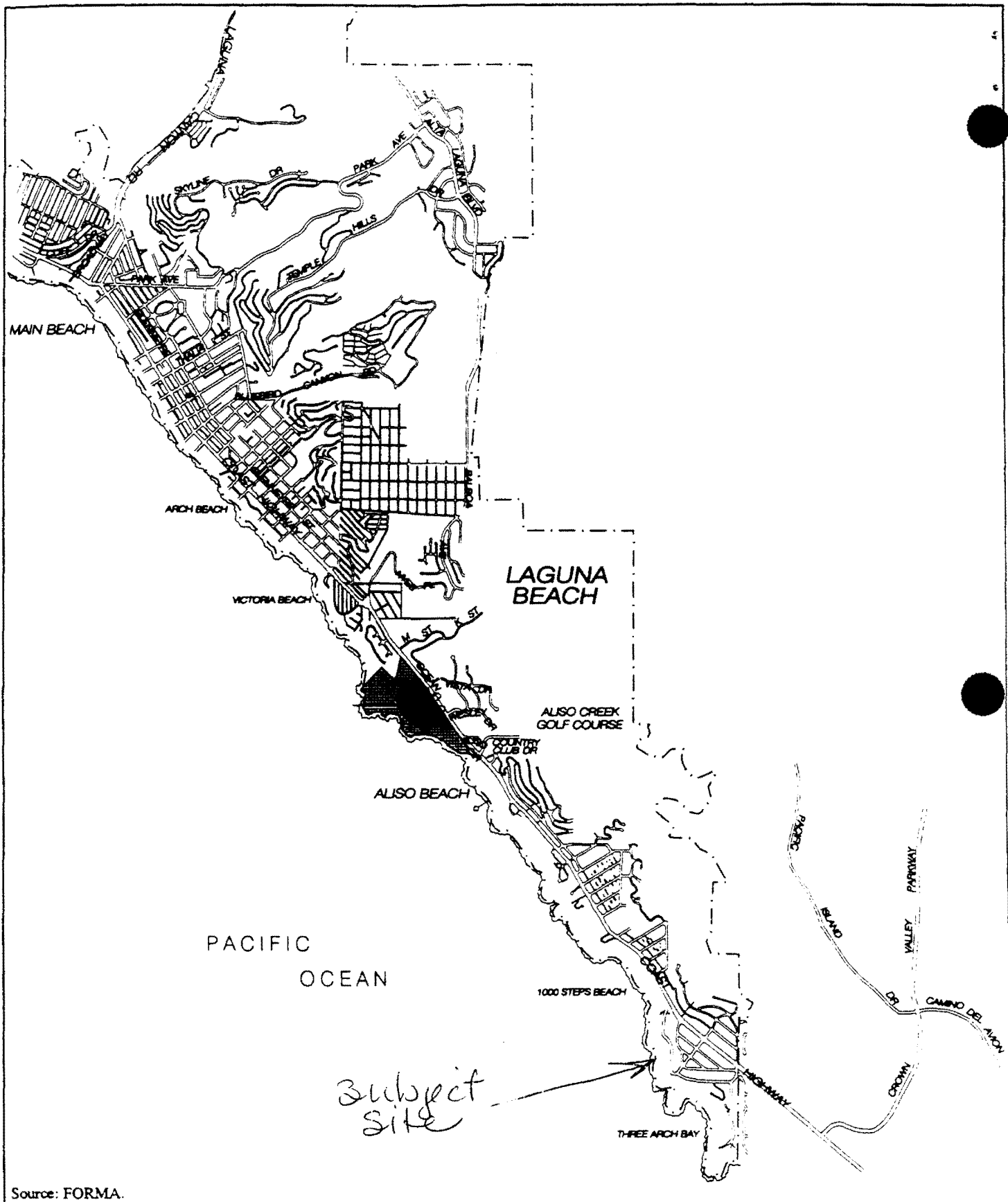
The proposed project is located within an existing locked gate community located between the sea and the first public road paralleling the sea. Public access through this community does not currently exist. The nearest public access exists at 1000 Steps County Beach approximately one half mile upcoast of the site. 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 new 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.

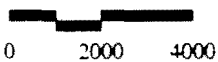


Source: FORMA.

6/9/97(LAB730)



Scale in Feet



0 2000 4000

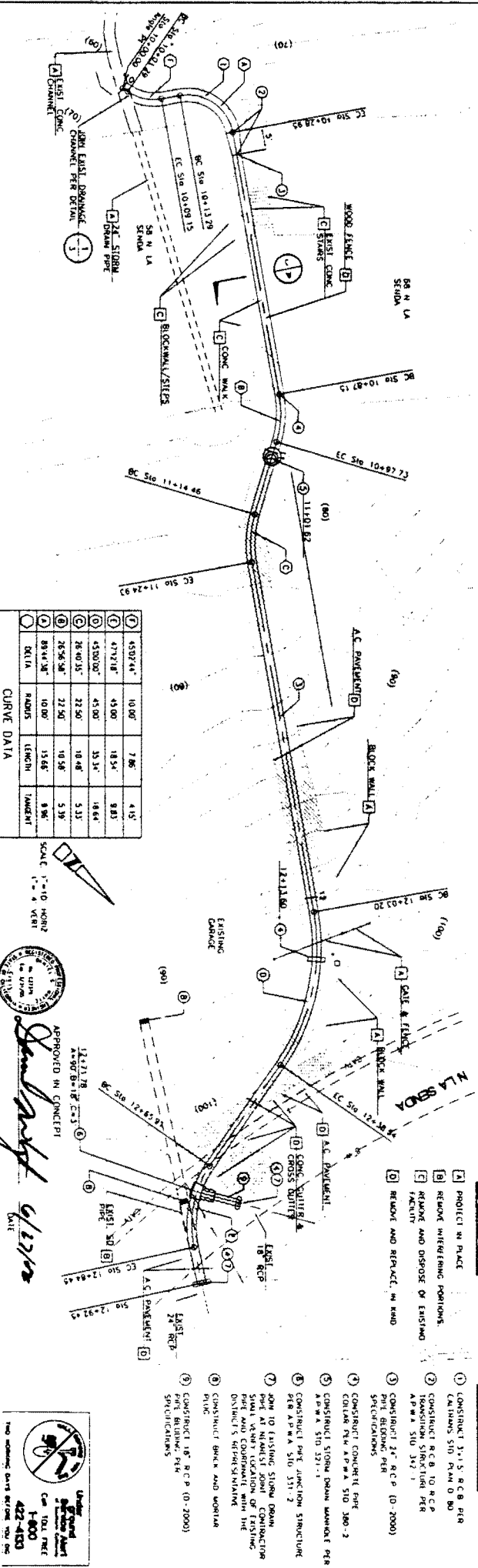
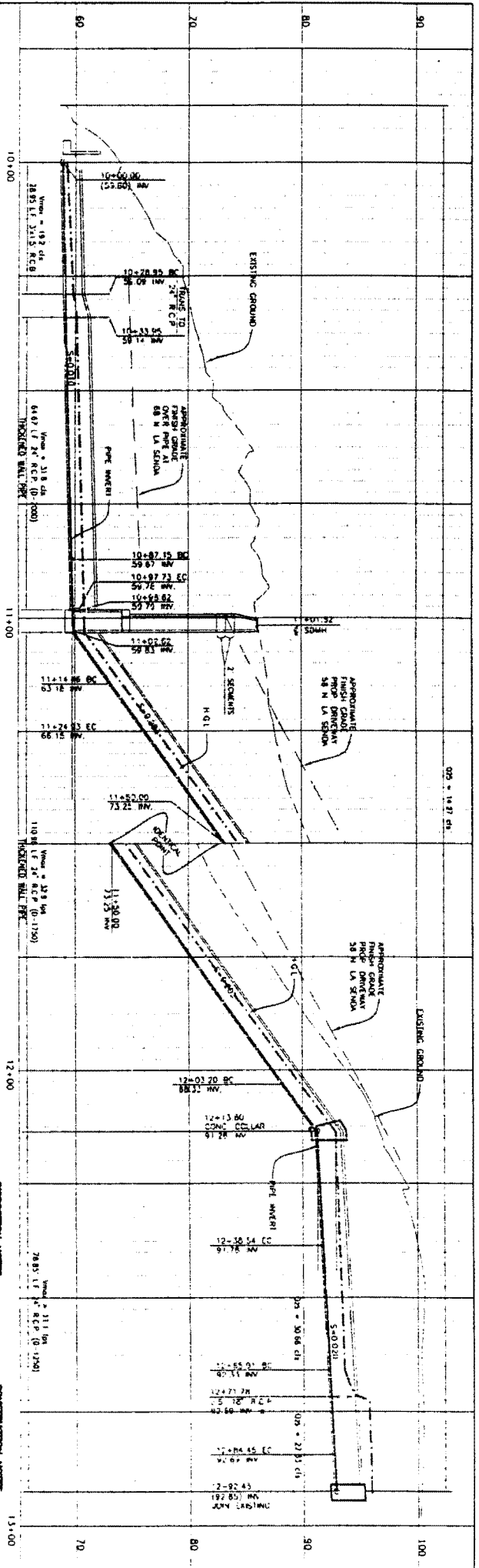
COASTAL COMMISSION  
5-02-218

EXHIBIT # A

PAGE 1 OF 1

Vicinity Map





**CURVE DATA**

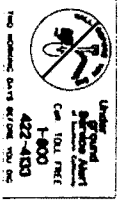
NO.	PC STA	PT STA	PI STA	LC (FEET)	EA (DEG)	RA (FEET)	TA (DEG)	CH (FEET)
1	4307+46	4307	4307	7.86	415			
2	4307+46	4307	4307	18.54	9.83			
3	4307+46	4307	4307	33.34	18.64			
4	4307+46	4307	4307	53.33	5.33			
5	26+96.38	22.50	18.48	10.56	5.33			
6	89+44	10.00	15.66	9.86				

SCALE: 1" = 10' HORIZ  
1" = 4' VERT



APPROVED IN CONCEPT  
 [Signature]  
 DATE: 6/17/18

- DESCRIPTION NOTES**
- PROJECT IN PLACE
  - REMOVE INTERFERING PORTIONS.
  - REMOVE AND DISPOSE OF EXISTING FACILITY
  - REMOVE AND RE-PLACE IN HAND
  - CONSTRUCT 3'-1" S. R.C.P. PER CALIFORNIA STD. PLAN D. 80
  - CONSTRUCT R.C.B. TO R.C.P. TRANSITION STRUCTURE PER A.P.M.A. STD. 317.1
  - CONSTRUCT 36" R.C.P. (D-2000) PIPE BEDDING PER SPECIFICATIONS
  - CONSTRUCT CONDUIT PIPE COLLAR PER A.P.M.A. STD. 300-2 A.P.M.A. STD. 317.1
  - CONSTRUCT PRE-JUNCTION STRUCTURE PER A.P.M.A. STD. 317.2
  - JOIN TO EXISTING STORM DRAIN PIPE AT NEAREST JOINT OF EXISTING DRAIN CONDUIT WITH THE DRAIN CONDUIT MANHOLE
  - CONSTRUCT BRK. AND WORTLA PLUG
  - CONSTRUCT 18" R.C.P. (D-2000) PIPE BEDDING PER SPECIFICATIONS



APPROVED FOR CONSTRUCTION  
 [Signature]  
 DATE: 6/17/18

**REVISIONS**

NO.	DATE	BY	DESCRIPTION

**REFERENCES**

NO.	DATE	BY	DESCRIPTION

**STORM DRAIN IMPROVEMENTS  
58/08 NORTH LA SENDA  
THREE ARCH BAY  
COMMUNITY SERVICES DISTRICT**

SCALE: 1" = 10' HORIZ  
1" = 4' VERT

DATE: 6/17/18

PROJECT NO.: 58/08-18-01

DESIGNED BY: J. G. [Signature]

CHECKED BY: J. G. [Signature]

DRAWN BY: J. G. [Signature]

DATE: 6/17/18

PROJECT NO.: 58/08-18-01

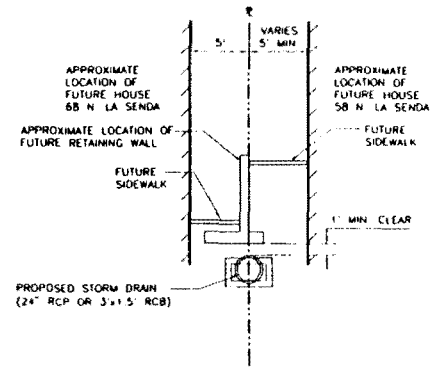
DESIGNED BY: J. G. [Signature]

CHECKED BY: J. G. [Signature]

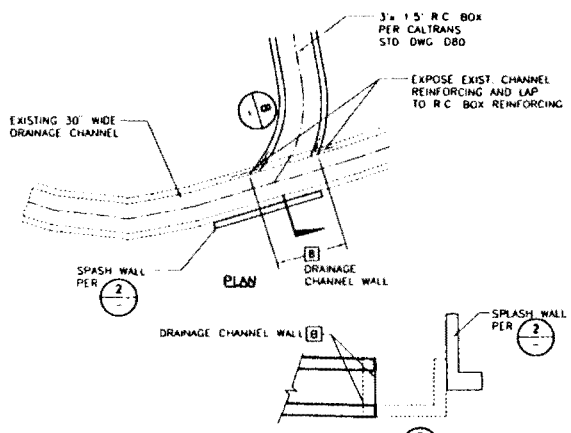
DRAWN BY: J. G. [Signature]

DATE: 6/17/18

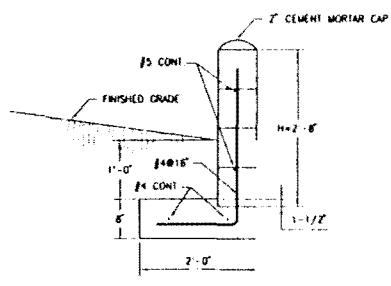
B33




**SECTION A**  
SCALE: NOT TO SCALE




**R.C. BOX / CHANNEL JOIN**  
SCALE: NOT TO SCALE



**SPLASH WALL**  
SCALE: NOT TO SCALE

APPROVED IN CONCEPT  

*James P. Holt*  
 DATE: 6/27/00

 Under Ground Service Alert  
 Call TOLL FREE 1-800-422-4333  
 TWO WORKING DAYS BEFORE YOU DIG

REVISIONS

NO.	DATE	DESCRIPTION	APPROVED BY	DATE

REFERENCES

NO.	REFERENCE

**SONUS ENGINEERING CORPORATION**  
 CONSULTING ENGINEERS & ARCHITECTS  
 1380 Blue Heron, P.O. Box 3630  
 Newport Beach, California 92660 949 / 779-3300

DATE: 6/19/00  
 BY: JF/OC  
 CHECKED: JF/OC  
 DRAWN: JF/OC

SCALE: AS SHOWN

FOR APPROVAL SEE SHEET NO. 1

STORM DRAIN IMPROVEMENTS  
**58/88 NORTH LA SENDA**

**THREE ARCH BAY**  
 COMMUNITY SERVICES DISTRICT

SHEET 1 OF 1  
 PLAN NUMBER



The solution to water pollution



United States

Applications

Construction

Maintenance

Removal

- Home
- United States
- Australia
- Inquiries
- News
- Papers
- Sewer
- Custom
- Dry Weather
- Clean Outs
- Which Unit?
- Eng & Design
- Construction

Click to Enter CDS Web Site

## Applications

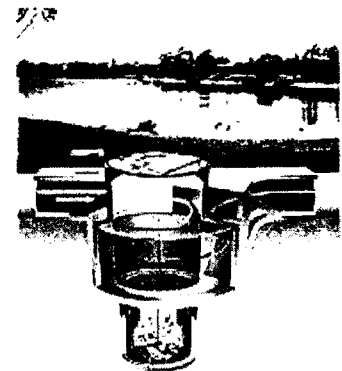
### Stormwater

CDS stormwater gross pollutant traps (GPTs) capture not only gross solid but also sediments considerably smaller than the screen aperture. This means that the GPT can effectively protect waterways from the entry of gross pollutants such as plastic, paper, leaves, cigarette butts, packaging syringes, etc., as well as from much of the sediment load that is transported by the water.

CDS Technologies offers several stormwater units that will treat a 1 to 30 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 custom design units to fit your specific application. Because of this adaptability, dry weather nuisance flows are effectively dealt with and maintenance and cleaning of CDS units are quickly and easily carried out.

There are many articles, papers and reports that have been written about the CDS technology. Visit [www.stormwater-resources.com](http://www.stormwater-resources.com) the website of "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

COASTAL COMMISSION

5-02-218

EXHIBIT # C

PAGE 1 OF 11