CALPINE

LOS ESTEROS CRITICAL ENERGY FACILITY
800 THOMAS FOON CHEW WAY
SAN JOSE, CALIFORNIA 95134

May 6, 2004

Mr. Lance Shaw
Compliance Project Manager
Los Esteros Critical Energy Facility (01-AFC-12)
California Energy Commission
1516 Ninth Street, (MS-15)
Sacramento, CA 95814

RE: Los Esteros Critical Energy Facility (LECEF)
Soils and Water Resources Compliance Data Request

Dear Mr. Shaw:

Transmitted herewith please find Calpine's response to the data request made on March 25, 2004. The initial request was made by Ms. Lorraine White.

Should you or Ms. White have any questions please don't hesitate to call me at (408) 592-7915.

Sincerely,
Calpine Corporation

Dana R. Petrin
Compliance Manager
South Bay Projects

Enclosures

Los Esteros Critical Energy Facility (Phase 1)
Compliance Data Requests

Technical Area: Soils and Water Resources
Author: M. Lorraine White

BACKGROUND

As required under Soil & Water-3, the project developer is required to submit specific information regarding the storm water outfall to Coyote Creek approximately 220 feet from the project site. For the temporary outfall installed in the high flow channel, the project did so. However, the permanent outfall is to be relocated to the edge of the low flow channel.

DATA REQUEST

1. Please submit all information required by Soil & Water-3 for the permanent storm water outfall in Coyote Creek located in the low flow channel.

   1. Attached

   2. & 3. Submitted NOI for storm water discharge and verified receipt by CPM

BACKGROUND

Soil & Water-4 requires, amongst other things, that the project owner submit all information/data necessary to satisfy the requirements of the Storm Water Discharge Permit issued by the Santa Clara Valley Water District for the outfall in Coyote Creek. The project developer obtained a permit from the Santa Clara Valley Water District for the temporary stormwater outfall in the high flow channel of Coyote Creek (issued July 30, 2002, Permit No. 02464). Additional permits were required for the construction and operation of the temporary storm water outfall in the high water channel of Coyote Creek for Phase 1.

DATA REQUEST

2. Please provide all federal and state permits approved for the construction and operation of the temporary outfall in Coyote Creek.

   Attached

3. Please submit all correspondence and or monitoring reports that demonstrate compliance with the general and special provisions contained in the Santa Clara Valley Water District Permit No. 02464, issued July 30, 2002. For ongoing compliance activities and restoration requirements, please submit a narrative of efforts by the project developer to comply with these requirements and a schedule for satisfying the remaining requirements (e.g., anticipated submittal and approval dates for plan(s) to restore the site that must be approved by the district).

   There are no ongoing compliance issues other than to comply with LORS which consist mainly of storm water discharge requirements, which we are in compliance with. Calpine is currently in the process of obtaining the necessary SCVWD Permit for construction of the permit outfall scheduled

for construction in the summer of 2005. Estimate time of receipt of this permit is 1st QTR of 2005.

4. Please provide all required information specified in Soil & Water 4 for the permanent storm water outfall to be constructed in the low flow channel.

   Required to be submitted "60 days prior to site mobilization". Construction not scheduled until summer 2005. I have attached the draft permit.

BACKGROUND

Soil & Water-6 requires the project owner to install metering devices and or utilize meters installed by the City of San Jose in order to record daily usage in gallons per day, monthly range, monthly average, and annual use. This usage summary is to be provided in the annual compliance report.
S & W 6 only requires recording on a monthly basis. The annual summary, which includes the monthly range, monthly daily average, and total water on a monthly and annual basis. I have included a spreedsheet.

DATA REQUEST

5. Please identify if the project owner installed meters or if they are utilizing meters installed by the City of San Jose. Please describe these meters, their capabilities and identify/show the location of these meters.

   They are City installed meters. They are standard water meters, read locally, that record in 1/10-acre increments. See drawing for location.

6. Please provide a summary of daily usage in gallons per day, monthly range, monthly average, and annual use for construction and since the start of operation for recycled water use.

   See attached.

BACKGROUND

The project owner currently has an Industrial Waste Discharge Permit (Soil & Water 8) for the Los Esteros Critical Energy Facility for 73,000 gallons per day (Permit No. SJ-488A, issued October 3, 2003. The permit requires semiannual monitoring. In the Data Adequacy Supplement, the project owner submitted the September 2003 Self-Monitoring Report.

DATA REQUEST

7. Please submit a copy of the March 2004 Self-Monitoring Report as soon as it is complete.

   Attached

Los Esteros Critical Energy Facility (Phase 1)
Compliance Data Requests

BACKGROUND

Soil & Water-9 required the project owner to submit evidence of submitting an accepted Engineer's Report for Title 22 Reclamation Requirements to the Department of Health Services for the Los Esteros Critical Energy Center.

DATA REQUEST

8. Please submit a copy of the accepted Report and all associated correspondence.

   Attached Title 22 Engineers report and previous submittal cover letter.

BACKGROUND

The project is currently operating under a Recycled Water Use Permit issued by the South Bay Water Recycling program.

DATA REQUEST

9. Please provide a complete copy of the permit.

   Attached

BACKGROUND

Phase 1 of the Los Esteros Critical Energy Center is complete and has been operating since March 2003.

DATA REQUEST

10. Please provide diagrams of all "as-built" conveyance, treatment and discharge features installed for Phase 1.

    Attached

11. Please provide a copy of the Notice for Termination for the General Permit for construction activity storm water discharges (Phase 1).

    Attached

California Regional Water Quality Control Board
San Francisco Bay Region

Terry Tamminen
Secretary for
Environmental
Protection

Internet Address: http://www.swrcb.ca.gov
1515 Clay Street, Suite 1400, Oakland, California 94612
Phone (510) 622-2300 • FAX (510) 622-2460

Arnold Schwarzenegger
Governor

Date: MAR 0 1 2004
File No: 2188.07 (bkw)
Site No: 02-43-C0457
ACOE File No: 26339S

BKW

Mr. Peter Hansen
Los Esteros Critical Energy Facility, LLC
6601 Koll Center Parkway
Pleasanton, CA 94566

Subject: Water Quality Certification for the Los Esteros Critical Energy Facility Permanent Storm Drain Outfall Project in the City of San Jose, County of Santa Clara

Dear Mr. Hansen:

We have reviewed the application materials submitted to the San Francisco Bay Regional Water Quality Control Board (Water Board) by Los Esteros Critical Energy Facility, LLC (the Applicant) and hereby issue water quality certification for the Applicant's project to construct a permanent stormwater outfall for the Los Esteros Critical Energy Facility, in the City of San Jose in the County of Santa Clara (Project). On December 2, 2003, you received authorization for the Project from the United States Army Corps of Engineers (ACOE) under Clean Water Act (CWA) Section 404 Nationwide Permit No. 7 (*Outfall Structures and Maintenance*) and Nationwide Permit No. 33 (*Temporary Construction Access and Dewatering*). You have applied to the Water Board for Clean Water Act Section 401 water quality certification that the project will not violate State water quality standards.

Project Description: The following Project description was derived from application materials received on August 28, 2003. The project is located along the west bank of Coyote Creek, 0.3 miles north of Highway 237 in the County of Santa Clara. The Applicant operates a natural-gas-fired generating facility in the north service area of the City of San Jose that is known as the Los Esteros Critical Energy Facility (LECEF). To manage stormwater flows from LECEF, the Applicant constructed a temporary stormwater outfall in the high flow channel of Coyote Creek, approximately 220 feet from the low-flow channel of the Creek, in 2002. The current project will replace the temporary outfall with permanent outfall to the low flow channel of Coyote Creek.

The existing 24-inch diameter storm drain culvert discharges on the east (river) side of a Santa Clara Valley Water District (SCVWD) flood control levee, onto a 60-foot by 20-foot concrete pad, with a border of rip rap over geotextile fabric. The permanent outfall will tie into the existing 24-inch diameter pipe on the west side of the SCVWD levee. Jack and bore installation methods will be used to install a new 48-inch diameter reinforced concrete pipe beneath the levee and the ground surface, to within about 50 feet of the low flow channel of Coyote Creek. The remaining distance to the outfall structure will be constructed using open trench methods. Construction of the permanent outfall will require removal of about 10 cubic yards (cy) of rock slope protection from the left bank of Coyote Creek. New, grouted rock slope protection material, placed over new geotextile fabric, will be added after the outfall has been installed. A temporary cofferdam will be constructed around the outfall to dewater the construction area.

Impacts: The *San Francisco Bay Basin Water Quality Control Plan* (Basin Plan) defines the beneficial uses of waters of the State. The Project is located within the banks of Coyote Creek, which has existing

and potential beneficial uses of: cold freshwater habitat, fish migration, preservation of rare and endangered species, contact and non-contact water recreation, fish spawning, warm freshwater habitat, and wildlife habitat. In addition, Coyote Creek is designated as critical habitat for a federally listed population of threatened Central California Coast Steelhead (Final Rule, Federal Register Vol. 65, No. 32, February 16, 2000).

Permanent impacts associated with the construction of the permanent outfall are limited to removal and replacement of about 10 cubic yards (cy) of rock slope protection from the left bank of Coyote Creek, impacting an area of about 0.006 acres (260 square feet), along 16 linear feet of the creek bank. Temporary impacts will be associated with the placement of a cofferdam over about 0.005 acres of Coyote Creek. The cofferdam will be constructed of about 23 cy of river run gravel, sheet piles, inflatable dams, and/or sand bags.

Mitigation: Mitigation for permanent impacts will not be required because the rock slope protection for the outfall will be placed in an area of existing rock slope protection in the bank of Coyote Creek. All disturbed riparian vegetation will be restored to pre-construction conditions and any trees removed from the banks of the creek will be replaced at 3:1 ratio.

CEQA Compliance: LECEF is under the jurisdiction of the California Energy Commission (CEC) (Pub. Res. Code Section 25500 et seq.). During licensing proceedings, the CEC acts as the lead State agency under the California Environmental Quality Act (CEQA) (Pub. Res. Code Section 25519(c), Section 21000 et seq.). The CEC's licensing review process and the associated documents are functionally equivalent to the preparation of an Environmental Impact Report under CEQA (Pub. Res. Code Section 21080.5). The CEC approved the Applicant's Application for Certification on July 2, 2002.

Certification and General Waste Discharge Requirements: I hereby issue an order certifying that any discharge from the referenced Project will comply with the applicable provisions of sections 301 (Effluent Limitations), 302 (Water Quality Related Effluent Limitations), 303 (Water Quality Standards and Implementation Plans), 306 (National Standards of Performance), and 307 (Toxic and Pretreatment Effluent Standards) of the Clean Water Act, and with other applicable requirements of State law. This discharge is also regulated under State Water Resources Control Board Order No. 2003 - 0017 - DWQ, "General Waste Discharge Requirements for Dredge and Fill Discharges That Have Received State Water Quality Certification" which requires compliance with all conditions of this Water Quality Certification. The following conditions are associated with this certification:

1. No debris, rubbish, creosote-treated wood, soil, silt, sand, cement, concrete, or washings thereof, or other construction related materials or wastes, oil or petroleum products or other organic or earthen material shall be allowed to enter into, or be placed where it may be washed by rainfall or runoff into Coyote Creek. Any of these materials placed within or where they may enter Coyote Creek by the Applicant or any party working under contract, or with the permission of the Applicant shall be removed immediately. When operations are completed, any excess material shall be removed from the work area and any areas adjacent to the work area where such material may be washed into Coyote Creek. During construction, the contractor shall not dump any litter or construction debris within the riparian/stream zone. All such debris and waste shall be picked up daily and properly disposed of at an appropriate site;
2. The Applicant shall adhere to the conditions of the Section 1601 Lake and Streambed Alteration Agreement (Notification Number 1600-2003-5071-3), issued by the California Department of

Fish and Game (CDFG); to avoid impacts to Chinook salmon and Central California Coast Steelhead, construction will be restricted to the dry season, as specified in the Lake and Streambed Alteration Agreement, or to any extension of the work period that is authorized by CDFG;

3. All work shall be done according to the plans, prepared by CH2MHill and dated March 25, 2003, submitted to the Water Board with the application for water quality certification on August 28, 2003;
4. No equipment shall be operated in areas of flowing or standing water; no fueling, cleaning, or maintenance of vehicles or equipment shall take place within any areas where an accidental discharge to Coyote Creek may occur; construction materials and heavy equipment must be stored outside of the ordinary high water mark;
5. This certification action is subject to modification or revocation upon administrative or judicial review, including review and amendment pursuant to Section 13330 of the California Water Code (CWC) and Section 3867 of Title 23 of the California Code of Regulations (23 CCR);
6. This certification action is not intended and shall not be construed to apply to any discharge from any activity involving a hydroelectric facility requiring a Federal Energy Regulatory Commission (FERC) license or an amendment to a FERC license unless the pertinent certification application was filed pursuant to 23 CCR Subsection 3855(b) and that application specifically identified that a FERC license or amendment to a FERC license for a hydroelectric facility was being sought; and,
7. Certification is conditioned upon total payment of the full fee required in State regulations (23 CCR Section 3833) and owed by the applicant. The fee for the proposed project is $601.50, which has been paid in full.

Please be aware that any violation of water quality certification conditions is a violation of State law and subject to administrative civil liability pursuant to California Water Code (CWC) Section 13350. Failure to respond, inadequate response, late response, or failure to meet any condition of a certification may subject the Applicant to civil liability imposed by the Water Board to a maximum of $1,000 per day of violation or $10 for each gallon of waste discharged in violation of this action. Any request for a report made as a condition to this action is a formal request pursuant to CWC Section 13267, and failure or refusal to provide, or falsification of such requested report is subject to civil liability as described in CWC Section 13268. We anticipate no further action on this request. However, should new information come to our attention that indicates a water quality problem with this Project, the Water Board may issue Waste Discharge Requirements.

Please contact Brian Wines of my staff at (510) 622-5680 or bkw@rb2.swrcb.ca.gov if you have any questions. All future correspondence regarding this Project should reference the Site Number indicated at the top of this letter.

Sincerely,

Bruce H. Wolfe
Executive Officer

cc: SWRCB-DWQ, Oscar Balaguer
USACE, San Francisco District, Attn: Regulatory Branch, 333 Market Street, San Francisco, CA 94105 –2197 (file number 26339S)
CDFG, Central Coast Region, Attn: Robert Floerke, Regional Manager, P.O. Box 47, Yountville CA 94599 (Notification Number 1600-2003-5071-3)
Santa Clara Valley Water Control District, Attn: Sue Tippets, Community Projects Review Unit 5750 Almaden Expressway, San Jose, Ca 95118-3686
U.S. EPA, Tim Vendlinski, WTR-8.

(V)-1

STATE OF CALIFORNIA THE RESOURCES AGENCY GRAY DAVIS, GOVERNOR
DEPARTMENT OF FISH AND GAME
CENTRAL COAST REGION
(707) 944-5520
Mailing address:
[redacted]ST OFFICE BOX 47
[redacted]UNTVILLE CALIFORNIA 94599
Street address:
7329 SILVERADO TRAIL
NAPA CALIFORNIA 94558

October 29, 2003

Notification Number: 1600-2003-5071-3

Peter Hansen / Calpine Corporation
805 South West Broadway, Suite 1850
Portland, OR 97205

1603 LAKE AND STREAMBED ALTERATION AGREEMENT

This agreement is issued by the Department of Fish and Game pursuant to Division 2, Chapter 6 of the California Fish and Game Code:

WHEREAS, the applicant Peter Hansen / Calpine Corporation, hereafter called the Operator, submitted a signed NOTIFICATION proposing to substantially divert or obstruct the natural flow of, or substantially change the bed, channel, or bank of, or use material from the streambed or lake of the following water: Coyote Creek, located about 1,400 feet north of Alviso-Milpitas Road in the City of San Jose, in the County of Santa Clara, State of California; and

WHEREAS, the Department has determined that such operations may substantially adversely affect existing fish and wildlife resources including water quality, hydrology, aquatic or terrestrial plant or animal species; and

WHEREAS, the project has undergone the appropriate review under the California Environmental Quality Act; and

WHEREAS, the Operator shall undertake the project as proposed in the signed PROJECT DESCRIPTION and PROJECT CONDITIONS (attached). If the Operator changes the project from that described in the PROJECT DESCRIPTION and does not include the PROJECT CONDITIONS, this agreement is no longer valid; and

WHEREAS, the agreement shall expire on December 31, 2004; with the work to occur between June 15 and October 15; and

WHEREAS, nothing in this agreement authorizes the Operator to trespass on any land or property, nor does it relieve the Operator of the responsibility for compliance with applicable Federal, State, or local laws or ordinances. Placement, or removal, of any material below the level of ordinary high water may come under the jurisdiction of the U. S. Army Corps of Engineers pursuant to Section 404 of the Clean Water Act;

THEREFORE, the Operator may proceed with the project as described in the PROJECT DESCRIPTION and PROJECT CONDITIONS. A copy of this agreement, with attached PROJECT DESCRIPTION and PROJECT CONDITIONS, shall be provided to contractors and subcontractors and shall be in their possession at the work site.

Failure to comply with all conditions of this agreement may result in legal action.

This agreement is approved by:

Jeni Swanson for

Robert W. Floerke
Regional Manager
Central Coast Region

[redacted]c: Warden. Sinclair
Kristine Atkinson

STATE OF CALIFORNIA THE RESOURCES AGENCY GRAY DAVIS, GOVERNOR
DEPARTMENT OF FISH AND GAME
CENTRAL COAST REGION
(707) 944-5520
Mailing address:
POST OFFICE BOX 47
YOUNTVILLE, CALIFORNIA 94599
Street address:
7329 SILVERADO TRAIL
NAPA, CALIFORNIA 94558

Notification Number: 1600-2003-5071-3
Coyote Creek, Santa Clara County

Peter Hansen / Calpine Corporation
805 SW Broadway, Suite 1850
Portland, OR 92705

PROJECT DESCRIPTION and PROJECT CONDITIONS

Description
The project is located on Coyote Creek approximately 1,400 feet north of Alviso-Milpitas Road on the western levee in the City of Milpitas in Santa Clara County. The project includes the installation of a permanent outfall into Coyote Creek for the Los Esteros Critical Energy Facility (LECEF). A temporary outfall discharging into the high flow channel is currently being used. The proposed permanent stormwater outfall will tie into the existing 24-inch force main outside (west) of the levee and will continue through an underground pipe to the edge of Coyote Creek's low-flow channel where the discharge stormwater outfall will be constructed.

The proposed project will replace the existing, temporary stormwater outfall by removing the overland flow component. The upgraded stormwater outfall will accommodate increased flows from the LECEF site without significant degradation of surface water quality of Coyote Creek. Jack and bore techniques along with open trenching will be used.

A temporary coffer dam will be installed around the proposed outfall location to dewater the construction site during construction.

Conditions
1. Work within the stream/riparian corridor shall be confined to the period June 15 to October 15. Revegetation work is not confined to this time period.

2. Nothing in this agreement authorizes the Operator to trespass on any land or property, nor does it relieve the Operator of the responsibility for compliance with applicable Federal, State, or local laws or ordinances. Placement, or removal, of any material below the level of ordinary high water may come under the jurisdiction of the U. S. Army Corps of Engineers pursuant to Section 404 of the Clean Water Act.

3. The disturbance or removal of vegetation shall not exceed the minimum necessary to complete operations. Precautions shall be taken to avoid other damage to vegetation by

people or equipment. The disturbed portions of the stream channel within the normal high-water mark of the stream shall be restored to as near their original condition as possible.

4. Vegetated areas shall be cleared using mowers, pruners, brush saws, or other hand tools. No bulldozer/backhoe type equipment shall be used to remove vegetation. No trees with trunks in excess of 4-inches in diameter at breast height (DBH) shall be removed.

5. The operator shall avoid (or at the very least, minimize) the removal of all trees and the disturbance to their root systems. Potentially impacted trees shall be monitored for a period of five (5) years and replaced with native trees which are suitable ecologically to the project area. For each native tree that is removed or disturbed, trees shall be replaced on-site with a minimum 3:1 ratio (replacement: loss). For each non-native tree that is removed or disturbed, trees shall be replaced on-site with a minimum 1:1 ratio (replacement: loss).

6. Disturbed areas shall be protected with correctly installed erosion control measures (jute, straw, coconut fiber erosion control fabric, coir logs, straw), and revegetated with propagules (seeds, cuttings, divisions) of locally collected native plants.

7. Work must be performed in isolation from the flowing stream. If there is any flow when the work is done, the operator shall construct a sediment barrier parallel to the bank and just outside the project area. The sediment barrier shall be an impervious sheeting or very tight mesh filter fabric well-anchored to the bottom of the stream and reaching above water level sufficiently high to contain the roiled water along the bank. The sediment barrier shall be tied into the bank upstream and downstream of the work site to isolate the work site from the flowing stream.

8. The operator shall hire a biologist, with all necessary State and Federal permits, to relocate all fish/amphibians within the work site prior to dewatering. Captured fish/amphibians shall be moved to the nearest appropriate site on the stream. A record shall be maintained of all fish/amphibians captured and moved, and the record shall be provided to the Department (c/o1600 program, Post Office Box 47, Yountville, California 94599) with appropriate Streambed Alteration Notification number.

9. Access to the work site shall be via existing roads and access ramps.

10. Streambank areas receiving rock slope protection (rip rap) shall be back-filled with appropriate topsoil. The topsoil fill should be placed to fill the voids in the rock slope protection and provide a substrate for revegetation efforts.

11. Rip rap will be set below grade and keyed into the bank. Rip rap rock shall be of the proper size and weight to withstand high flows.

12. Silt control measures shall be utilized throughout all phases of the project where silt

and/or earthen fill threaten to enter Waters of the State. Silt control structures shall be monitored for effectiveness and shall be repaired or replaced as needed. Build up of soil behind the fence shall be removed promptly and any breaches or undermined areas repaired at once.

13. All exposed/disturbed areas within the project site shall be stabilized to the greatest extent possible. Erosion control measures, such as, silt fences, straw hay bales, gravel or rock lined ditches, water check bars, and broadcasted straw shall be used where ever silt laden water has the potential to leave the work site and enter State waters. Erosion control measures shall be monitored during and after each storm event. Modifications, repairs and improvements to erosion control measures shall be made whenever it is needed.

14. Passage of sediment beyond the sediment barrier is prohibited. If the sediment barrier fails to retain sediment, corrective measures shall be employed, and the Department notified, immediately.

15. All concrete surfaces, which will be ultimately exposed to surface water flow shall be sufficiently cured (30-60 days), or sealed with appropriate concrete sealer, prior to inundation to avoid leaching of lime into the receiving water. Compliance with this condition shall be demonstrated when the pH of applied water on the surface of exposed concrete is 9.5 pH units or less.

16. At the end of each work day, an escape ramp shall be placed at each end of the open trench to allow any animals that may have become entrapped in the trench to climb out overnight. The ramp may be constructed of either dirt fill or wood planking or other suitable material that is placed at an angle no greater than 30 degrees.

17. If vegetation removal will occur between February 15 and July 31 a qualified biologist shall conduct pre-construction surveys for nesting birds no more than two weeks prior to construction. If nesting birds are found a 50-foot radius buffer should be established around the nest, a 300-foot radius buffer in the case of hawks and owls. The area should be fenced and avoided until the young have fledged, as determined by a qualified biologist.

18. If the Operator needs more time to complete the authorized activity, the work period may be extended on a day-to-day basis by Marcia Grefsrud at (707)944-5559, or the Yountville office at (707) 944-5520.

19. A copy of this agreement must be provided to the contractor and all subcontractors who work within the stream zone and must be in their possession at the work site.

20. Building materials and/or construction equipment shall not be stockpiled or stored where they could be washed into the water or where they will cover aquatic or riparian vegetation.

21. Debris, soil, silt, bark, rubbish, creosote-treated wood, raw cement/concrete or washings thereof, asphalt, paint or other coating material, oil or other petroleum products, or any other substances which could be hazardous to aquatic life, resulting from project related activities, shall be prevented from contaminating the soil and/or entering the waters of the state. Any of these materials, placed within or where they may enter a stream or lake, by Operator or any party working under contract, or with the permission of the Operator, shall be removed immediately.

22. The contractor shall not dump any litter or construction debris within the riparian/stream zone. All such debris and waste shall be picked up daily and properly disposed of at an appropriate site.

23. Department personnel or its agents may inspect the work site at any time.

24. The Operator is liable for compliance with the terms of this Agreement, including violations committed by the contractors and/or subcontractors. The Department reserves the right to suspend construction activity described in this Agreement if the Department determines any of the following has occurred:
    A). Failure to comply with any of the conditions of this Agreement
    B). Information provided in support of the Agreement is determined by the Department to be inaccurate.
    C). Information becomes available to the Department that was not known when preparing the original conditions of this Agreement (including, but not limited to, the occurrence of State or federally listed species in the area or risk to resources not previously observed)
    D).The project as described in the Agreement has changed or conditions affecting fish and wildlife resources change.

Any violation of the terms of this Agreement may result in the project being stopped, a citation being issued, or charges being filed with the District Attorney. Contractors and subcontractors may also be liable for violating the conditions of this agreement.

Amendments and Renewals

The Operator shall notify the Department before any modifications are made in the project plans submitted to the Department. Project modifications may require an amendment or a new notification.

This Agreement is transferable to subsequent owners of the project property by requesting an amendment.

To renew the Agreement beyond the expiration date, a written request for a renewal must be submitted to the Department (1600 Program, Post Office Box 47, Yountville, California 94599) for consideration at least 30 days before the Agreement expiration date. A renewal requires a fee. The Fee Schedule can be obtained at www.dfg.ca.gov/1600 or by phone at (707) 944-5520. Renewals of the original Agreement are issued at the discretion of the Department.

To modify the project, a written request for an amendment must be submitted to the Department (1600 Program, Post Office Box 47, Yountville, California 94599). The fee for an amendment is one-half (½) of the original fee. Amendments to the original Agreement are issued at the discretion of the Department.

Please note that you may not proceed with construction until your proposed project has undergone CEQA review and the Department signs the Agreement.

I, the undersigned, state that the above is the final description of the project I am submitting to the Department for CEQA review, leading to an Agreement, and agree to implement the conditions above required by the Department as part of that project. I will not proceed with this project until the Department signs the Agreement. I also understand that the CEQA review may result in the addition of measures to the project to avoid, minimize, or compensate for significant environmental impacts:

Operator's name (print): Peter Hansen

Operator's signature: Peter V. Hansen

Signed the 10th **day of** September **, 2003**

For Department Use Only					
Notification Number		Date Received:		Date Completed:	
Fees Enclosed	☐ Yes $ ----------		☐ No $ ----------		
[redacted]tion Taken/Notes					

1600-2003-5071-3
cx rec'd 8-14-03

#362009
$772.75
Calpine Corp.

STATE OF CALIFORNIA
THE RESOURCES AGENCY
DEPARTMENT OF FISH AND GAME

NOTIFICATION OF LAKE OR STREAMBED ALTERATION
(See attachment/enclosure for instructions)

Baldwin
Atkinson

Notification Type		
☐ 1601 (Public)	☐ Timber Harvest Plan	(No. ----------)
☒ 1603 (Private)	☐ Commercial Gravel Extraction	(No. ----------)
	☐ Water Application	(No. ----------)

Application Information			
	Name	Address	Telephone/Fax
Applicant:	Peter Hansen/Rick Tetzloff	805 SW Broadway, Suite 1850 Portland, OR 97205	Business: (503) 552-3781 Fax: (503) 223-7400
Operator:	Los Esteros Critical Energy Facility, LLC	Same as above	Business: Fax:
[redacted]ntractor: (If not applicant)	Not known at this point	-----	Business: Fax:
Contractor Person: (If not applicant)			Business: Fax:
Property Owner:	Santa Clara Valley Water District	5750 Almaden Expressway San Jose, CA 95118	Business: (408) 265-2600 Fax:: (408) 266-9751

Project Location					
Location Description:	The proposed stormwater outfall is located within the western SCVWD levee about 1,400 ft north of the Alviso. Milpitas Road				
County			Assessor's Parcel Number		
Santa Clara County, California			15-31-002 (LECEF site); 15-31-055		
USGS Map	Township	Range	Section	Latitude/Longitude	
Milpitas Quadrangle	6 S	1 W	22	37° 25′ 38″ N / 121° 55′ 35″ W	
Name of River, Stream, or Lake:	Coyote Creek				
Tributary To?	San Francisco Bay				

[redacted]

NOTIFICATION OF LAKE OR STREAMBED ALTERATION
(Continued)

ame of Applicant: Rick Tetzloff, Calpine

Project Description							
[redacted]ct Name:	Permanent Stormwater outfall, Los Esteros Critical Energy Facility						
Proposed Start Date:	6/15/2004	Proposed Completion Date:	10/30/2004	Project Cost:	$ 240,000	Number of Stream Encroachments: *(Timber Harvest Plans Only)*	

Describe project below: *(Attach separate pages if necessary)*

See attached

☒ Continued on separate page(s)

Attachments/Enclosures		
Attach or enclose the required documents listed below and check the corresponding boxes.		
[redacted]roject description	☒ Map showing project location, including distances and/or directions from nearest city or town	☒ Construction plans and drawings pertaining to the project

Attach or enclose the documents listed below, if complete, and check the corresponding boxes.

Completed CEQA-documents:	☐ Negative Declaration ☐ Mitigated Negative Declaration	☐ Environmental Impact Report ☒ Application for Certification [CEC functional equivalent of EIR]	☐ Notice of Exemption ☐ Notice of Determination
Copies of applicable local, State, or federal permits, agreements, or other authorizations:	☒ Local, Describe: Santa Clara Valley Water District encroachment permit		
	☒ State. Describe: Application for Certification, California Energy Commission (01-AFC-12)		
	☒ Federal. Describe: Nationwide Permits (NWP 7 and NWP 33) in process		

I hereby certify that all information contained in this notification is true and correct and that I am authorized to sign this document. I understand that in the Event this information is found to be untrue or incorrect, I may be subject to civil or criminal prosecution and the Department may consider this notification to be incomplete and/or cancel any Lake or Streambed Alteration Agreement issued pursuant to this notification. I understand that this notification is valid only for the project described herein and that I may be subject to civil or criminal prosecution for undertaking a project that differs from the one described herein, unless I have notified the Department of the project in accordance with section 1601 or 1603 of the Fish and Game Code.

I understand that a department representative may need to inspect the property where the project described herein will take place before issuing a Lake or Streambed Alteration Agreement pursuant to this notification. In the event the Department determines that a site inspection is necessary, I hereby authorize the Department to enter the property where the project described herein will take place to inspect the property at any reasonable time and certify that I am authorized to grant the Department permission to access the property.

~ *I request the Department to first contact me at (insert telephone number) (510) 587-7774 to schedule a date and time to enter the property where the project described herein will take place and understand that this may delay the Department's evaluation of the project described herein.*

[redacted] (Rene Langis)

Operator or Operator's Representative — Date

Attachment for California DFG Form FG2023

Permanent Stormwater Outfall
Los Esteros Critical Energy Facility (LECEF)

Project Description

Objective

The objective of the proposed project is to construct a permanent stormwater outfall structure into Coyote Creek for the Los Esteros Critical Energy Facility (LECEF) in north San Jose (Figure 1). An existing 24-inch diameter (inside pipe) force main and temporary stormwater outfall currently discharges into Coyote Creek through the western Santa Clara Valley Water District (SCVWD) levee that confines Coyote Creek in the project area. The existing stormwater flow reaches Coyote Creek waters after discharging to the high flow channel on the inside of the levee. The temporary outfall has been permitted by SCVWD for a period not to exceed 36-months. The proposed permanent stormwater outfall would tie into the existing 24-inch force main outside (west) of the levee and would continue through an underground pipe to the edge of Coyote Creek's low-flow channel where the discharge stormwater outfall would be constructed.

The proposed project would replace the existing, temporary stormwater outfall by removing the overland flow component. The upgraded stormwater outfall would accommodate increased flows from the LECEF site without significant degradation of surface water quality in Coyote Creek. The overland flow component of the existing stormwater discharge would be replaced with a subsurface pipe that would carry the stormwater to an outfall at the western edge of the Coyote Creek low flow channel. Using jack and bore techniques to install the pipeline beneath the protective clay, will also help to preserve the integrity of the layer.

Project Location

The LECEF site is located in the northern portion of the City of San Jose, California at 1515 Alviso-Milpitas Road (See Figure 2). The site is on the north side of State Route 237. Coyote Creek and it's associated flood control channel are located east of the LECEF site. The channel is confined by SCVWD levees on the east and west sides of Coyote Creek.

The LECEF parcel is located on the San Jose West 7.5-minute Series Quadrangle in Township 6 South, Range 1 West. The proposed stormwater outfall location will be approximately 300 feet east of the existing stormwater outfall junction box located about 1,400 feet north of Alviso-Milpitas Road on the west side of the SCVWD levee (Figure 3).

Proposed Activity

The proposed activity is to construct a permanent stormwater outfall for the LECEF facility. The new stormwater outfall would be installed within the levee immediately adjacent on the north side of an existing outfall structure. The existing outfall structure has a low-flow flap gate on the east side of the levee. A new outfall is needed to provide permanent outfall capacity for LECEF and vicinity stormwater drainage and to meet the long-term stormwater discharge requirements of the Los Esteros project.

The proposed stormwater outfall would tie into the existing 24-inch diameter (inside) pipe on the west side of the Santa Clara Valley Water District (SCVWD) levee. A 'jack and bore' installation method will be used to install a new 48-inch reinforced concrete pipe(RCP) beneath the SCVWD levee and the ground surface between Stations 1+22.00 and 3+70.00 (a distance of 248 feet) as shown on Figure 4. The remaining distance to the proposed outfall structure (Station 3+70.00 to 4+20.00± or approximately 50 feet) would be constructed using open trench methods.

The stormwater outfall structure would be constructed above and below the Ordinary High Water (OHW) associated with Coyote Creek as shown on Figure 5. The existing rock slope protection and geotextile materials would be removed prior to installation of the new structure while the surrounding areas are protected. New rock slope protection materials will be added once the outfall structure has been installed. The new materials will be matched in size and grade to the existing rock slope protection materials surrounding the outfall.

The proposed construction activities would be conducted during the summer months (after June 15) when flows in the Coyote Creek are expected to be low. Construction vehicles will be kept outside of the OHW mark for Coyote Creek. A temporary cofferdam will be installed around the proposed outfall location to dewater the construction site during construction. This will permit installation of new geotextile and grouted rock slope protection materials around the new outfall pipe. The cofferdam will also be used to allow the continued flow of Coyote Creek waters around the proposed work area and to keep the waters of Coyote Creek from contacting uncured grout during construction. The cofferdam will be removed after the outfall construction is complete. The Contractor will be responsible for providing information on the design, operation, dewatering, and removal of the cofferdam as part of the Storm Water Pollution Prevention Plan (SWPPP) to be submitted prior to construction activities.

The construction vehicles will access the outfall location from the SCVWD access road from within the same corridor that will be used for pipeline installation. A pre-construction survey of the proposed access route and work site will be completed by a biological construction monitor 24 to 48 hours prior to startup of clearing activities. The vegetation within the access areas will be cleared using hand-held power tools (e.g., machetes and weed wackers) rather than using vehicle-mounted tools to help minimize potential disturbance to sensitive resources. Once the access route and work area have been cleared, then Environmentally Sensitive Area (ESA) fencing will be installed and keyed into the ground to isolate the work areas and access route from surrounding natural areas. Existing trees within this construction corridor will also be protected from construction activities.

(1) -1

DEPARTMENT OF THE ARMY
SAN FRANCISCO DISTRICT, U.S. ARMY CORPS OF ENGINEERS
333 MARKET STREET
SAN FRANCISCO, CALIFORNIA 94105-2197

DEC 02 2003

Regulatory Branch

SUBJECT: File Number 26339S

Mr. Peter Hansen
CALPINE c* Power
6601 Koll Center Parkway
Pleasanton, California 94566

Dear Mr. Hansen:

This letter is in reference to your submittal of June 16, 2003, concerning Department of the Army authorization to construct a permanent stormwater outfall structure in Coyote Creek for the Los Esteros Critical Energy Facility (LECEF), east of 1515 Alviso-Milpitas Road, in the City of San Jose, Santa Clara County, California.

Based on a review of the information you submitted, your project qualifies for authorization under Department of the Army Nationwide Permits 7 – *Outfall Structures and Maintenance* and 33 – *Temporary Construction, Access, and Dewatering* (67 FR 2020, January 15, 2002), pursuant to Section 404 of the Clean Water Act (33 U.S.C. 1344). See Enclosure 1.

The project consists of removing approximately 10 cubic yards of rock slope protection, which will be replaced with the outfall pipe and similar rock slope protection materials to restore the same stream bank profile. Approximately 0.006 acre of waters of the U.S. will be disturbed during construction. A temporary cofferdam will be constructed to dewater the project site and allow the continued flow of Coyote Creek waters around the work area and to keep the waters of Coyote Creek from contacting uncured grout during construction. The cofferdam will be removed after the outfall construction is complete. All work shall be completed in accordance with the attached plans and drawings titled Los Esteros Critical Energy Facility Permanent Storm Drainage Outfall, dated March 23, 2003.

The project must be in compliance with the General Conditions cited in Enclosure 2 for this Nationwide Permit authorization to remain valid. Upon completion of the project and all associated mitigation requirements, you shall sign and return the Certification of Compliance, Enclosure 3, verifying that you have complied with the terms and conditions of the permit. Non-compliance with any condition could result in the revocation, suspension or modification of the authorization for your project, thereby requiring you to obtain an individual permit from the Corps. This Nationwide Permit authorization does not obviate the need to obtain other State or local approvals required by law.

This authorization will remain valid for two years from the date of this letter unless the Nationwide Permit is modified, suspended or revoked. If you have commenced work or are under contract to commence work prior to the suspension, or revocation of the Nationwide Permit and the project would not comply with the resulting Nationwide Permit authorization, you have twelve (12) months from that date to complete the project under the present terms and conditions of the Nationwide Permit.

This authorization will not be effective until you have obtained a Section 401 water quality certification from the San Francisco Bay Regional Water Quality Control Board (RWQCB). If the RWQCB fails to act on a valid request for certification within two (2) months after receipt of a complete application, the Corps will presume a waiver of water quality certification has been obtained. You shall submit a copy of the certification to the Corps prior to the commencement of work.

To ensure compliance with the Nationwide Permit, the following special conditions shall be implemented:

1. All debris, fill and excess material generated as a result of the authorized work shall be removed from the site and disposed of in a location outside of Corps jurisdiction.

2. Construction activities will be conducted between June 15 and October 15 when flow in Coyote Creek is expected to be low.

3. Flow through the active creek channel will not be impeded at any time.

4. All disturbed riparian vegetation will be restored to pre-construction condition, and trees that are removed along the banks will be replaced at a 3 to 1 ratio.

5. Erosion and sediment control Best Management Practices, including the use of clean fill, will be appropriately implemented.

6. Construction vehicles will be kept above the Ordinary High Water Mark of Coyote Creek.

7. Construction vehicles will access the outfall location from the SCVWD access road from within the same corridor that will be used for pipeline installation.

8. Environmentally Sensitive Area fencing will be installed and keyed into the ground to isolate the work areas and access route from the surrounding natural areas.

9. Existing trees within the construction corridor will be protected from construction activities.

Should you have any questions regarding this matter, please call Holly Costa of our Regulatory Branch at 415-977-8438. Please address all correspondence to the Regulatory Branch and refer to the File Number at the head of this letter. If you would like to provide comments on our permit review process, please complete the Customer Survey Form available through the Forms and Contacts Block on our website: www.spn.usace.army.mil/regulatory.

Sincerely,

Robert H. Smith

for Edward A. Wylie
Chief, South Section

Enclosures

Copy furnished (w/ enclosures):

Rene Langis, CH2M HILL

Copy furnished (w/o enclosures):

US NMFS, Santa Rosa, CA
CA RWQCB, Oakland, CA

Terry Tamminen
Secretary for Environmental Protection

State Water Resources Control Board

Division of Water Quality

1001 I Street • Sacramento, California 95814 • (916) 341-5538
Mailing Address:P.O. Box 1977 • Sacramento, California • 95812-1977
FAX (916) 341-5543 • Internet Address: http://www.swrcb.ca.gov/stormwtr/index.html

Arnold Schwarzenegger
Governor

Date Processed: 2/18/2003

Calpine Corp
3800 Cisco Way
San Jose, CA 95134

RECEIPT OF YOUR NOTICE OF INTENT

The State Water Resources Control Board (State Water Board) has received and processed your NOTICE OF INTENT TO COMPLY WITH THE TERMS OF THE GENERAL PERMIT TO DISCHARGE STORM WATER ASSOCIATED WITH INDUSTRIAL ACTIVITY. Accordingly, you are required to comply with the permit requirements.

The WDID identification number: **2 43I017829.** Please use this number in any future communications regarding this permit.

FACILITY DESCRIPTION

OPERATOR:	Calpine Corp
FACILITY:	Calpine Corp Los Esteros Criti
COUNTY:	Santa Clara
FACILITY LOCATION:	1515 Milpitas Alviso Rd San Jose, CA 95134

When the operator changes (i. e. the business was bought or transferred), a new Notice of Intent (NOI), site map, and fee must be submitted by the new operator. As the previous operator, you are required to submit a Notice of Termination (NOT) to the Regional Water Board stating that your facility is not being operated by you and that you no longer need to be covered by the General Permit. Unless notified, you will continue to be invoiced for the annual fee each **January**.

If you have any questions regarding permit requirements, please contact your Regional Water Board at (510) 622-2300. Please visit the storm water web page at www.swrcb.ca.gov/stormwtr/index.html to obtain storm water related information and forms.

Sincerely,

Storm Water Section
Division of Water Quality

California Regional Water Quality Control Board

San Francisco Bay Region

Winston H. Hickox
Secretary for Environmental Protection

Internet Address: http://www.swrcb.ca.gov
1515 Clay Street, Suite 1400, Oakland, California 94612
Phone (510) 622-2300 • FAX (510) 622-2460

Gray Davis
Governor

Date: JUL 26 2002
File No: 2188.07 (bkw)
Site No: 02-43-C0407

Mr. Todd Stewart
Calpine C*Power
4160 Dublin Boulevard
Dublin, CA 94568-3139

Subject: Conditional Waiver of Waste Discharge Requirements for Los Esteros Critical Energy Facility Storm Drain Outfall Project in the City of San Jose, County of Santa Clara

Dear Mr. Stewart:

We have reviewed the application materials submitted to the San Francisco Bay Regional Water Quality Control Board (Regional Board) by Calpine C*Power (the Applicant) in accordance with Section 13269 of the Porter Cologne Act, and hereby issue conditional waiver of waste discharge requirements for the Applicant's project to construct a stormwater outfall for the Los Esteros Critical Energy Facility, in the City of San Jose in the County of Santa Clara (Project). This certification is conditioned upon payment of the remaining fee amount of $500, prior to initiating work on the Project.

Project Description: The following Project description was derived from application materials received on July 15, 2002. The project is located along the west bank of Coyote Creek, 0.3 miles north of Highway 237 in the County of Santa Clara. The Applicant proposes to develop a natural-gas-fired generating facility in the north service area of the City of San Jose that will be known as the Los Esteros Critical Energy Facility (LECEF). To manage stormwater flows from LECEF, the Applicant proposes to construct a stormwater outfall in the high flow channel of Coyote Creek, approximately 220 feet from the low-flow channel of the Creek. The outfall will be composed of an existing 24-inch diameter culvert and a new energy dissipating pad constructed of concrete and rip rap. The existing culvert is located in the levy that defines the outer boundary of the high flow channel of the Creek.

Discharged stormwater will flow through the culvert and onto and across a 60-foot by 20-foot concrete pad, with a 5-foot-wide border of rip rap over geotextile fabric on the side of the pad opposite the culvert. The concrete pad and rip rap will be placed over an existing maintenance road that is paved with crushed aggregate. Stormwater discharged to the high flow channel from the proposed outfall will enter the low flow channel about 5,000 feet north of the culvert. At the point of release from the culvert, the high-flow channel is a 200-foot wide grassy swale that is separated form the low-flow channel by a 3-foot-high to 5-foot-high berm. The discharge system from the LECEF has been designed for a 25-year storm event discharge rate of 33 cubic feet per second (cfs). Estimated discharge rates for the 10-year, 3-year, and 1-year events are 26 cfs, 16 cfs, and 3 cfs, respectively.

Impacts: The *San Francisco Bay Basin Water Quality Control Plan* (Basin Plan) defines the beneficial uses of waters of the State. The Project is located within the banks of Coyote Creek, which has existing and potential beneficial uses of: cold freshwater habitat, fish migration, preservation of rare and endangered species, contact and non-contact water recreation, fish spawning, warm freshwater habitat, and wildlife habitat. In addition, Coyote Creek is designated as critical habitat for a federally listed

5.9.5.1.5

population of threatened Central California Coast Steelhead (Final Rule, Federal Register Vol. 65, No. 32, February 16, 2000).

No trees or riparian vegetation will be removed to construct the outfall, since the concrete and rip rap will be placed on an existing maintenance road that is paved with crushed aggregate. The concrete pad will consist of approximately 35.6 cubic yards of concrete, placed over an area of 1,200 square feet, and the rip rap border will consist of approximately 20 cubic yards of rock, placed over a surface area of 300 square feet. The combined surface area of the concrete and rip rap will be about 0.035 acres.

Mitigation: Mitigation for permanent impacts will not be required because the energy dissipating pad will be constructed over a segment of an existing maintenance road. The Applicant has filed a Notice of Intent (NOI) to comply with the General Permit for Discharges of Storm Water Associated with Construction Activity and prepared a Storm Water Pollution Prevention Plan (SWPPP) addressing measures to minimize and control construction and post-construction runoff. The California Energy Commission (CEC) reviewed the SWPPP as part of the CEC's review of the Application for Certification (AFC) for the LECEF.

CEQA Compliance: LECEF is under the jurisdiction of the CEC (Pub. Res. Code Section 25500 et seq.). During licensing proceedings, the CEC acts as the lead State agency under the California Environmental Quality Act (CEQA) (Pub. Res. Code Section 25519(c), Section 21000 et seq.). The CEC's licensing review process and the associated documents are functionally equivalent to the preparation of an Environmental Impact Report under CEQA (Pub. Res. Code Section 21080.5). The CEC approved the Applicant's AFC on July 2, 2002.

Waiver of Waste Discharge Requirements: I find that waiving waste discharge requirements for this specific discharge is not against the public interest, and hereby waive waste discharge requirements for this discharge pursuant to Regional Board Resolution No. 83-3. The conditions of this certification and waiver are as follows:

1. No debris, rubbish, creosote-treated wood, soil, silt, sand, cement, concrete, or washings thereof, or other construction related materials or wastes, oil or petroleum products or other organic or earthen material shall be allowed to enter into, or be placed where it may be washed by rainfall or runoff into Coyote Creek. Any of these materials placed within or where they may enter Coyote Creek by the Applicant or any party working under contract, or with the permission of the Applicant shall be removed immediately. When operations are completed, any excess material shall be removed from the work area and any areas adjacent to the work area where such material may be washed into Coyote Creek. During construction, the contractor shall not dump any litter or construction debris within the riparian/stream zone. All such debris and waste shall be picked up daily and properly disposed of at an appropriate site;
2. The Applicant shall adhere to the conditions of the Section 1601 Lake and Streambed Alteration Agreement (R3-2002-0037), issued by the California Department of Fish and Game (CDFG); to prevent the accidental discharge of sediment to Coyote Creek, construction within the high-flow channel will be restricted to the dry season, as specified in Lake and Streambed Alteration Agreement, or to any extension of the work period that is authorized by the CDFG;
3. Storm drains lines/culverts shall be adequately sized to carry peak storm flows for the drainage to one outfall structure. The storm drain lines/culverts and the outfall structure shall be properly aligned within the stream and otherwise engineered, installed and maintained, to assure

resistance to washout, and erosion of the stream bed, stream banks and/or fill. Water velocity shall be dissipated at the outfall, to reduce erosion;

4. All work shall be done according to the plans, prepared by CH2MHill and dated May 1, 2002, submitted to the Regional Board with the application for waiver of waste discharge requirements;
5. No equipment shall be operated in areas of flowing or standing water; no fueling, cleaning, or maintenance of vehicles or equipment shall take place within any areas where an accidental discharge to Coyote Creek may occur; construction materials and heavy equipment must be stored outside of the ordinary high water mark;
6. Waiver of waste discharge requirements is conditioned upon full payment of the required fee. The total fee required for certification of the subject project is $1,000. Regional Board staff received $500 as a fee deposit. Please submit the remaining amount of $500 prior to initiating the subject project.

Please be aware that any violation of waiver of waste discharge requirement conditions is a violation of State law and subject to administrative civil liability pursuant to California Water Code (CWC) Section 13350. Failure to respond, inadequate response, late response, or failure to meet any condition of a certification or waiver may subject the Applicant to civil liability imposed by the Regional Board to a maximum of $1,000 per day of violation or $10 for each gallon of waste discharged in violation of this action. Any request for a report made as a condition to this action is a formal request pursuant to CWC Section 13267, and failure or refusal to provide, or falsification of such requested report is subject to civil liability as described in CWC Section 13268.

We anticipate no further action on this request. However, should new information come to our attention that indicates a water quality problem with this Project, the Regional Board may issue Waste Discharge Requirements. This waiver action is subject to modification or revocation upon administrative or judicial review, including review and amendment pursuant to CWC Section 13330.

Please contact Brian Wines of my staff at (510) 622-5680 or bkw@rb2.swrcb.ca.gov if you have any questions. All future correspondence regarding this Project should reference the Site Number indicated at the top of this letter.

Sincerely,

Loretta K. Barsamian
Executive Officer

cc: SWRCB-DWQ, Tom Filler
USACE, San Francisco District, Attn: Gordon Lin, Regulatory Branch, 333 Market Street, San Francisco, CA 94105 –2197 (file number 24877S)
CDFG, Central Coast Region, Attn: Robert Floerke, Regional Manager, P.O. Box 47, Yountville CA 94599 (Notification No. R3-2001-0016)
Santa Clara Valley Water Control District, Attn: Sue Tippets, Community Projects Review Unit 5750 Almaden Expressway, San Jose, Ca 95118-3686
U.S. EPA, Tim Vendlinski, WTR-8.

*941

CALPINE C*Power

August 13, 2002

Mr. Chris Huntley
Compliance Project Manager
Los Esteros Critical Energy Facility (01-AFC-12)
California Energy Commission
1516 Ninth Street, MS-2000
Sacramento, CA 95814

RE: Los Esteros Critical Energy Facility (LECEF)
Condition of Certification SOIL & WATER-4
Santa Clara Valley Water District Outfall Permit

Dear Mr. Huntley:

Pursuant to Condition of Certification SOIL & WATER-4, Calpine Corporation has received the enclosed Outfall Permit from the Santa Clara Valley Water District.

If you or your technical staff have any questions concerning the enclosed Permit, please contact me at (925) 479-6833.

Sincerely,

John E. Larsen
Compliance Manager

Enclosures

cc: Gerard Murray, Calpine
Todd Stewart, Calpine
Dave Shibley, Calpine
Sam Grossman, Calpine
Karen Betenbaugh, Calpine
Steve De Young, Calpine
Tony Rossi, Calpine
Ron Sichau, Calpine
Chuck Vosicka, Calpine

5.1.1.2 + 5.9.5.1.5

4160 Dublin Boulevard • Dublin, California 94568-3139 • Phone (925) 479-6600 • Fax (925) 479-7313

Santa Clara Valley Water District 5750 ALMADEN EXPRESSWAY, SAN JOSE, CA 95118-3614 (408) 265-2600

PERMIT

FCE 60w (04-24-02)

Facility: Coyote Creek

Date Issued: July 30, 2002

Permit No.: 02464

Permittee: Calpine C*Power
Attention: Mr. Todd Stewart
4160 Dublin Boulevard
Dublin, CA 94560

Telephone: (925) 479-6600

File: 28496
Coyote Creek
Wly Highway 880
Nly Highway 237

Applicant: Mr. Bruce McClish
CH2M Hill
1737 North First Street, Suite 300
San Jose, CA 95112

Telephone: (408) 436-4909

Re: Los Esteros Critical Energy Facility; Storm Water Outfall

Purpose of Permit:

☒ Encroachment
☒ Construction
☒ Temporary

1. Installation of a 60- by 20-foot portland cement concrete pad for temporary outfall protection on the District access road, within District fee title right of way.

Continued on page 3

Construction Expiration Date: July 30, 2003 **Encroachment Expiration Date:** July 30, 2005

PERMITTEE MUST NOTIFY AND FURNISH SCHEDULE OF WORK TO:

District's Construction Unit, c/o Mr. Dean Arroyo, (408) 265-2607, extension 2801, at least 2 normal working days before starting any work under this permit. **Failure to notify is cause for revocation of permit and removal of work.** Exercise of his permit shall indicate acceptance of and agreement to comply with all provisions included herein. This permit is subject to he General Provisions listed on the reverse side hereof or as expressly modified in the additional Special Provisions listed below. Violation of any provision shall be cause for immediate revocation of permit.

SPECIAL PROVISIONS

. All backfill within District right of way shall be compacted to at least 90 percent relative compaction which shall be determined using maximum dry density based on ASTM D 1557 laboratory test procedure. Field dry density and water content of soil should be determined following the ASTM D 1556 or ASTM D 2922/ASTM D 3017 standard procedure as applicable.

Continued on page 3

Todd Stewart
Calpine C*Power

Approval:

Sue A. Tippets, P.E
Engineering Unit Manager
Community Projects Review Unit

have read, understand, and agree to the terms and conditions of this permit, and declare that I have signatory authority on ehalf of Calpine C*Power.

c: Mr. Robert Worl
Project Manager
California Energy Commission
1516 Ninth Street, MS40
Sacramento, CA 95814

GENERAL PROVISIONS

A. PERMITTEE MUST MAINTAIN A COPY OF THIS PERMIT AND APPROVED PLANS ON JOBSITE FOR DURATION OF CONSTRUCTION PERIOD.

B. All work shall be constructed in accordance with approved plans and to the satisfaction of the District's Inspector. No change of program, as outlined in application or drawings submitted with application, will be allowed except upon written permission of the District. The work area must be restored to the satisfaction of the District's Inspector.

C. Activities and uses authorized under this permit are subject to any instructions of the assigned District representative. ALL INSTRUCTIONS MUST BE STRICTLY OBSERVED.

D. Permittee is responsible for complying with any applicable water quality standards adopted by the District, Regional Water Quality Control Board, State Water Resources Control Board, or other jurisdictional or properly empowered regulatory agency.

E. The permittee shall not use, store, transport, or place any hazardous substances, hazardous wastes, or materials contaminated with hazardous substances on District right of way or adjacent to District right of way such that it may purposefully or accidentally be spilled or otherwise discharged onto same right of way. If a discharge of a hazardous substance or waste occurs as a result of the permittee's operation, the permittee is responsible to: (1) notify the proper authorities; (2) investigate, remove, and monitor the hazardous substances or wastes to the satisfaction of the District and any regulatory agency; (3) bear any and all costs associated with the remedial activities and, (4) be recognized as the generator and owner of the wastes.

F. The permittee shall submit to the District a fully completed "Import Material Certification Form" for any soils that will be placed or stored on District right of way that do not originate from within the legal boundaries of such right of way.

G. Permittee shall assume entire responsibility for all activities and uses under this permit and shall indemnify, defend and hold harmless, District, its Directors, officers, agents, and employees from any and all demands, claims, expenses, costs, or liability of any nature, including death or injury to any person, property damage, or any other loss, caused by or arising out of, or incurred in connection with, or resulting from, the exercise of this permit by permittee, or permittee's officers, agents, subcontractors, assignees, or employees, or any of them, including, but not limited to, negligent acts, errors, or omissions, or willful misconduct, or conduct for which the law imposes strict liability on permittee.

H. Any damage caused to District structures including, but not limited to, fencing, levee surfacing, and asphalt walkway reason of exercise of this permit shall be repaired at the cost of permittee to the satisfaction of the District. Sho permittee neglect to make repairs promptly, District may make repairs or have repairs made, and permittee agrees to reimburse District for all costs of such repairs. District may require a security deposit in advance from permittee to secure the performance of this clause. Unexpended portions of any deposit shall be refunded to permittee within 14 working days of the expiration of this permit. The posting of such a security deposit shall not relieve the permittee from any liability under this permit which exceeds the value of the deposit required.

I. This permit is valid only to the extent of District jurisdiction. Permits required by other interested agencies and consent of underlying fee owners of District easement lands are the responsibility of the permittee. NOTHING CONTAINED IN THIS PERMIT SHALL BE CONSTRUED AS A RELINQUISHMENT OF ANY RIGHTS NOW HELD BY THE DISTRICT.

J. This permit is subject to all prior unexpired permits, agreements, easements, privileges, or other rights, whether recorded or unrecorded, in the area specified in this permit. Permittee shall make arrangements with holders of such prior rights.

K. Unless otherwise specified herein, this permit may be revoked or canceled at any time by the District when required for flood control, conservation, or water utility purposes.

L. Upon written notice of cancellation or revocation of this permit for any cause whatsoever, permittee shall restore District right of way and structure to the condition prior to the issuance of the permit and then shall vacate District property. Should permittee neglect to restore the premises or structures to a satisfactory condition, the District may perform such work or have work performed, and permittee agrees to reimburse the District for all costs of the work so performed upon receipt of a statement therefor.

M. Trench safety has not been checked and is not implied with this permit. Compliance with Section 6705 of the Labor Code concerning trench excavation and the obtaining of a "Permit to Excavate" issued by the Division of Occupational Safety and Health as required by Labor Code Section 6500 shall be the responsibility of the permittee.

N. Permittee shall be responsible for compliance with California Labor Code Section 6300 (and following).

PURPOSE OF PERMIT—Continued

2. Minor grading on Coyote Creek high flow channel to drain storm water into the low flow channel, within District fee title right of way.
3. Installation of a 24-inch diameter ductile iron pipe (DIP) and associated appurtenances, westerly of District levee and within District fee title right of way.
4. Connection of a 24-inch diameter DIP to an existing 24-inch diameter corrugated metal pipe (CMP) located across District levee and within District fee title right of way.
5. Installation of a 22-inch diameter high density polyethylene (HDPE) pipe inside an existing 24-inch diameter CMP located across the District levee and within District fee title right of way.
6. Removal of outfall and slope protection improvements prior to permit expiration.

SPECIAL PROVISIONS—Continued

2. Obstructions to the existing waterway between October 15 and April 15 will not be allowed except by special permit from the District. Allow at least 15 days for the District to review and approve detailed plans and provisions for emergency flows.
3. Permittee shall use only nonpotable or reclaimed water for completion of activities under this permit, unless the District approves another source.
4. Permittee shall be responsible to adjacent property owners for disturbances of any kind caused by permittee's operations.
5. **The 24-inch CMP located across the District levee was installed by the District to allow Mr. Cilker to exercise his legal water rights on Coyote Creek. Permittee shall be responsible for obtaining Mr. Cilker's permission and coordinate with Mr. Cilker so as to not impact his use of the 24-inch CMP and/or the full exercise of his legal water rights.**
6. Permittee is responsible for accurately locating all utilities and for repairing any damage caused by the proposed work.
7. Permittee shall prevent construction materials and wastes, including sediment and nonstorm water, from directly or indirectly entering Coyote Creek.
8. All work associated with this permit is to be in accordance with the plans which were submitted to and accepted by the District.
9. Permittee shall be responsible for any adverse impacts to the riparian habitat within Coyote Creek high flow channel resulting from the work permitted hereunder, including the proposed grading activities.
10. **All the work permitted hereunder is temporary in nature and shall be removed, and the site restored to its original condition, within 3 years from the issuance of this permit. Plans for the restoration of the site must be submitted to and approved by the District prior to removal of the outfall and slope protection improvements.**
11. Permittee and Permittee's contractor will, at Permittee's and Permittee's contractors' own expense, secure and maintain, in full force and effect at all times during its activity under this permit, general and automobile liability and Workers' Compensation insurance forms, to limits of liability, and with a carrier satisfactory to the District, insuring Permittee and the Santa Clara Valley Water District, its Directors, officers, agents, employees, and volunteers from and against any claim, loss, liability, cost, or expense arising out of or in any way connected with this permit. A certificate of insurance and separate additional insured endorsement shall be delivered to and approved by the District before this permit shall be effective.

Santa Clara Valley Water District

5750 ALMADEN EXPRESSWAY, SAN JOSE, CA 95118-3614 (408) 265-2600

PERMIT

FCE 60w (04-24-02)

[redacted]ility: Coyote Creek

Date Issued: July 23, 2003

Permit No.: Draft

Permittee: Calpine C*Power
Attention: Mr. Todd Stewart
4160 Dublin Boulevard
Dublin, CA 94560

Telephone: (925) 479-6600

File: 28496
Coyote Creek
Wly Highway 880
Nly Highway 237

Applicant: Mr. Bruce McClish
CH2M Hill
1737 North First Street, Suite 300
San Jose, CA 95112

Telephone: (408) 436-4909

Re: Los Esteros Critical Energy Facility; Storm Water Outfall

Purpose of Permit:

☒ Encroachment
☒ Construction
☐ Temporary

1. Installation of 48-inch reinforced concrete pipe (RCP) under Santa Clara Valley Water District (District) levee and overflow channel by bore and jack method within District fee title right of way.

Continued on page 3

Construction Expiration Date: July 23, 2004 **Encroachment Expiration Date:**

PERMITTEE MUST NOTIFY AND FURNISH SCHEDULE OF WORK TO:

District's Construction Unit, c/o Mr. Dean Arroyo, (408) 265-2607, extension 2601, at least 2 normal working days before starting any work under this permit. **Failure to notify is cause for revocation of permit and removal of work.** Exercise of this permit shall indicate acceptance of and agreement to comply with all provisions included herein. This permit is subject to the General Provisions listed on the reverse side hereof or as expressly modified in the additional Special Provisions listed below. Violation of any provision shall be cause for immediate revocation of permit.

[redacted]

SPECIAL PROVISIONS

1. All backfill within District right of way shall be compacted to at least 90 percent relative compaction which shall be determined using maximum dry density based on ASTM D 1557 laboratory test procedure. Field dry density and water content of soil should be determined following the ASTM D 1556 or ASTM D 2922/ASTM D 3017 standard procedure as applicable.

Continued on page 3

I have read, understand, and agree to the terms and conditions of this permit, and declare that I have signatory authority on behalf of Calpine C*Power.

Approval:

ORIGINAL SIGNED BY

Todd Stewart
Calpine C*Power

Sue A. Tippets, P.E.
Engineering Unit Manager
Community Projects Review Unit

cc: Mr. Robert Worl
Project Manager
California Energy Commission
1516 Ninth Street, MS40
Sacramento, CA 95814-5504

Mr. Eric Behn
Corps of Engineers
333 Market Street
San Francisco, CA 94105

J. Fiedler, S. Tippets, S. Yung, M. Klemencic, L. Melton, S. Katric, File (2)

eh:jl:mf

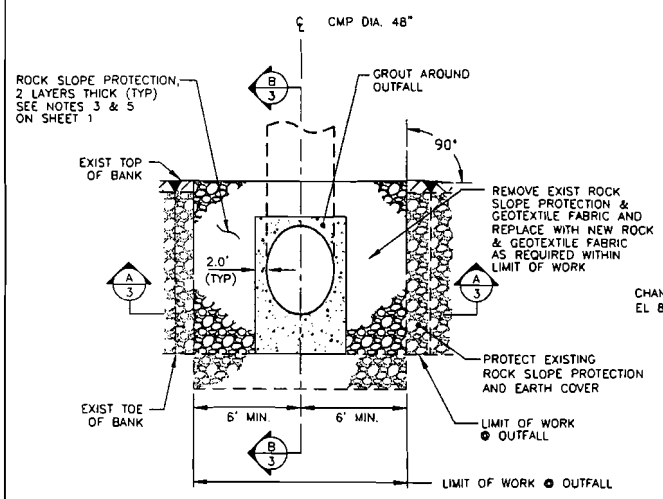
[redacted]

PURPOSE OF PERMIT—Continued

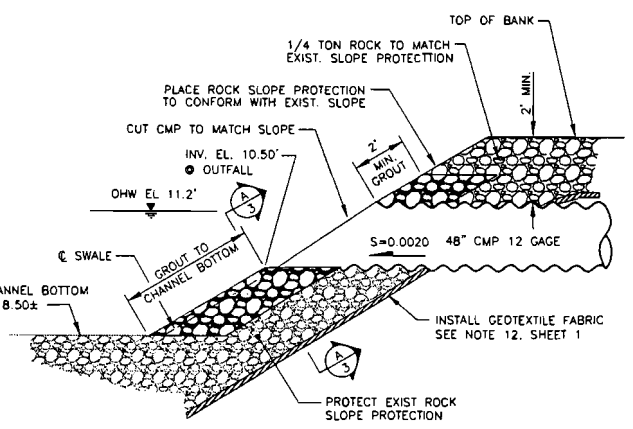
2. Installation of 39 feet of 48-inch corrugated metal pipe (CMP) within overflow channel by open trench method.
3. Installation of rock riprap slope protection at terminus of 48-inch CMP outfall.
4. Removal of existing 22-inch high density polyethylene (HDPE) pipe through levee, removal of concrete anchors and concrete pavement installed under permit 02464.
5. Minor grading and placement of aggregate base rock within overflow channel to restore site upon removal of concrete paving.

SPECIAL PROVISIONS—Continued

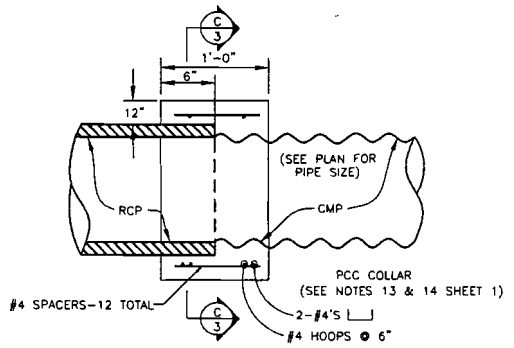
2. Obstructions to the existing waterway between October 15 and April 15 will not be allowed except by special permit from the District. Allow at least 15 days for the District to review and approve detailed plans and provisions for emergency flows.
3. Permittee shall use only nonpotable or reclaimed water for completion of activities under this permit, unless the District approves another source.
4. Permittee shall be responsible to adjacent property owners for disturbances of any kind caused by permittee's operations.
5. Permittee is responsible for accurately locating all utilities and for repairing any damage caused by the proposed work.
6. Permittee shall prevent construction materials and wastes, including sediment and nonstorm water, from directly or indirectly entering Coyote Creek.
7. All work associated with this permit is to be in accordance with the plans which were submitted to and accepted by the District.
8. Permittee shall be responsible for any adverse impacts to the riparian habitat within Coyote Creek high flow channel resulting from the work permitted hereunder, including the proposed grading activities.
9. All joints in 48-inch pipe are to be watertight.
10. Discharge from pipe is limited to 67 cubic feet per second, the 10-year flow from the 120 acre Los Esteros and U.S. Dataport site.
11. Permittee is responsible for maintenance of outfall pipe and exit structure.
12. Permittee is responsible for the installation, maintenance, and integrity of the back flow prevention device to be installed off-site.



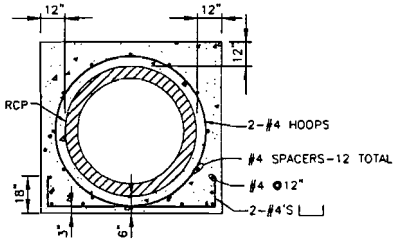
DETAIL 1/3 OUTFALL WITH ROCK SLOPE PROTECTION
SCALE: NTS



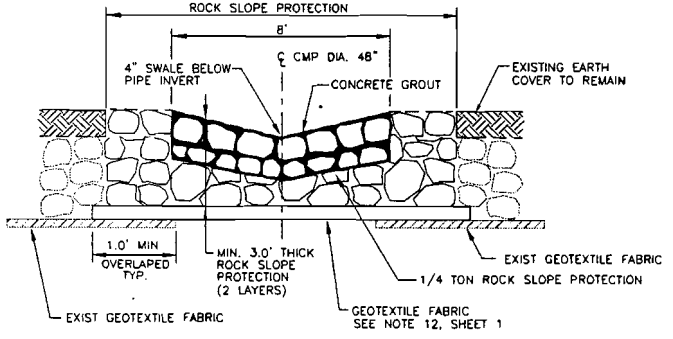
SECTION B/3 OUTFALL GROUTING AND ROCK SLOPE PROTECTION
SCALE: NTS



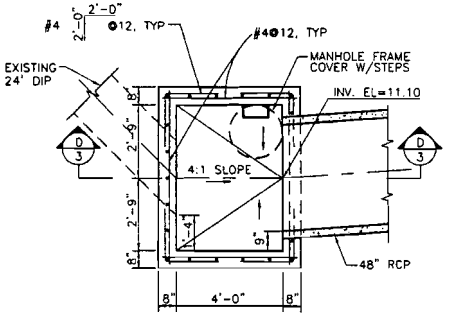
DETAIL C/3 PCC COLLAR
SCALE: NTS



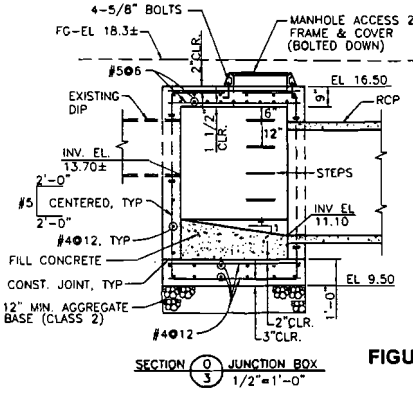
SECTION C/3 PCC COLLAR
SCALE: NTS



SECTION A/3 OUTFALL ROCK SLOPE PROTECTION REWORK SECTION
SCALE: NTS



DETAIL 3/3 JUNCTION BOX PLAN
1/2"=1'-0"



SECTION D/3 JUNCTION BOX
1/2"=1'-0"

FIGURE 5

1737 N. FIRST STREET, SUITE 6300
SAN JOSE, CALIFORNIA 95112-4524
(408)436-4909

DSGN	B.M.M.
DR	J.C.
CHK	D.V.P.
APVD	B.M.M.

NO.	DATE	REVISION	BY	APVD

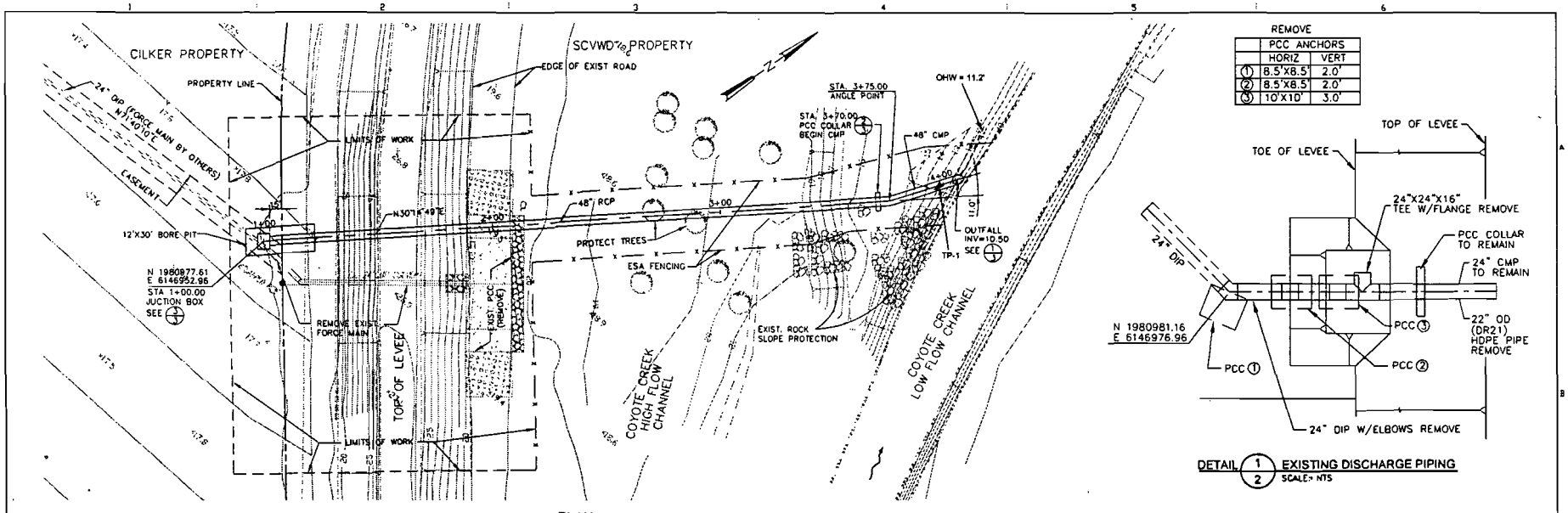
BAR IS ONE INCH ON ORIGINAL DRAWING. IF NOT ONE INCH ON THIS SHEET, ADJUST SCALES ACCORDINGLY

LOS ESTEROS
CRITICAL ENERGY FACILITY
SAN JOSE, CALIFORNIA

PERMANENT
STORM DRAINAGE OUTFALL
NOTES & CONSTRUCTION DETAILS

SHEET	3
DWG NO	3 OF 3
DATE	03/25/03
PROJ NO	179091

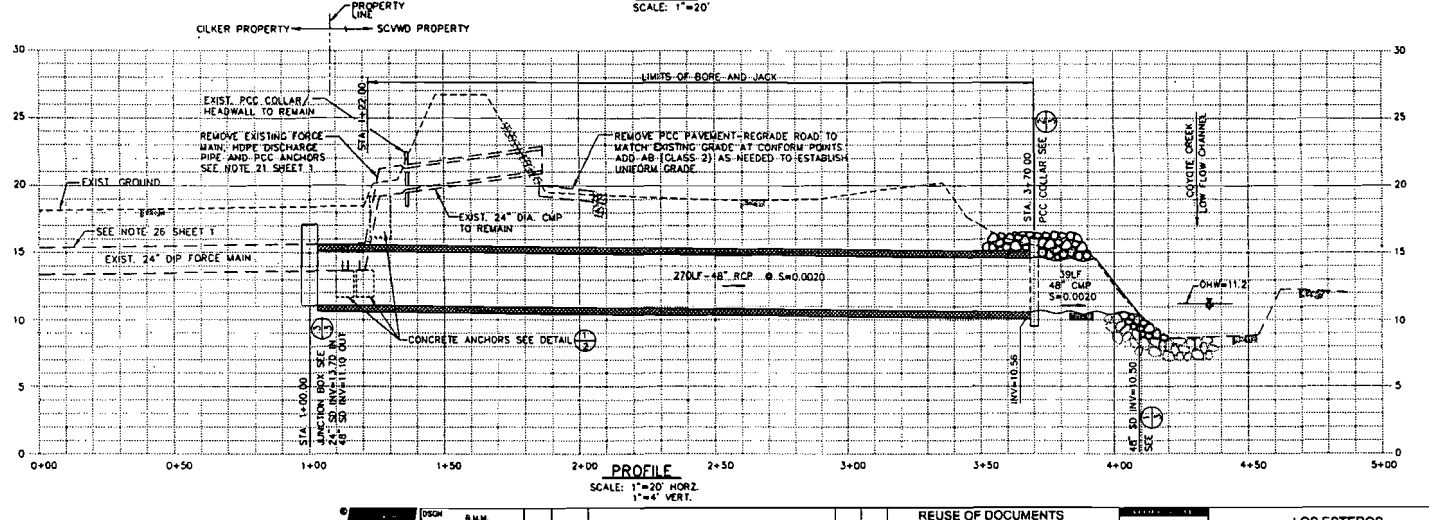
E052003003SAC_Los_Esteros\FINAL fig_5.sil 05.13.03 dfacile



REMOVE	PCC ANCHORS	
	HORIZ	VERT
①	8.5'X8.5'	2.0'
②	8.5'X8.5'	2.0'
③	10'X10'	3.0'

DETAIL 1/2 EXISTING DISCHARGE PIPING
SCALE: NTS

PLAN
SCALE: 1"=20'



PROFILE
SCALE: 1"=20' HORZ.
1"=4' VERT.

FIGURE 4

SCALE 1"=20'

CH2M HILL
1737 N. FIRST STREET, SUITE #300
SAN JOSE, CALIFORNIA 95112-4524
(408)436-4909

DSGN B.M.M.
DR J.C.
CHK D.V.R.
APVD B.M.M

NO.	DATE	REVISION	BY	APVD

BAR IS ONE INCH ON ORIGINAL DRAWING
IF NOT ONE INCH ON THIS SHEET, ADJUST SCALES ACCORDINGLY

LOS ESTEROS
CRITICAL ENERGY FACILITY
SAN JOSE, CALIFORNIA

PERMANENT
STORM DRAINAGE OUTFALL
PLAN AND PROFILE

SHEET NO.	2 OF 3
DATE	03/25/03
PROJ NO.	176091

E082003003SAC_Los_Esteros\FINAL fig_4.sl 05.13.03 dfacile

Recycled Water - METER #16616799				
	HCF	GAL	Average Daily Use	
Jan		0		
Feb	0	0		
Mar		0		
Apr	23669	17,704,412	147537	This is first reading. Starting taking water 1/03
May		0		
Jun	2566	1,919,368	31465	
Jul		0		
Aug	5967	4,463,316	71989	
Sep		0		
Oct	5399	4,038,452	66204	
Nov		0		
Dec	1960	1,466,080	24034	
Annual Total		**29,591,628**		

Recycled Water - METER# 16616800			
	HCF	GAL	
Jan		0	
Feb	0	0	
Mar		0	
Apr	380	284,240	2369
May		0	
Jun	59	44,132	723
Jul		0	
Aug	6611	4,945,028	81066
Sep		0	
Oct	5900	4,413,200	72348
Nov		0	
Dec	2261	1,691,228	27725
Annual Total		**11,377,828**	

CALPINE

LOS ESTEROS CRITICAL ENERGY FACILITY
800 THOMAS FOON CHEW WAY
SAN JOSE, CALIFORNIA 95134

March 30, 2004

Tellis R. Hynes
SAN JOSE/SANTA CLARA WATER POLLUTION CONTROL PLANT
Environmental Services Building
700 Los Esteros Road
San Jose, CA 95134

Dear Tellis,

Enclosed is the Self-Monitoring Report for Los Esteros Critical Energy Facility due March 31, 2004. Please do not hesitate to call me if you should have any questions. I may be reached at (408) 456-2690 ext. 1612.

Sincerely,
CALPINE CORPORATION

Charles J. Hoock
Operations Manager
Los Esteros Critical Energy Facility

cs

Enclosure

0407.LECEF

SAN JOSE'/SANTA CLARA WATER POLLUTION CONTROL PLANT

SELF MONITORING REPORT

COMPANY NAME: Los Esteros Critical Energy Facility, L.L.C.	Permit #: SJ-488A	WPCP use only - sample #
Discharge Address: 1515 Alviso-Milpitas Road, San Jose, CA		
[redacted] Due Date: 31 March 2004	Sample Time: Composite 1200 to 1200, 24 hours; Grab 1330, 03/11/04	Sample Point Description: Waste water pump final discharge to sanitary sewer line.
Sampled By: Clearwater Environmental	Sample Date: 03/10/04 – 03/11/04	

Date Received: **Received By:**

ANALYTICAL RESULTS

List all values in mg/l **(or indicate units)** *Attach Original Report*

PARAMETER	Det. Limit	Conc.	Grab Comp (G/C)	PARAMETER	Det. Limit	Conc.	Grab Comp (G/C)
Antimony				EPA 601/602*			
Arsenic				EPA 624/625*			
Beryllium				Phenols			
Cadmium				Xylene			
Chromium (T)	.005	ND	C	Oil & Grease			
Copper	.005	.007	C	Cyanide (A)			
Lead				Cyanide (T)			
Managanese				pH	NA	7.8	G
[redacted]cury				Other:			
[redacted]kel							
Selenium							
Silver							
Zinc	.005	0.81	C				

QA/QC Provided? Y ☞ N ☞

* Totalize all TTO (EPA 601/602 & EPA 624/625) results greater than 10 ppb (ug/l)

Laboratory Used: Entech Analytical Labs, Inc.

Attach extra sheets for additional sample points.
Included? Yes? ☞ No? ☞

ARE DISCHARGE STANDARDS BEING MET ON A CONSISTENT BASIS? Yes? ☞ No? ☞

If "no", what additional operation and maintenance or pretreatment measures are necessary to achieve consistent compliance?
Enclose a statement or report

Flow Measurement by: (Circle one)
(Effluent Meter) (Influent Meter) (Bills)

Composite Sample? ☞
Sample duration (hrs) 24
or
Batch Sample? ☞

Representative of:

FLOW DATA: Process Name:	Ave. (gpd)	Max (gpd)
Los Esteros Critical Energy Facility	40,200	275,300

CERTIFICATION STATEMENT

"I certify under penalty of law that this document and all attachments were prepared under my direction or supervision in accordance with a system designed to assure that qualified personnel properly gather and evaluate the information submitted. Based on my inquiry of the person or persons who manage the system, or those persons directly responsible for gathering the information, the information submitted is, to the best of my knowledge and belief, true, accurate, and complete. I am aware that there are significant penalties for submitting false information, including the possibility of fine and imprisonment for knowing violations."

THIS FORM MUST BE COMPLETED IN ITS ENTIRETY

PREPARED BY:	CERTIFIED BY:
Signature and Date 3/24/04	Signature and Date 3/24/04
[redacted]d Name and Title Charlie Hoock – Operations Manager	Printed Name and Title Charlie Hoock – Operations Manager

CALPINE

Los Esteros Critical Energy Facility

2003-2004 Semi-annual Flow Data: September - February

All Data In Kgal

Midnight Meter		Previous	5052.8			
DATE	September	October	November	December	January	February
1	5079.0	7221.8	9141.3	9779.5	10847.5	11435.9
2	5210.3	7221.8	9141.3	9807.6	10852.5	11456.5
3	5347.1	7238.2	9226.2	9812.6	10852.5	11648.8
4	5479.3	7238.2	9289.5	9812.6	10857.4	11732.1
5	5628.1	7238.2	9314.4	9817.9	11001.0	11743.2
6	5634.7	7368.0	9318.4	9817.9	11091.3	11747.5
7	5638.9	7524.9	9373.7	9817.9	11123.4	11751.7
8	5709.5	7555.4	9386.1	9867.3	11210.4	11751.7
9	5719.0	7555.4	9403.2	9969.3	11219.2	11760.4
10	5788.7	7559.4	9407.3	10198.8	11223.2	11814.2
11	5895.7	7559.4	9407.3	10258.7	11223.2	11884.6
12	5997.2	7659.8	9411.3	10324.6	11227.2	12044.6
13	6057.6	7683.7	9415.4	10350.9	11307.0	12115.8
14	6065.8	7768.5	9433.3	10350.9	11311.4	12119.9
15	6069.8	7807.5	9433.3	10424.4	11315.5	12127.8
16	6118.0	7811.5	9433.3	10487.0	11319.4	12132.0
17	6128.2	7891.4	9441.5	10535.2	11377.8	12132.0
18	6132.2	7953.3	9441.5	10542.4	11377.8	12140.0
19	6171.6	8047.7	9478.4	10548.1	11381.9	12140.0
20	6278.1	8195.5	9494.5	10548.1	11386.0	12144.3
21	6441.7	8332.5	9498.4	10553.1	11394.7	12148.4
22	6628.6	8491.8	9498.4	10558.7	11394.7	12148.4
23	6904.0	8511.9	9498.4	10563.9	11403.5	12152.4
24	6985.5	8581.4	9642.3	10563.9	11403.5	12156.5
25	6985.5	8671.1	9699.8	10568.8	11407.5	12204.1
26	7020.5	8747.4	9721.5	10568.8	11411.7	12259.1
27	7020.5	8871.8	9721.6	10573.8	11411.7	12277.5
28	7020.5	9034.5	9721.6	10627.3	11419.7	12281.7
29	7025.0	9132.8	9721.6	10770.2	11423.8	12285.6
30	7165.8	9132.8	9726.7	10821.6	11427.8	
31		9141.3		10832.0	11427.8	

		Average	Max			
Daily Use Kgal		40.2	275.3			
DATE	September	October	November	December	January	February
1	26.1	56.0	8.5	52.8	25.8	8.1
2	131.3	0.0	0.0	28.1	5.0	20.5
3	136.8	16.5	84.8	5.0	0.0	192.3
4	132.2	0.0	63.3	0.0	4.9	83.3
5	148.8	0.0	24.9	5.3	143.6	11.0
6	6.7	129.8	4.0	0.0	90.3	4.4
7	4.2	156.9	55.3	0.0	32.1	4.2
8	70.6	30.5	12.4	49.3	87.0	0.0
9	9.5	0.0	17.1	102.1	8.9	8.7
10	69.7	4.0	4.1	229.4	4.0	53.8
11	107.1	0.0	0.0	60.0	0.0	70.4
12	101.4	100.4	4.0	65.9	4.0	160.0
13	60.4	23.9	4.1	26.2	79.8	71.1
14	8.2	84.9	17.9	0.0	4.4	4.2
15	4.0	39.0	0.0	73.5	4.1	7.9
16	48.3	4.0	0.0	62.6	3.9	4.1
17	10.2	79.9	8.3	48.2	58.5	0.0
18	4.0	61.9	0.0	7.2	0.0	8.0
19	39.4	94.4	36.9	5.6	4.1	0.0
20	106.5	147.8	16.1	0.0	4.1	4.2
21	163.6	137.0	3.9	5.0	8.7	4.1
22	186.9	159.2	0.0	5.6	0.0	0.0
23	275.3	20.1	0.0	5.2	8.8	4.0
24	81.6	69.6	143.9	0.0	0.0	4.1
25	0.0	89.6	57.5	4.9	4.0	47.5
26	35.0	76.3	21.8	0.0	4.2	55.0
27	0.0	124.5	0.0	4.9	0.0	18.4
28	0.0	162.6	0.0	53.5	7.9	4.2
29	4.5	98.4	0.0	142.9	4.1	3.9
30	140.7	0.0	5.1	51.5	4.0	
31		8.5		10.4	0.0	
Totals	2112.9	1975.6	593.8	1105.4	606.2	857.8

Entech Analytical Labs, Inc.

3334 Victor Court • Santa Clara, CA 95054 • (408) 588-0200 • Fax (408) 588-0201

March 17, 2004

Fred Chandler
Clearwater EMI
PO Box 2407
Union City, CA 94587

Order:	38200	**Date Collected:**	3/11/2004
Project Name:	SMR-Calpine/Los Esteros Cogen	**Date Received:**	3/11/2004
Project Number:		**P.O. Number:**	0403-042
Project Notes:			

On March 11, 2004, samples were received under documentented chain of custody. Results for the following analyses are attached:

Matrix	Test	Method	Comments
Liquid	Chromium	EPA 200.7	
	Copper	EPA 200.7	
	PDF	PDF	
	pH	EPA 150.1	
	Zinc	EPA 200.7	

Chemical analysis of these samples has been completed. Summaries of the data are contained on the following pages. USEPA protocols for sample storage and preservation were followed.

Entech Analytical Labs, Inc. is certified by the State of California (#2346). If you have any questions regarding procedures or results, please call me at 408-588-0200.

Sincerely,

Patti Sandrock
QA/QC Manager

Entech Analytical Labs, Inc.

3334 Victor Court , Santa Clara, CA 95054 Phone: (408) 588-0200 Fax: (408) 588-0201

Clearwater EMI
PO Box 2407
Union City, CA 94587
Attn: Fred Chandler

Date: 3/17/2004
Date Received: 3/11/2004
Project Name: SMR-Calpine/Los Esteros Coge
Project Number:
P.O. Number: 0403-042
Sampled By: Client

Certified Analytical Report

Order ID: 38200 **Lab Sample ID:** 38200-002 **Client Sample ID:** LECEF-SP2(Grab)

Sample Time: 1:30 PM **Sample Date:** 3/11/2004 **Matrix:** Liquid

Parameter	Result	DF	PQL	DLR	Units	PrepDate	Analysis Date	QC Batch ID	Method
pH	7.8	1			STU	N/A	3/11/2004	WPH040311	EPA 150.1

DF = Dilution Factor ND = Not Detected DLR = Detection Limit Reported PQL = Practical Quantitation Limit

Analysis performed by Entech Analytical Labs, Inc. (CA ELAP #2346)

Analyst 3/17/04 Date

Supervisor 3/17/04 Date

Entech Analytical Labs, Inc.

3334 Victor Court , Santa Clara, CA 95054 Phone: (408) 588-0200 Fax: (408) 588-0201

Clearwater EMI
PO Box 2407
Union City, CA 94587
Attn: Fred Chandler

Date: 3/17/2004
Date Received: 3/11/2004
Project Name: SMR-Calpine/Los Esteros Coge
Project Number:
P.O. Number: 0403-042
Sampled By: Client

Certified Analytical Report

Order ID: 38200 **Lab Sample ID:** 38200-001 **Client Sample ID:** LECEF-SP2(Comp.)

Sample Time: 1:30 PM **Sample Date:** 3/11/2004 **Matrix:** Liquid

Parameter	Result	DF	PQL	DLR	Units	PrepDate	Analysis Date	QC Batch ID	Method
Chromium	ND	1	0.005	0.005	mg/L	3/11/2004	3/17/2004	WM8667	EPA 200.7
Copper	0.007	1	0.005	0.005	mg/L	3/11/2004	3/17/2004	WM8667	EPA 200.7
Zinc	0.81	1	0.005	0.005	mg/L	3/11/2004	3/17/2004	WM8667	EPA 200.7

DF = Dilution Factor ND = Not Detected DLR = Detection Limit Reported PQL = Practical Quantitation Limit

Analysis performed by Entech Analytical Labs, Inc. (CA ELAP #2346)

Marcaine Felix 3/17/04
Analyst Date

Supervisor 3/17/04
Date

Quality Control Results Summary

QC Batch #: WM8667 **Units:** mg/L
Matrix: Liquid **Date Analyzed:** 3/12/2004

Parameter	Method	Blank Result	Spike Sample ID	Spike Amount	Sample Result	Spike Result	QC Type	% Recovery	RPD	RPD Limits	Recovery Limits
Chromium	EPA 200.7	ND		0.5		0.574	LCS	114.8			93.2 - 120.3
Copper	EPA 200.7	ND		0.5		0.523	LCS	104.6			75.0 - 125.0
Zinc	EPA 200.7	ND		0.5		0.55	LCS	110.0			94.8 - 120.6
Chromium	EPA 200.7	ND		0.5		0.582	LCSD	116.4	1.38	25.00	93.2 - 120.3
Copper	EPA 200.7	ND		0.5		0.525	LCSD	105.0	0.38	25.00	75.0 - 125.0
Zinc	EPA 200.7	ND		0.5		0.55	LCSD	110.0	0.00	25.00	94.8 - 120.6

Entech Analytical Labs, Inc.

3334 Victor Court (408) 588-0200
Santa Clara, CA 95054 (408) 588-0201 - Fax

Chain of Custody / Analysis Request

Attention to: FRED CHANDLER	Phone No.: 510 476-1740	Purchase Order No.: 0403-042	Invoice to: (If Different)	Phone:	
Company Name: CEMI	Fax No.:	Project No.:	Company:		
Mailing Address: PO BOX 2407	Email Address:	Project Name: SMR - CALPINE/LOS ESTEROS	Billing Address: (If Different)		
City: UNION CITY	State: CA	Zip Code: 94587	Project Location: MILPITAS	City:	State: / Zip:

Sampler: FC | Field Org. Code:

Global ID:

Turn Around Time
- ☐ Same Day ☐ 1 Day
- ☐ 2 Day ☐ 3 Day
- ☐ 4 Day 5 ☐ 5 Day
- ☒ ~~8-10~~ Day (std)

Order ID:

Client ID / Field Point	Lab. No.	Sample Date	Sample Time	Matrix	Composite	Grab	Containers	Preservative	Volatile Organics by GCMS: 601/602 ☐ 624 ☐ 8010 by 8260 ☐ 8260B ☐	Oxygenates by 8260 ☐ MTBE by 8260B ☐ Eth/Meth ☐	TPH as Gas/BTEX ☐ TPH as Gas/BTEX/MTBE ☐ Gas by GCMS ☐	Diesel ☐ w/ Si-gel Standard Cleanup ☐ Motor Oil ☐ w/ Si-gel Column Cleanup ☐	Fuel Scan Extractable ☐ Purgeable ☐	Base/Neutral/Acid Organics 8270 ☐ PAH ☐	Pesticides 8081 ☐ PCBs - 8082 ☐	pH ☐	TSS ☐ SC ☐ TOC ☐	TRPH ☐ Oil & Grease ☐	CN ☐ Phenols ☐	Anions: F ☐ Cl ☐ Br ☐ SO4 ☐ NO3 ☐ NO2 ☐ PO4 ☐	Perchlorate	Metals: Circle Below (total) Dissolved ☐	STLC ☐ TCLP ☐	TO-14 ☐ TO-15 ☐ (Tedlar Bag Only)	Remarks
LECEF-SP2		3/11/04	1330	W	X		1	X														X			38200-001
LECEF-SP2		3/11/04	1330	W		X	1									X									002

04 MAR 11 15:15

Relinquished by:	Received by:	Date:	Time:
	Quadrado	3/11/04	1525

Special Instructions or Comments

- ☐ EDD Report ☒ PDF Report
- ☐ EDF Report
- ☐ NPDES Detection Limits

Semi-Conductor Metals: Bi, Ce, Cs, Ga, Ge, In, Li, P, S, Ta, Te, Zr

Metals:
Al, As, Sb, Ba, Be, B, Cd, Ca, Cr, Co, Cu, Fe, Pb, Mg, Mn, Hg, Mo, Ni, K, Si, Ag, Na, Se, Sr, Tl, Sn, Ti, Zn, V, W

- ☐ LUFT-5 ☐ RCRA-8
- ☐ PPM-13 ☐ CAM-17

8

CALPINE

LOS ESTEROS PROJECT
P.O. BOX 640130
SAN JOSE, CA 95164-0130
408.957.4700
408.956.9141 (FAX)

December 11, 2002

Mr. Lance Shaw
Compliance Project Manager
Los Esteros Critical Energy Facility (01-AFC-12)
California Energy Commission
1516 Ninth Street, (MS-15)
Sacramento, CA 95814

RE: Los Esteros Critical Energy Facility (LECEF)
Conditions of Certification Soil & Water 7 & 9
Title 22 Engineer's Report

Dear Mr. Shaw,

In accordance with the California Energy Commission's Conditions of Certification Soil & Water 7 and 9, Calpine is herewith transmitting, for your review and approval, the following materials:

1. Copy of Title 22 Engineer's Report, as approved by the State of California Department of Health Services, Drinking Water Field Operations Branch.
2. Copy of letter from DOHS indicating their approval.

If additional information is required, feel free to contact me at (408) 957-4712.

Yours sincerely,

Charles J. Vosicka

Charles J. Vosicka, P.E.
Project Engineer, Civil/Structural
Los Esteros Critical Energy Facility

cc: Mr. John Larsen, LECEF Compliance Manager
Mr. Dana Petrin, Calpine Operations
Mr. Mark Casterson, South Bay Water Recycling

Los Esteros Critical Energy Facility

Title 22 Engineer's Report - Dual Plumbed Recycled Water System

Site Name:	Los Esteros Critical Energy Facility
Site Address:	1515 Alviso-Milpitas Road, San Jose Near northeast intersection of SR 237 and Zanker Road
Site Owner:	Calpine Corporation
Site Contact:	Dana Petrin (408-847-5328), Charles Hoock (408-456-2690)
Site Staffing:	5 personnel onsite

BACKGROUND

The Los Esteros Critical Energy Facility (LECEF) will be a nominal 180-megawatt (MW), simple-cycle power plant operated by Calpine. The facility will include four combustion turbine generators (CTGs) equipped with water injection to control nitrous oxides (NOx), spray intercooling injection (SPRINT) for power augmentation, additional emissions control equipment, and associated support equipment. LECEF will be considered a "peaker" plant and, thus, will not operate full-time.

LECEF will use recycled water in most of its daily operations. This water will be supplied by the San Jose/Santa Clara Water Pollution Control Plant (WPCP) through the South Bay Water Recycling (SBWR) program. As shown in the attached figures, an existing 60-inch recycled water line runs from the recycled water system's transmission pump station south, parallel to Zanker Road. Calpine will connect to this line with an 18-inch recycled water line, approximately 1,000 feet in length, following the LECEF access road. The facility is initially anticipated to consume approximately 268,490 gallons of recycled water per day under average conditions and up to 335,075 gallons per day maximum.

This engineer's report documents the ways in which recycled water will be used at the site, the strategies for the safe use of recycled water, and the protection of potable water in the

dual plumbed system. The attached figures include the plans for the facility and should show all water system piping at the site.

USES OF RECYCLED WATER

Recycled water will be utilized as cooling water, process water, irrigation water, and fire suppression water at the LECEF site. The following equipment will operate using recycled water:

Equipment Type	Equipment ID Number	Manufacturer	Model Number
Cooling Tower	010-CWS-CT-001	Marley	F499-6.0-02/03
Combustion Turbines (CTG01-04)	011-CTG-GT-001	General Electric	LM6000-PC-NDWG09
Auxiliary Cooling Water Pumps	010-CWS-PP-003	Goulds	VIT26GHXC/26GHC
Equipment Cooling Water Heat Exchanger	010-ACW-HX-001	Alfa Laval	M30-FD
Chiller Condenser Water Heat Exchanger	010-CCW-HX-005	Alfa Laval	M30-FM
Raw Water Storage Tank	010-RWS-TK-001	Columbia TecTank	54'-11 ½" diameter x 32'- 3 15/16" height
Motor Driven Fire Water Pump	010-FWS-PP-001	Fairbanks Morse	8" 1824BF
Engine Driven Fire Water Pump	010-FWS-PP-002	Fairbanks Morse	8" 1824BF
Fire Water Jockey Pump	010-FWS-PP-003	Fairbanks Morse	F393-60
Dry Barrel Hydrant		Mueller Centurion	250
Hydrant Monitor		Elkhart Brass	299-11 Python
RO Unit and Demineralizer		Ionics	
Demineralized Water Tank			
Sprint Water Pumps			
NOx Water Injection Pumps			
CTG Inlet Chiller Water			
Irrigation Equipment	210043-10	Milani	

The primary equipment that will use recycled water at the LECEF site will be the cooling tower and the combustion turbine generators. The cooling tower, a one-cell Marley model, will use recycled water as cooling water. The circulating cooling water system will be treated with a 93-percent sulfuric acid solution, a 12-percent sodium hypochlorite solution, a microbial growth inhibitor, and a dispersant. The cooling tower will include a drift eliminator to prevent tower mist or sprays from coming into contact with people.

Recycled water will pass through a water treatment system including ultra filtration, reverse osmosis unit, and a mixed bed demineralizer. This treated water will then be pump to a demineralized water tank.

The demineraliezed water will be pump to SPRINT water pump and NOx water injection pumps for power augmentation and NOx suppression.

The remaining uses of recycled water on the site will be for irrigation and fire suppression purposes. Recycled water will be used to irrigate landscaping along the west, east, and south sides of the property. Recycled water for fire suppression will be supplied by the raw water storage tank where recycled process water is stored. The tank will store a recycled water supply in excess of that necessary for daily production needs, so that in the event of a fire, there will be sufficient supply. Fire hydrants will be located throughout the facility. These equipment items, and all other equipment required for the use of recycled water, will be reviewed and approved by SBWR and the State of California Department of Health Services prior to connection.

The facility and all equipment will comply with SBWR's *Rules and Regulations For Design and Operation of On-Site Recycled Water Facilities.*

RECYCLED WATER LABELS AND SIGNS

Extreme care will be taken to place written warnings in each location that recycled water is used. Signs will be posted in all areas where recycled water is used or where equipment associated with recycled water is found, reading "RECYCLED WATER - DO NOT DRINK" or equal wording. All piping carrying recycled water will be labeled as such. Purple labels and warning tags reading "RECYCLED WATER - DO NOT DRINK" will be placed on all valve boxes, quick couplers, recycled water storage tanks, air/vacuum relief valves, pressure reducing valves, pumps, backflow prevention devices, system controller boxes, and other appurtenances on the recycled water systems.

The process water system and fire suppression system piping on the site will be high density polyethylene (HDPE) pipe. The pipe will be black with continuous purple labeling tape affixed to it at five-foot intervals.

All irrigation piping will be purple PVC, with the continuous wording "RECYCLED WATER - DO NOT DRINK" printed on both sides of the pipe.

The fire hydrants located throughout the facility will each have a purple top and will be appropriately labeled as discharging recycled water.

FACILITY STAFFING AND TRAINING

There will be no public access to the LECEF facility. The entire site will be fenced and locked, and only authorized personnel will have access to the facility. It is expected that the facility will be staffed by one operator, with no more than five personnel at the site at any given time during typical operations. All efforts will be made to ensure that human contact with recycled water be minimized. All operations personnel will receive training through

the WPCP in the use of recycled water. This training should involve learning the procedures, requirements, and restrictions involved in the use of recycled water; understanding the distinctions between recycled and potable water; recognizing that cross connections between recycled and potable water systems are not permissible; detailing the health and safety aspects cited in Title 17 and Title 22 of the California Code of Regulations; and other information that will allow personnel to become familiar with the safe use of recycled water.

A Site Supervisor will be named before construction is complete and the use of recycled water commences. The Site Supervisor will be a designated representative of Calpine, approved by SBWR, who will assume responsibility for the recycled water plumbing system. This responsibility will include installation, operation, maintenance, and prevention of potential hazards on the recycled and potable water systems, ensuring that no cross connections are made.

POTABLE WATER USE

There are no potable water lines in the vicinity of the LECEF site at this time. The City of San Jose's municipal water supply does not currently extend to the site, and all groundwater wells within the area have been destroyed, as shown in the attached table and well location drawing. Thus, for the foreseeable future, potable water will be delivered by truck to the site and kept in a potable storage tank. Potable water from the tank will be used to feed the facilities in the control office and service area. Potable water will also be piped from the storage tank to hose bibs and eyewash/safety shower locations throughout the facility. Drinking water will consist only of bottled water, and the only designated eating area will be in the control office and service area away from recycled water lines. Because the LECEF potable water system is not connected to the City of San Jose water system, the potential for contamination of the public drinking water system will be eliminated.

DUAL PLUMBING

Section 60301.250 of Title 22 in the California Code of Regulations defines a "dual plumbed system" as a "system that utilizes separate piping systems for recycled water and potable water within a facility and where recycled water is used for either of the following purposes: (a) To serve plumbing outlets (excluding fire suppression systems) within a building or (b) Outdoor landscape irrigation at individual residences." Although there will be no recycled water lines inside the control office and service area buildings, the LECEF site may be considered dual plumbed, because potable water will feed various locations throughout the facility where recycled water is utilized.

In cases of dual plumbing, the potential for cross connections and backflow are primary concerns. Because LECEF is a new facility with no pre-existing water lines, the opportunities for cross connections are very limited. Potable water use in the plant area itself is minimal, and there will be a physical separation between all potable and recycled water lines. This physical separation, as defined by *Rules and Regulations*, will be a horizontal separation of ten feet (in specific cases, there may be a separation between four

and ten feet, but only if special conditions are met) and a vertical separation at crossings of one foot or more. Recycled water lines will be constructed below potable water lines in all cases, but if recycled water lines must be placed above potable water lines for any reason, a full standard pipe length will be centered over the crossing or the recycled water line will be installed in a pipe sleeve extending ten feet on either side of the crossing. There are also no plans for potable water to ever be used as process water. If the recycled water supply is shut down for any reason, the plant will be taken out of operation , if necessary, but potable water will not be used in the place of recycled water.

All dual plumbed facilities are subject to a cross connection test, per SBWR *Rules and Regulations*, to ensure the absolute separation of the recycled and potable water systems. A cross connection test would be completed under the supervision of SBWR by an AWWA-certified cross connection control specialist.

INSPECTION AND APPROVAL

During construction, the recycled water system will be visually inspected by SBWR to ensure that all recycled water piping is properly identified and that the recycled water system is sufficiently isolated from any other piping systems. The LECEF recycled water system will not begin operation until approval is received from SBWR and the Department of Health Services. No modifications of the recycled or potable water systems will be made without the consent of SBWR and the Department of Health Services.

APPENDICES

Appendix 1– General supporting information.

Appendix 2 – Plant system specific information.

GENERAL SITE INFORMATION for RECYCLED WATER USE

1. LANDSCAPED RECYCLED WATER IRRIGATION USE AREA: ~70,000 ft²

2. PUBLIC ACCESS TO SITE GROUNDS IS: Restricted

3. OWNER: Calpine Corporation

4. PROPERTY MANAGER CONTACT: Dana Petrin (408-847-5328), Charles Hoock (408-456-2690)

5. TENANT(S): Not Applicable

6. ON-SITE WELL LOCATIONS: None

7. WELLS ON ADJACENT SITES LOCATED WITHIN 50 FT. OF RECYCLED WATER APPROVED USE AREA OR WITHIN 100 FT. OF ANY RECYCLED WATER IMPOUNDMENT: None

8. OUTDOOR DRINKING FOUNTAINS IN/NEAR THE RECYCLED WATER APPROVED USE AREA: None

9. OUTDOOR EATING AREA(S) IN/NEAR THE RECYCLED WATER APPROVED USE AREA: None

10. WATER FEATURES ON SITE: None

Destroyed Wells in Vicinity of LECEF Site

State Well Number	SCVWD Well Destruction Permit Number	Date of Permit	Well Completion Report Number
06S/01W-12M001	01000668	11/19/2001	760338
06S/01W-12M002	01000669	11/20/2001	760339
06S/01W-12M004	01000671	11/20/2001	760341
Unregistered	01000672	11/20/2001	760342
Unregistered	01000673	11/20/2001	760343

RECYCLED WATER USE PERMIT

SOUTH BAY WATER RECYCLING

Customer Number: SJ 000 4271 New ☑ Retrofit ☐

Site Name: LOS ESTEROS CRITICAL ENERGY FACILITY (CALPINE P

Site Address: LOS ESTEROS RD

SAN JOSE CA 95134

Business Type: POWER PLANT

Startup Date: 12/16/02

	Owner Information:	Site Information:
Name:	LOS ESTEROS CRITICAL ENERGY FACILITY (CALPINE POWER)	LOS ESTEROS CRITICAL ENERGY FACILITY (CALPINE POWER)
Address:		LOS ESTEROS RD
		SAN JOSE CA 95134

	Owner Contact Information:	Site Contact Information:
Name:	Chuck Vosicka	Chuck Vosicka
Title:	Senior Project Engineer	Senior Project Engineer
Phone Number:	(408) 957-4712	(408) 957-4712
Fax Number:		
Email:		

Landscape Contractor:

Related Information:

APN Number(s):	
Acreage:	
Land Use:	POWER GEMERATION
Retailer:	SJMUNI
Well:	NONE
Flow (AF/yr)	300
Meter No.	
Comments:	

Signature: _____ **Date:** 12/10/02

LOS ESTEROS CRITICAL ENERGY FACILITY
STORM DRAINAGE OUTFALL

SAN JOSE, CALIFORNIA

As-Built

APPROVED
WILLDAN DATE: 7-28-03
BY:
DELEGATE CHIEF BUILDING OFFICIAL FOR THE CALIFORNIA ENERGY COMMISSION

CONSTRUCTION NOTES

1. ALL WORK TO BE IN ACCORDANCE WITH THE STANDARD SPECIFICATIONS, STATE OF CALIFORNIA, DEPARTMENT OF TRANSPORTATION (CALTRANS), DATED JULY 1999, EXCEPT FOR ROCK SIZE AND CAPACITY, AND AS MODIFIED HEREON. CONVERT ALL MEASUREMENTS TO ENGLISH UNITS.
2. IT IS MANDATORY THAT THE SCVWD (DISTRICT) INSPECTOR BE NOTIFIED AT LEAST 48 HOURS PRIOR TO THE COMMENCEMENT OF CONSTRUCTION. COMPLETE REMOVAL OF PORTIONS OF THE WORK INSTALLED WITHOUT INSPECTION MAY BE REQUIRED IF THIS REQUIREMENT IS NOT MET.
3. ALL WORK TO FURNISH AND PLACE ROCK SLOPE PROTECTION INCLUDING CONCRETE GROUTING SHALL BE IN ACCORDANCE WITH THE CALTRANS STANDARD SPECIFICATIONS SECTION 72. NO WHITE ROCK MAY BE USED. METHOD B PLACEMENT SHALL BE USED.
4. ALL BACKFILL WITHIN DISTRICT RIGHT OF WAY SHALL BE WITH SUITABLE MATERIAL FROM EXCAVATION AND SHALL BE COMPACTED TO 90 PERCENT RELATIVE COMPACTION IN ACCORDANCE WITH CALIFORNIA TEST METHOD #216.
5. CARRY ROCK RIPRAP TO MINIMUM 2 FEET ABOVE TOP OF CMP, UNLESS OTHERWISE SPECIFIED.
6. CONTRACTOR SHALL VERIFY WORK IN FIELD AND SHALL SATISFY HIMSELF AS TO THE ACCURACY BETWEEN WORK SET FORTH ON THESE PLANS AND THE WORK REQUIRED IN THE FIELD. ANY DISCREPANCIES SHALL BE BROUGHT TO THE ATTENTION OF THE ENGINEER PRIOR TO START OF CONSTRUCTION.
7. THE ENGINEER WILL NOT DIRECTLY CONTROL THE PHYSICAL ACTIVITIES OF THE CONTRACTOR OR ANY SUBCONTACTORS. CONTRACTORS WILL BE SOLELY AND COMPLETELY RESPONSIBLE FOR WORKING CONDITIONS ON THE JOB SITE, INCLUDING SAFETY OF ALL PERSONS AND PROPERTY DURING PERFORMANCE OF WORK. THIS REQUIREMENT WILL APPLY CONTINUOUSLY AND NOT BE LIMITED TO NORMAL WORKING HOURS.
8. ANY EXCESS SOIL FROM EXCAVATION SHALL BE DEPOSITED OFF OF DISTRICT RIGHT OF WALL UNLESS APPROVED BY THE DISTRICT'S INSPECTOR.
9. AGGREGATE BASE SHALL BE CLASS 2 AND SHALL COMPLY WITH THE PROVISIONS OF SECTION 26 OF CALTRANS STANDARD SPECIFICATIONS.
10. PORTLAND CEMENT CONCRETE (PCC) PAVEMENT SHALL COMPLY WITH THE PROVISIONS OF SECTION 40 OF CALTRANS STANDARD SPECIFICATIONS.
11. DUCTILE IRON PIPE (DIP) SHALL CONFORM TO THE REQUIREMENTS OF AWWA STANDARDS C151. THE THICKNESS CLASS SHALL BE FOR A RATED WORKING PRESSURE OF 150 PSI AND A DEPTH OF COVER OF 10 FEET. JOINTS SHALL BE FLANGED JOINTS CONFORMING TO AWWA STANDARDS C151.
12. GEOTEXTILE FABRIC SHALL BE MIRAFI 700X OR EQUAL PER CALTRANS SPECIFICATIONS SECTION 88.
13. CONCRETE COLLAR SHALL BE CONSTRUCTED WHERE THE TRANSITION BETWEEN DIP AND CMP IS IN A STRAIGHT LINE.
14. THE CONTRACTOR SHALL COMPLY WITH THE RULES AND REGULATIONS OF "CAL OSHA" CALIFORNIA LABOR CODE SECTION 6300.
15. INSTALL ESA PRIOR TO STARTING WORK, FENCE AT WORK LIMIT LINE AND AROUND ALL TREES TO BE SAVED. REMOVE FENCE AFTER ALL WORK IS ACCEPTED BY SCVWD.
16. HDPE PIPE AND FITTINGS SHALL CONFORM TO THE REQUIREMENTS OF AWWA STANDARDS C906 AND SHALL BE PHILLIPS 66 DRISCOPIPE SERIES 1000 OR EQUAL.

GENERAL NOTES

1. SURVEY HORIZONTAL CONTROL IS BASED ON NAD 83 AND VERTICAL CONTROL IS BASED ON NAVD 88 ALL STATIONING AND DISTANCES INDICATED ON THE DRAWINGS ARE BASED ON HORIZONTAL MEASUREMENTS.
2. THE CONTRACTOR SHALL RESTORE ALL DISTURBED AREAS TO MATCH PRE-CONSTRUCTION CONDITION OR BETTER AFTER COMPLETION OF PROJECT.

SURVEY NOTES

BENCH MARK:

ELEVATIONS SHOWN HEREON ARE BASED UPON BENCHMARK 234 PER "CONTROL VALUES FOR THE CITY OF SAN JOSE RECLAIMED WATER PROJECT", NAVD88. JANUARY 19, 1996: SURVEY SPIKE AND TOWILL TAG STAMPED "234". SET IN THE CENTERLINE OF OLD ALVISO-MILPITAS ROAD, NOW AN ACCESS ROAD TO THE FIELDS, ON THE NORTH SIDE OF HIGHWAY 237, 200 FT.± NORTH OF HIGHWAY 237, 900 FT.± EAST OF ZANKER ROAD TO REACH, ENTER OFF ZANKER ROAD, IN THE CITY OF SAN JOSE ELEVATION 15.494 FEET.

BASIS OF BEARING:

BEARINGS SHOWN HEREON ARE BASED UPON FOUND MONUMENTS ON THE NORTHERN LINE OF "LANDS OF THE CITY OF SAN JOSE" SHOWN ON SHEET 3 OF 3 OF THE RECORD OF SURVEY BY CROSS LAND SURVEYING INC. DATED MAY 1994 (658 PM 6) AS N74°54'17"E. CALIFORNIA COORDINATE SYSTEM. ZONE III. NAD 83, DISTANCES SHOWN HEREON ARE GOUND DISTANCES; MULTIPLY DISTANCES SHOWN BY D 999945823 TO OBTAIN GRID DISTANCES.

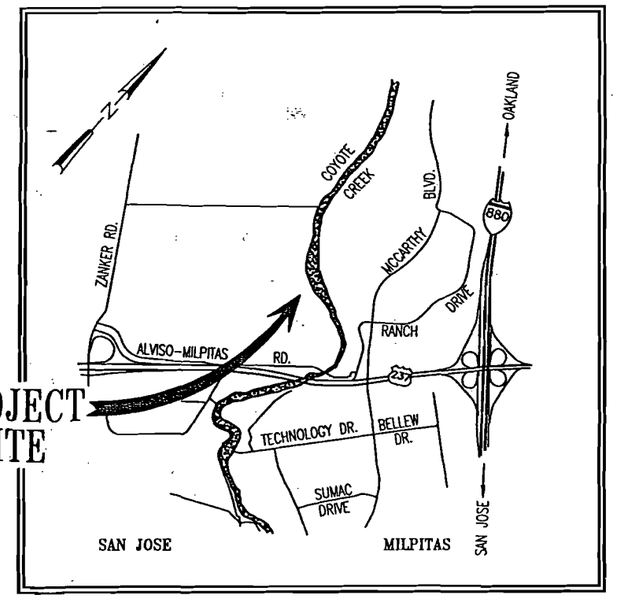
ABBREVIATIONS

DIP	DUCTILE IRON PIPE
PCC	PORTLAND CEMENT CONCRETE
RCP	REINFORCED CONCRETE PIPE
CMP	CORRUGATED METAL PIPE
℄	CENTER LINE
PT	POINT
EXIST	EXISTING
OHW	ORDINARY HIGH WATER ELEVATION
INV	INVERT ELEVATION
SD	STORM DRAIN
TYP	TYPICAL
STA	STATIONING
EL	ELEVATION
SHT	SHEET
NIC	NOT IN CONTRACT
FES	FLARED END SECTION
NTS	NOT TO SCALE
MAX	MAXIMUM
MIN	MINIMUM
DIA	DIAMETER
ESA	ENVIRONMENTLY SENSITIVE AREA
AB	AGGREGATE BASE
⚠PVC	POLYVINYL CHLORIDE PIPE

LEGEND

TO BE CONST.	EXIST.	DESCRIPTION
		PROPERTY LINE
		CENTER LINE
	20	CONTOUR
		GROUND SURFACE
		LIMIT OF WORK
		STORM DRAIN
		SLOPE DIRECTION
		TREES – SAVE/PROTECT
	18.6	SPOT ELEVATION
		GRADE TO DRAIN

TABLE OF CONTENTS



VICINITY MAP
NOT TO SCALE

REGISTERED PROFESSIONAL ENGINEER
BRUCE MCCLISH
No. C24894
Exp. 12/31/05
CIVIL
STATE OF CALIFORNIA

1737 N. FIRST STREET, SUITE #300
SAN JOSE, CALIFORNIA 95112-4524
(408)436-4909

CH2MHILL

DSGN	D.T.L.
DR	J.C.
CHK	D.T.L.
APVD	B.M.M.

NO.	DATE	REVISION	BY	APVD
⚠	07/24/03	AS BUILT CONDITION		BM

BAR IS ONE INCH ON ORIGINAL DRAWING.
0 1"
IF NOT ONE INCH ON THIS SHEET, ADJUST SCALES ACCORDINGLY.

LOS ESTEROS
CRITICAL ENERGY FACILITY - PHASE I
SAN JOSE, CALIFORNIA

TITLE, VICINITY MAP & NOTES

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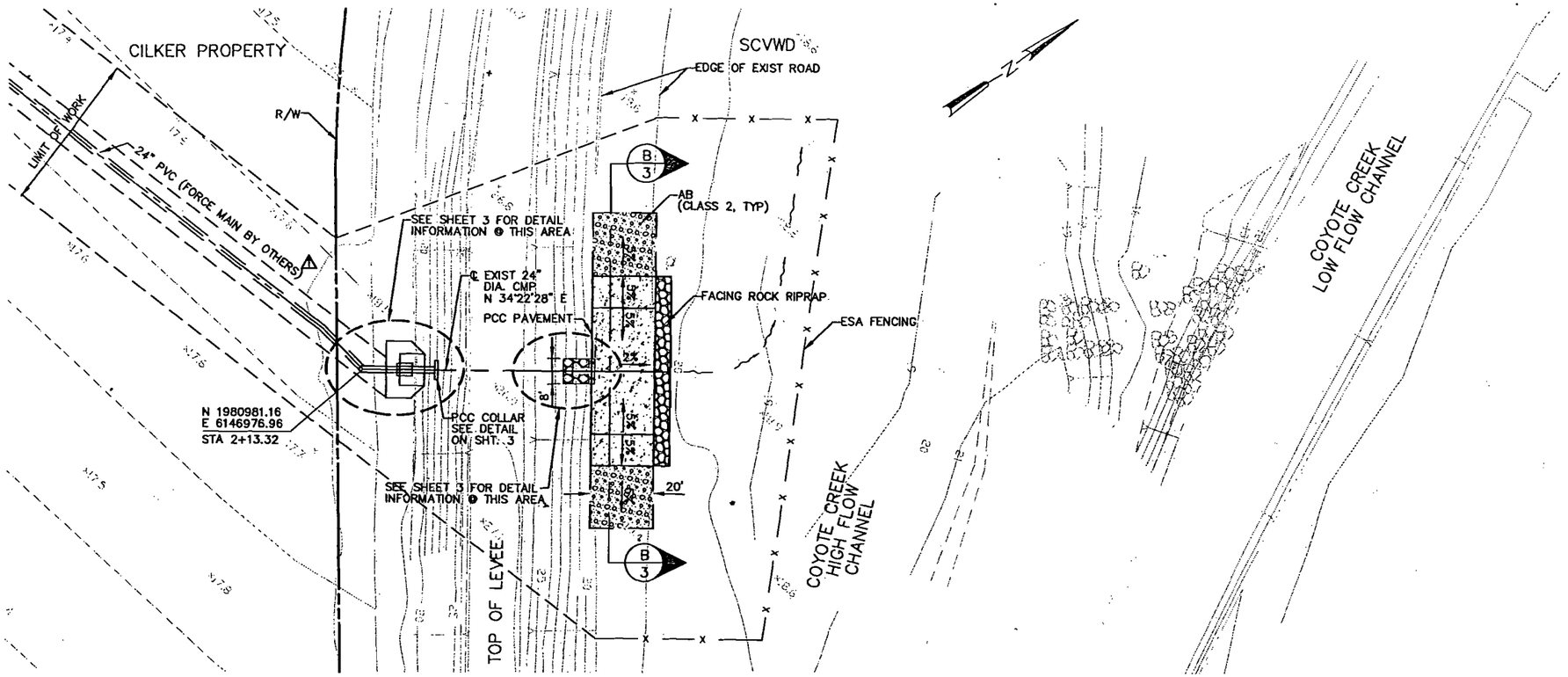
DATE	05/07/02
PROJ NO.	171228.0F.10



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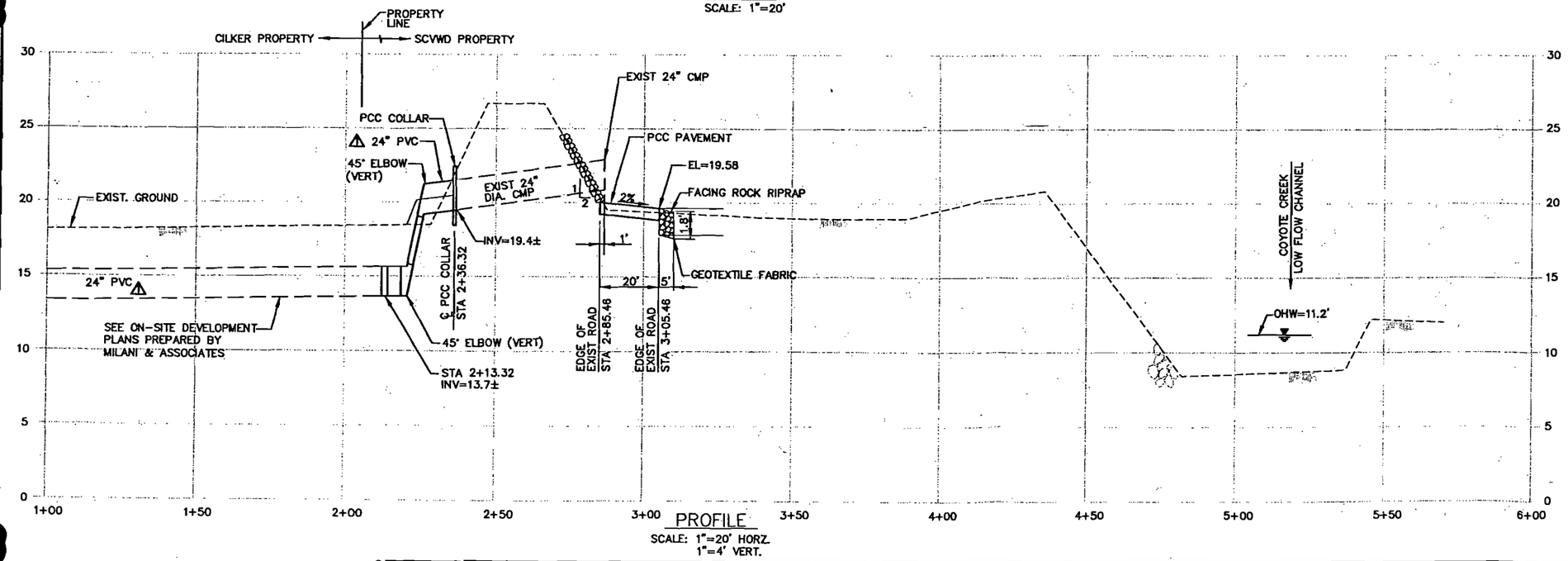

PROFILE
SCALE: 1"=20' HORZ.
1"=4' VERT.

As-Built

APPROVED
WILLDAN DATE: 7-28-03
BY:
DELEGATE CHIEF BUILDING OFFICIAL FOR THE CALIFORNIA ENERGY COMMISSION

REGISTERED PROFESSIONAL ENGINEER
BRUCE MCCLISH
No. C24894
Exp. 12/31/05
CIVIL
STATE OF CALIFORNIA

0 20 40 60
SCALE 1"=20'

1737 N. FIRST STREET, SUITE #300
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CH2M HILL

DSGN	D.T.L.
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NO.	DATE	REVISION	BY	APVD
⚠	07/24/03	AS BUILT CONDITION		BM

BAR IS ONE INCH ON ORIGINAL DRAWING.
IF NOT ONE INCH ON THIS SHEET, ADJUST SCALES ACCORDINGLY.

LOS ESTEROS
CRITICAL ENERGY FACILITY - PHASE I
SAN JOSE, CALIFORNIA

PLAN AND PROFILE

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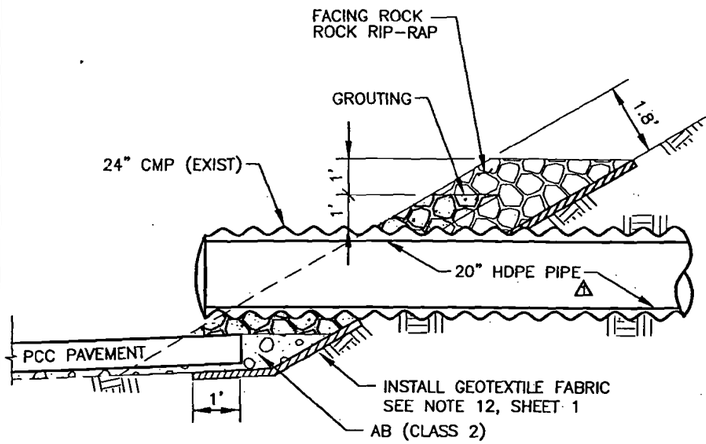
DATE	05/07/02
PROJ NO.	171228.0F.10



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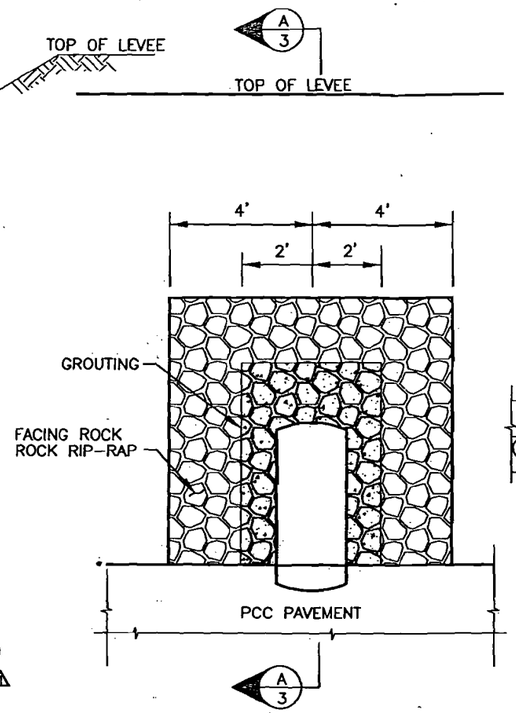
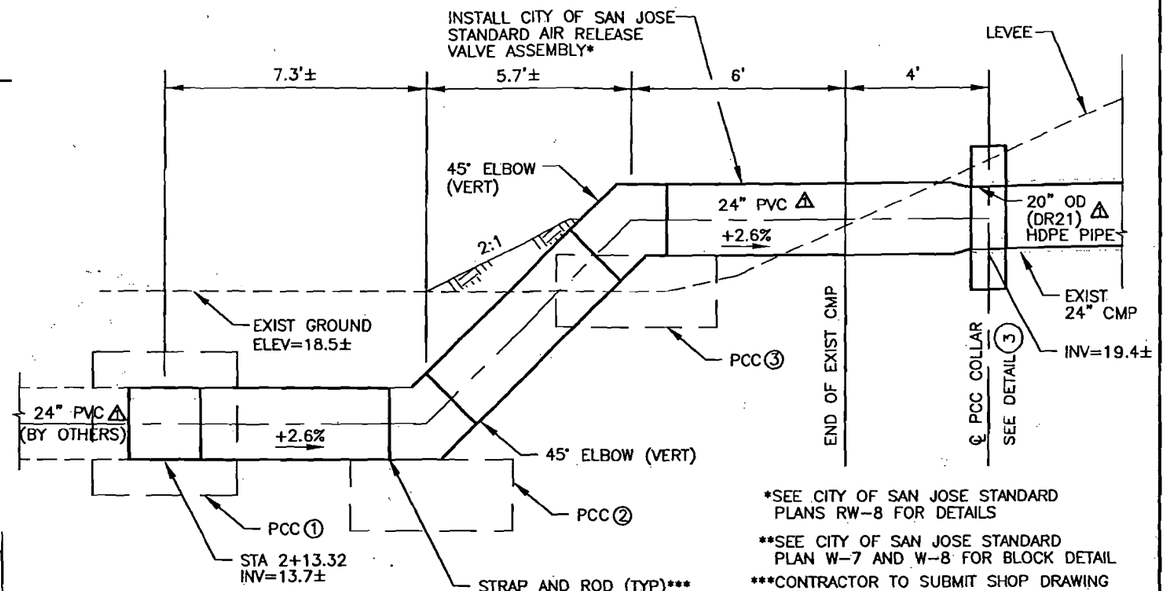


DETAIL 1 SCALE: NTS



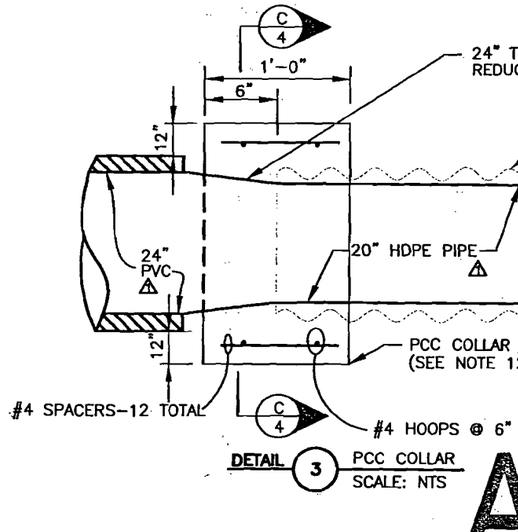
*SEE CITY OF SAN JOSE STANDARD PLANS RW-8 FOR DETAILS

**SEE CITY OF SAN JOSE STANDARD PLAN W-7 AND W-8 FOR BLOCK DETAIL

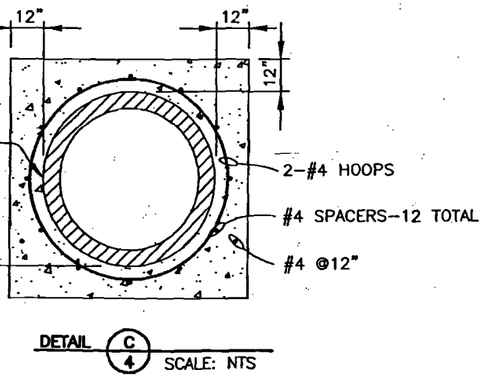
***CONTRACTOR TO SUBMIT SHOP DRAWING DETAIL OF STRAPS AND RODS FOR APPROVAL PRIOR TO INSTALLATION

DETAIL D/3 SCALE: NTS

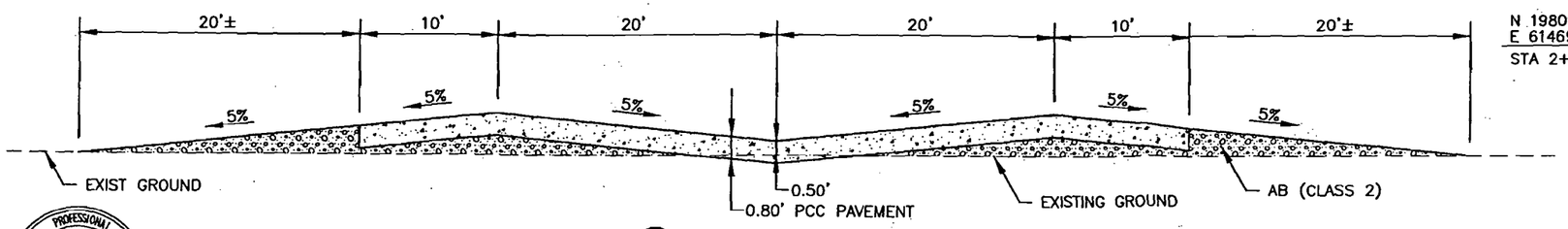
	PCC BLOCK**	
	HORIZ	VERT
①	8.5'X8.5'	2.0'
②	8.5'X8.5'	2.0'
③	10'X10'	3.0'



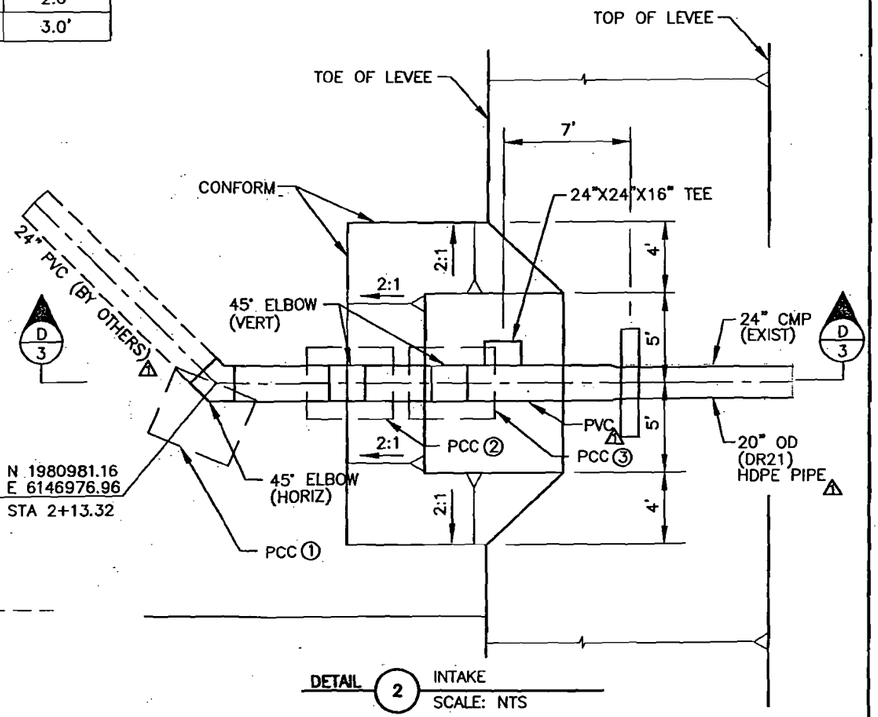
DETAIL 3 PCC COLLAR
SCALE: NTS



DETAIL C/4 SCALE: NTS



DETAIL B/3 PCC PAD
SCALE: NTS



DETAIL 2 INTAKE
SCALE: NTS

As-Built

APPROVED
DATE: 7-28-03
BY: WILLDAN
DELEGATE CHIEF BUILDING OFFICIAL FOR THE CALIFORNIA ENERGY COMMISSION

REGISTERED PROFESSIONAL ENGINEER
BRUCE MCCLISH
No. C24894
Exp. 12/31/05
CIVIL
STATE OF CALIFORNIA

1737 N. FIRST STREET, SUITE 4300
SAN JOSE, CALIFORNIA 95112-4524
(408)436-4909

CH2M HILL

DSGN	D.T.L.
DR	J.C.
CHK	D.T.L.
APVD	B.M.M.

NO.	DATE	REVISION	BY	APVD
1	07/24/03	AS BUILT CONDITION	BM	

BAR IS ONE INCH ON ORIGINAL DRAWING.
IF NOT ONE INCH ON THIS SHEET, ADJUST SCALES ACCORDINGLY.

LOS ESTEROS
CRITICAL ENERGY FACILITY - PHASE I
SAN JOSE, CALIFORNIA

CONSTRUCTION DETAILS

SHEET	3
DWG NO.	3 OF 3
DATE	05/07/02
PROJ NO.	171228.0F.10

All

State of California
State Water Resources Control Board

NOTICE OF TERMINATION

OF COVERAGE UNDER THE NPDES GENERAL PERMIT NO. CAS000002
FOR DISCHARGES OF STORM WATER
ASSOCIATED WITH CONSTRUCTION ACTIVITY

Unpaid inv 0313337 $1,541
mp 9/17/04

Submission of this Notice of Termination constitutes notice that the owner (and his/her agent) of the site identified on this form is no longer authorized to discharge storm water associated with construction activity by NPDES General Permit No. CAS000002.

I. WDID NO. 243C317374

II. OWNER

COMPANY NAME CALPINE CONTACT PERSON Dana Petrin

STREET ADDRESS 4160 Dublin Blvd TITLE Compliance Manager

CITY Dublin STATE CA ZIP 94568 PHONE (408) 592-7915

III. CONSTRUCTION SITE INFORMATION

A. DEVELOPER NAME University Marelich Mechanical CONTACT PERSON Chad Johnston

STREET ADDRESS 24041 Amador St TITLE Project Manager

CITY Hayward CA ZIP 94544 PHONE (510) 785-5500

B. SITE ADDRESS 1515 Alviso Milpitas Rd COUNTY Santa Clara

CITY San Jose CA ZIP 95134 PHONE (408) 456-2690

IV. BASIS OF TERMINATION

X 1. The construction project is complete and the following conditions have been met.

- All elements of the Storm Water Pollution Prevention Plan have been completed.
- Construction materials and waste have been disposed of properly.
- The site is in compliance with all local storm water management requirements.
- A post-construction storm water operation and management plan is in place.

Date of project completion 12/11/03

____ 2. Construction activities have been suspended, either temporarily ____ or indefinitely ____ and the following conditions have been met.

- All elements of the Storm Water Pollution Prevention Plan have been completed.
- Construction materials and waste have been disposed of properly.
- All denuded areas and other areas of potential erosion are stabilized.
- An operation and maintenance plan for erosion and sediment control is in place.
- The site is in compliance with all local storm water management requirements.

Date of suspension ____/____/____ Expected start up date ____/____/____

____ 3. Site can not discharge storm water to waters of the United States (check one).

____ All storm water is retained on site.

____ All storm water is discharged to evaporation or percolation ponds offsite.

____ 4. Discharge of storm water from the site is now subject to another NPDES general permit or an individual NPDES permit.

NPDES Permit No. _____ Date coverage began ____/____/____

____ 5. There is a new owner of the identified site. Date of owner transfer ____/____/____

Was the new owner notified of the General Permit requirements? YES ____ NO ____

NEW OWNER INFORMATION

COMPANY NAME _____ CONTACT PERSON

STREET ADDRESS _____ TITLE

CITY _____ STATE _____ ZIP _____ PHONE

V. EXPLANATION OF BASIS OF TERMINATION (Attach site photographs - see instructions).

N/A INDUSTRIAL WDID 2M35017329 Not applicable MP 4/23/04

VI. CERTIFICATION:

I certify under penalty of law that all storm water discharges associated with construction activity from the identified site that are authorized by NPDES General Permit No. CAS000002 have been eliminated or that I am no longer the owner of the site. I understand that by submitting this Notice of Termination, I am no longer authorized to discharge storm water associated with construction activity under the general permit, and that discharging pollutants in storm water associated with construction activity to waters of the United States is unlawful under the Clean Water Act where the discharge is not authorized by a NPDES permit. I also understand that the submittal of this Notice of Termination does not release an owner from liability for any violations of the general permit or the Clean Water Act.

PRINTED NAME Bob McCaffrey TITLE General Manager

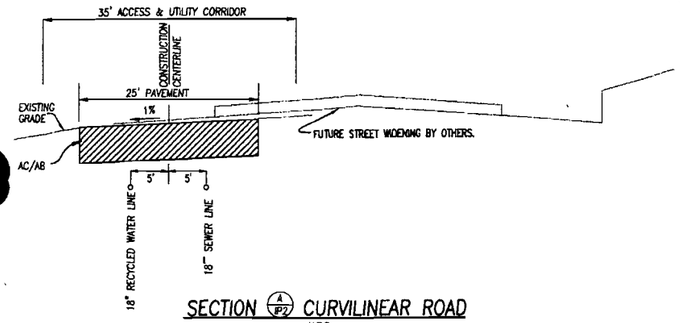
SIGNATURE: _____ DATE 3/4/04

REGIONAL WATER BOARD USE ONLY

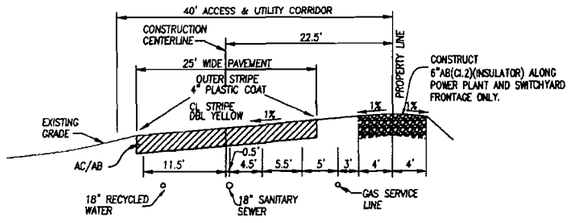
This Notice of Termination has been reviewed, and I recommend termination of coverage under the subject NPDES general permit.

Printed Name _____ Region No. _____

Signature _____ Date ____/____/____

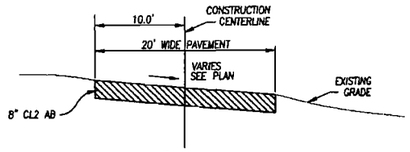


SECTION (A/P7) CURVILINEAR ROAD
N.T.S.



NOTE: SEE PLAN VIEW FOR GAS AND RECYCLED WATER END OF CONSTRUCTION

SECTION (B/P2) EAST LOOP
N.T.S.



SECTION (C/P7) 20' AB ROAD
N.T.S.

STREET STRUCTURAL SECTION

DESIGN TRAFFIC INDEX	ASPHALT CONCRETE (INCHES)	AGGREGATE BASEROCK* (INCHES)	AGGREGATE SUBBASE** (INCHES)	TOTAL THICKNESS (INCHES)	LOCATION
10.0	6.5	18.0	0.0	24.5	1. CURVILINEAR ROAD INCLUDING INCLUDING TURN-AROUND.
10.0	6.5	7.0	12.0	25.5	2. EAST LOOP ROAD STATION 0+00 TO STATION 7+35
10.0	18.5	0.0	0.0	18.5	
0.0	0.0	8.0	0.0	8.0	CILKER - ACCESS ROAD

* CALTRANS CLASS 2 AGGREGATE BASE; MINIMUM R-VALUE EQUAL TO 78
** CALTRANS CLASS 2 AGGREGATE SUBBASE; MINIMUM R-VALUE EQUAL TO 50

NOTES:
1. THE PAVEMENT RECOMMENDATIONS CONTAINED IN LOWNEY ASSOCIATES SOIL'S REPORT DATED JULY 23, 2001 SHOULD ALSO BE FOLLOWED IN THE DESIGN AND CONSTRUCTION OF THIS PAVEMENT SECTION AS WELL.
2. ADDITIONAL SOIL SAMPLES SHOULD BE COLLECTED FOR FURTHER (R") VALUE TESTING ONCE ROUGH PAVEMENT SUBGRADE ELEVATIONS HAVE BEEN ATTAINED. FINAL PAVEMENT SECTION RECOMMENDATIONS SHOULD BE MADE ON THE BASIS OF THIS ADDITIONAL TEST RESULTS.

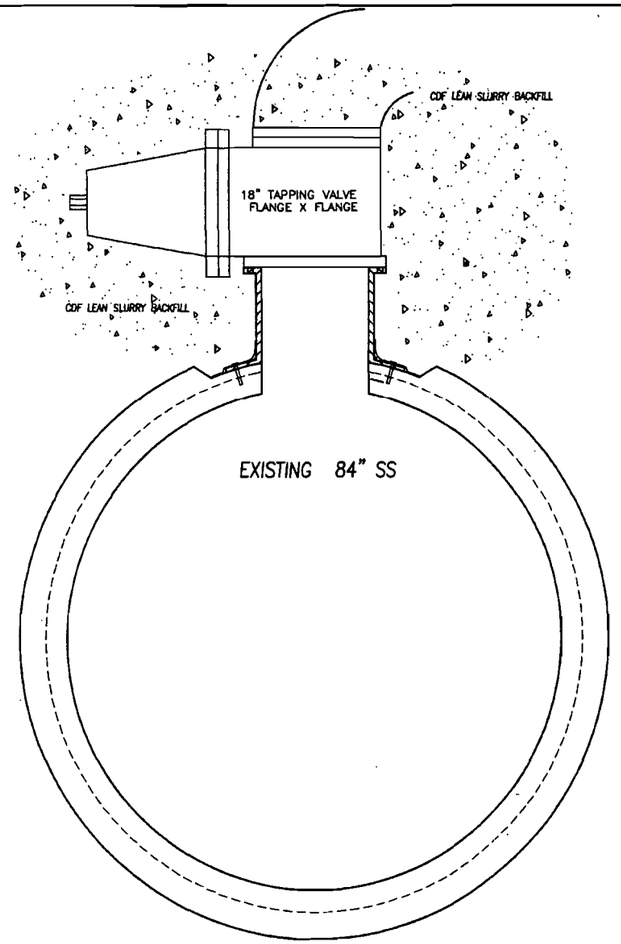
REGISTERED PROFESSIONAL ENGINEER MICHAEL EUGENE MILANI No. 35121 (EXP.09/30/03) CIVIL STATE OF CALIFORNIA

RECORD PLANS
THIS PLAN HAS BEEN UPDATED TO REFLECT CHANGES TO THE PROJECT OBSERVED BY, OR REPORTED TO, THE ENGINEER AND CANNOT BE DEEMED TO BE ALL INCLUSIVE OR APPLICABLE TO ITEMS BEYOND THE ENGINEER'S FUNCTION.

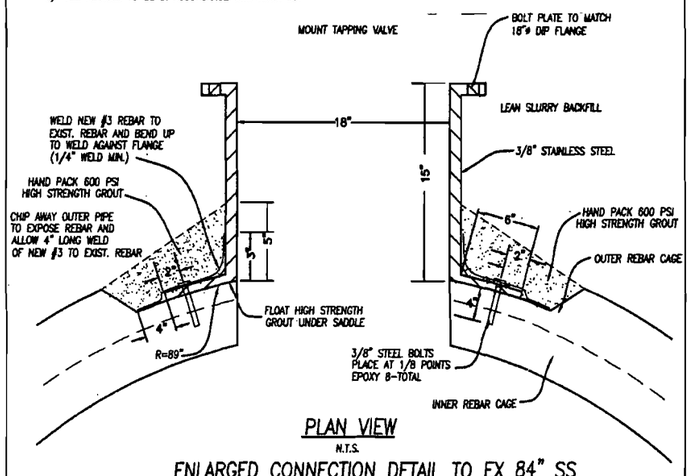
BY:_____ DATE

Michael E. Milani
Milani & Associates
R.C.E. #35121 Exp. 09/30/03

RECEIVED
AUG 12 2003
Calpine LECEF

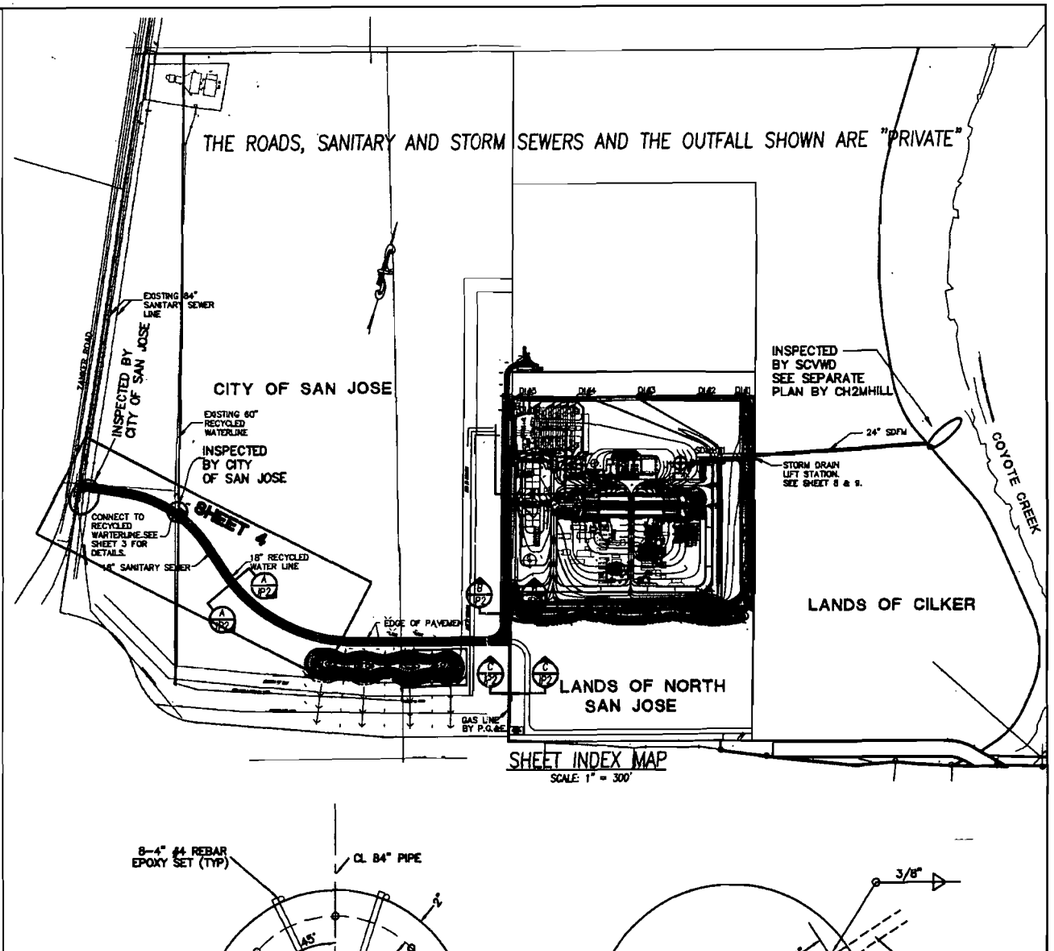


1) ALL STEEL PLATES, NUT, BOLTS AND WASHERS SHALL BE TYPE 316 STAINLESS STEEL
2) ALL FLANGES TO BE IN ACCORDANCE WITH AWWA 207

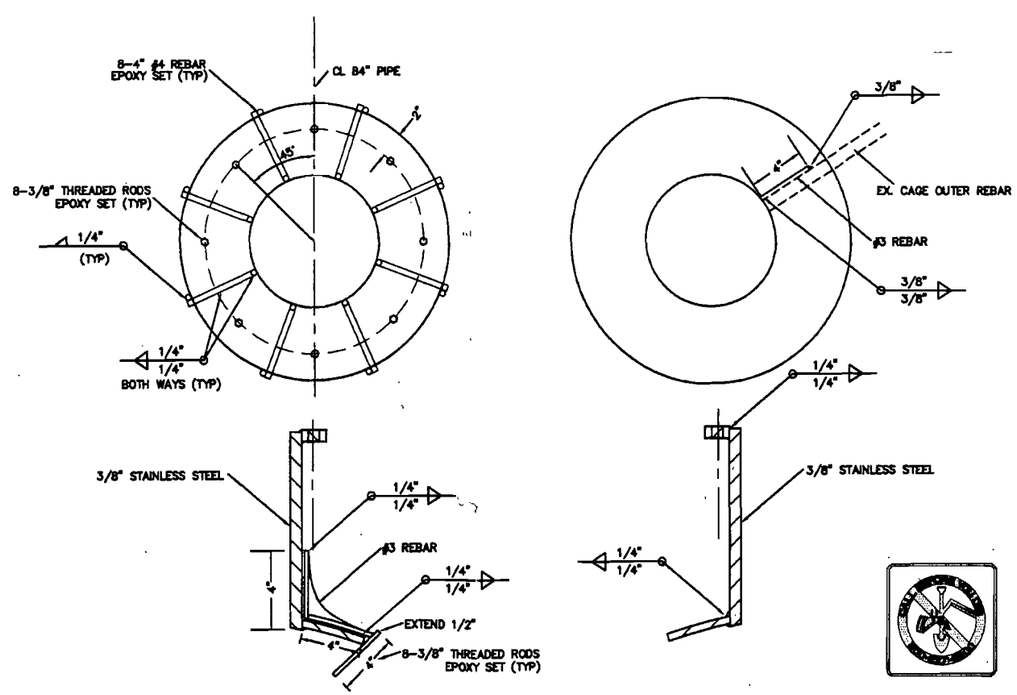


PLAN VIEW
N.T.S.

ENLARGED CONNECTION DETAIL TO EX 84" SS



SHEET INDEX MAP
SCALE: 1" = 300'



Planning
Surveying & Mapping
Land Development Engineering
Municipal Engineering
Construction Staking
Construction Management

MILANI & Associates

4071 Port Chicago Highway
Suite 100
Concord, CA 94520
Phone: (925) 674-9082
Fax: (925)674-9279

PREPARED BY, OR UNDER THE DIRECTION OF:

BY: M.E.M.
R.C.E. No. 35121
DATE:

REGISTERED PROFESSIONAL ENGINEER MICHAEL EUGENE MILANI No. 35121 (EXP.09/30/03) CIVIL STATE OF CALIFORNIA

	REVISIONS	DESIGN BY	DESIGN DATE	CITY APPR.	APPR. DATE
1	ADDED REVISED RW LAYOUT		1-5-03		
2	ADDED FORCE MAIN		11.14.02		
3	PER CITY RED LINES		7.15.02		

PLAN FOR THE IMPROVEMENT OF LOS ESTEROS CRITICAL ENERGY FACILITY-PHASE I CALPINE C* POWER
3-14457
SAN JOSE CALIFORNIA

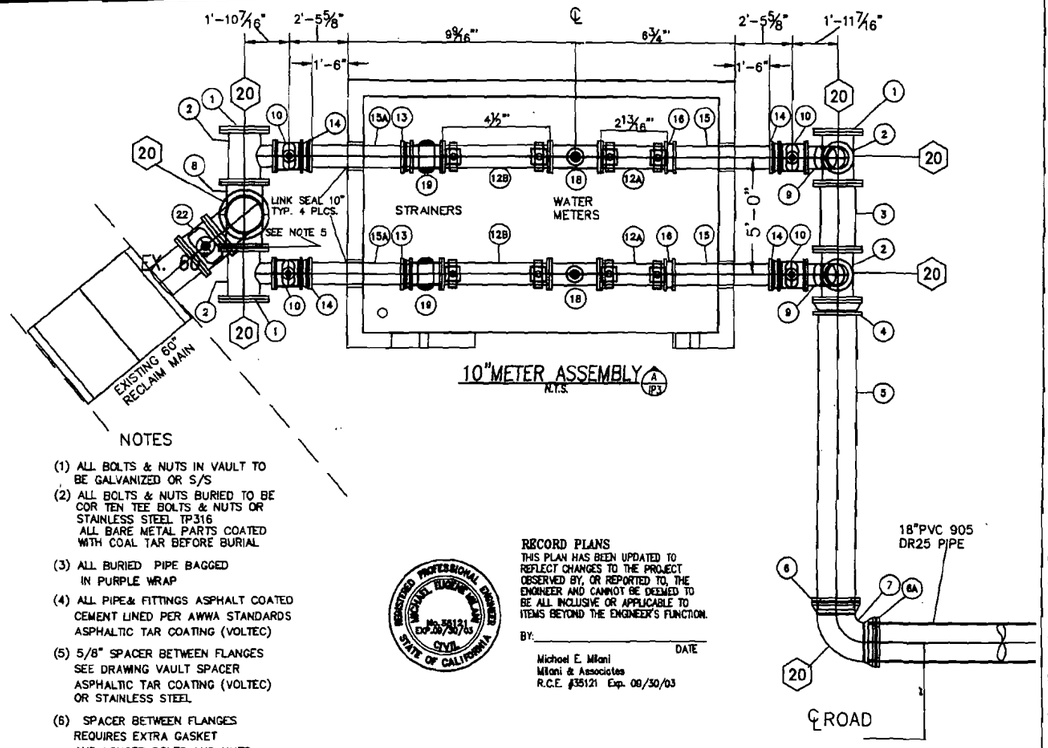
DRAWN BY: ASP/RKH
DESIGNED BY: MEM
CHECKED BY: MEM
JOB NO.: 210043-10 DATE: JUNE 2002
SCALE: AS NOTED

CITY OF SAN JOSE
CAPITOL OF SILICON VALLEY

DEPARTMENT OF PUBLIC WORKS
SAN JOSE, CALIFORNIA

	INITIAL	DATE
PROJECT ENGINEER:		
D.O.T. OPERATIONS:		
MUNI - WATER:		
D.O.T. MAINT.:		
SOUTHBAY WATER:		

APPROVED BY DIRECTOR OF PUBLIC WORKS



10"METER ASSEMBLY (A/JP3)
N.T.S.

NOTES

(1) ALL BOLTS & NUTS IN VAULT TO BE GALVANIZED OR S/S

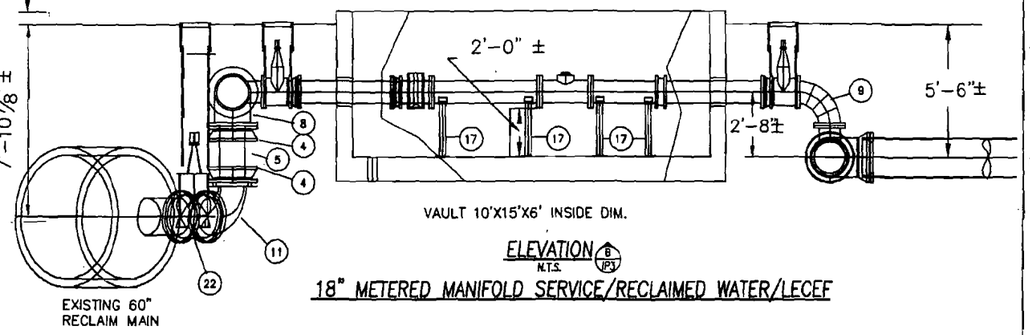
(2) ALL BOLTS & NUTS BURIED TO BE COR TEN TEE BOLTS & NUTS OR STAINLESS STEEL TP316 ALL BARE METAL PARTS COATED WITH COAL TAR BEFORE BURIAL

(3) ALL BURIED PIPE BAGGED IN PURPLE WRAP

(4) ALL PIPE& FITTINGS ASPHALT COATED CEMENT LINED PER AWWA STANDARDS ASPHALTIC TAR COATING (VOLTEC)

(5) 5/8" SPACER BETWEEN FLANGES SEE DRAWING VAULT SPACER ASPHALTIC TAR COATING (VOLTEC) OR STAINLESS STEEL

(6) SPACER BETWEEN FLANGES REQUIRES EXTRA GASKET AND LONGER BOLTS AND NUTS



ELEVATION (B/JP3)
N.T.S.

18" METERED MANIFOLD SERVICE/RECLAIMED WATER/LECEF

RECORD PLANS
THIS PLAN HAS BEEN UPDATED TO REFLECT CHANGES TO THE PROJECT OBSERVED BY, OR REPORTED TO, THE ENGINEER AND CANNOT BE DEEMED TO BE ALL INCLUSIVE OR APPLICABLE TO ITEMS BEYOND THE ENGINEER'S FUNCTION.

BY:_____ DATE

Michael E. Milani
Milani & Associates
R.C.E. #35121 Exp. 09/30/03

BILL OF MATERIAL

MARK	QTY	LENGTH	SIZE	DESCRIPTION
1	3	ADDED ONE	18"	DUCTILE IRON BLIND FLANGES STD. AWWA COATINGS
2	4		18"X10"	DUCTILE IRON FLANGED RED TEE STD. AWWA COATINGS
3	1	2'-9 7/8"FXF	18"	DUCTILE IRON FLANGEDSPOOL STD. AWWA COATINGS
4	3		18"	MEGAFLANGE 2100 RESTRAINED ADAPTER STD. AWWA COATING
5	3	10'-0"EXE	18"	DUCTILE IRON PIPE STD. AWWA COATING
6	5		18"	MEGALUG 1100 RETAINER GLANDS AWWA COATED DIP
6A	1		18"	MEGALUG 2000 RETAINER GLANDS AWWA COATED DIP
7	2	DELETED	18"	90° ELL DUCTILE IRON MJ AWWA COATED
8	1	CHANGED ITEM	18"	TEE DUCTILE IRON MJ AWWA COATED
9	2		10"	90° LONG RADIUS ELL D.I. FLG'D AWWA COATED
10	4		10"	MUELLER A-2360-19 WEDGE GATE VALVE RESILIENT SEAT FLANGED X MJ COATED AWWA C509
11	1	CHANGED ITEM	18"	90° ELL DUCTILE IRON FLGXFLG AWWA COATED
12A	2	2'-9-1/2" FXF	10"	D.I. FLG'D X FLG'D SPOOLS AWWA COATED
12B	2	4-6" FXF	10"	
13	2	DELETED 2	10"	MEGAFLANGE 2100 RESTRAINED ADAPTER AWWA COATED
14	4		10"	MEGALUG 1100 RETAINER GLANDS AWWA COATED DIP
15	4		10"	D.I. FLG'D X PLAIN SPOOLS AWWA COATED FIELD DIM
15A	2		10"	D.I. PLAIN X PLAIN SPOOLS AWWA COATED FIELD DIM
16	2		10"	WAFER CHECK VALVE CLA-VAL MODEL 501
17	8	30" ±	2"/2-1/2"	PIPE SUPPORTS TOLCO FIG. 315(10) WITH 316(2-1/2) HOT DIPPED GALVANIZED
18	2	26" FXF	10"	CITY SUPPLIED BADGER METER RTS 5500 WITH READOUT
19	2	16" FXF	10"	CITY SUPPLIED BADGER PLATE STRAINERS MODEL ML-MS
20	8	THRUST BLOCK	18"	CITY W-7 THRUST BLOCK ON 18" ONLY
21		PURPLE WRAP	10"/18"	AS SPECIFIED IN AWWA C105
22	1	1'-5"	18"	MUELLER A-2381-8 WEDGE GATE VALVE RESILIENT SEAT FLANGED X FLANGED COATED AWWA C509 FULL PORT FOR TAPPING

SAN JOSE MUNICIPAL WATER SYSTEM RECYCLED WATER SYSTEM NOTES

1. RECYCLED WATER SYSTEM CONSTRUCTION SHALL CONFORM TO THE "1992 STANDARD SPECIFICATIONS FOR CITY OF SAN JOSE PUBLIC WORKS" AND "1992 STANDARD DETAILS FOR THE CITY OF SAN JOSE PUBLIC WORKS." COPIES CAN BE PURCHASED IN ROOM 320 OF SAN JOSE CITY HALL.
2. RECYCLED WATER FACILITIES SHALL BE CONSTRUCTED AS SHOWN ON THESE PLANS, PER SBWR RECYCLED WATER STANDARD DETAILS, NOTICE, AND SUPPLEMENTARY SPECIFICATIONS, AND THE APPLICABLE CITY OF SAN JOSE STANDARD SPECIFICATIONS AND DETAILS. ALL CHANGES MUST BE APPROVED BY MUNI. WATER INSPECTOR PRIOR TO BEING CONSTRUCTED. A REVISED DRAWING MUST BE APPROVED BY MUNI. WATER ENGINEER.
3. NOTIFY MUNI. WATER INSPECTOR A MINIMUM OF 24 HOURS PRIOR TO REQUIRED INSPECTIONS. INSPECTOR MAY PHONE AT (408) 277-3671 BETWEEN 8:00 AM AND 4:30 PM MONDAY THROUGH FRIDAY, EXCEPT HOLIDAYS.
4. CONSTRUCTION OF RECYCLED WATER FACILITIES SHALL PROCEED ONLY AFTER THE CURB AND GUTTER IS COMPLETED. PRIOR TO PRESSURING WATER MAINS, A MINIMUM OF 30" COVER SHALL BE CONSTRUCTED AND MAINTAINED BETWEEN THE TOP OF WATER MAIN AND TOP OF STREET SUBGRADE.
5. STAMP "RW" ON FACE OF CURB FOR EACH WATER SERVICE.
6. BEDDING AND BACKFILL SHALL BE AS PER SECTION 1301 OF THE STANDARD SPECIFICATIONS. IMPORTED SAND SHALL BE USED FOR TYPE A BEDDING. NO JETTING OF BACKFILL IS ALLOWED.
7. ALL METALLIC WATER MAIN SHALL BE ENCASED WITH PURPLE POLYETHYLENE WRAP AS SPECIFIED IN AWWA C105. PVC PIPE SHALL BE PURPLE COLORED OR WRAPPED IN PURPLE AND HAVE A 4 TO 1 SAFETY FACTOR.
8. RECYCLED WATER MAIN SHALL BE DISINFECTED AND FLUSHED ACCORDING TO THE STANDARD SPECIFICATIONS. A BACTERIOLOGICAL TEST WILL BE REQUIRED IF POTABLE WATER IS USED FOR DISINFECTION, FLUSHING, AND PRESSURE TESTING.

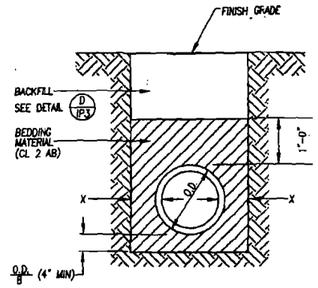
BACTERIOLOGICAL TEST

- WATER SAMPLING SHALL BE WITNESSED BY MUNI. WATER INSPECTOR. THE SAMPLING AND TEST SHALL BE PERFORMED BY A LABORATORY APPROVED BY THE STATE OF CALIFORNIA DEPARTMENT OF HEALTH.
- THE ORIGINAL TEST REPORTS MUT BE DELIVERED TO AND APPROVED BY MUNI. WATER ENGINEER PRIOR TO PRESSURE TESTING.

9. LEAKAGE AND PRESSURE TEST SHALL BE FOR A MINIMUM OF 2 HOURS AT 200 PSI.
10. STATIC WATER PRESSURE: 105 PSI AT ELEVATION 14 FT. PRESSURE ONE 1
11. RECYCLED WATER MAIN SHALL BE RATED FOR WORKING PRESSURE OF 200 PSI. (PVC C905 DR 18 OR EQUAL)
12. RECYCLED METER BOXES SHALL BE INSTALLED AT BACK OF ATTACHED RESIDENTIAL SIDEWALKS, OTHERWISE AT BACK OF CURB. METER BOXES SHALL HAVE "RECYCLED WATER" STAMPED OR ETCHED ON THE LID AND PAINTED PURPLE.
13. TRACER WIRE SHALL BE INSTALLED ON ALL NON-METALLIC WATER LINES. WIRE SHALL BE TYPE RHW #10 AWG STRANDED. WIRE SHALL BE SECURELY FASTENED TO TOP OF RECYCLED WATER LINE AND SHALL BE PLACED ALONG THE OUTSIDE OF VALVE BOX RISERS WITH ONE FOOT OF SLACK PLACED INSIDE OF VALVE BOX. WIRE SHALL TERMINATED IN EACH BOX IN THE DIRECTION THE VALVE CONTROLS AND BE EXTENDED INTO BLOW-OFF BOXES.
14. CLEARANCES

- ONE-FOOT-MINIMUM VERTICAL CLEARANCE BETWEEN RECYCLED WATER MAIN AND OTHER FACILITIES.
- FIVE FEET MINIMUM HORIZONTAL CLEARANCE BETWEEN RECYCLED WATER MAIN AND SANITARY MAIN.
- SEVEN FEET MINIMUM HORIZONTAL CLEARANCE BETWEEN RECYCLED WATER MAIN AND STORM MAIN.
- TEN FEET MINIMUM HORIZONTAL CLEARANCE BETWEEN RECYCLED WATER MAIN AND POTABLE WATER MAIN.
- TEN FEET MINIMUM HORIZONTAL CLEARANCE BETWEEN RECYCLED WATER SERVICE AND SEWER OR POTABLE WATER LATERALS.
- FIVE FEET MINIMUM HORIZONTAL CLEARANCE BETWEEN RECYCLED WATER SERVICE AND STREET TREES.
- TWO FOOT MINIMUM HORIZONTAL CLEARANCE BETWEEN RECYCLED WATER METER BOX AND EDGE OF DRIVEWAY.

15. ALL RECYCLED WATER MAIN VALVES SHALL HAVE "RECYCLED WATER" STAMPED, ETCHED, OR 'BEAD WELDED' ON THE VALVE BOX LID AND RIM, WHICH SHALL BE PAINTED PURPLE. (ADD WARNING TAGS TO VALVES)
16. ALL RECYCLED WATER MAIN BLOW-OFF ASSEMBLIES AND AIR RELIEF VALVES SHALL HAVE "RECYCLED WATER" STAMPED OR ETCHED ON THE BOX LID AND SHALL BE PAINTED PURPLE ALONG WITH THE LID. (ADD WARNING TAGS TO VALVES)
17. OWNER/DEVELOPER SHALL SUBMIT A COPY OF THE SITES' APPROVED RECYCLED WATER USE PERMIT, ISSUED BY SOUTH BAY WATER RECYCLING WHEN REQUESTING A RECYCLED WATER METER.



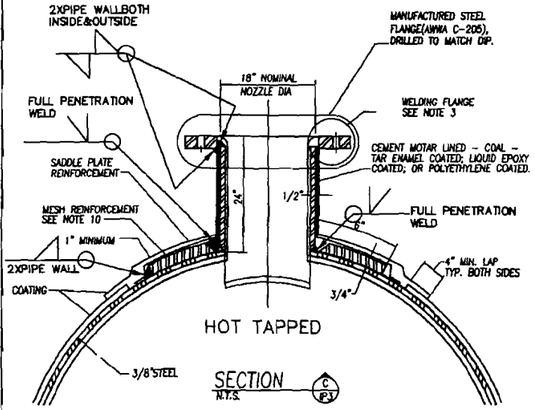
PIPE SIZE	LIMITS OF X	
	MINIMUM	MAXIMUM
24" OR LESS	4"	4"+ O.D./4
27" AND GREATER	6"	6"+ O.D./4

CATEGORY OF PIPE	TYPE OF BEDDING	CLASS OF MATERIAL
DUCTILE IRON PIPE	A	I
CONCRETE PIPE		I
24" DIAMETER AND LESS	A	
25" DIAMETER AND GREATER	A	
POLYVINYL CHLORIDE PIPE	A	I

TYPICAL TRENCH SECTION (D/JP3)
N.T.S.

GENERAL NOTES:

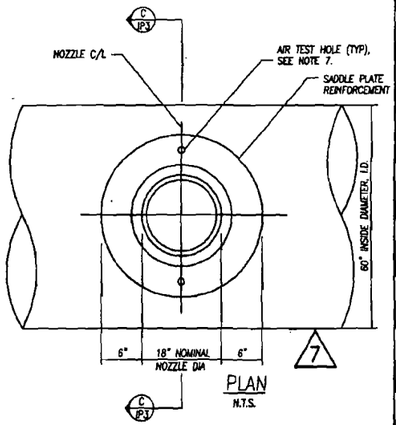
1. CONTRACTOR SHALL FIELD VERIFY THE EXACT TYPE, LOCATION BEARINGS, SLOPE AND ELEVATION OF EXISTING PIPE PRIOR TO SUBMITTING THE SHOP DRAWINGS FOR THE PIPE FABRICATION AND MAKE ADJUSTMENTS AS NECESSARY FOR PROPER CONNECTION.
2. ALL NOZZLES AND PLATES ARE TO BE MANUFACTURED FROM STEEL CONFORMING TO THE REQUIREMENTS OF STEEL PIPE (ASTM 283 GRADE C OR EQUAL)
3. WELDING FLANGES SHALL BE SLIP-ON WELDING FLANGES, RING TYPE, FLAT-FACE. BLIND FLANGES SHALL BE STEEL.
4. FLANGE FACES SHALL BE SHOP COATED WITH A REMOVABLE RUST-PREVENTING COMPOUND TO PROVIDE PROTECTION DURING TRANSPORT AND PRIOR TO INSTALLATION.
5. FLANGE GASKETS SHALL BE 1/8 INCH THICK, FULL-FACE CLOTH INSERTED NEOPRENE GASKETS.
6. FLANGE BOLTS SHALL STRADDLE CENTERLINE OF PIPE OR CENTERLINE OF FLANGE UNLESS REQUIRED OTHERWISE ON DRAWINGS.
7. DRILL AND TAP TEST HOLES FOR AIR TEST BEFORE WELDING MEMBERS AS SHOWN ON DETAILS. PLUG WELD AFTER AIR TEST IS COMPLETED.
8. SHOP COAT ALL METAL SURFACES EXCEPT FLANGE FACES AND SURFACES RECEIVING FIELD APPLIED COATINGS.
9. MESH REINFORCING SHALL BE SELF-FURRING GALVANIZED WIRE MESH 2"X4"X13 GAUGE. SECURE WITH CLIPS A 24" CENTERS AND WELD TO SADDLE, PIPE CYLINDER, OR NOZZLE.
10. PAINT IN SIDE OF BOX PURPLE (PAINTONE 512).



HOT TAPPED

SECTION (C/JP3)
N.T.S.

18" TYPICAL NOZZLE CONNECTION TO EXISTING 60" RECYCLED WATERLINE PIPE
N.T.S.



PLAN (C/JP3)
N.T.S.

HOT TAP WATER CONNECTION

PER STANDARD DETAIL C12921 SANTA CLARA VALLEY WATER DISTRICT TRANSMISSION PIPELINE 523.1. HOT TAP-WELD SADDLE

SPECIAL INSPECTIONS SHALL BE PROVIDED IN ACCORDANCE WITH SECTIONS 106.3.3.5, 1701.1 AND 3317.1 OF THE 1997 EDITION, UNIFORM BUILDING CODE. THE SPECIAL INSPECTION PROGRAM WILL INCLUDE:

EXCAVATIONS AND GRADING;
PLACEMENT AND COMPACTION OF MATERIALS;
CONCRETE FORM WORK;
PLACEMENT OF REINFORCING STEEL;
CONCRETE PLACEMENT;
WELDING;
PLACEMENT OF BOLTS;
PLACEMENT OF BACKFILL AS REQUIRED BY THE SOILS ENGINEER

SELECTION OF THE SPECIAL INSPECTOR SHALL BE SUBJECT TO THE APPROVAL OF THE APPROPRIATE APPROVAL AGENCY PRIOR TO CONSTRUCTION. THE APPROPRIATE APPROVAL AGENCY SHALL BE AS DESIGNATED BY THE CALIFORNIA ENERGY COMMISSION. A RESUME AND APPROPRIATE I. C. B. O. CERTIFICATIONS SHALL BE SUBMITTED TO THE APPROPRIATE APPROVAL AGENCY FOR REVIEW OF QUALIFICATIONS AND APPROVAL. ON COMPLETION OF THE WORK, THE SPECIAL INSPECTOR SHALL SUBMIT A REPORT TO THE APPROPRIATE APPROVAL AGENCY, CONFIRMING COMPLETION OF THE WORK PER APPROVED DRAWINGS AND SPECIFICATIONS, WITH APPLICABLE TESTING AND INSPECTION REPORTS AS REQUIRED BY THE UNIFORM BUILDING CODE IN A FORMAT ACCEPTABLE TO OR DESIGNATED BY THE APPROPRIATE APPROVAL AGENCY.

SERVICE CONNECTION TO THE 60" RECLAIMED WATER LINE MAY BE DONE BY THE FOLLOWING TWO METHODS, SUBJECT TO APPROPRIATE NOTICE TO AND APPROVAL OF THE SOUTH BAY RECYCLED WATER AUTHORITY:
- HOT TAP. THIS PROCEDURE REQUIRES SPECIALIZED EXPERIENCE.

1. THE CONTRACTOR CONDUCTING THE HOT TAP, THE PROCEDURE TO BE USED, AND THE SCHEDULE FOR THE HOT TAP PROCEDURE SHALL BE SUBMITTED TO THE AUTHORITY FOR APPROVAL 60 DAYS PRIOR TO PLANNED SERVICE INSTALLATION.
2. THE HOT TAP INSTALLATION SHALL BE SUBJECT TO INSPECTION BY THE AUTHORITY.
3. HOT TAP WATER CONNECTION - A FULL BORE VALVE WILL BE REQUIRED AT THE HOT TAP FLANGE. A VALVE BOX WILL BE REQUIRED FOR FUTURE ACCESS TO THIS VALVE. SUBMITTAL AND APPROVAL OF A HOT TAP PROCEDURE IS REQUIRED. IT SHALL INCLUDE WELDING AND TESTING PROCEDURES FOR THE 18" PIPE CONNECTION IS REQUIRED.

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Calpine LECEF

Planning
Surveying & Mapping
Land Development Engineering
Municipal Engineering
Construction Staking
Construction Management

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PREPARED BY, OR UNDER THE DIRECTION OF:
BY: M.E.M.
R.C.E. No. 35121
DATE:

	REVISIONS	DESIGN BY	DESIGN DATE	CITY APPR.	APPR. DATE
A	ADDED REVISED RW LAYOUT		1-5-03		
B	ADDED FORCE MAIN		11.14.02		
C	PER CITY RED LINES				
15.02					

PLAN FOR THE IMPROVEMENT OF
LOS ESTEROS CRITICAL ENERGY FACILITY-PHASE I
CALPINE C* POWER
3-14457
SAN JOSE CALIFORNIA

DRAWN BY: ASP/RCH
DESIGNED BY: MEM
CHECKED BY: MEM
JOB NO.: 210043-10 DATE: JUNE 2002
SCALE: AS NOTED

CITY OF SAN JOSE
CAPITOL OF SILICON VALLEY

DEPARTMENT OF PUBLIC WORKS
SAN JOSE, CALIFORNIA

	INITIAL	DATE
PROJECT ENGINEER:		
D.O.T. OPERATIONS:		
MUNI - WATER:		
D.O.T. MAINT.:		
SOUTHBAY WATER:		

APPROVED BY DIRECTOR OF PUBLIC WORKS

SHEET 4 OF 5