



**SOUTH SAN LUIS OBISPO COUNTY
SANITATION DISTRICT**

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**AGENDA
BOARD OF DIRECTORS MEETING**

OCSD Board Room
1655 Front Street
Oceano, California 93445

Wednesday, September 7, 2016 at 6:00 p.m.

Board Members

John Shoals, Chair
Mary Lucey, Director
Jim Hill, Director

Agencies

City of Grover Beach
Oceano Community Services District
City of Arroyo Grande

Alternate Board Members

Matthew Guerrero, Director
Tim Brown, Director
Barbara Nicolls, Director

Oceano Community Services District
City of Arroyo Grande
City of Grover Beach

-
- 1. CALL TO ORDER AND ROLL CALL**
 - 2. PLEDGE OF ALLEGIANCE**
 - 3. AGENDA REVIEW**
 - 4. PUBLIC COMMENTS ON ITEMS NOT APPEARING ON AGENDA**

This public comment period is an invitation to members of the community to present comments, thoughts or suggestions on matters not scheduled on this agenda. Comments should be limited to those matters which are within the jurisdiction of the District. The Brown Act restricts the Board from taking formal action on matters not published on the agenda. In response to your comments, the Chair or presiding Board Member may:

- Direct Staff to assist or coordinate with you.
- Direct Staff to place your issue or matter on a future Board meeting agenda.

Please adhere to the following procedures when addressing the Board:

- Comments should be limited to three (3) minutes or less.
- Your comments should be directed to the Board as a whole and not directed to individual Board members.
- Slanderous, profane or personal remarks against any Board Member, Staff or member of the audience shall not be permitted.

Any writing or document pertaining to an open-session item on this agenda which is distributed to a majority of the Board after the posting of this agenda will be available for

public inspection at the time the subject writing or document is distributed. The writing or document will be available for public review in the offices of the Oceano CSD, a member agency located at 1655 Front Street, Oceano, California. Consistent with the Americans with Disabilities Act (ADA) and California Government Code §54954.2, requests for disability-related modification or accommodation, including auxiliary aids or services, may be made by a person with a disability who requires modification or accommodation in order to participate at the above referenced public meeting by contacting the District Administrator or Bookkeeper/Secretary at (805) 481-6903. So that the District may address your request in a timely manner, please contact the District two business days in advance of the meeting.

5. CONSENT AGENDA:

The following routine items listed below are scheduled for consideration as a group. Each item is recommended for approval unless noted. Any member of the public who wishes to comment on any Consent Agenda item may do so at this time. Any Board Member may request that any item be withdrawn from the Consent Agenda to permit discussion or to change the recommended course of action. The Board may approve the remainder of the Consent Agenda on one motion.

- 5A. Approval of Minutes of Meeting of July 20, 2016**
- 5B. Approval of Minutes of Meeting of August 03, 2016**
- 5C. Approval of Minutes of Meeting of August 17, 2016**
- 5D. Approval of Warrants**
- 5E. Financial Review at July 31, 2016**

6. ACTION ITEMS:

- 6A. DISTRICT'S LONG-RANGE REDUNDANCY PROJECT - SECONDARY CLARIFIER AND AERATION TANKS, CONSIDERATION OF RESOLUTION NO. 2016-357, A RESOLUTION CONCURRING THAT NO FURTHER ENVIRONMENTAL REVIEW IS REQUIRED FOR THIS PROJECT**

Staff recommends:

Adoption of Resolution No. 2016-357, a Resolution Concurring that No Further Environmental Review is Required for the Long Range Redundancy Project, Secondary Clarifier and Aeration Tanks.

- 6B. CHERRY AVENUE SEWER PIPE BRIDGE MAINTENANCE PROJECT - CONSIDERATION OF A RESOLUTION NO. 2016-356, A RESOLUTION MAKING FINDINGS, ADOPTS A MITIGATION MONITORING PROGRAM, APPROVE A MITIGATED NEGATIVE DECLARATION, AND DIRECT THE FILING OF THE MITIGATED NEGATIVE DECLARATION**

Staff recommends adoption of Resolution No. 2016-356, a Resolution Making Findings, Adopt a Mitigation Monitoring Program, approve a Mitigated Negative Declaration, and Direct the Filing of the Mitigated Negative Declaration for the Project.

6C. AWARD OF CONTRACT FOR A MECHANICAL BAR SCREEN/HEADWORKS IMPROVEMENT PROJECT AT THE DISTRICT'S WASTEWATER TREATMENT PLANT

Staff recommends:

1. Award a contract for installation and construction of the Mechanical Bar Screen/Headwork Improvement Project to Fluid Resource Management;
2. Direct the District Administrator to enter into an Agreement (Attachment No. 1) with Fluid Resource Management in the amount of \$511,370.51;
3. Approve a specific contingency fund for this project up to 15% (\$76,706) of the total contract amount for unforeseen future project events; and
4. Authorize the District Administrator to approve further change orders for this project within the newly created contingency fund.

7. DISTRICT ADMINISTRATOR AND PLANT SUPERINTENDENT'S REPORT

Staff recommends the Board receive and file this report.

8. ADJOURN MEETING

The next regularly scheduled Board meeting on September 21, 2016, 6 pm at the Oceano Community Service District Board Room, 1655 Front Street, Oceano, California

SOUTH SAN LUIS OBISPO COUNTY SANITATION DISTRICT

OCSD Board Room
1655 Front Street
Oceano, California 93445

Minutes of the Meeting of Wednesday July 20, 2016
6 P.M.

1. CALL TO ORDER AND ROLL CALL

Present: Director Barbara Nicolls, City of Grover Beach; Acting Chair Mary Lucey, Oceano Community Services District; Director Tim Brown, City of Arroyo Grande

District Staff in Attendance: Gerhard Hubner, District Administrator; Gilbert Trujillo, District Legal Counsel; Amy Simpson, District Secretary/Bookkeeper; John Clemons, Plant Superintendent

2. FLAG SALUTE

3. AGENDA REVIEW – Accepted as presented.

4. PUBLIC COMMENTS ON ITEMS NOT APPEARING ON THE AGENDA

There was no public comment on items not appearing on the agenda.

5. CONSENT AGENDA

5A. Approval of Minutes of Meeting of July 06, 2016

5B. Approval of Warrants

District Administrator noted that the two highlighted items on the Warrant Register will be Board Action Items tonight. The Board will consider those items when they are taken up.

Acting Chair Lucey opened the public comment period.

Julie Tacker commented on the legal counsel warrant.

Acting Chair Lucey closed public comment.

Motion: Director Brown made a motion to approve the Consent Agenda with the exception of the two Action Items highlighted on the Warrant Register.

Second: Director Nicolls

Action: Approved unanimously by roll call vote.

6. DISTRICT ADMINISTRATOR AND PLANT SUPERINTENDENT'S REPORT

District Administrator Hubner presented the first part of this report.

Superintendent Clemons presented the second part of the report. He did report that the plant is operating in compliance.

Acting Chair Lucey opened the item to public comment.

Julie Tacker commented on the District Administrator and Superintendent Report.

Acting Chair Lucey closed the public comment period.

Action: The Board received and filed this report.

7. ACTION ITEMS:

7A. AUTHORIZATION TO SUBMIT PAYMENT TO CALIFORNIA PUBLIC EMPLOYEE'S RETIREMENT SYSTEM (CalPERS) AS ANNUAL LUMP SUM PAYMENT VS. MONTHLY AS A COST SAVING MEASURE

Staff recommended the Board of Directors authorize the District Administrator to submit a lump sum annual payment to CalPERS in the amount of \$41,854.

Acting Chair Lucey opened the item to public comment.

Julie Tacker commented on this item.

Acting Chair Lucey closed the public comment period.

Motion: Director Nicolls made a motion to authorize the District Administrator to submit a lump sum annual payment to CalPERS in the amount of \$41,854.

Second: Director Brown

Action: Approved unanimously by roll call vote.

7B. AUTHORIZATION TO UTILIZE THE PREPAYMENT OPTION ON THE LOAN FOR DISTRICT'S COGENERATION UNIT

Staff recommended the Board of Directors authorize the District Administrator to submit prepayment of \$73,750.05 on the loan for the District's Cogeneration Unit.

Director Tim Brown asked if other vendors could come in and use any of the original unit or if there was any salvage or depreciation value in the unit.

Acting Chair Lucey did not feel it was a great value to save only a small percentage in prepaying. She asked about refinancing the loan.

Acting Chair Lucey opened the item to public comment.

Julie Tacker gave public comment.

Acting Chair Lucey closed the public comment period.

Motion: Director Brown made a motion to authorize the District Administrator to submit prepayment of \$73,750.05 on the loan for the District's Cogeneration Unit to save rate payers \$1,046.55.

Second: Director Nicolls

Action: Approved unanimously by roll call vote.

7C. NOMINATION FOR MAIL IN BALLOT FOR CALIFORNIA SPECIAL DISTRICTS ASSOCIATION 2016 BOARD ELECTIONS

Staff asked for direction from the Board of Directors whether to proceed with

options to either: 1) nominate one candidate, and complete and submit the mail in ballot for the CSDA's 2016 Board Election, 2) no action, or 3) create a subcommittee of one Board member to consider a candidate and provide a recommendation at future Board meeting.

Acting Chair Lucey shared her experience with Anthony Kalvans and is in favor of nominating him for the position.

Acting Chair Lucey opened the item to public comment.

Julie Tacker gave public comment.

Acting Chair Lucey closed the public comment period.

Motion: Acting Chair Lucey made a motion to submit the mail in ballot for the CSDA Board nominating Anthony Kalvans.

Second: Director Brown

Action: Approved unanimously by roll call vote.

7D.

APPROVAL TO SELECT FIRM AND EXECUTE A CONTRACT TO PERFORM PROFESSIONAL AUDITING SERVICES FOR THE DISTRICT'S 2015-16 FINANCIAL AUDIT

Staff introduced the item, provided the background process for obtaining proposals, the review and selection process.

Acting Chair Lucey opened the item to public comment.

Julie Tacker gave public comment.

Acting Chair Lucey closed the public comment period.

Motion: Director Brown made a motion to approve the selection of Glenn Burdette Attest Corporation to perform the District's 2015-2016 Financial Audit,

Second: Director Nicolls

Action: Approved unanimously by roll call vote.

Motion: Director Nicolls made a motion to authorize the District Administrator to sign and execute a professional contract with this firm in the amount of \$11,500 and to transfer funds in the amount of \$1,500 from the District's Contingency account to cover the remaining contractual amount.

Second: Director Brown

Action: Approved unanimously by roll call vote.

Director Brown made a personal request for the District Administrator's resume.

There being no further business to come before the Board, Acting Chair Lucey adjourned the meeting at approximately 7:02 p.m.

THESE MINUTES ARE DRAFT AND NOT OFFICIAL UNTIL APPROVED BY THE BOARD OF DIRECTORS AT A SUBSEQUENT MEETING.

SOUTH SAN LUIS OBISPO COUNTY SANITATION DISTRICT

OCSD Board Room
1655 Front Street
Oceano, California 93445

Minutes of the Meeting of Wednesday August 03, 2016
6 P.M.

1. CALL TO ORDER AND ROLL CALL

Present: Chairman John Shoals, City of Grover Beach; Alternate Matthew Guerrero, Oceano Community Services District; Director Jim Hill, City of Arroyo Grande

District Staff in Attendance: Gerhard Hubner, District Administrator; Gilbert Trujillo, District Legal Counsel; Amy Simpson, District Secretary/Bookkeeper; John Clemons, Plant Superintendent

2. FLAG SALUTE

3. AGENDA REVIEW – Accepted as presented.

4. PUBLIC COMMENTS ON ITEMS NOT APPEARING ON THE AGENDA

Chairman Shoals opened the public comment period.

Julie Tacker believes the resume of the District Administrator is a public record and asks that the resume be released.

Patricia Price suggested adding a link on the website to the AGP recordings of District meetings. She feels the new Administrator is expensive and would have preferred a part time administrator. She believes the District Administrator should stay on the plant site and not have an offsite office. She would like more details of the meetings he attends and project updates. She asked if and when the cities of Grover Beach and Arroyo Grande will be moved to the county tax roll.

Beatrice Spencer believes the District Administrator resume should be released as a public document. She is concerned that the excessive legal bills do not reflect the position of the District plant that is operating in compliance.

Chairman Shoals closed the Public Comment.

District Administrator Hubner said that the District has legally responded to all requests for his resume but to put this issue behind the District he provided his redacted resume to Ms. Tacker as a courtesy.

5. CONSENT AGENDA

5A. Approval of Minutes of Meeting of July 20, 2016

This item will be moved to the agenda of August 17th. Legal Counsel recommended that the Board members watch the video recording of the meeting. This will allow the Directors to approve the minutes of July 20, 2016 even though they were unable to attend the meeting in person.

5B. Approval of Warrants

5C. Financial Review at June 30, 2016

Chairman Shoals opened the public comment period.

Julie Tacker hopes that this is the last Downey Brand warrant. She would like to see an accounting of the total cost of the legal fees associated with litigating the ACL violation.

Chairman Shoals closed public comment.

Motion: Alternate Guerrero made a motion to approve Items 5B and 5C of the Consent Agenda.

Second: Director Hill

Action: Approved unanimously by roll call vote.

6. DISTRICT ADMINISTRATOR AND PLANT SUPERINTENDENT'S REPORT

District Administrator Hubner presented the first part of this report.

Superintendent Clemons presented the second part of the report.

Director Hill asked about the MND comment period for the Cherry Ave Sewer Bridge Project and the comment deadline of August 19. He asked if there was any value in holding a Special Meeting to expedite the project.

Administrator Hubner replied that he hopes that the process will be complete, done correctly and legally by the September 7, 2016 meeting. A Special Meeting is an option for the Board.

Director Hill requested a copy of the Ergonomics Specialist report and a copy of the MOU for the IRWM approved previously. Complimented staff on getting parameters met and the plant running well.

Chairman Shoals and Director Guerrero also thanked staff for their accomplishments.

Chairman Shoals opened the item to public comment.

Patricia Price asked what Superintendent Clemons meant when he said that there are internal problems.

Julie Tacker thanked Administrator Hubner for his resume. She asked that Mr. Hubner spell out for the Board why he needs an offsite office and recommended a cost analysis be done before any move.

Ron Arnoldson asked the Board to "keep Superintendent Clemons happy because he is a great guy".

Beatrice Spencer hopes that the District Administrator report was not a sales pitch for a new offsite office. She thanked Mr. Clemons for his reports.

Chairman Shoals closed the public comment period.

Action: The Board received and filed this report.

7. ACTION ITEMS:

7A. REQUEST FOR APPROVAL FOR A CHANGE ORDER FOR THE GRIT REMOVAL SYSTEM PROJECT, CONTINGENCY FUNDS AND AUTHORITY TO PROCESS FUTURE CHANGE ORDER TO SUPPORT FUTURE UNFORESEEN PROJECT CONSTRUCTION EVENTS.

District Administrator presented this item in a power point presentation with an update on the Grit Removal Project.

Chairman Shoals opened the item to public comment.

Julie Tacker asked why there is not a Budget Adjustment to move money from Contingency to Grit Removal.

Chairman Shoals closed the public comment period.

Motion: Director Hill made a motion to:

1. Approve a change order in the amount \$15,526.17 for the Grit Removal Project.
2. Approve a specific contingency fund for this project in the amount of \$35,000 for unforeseen future project events; such funds to be taken from the fiscal year 2016/17 Contingency Fund currently at \$98,500 and would be subsequently reduced by the \$35,000 subject to repayment to any unused funds.
3. Authorize the District Administrator to approve further change orders for this project within the newly created contingency fund subject only to reporting back to the Board after the fact.

Second: Director Guerrero

Action: Approved unanimously by roll call vote.

8. CLOSED SESSION

Legal Counsel Trujillo announced that the Board would be meeting in Closed Session.

CONFERENCE WITH LEGAL COUNSEL - EXISTING LITIGATION

[Paragraph (1) of subdivision (d) of Government Code Section 54956.9]; (one case).

(1) South San Luis Obispo County Sanitation District v. State Water Resources Control Board (Superior Court of Sacramento) case number 34-2012-80001209-CU-WM-GDS)

Chairman Shoals opened the item to public comment.

Julie Tacker is hopeful the Board is close to putting litigation to bed.

Chairman Shoals closed the public comment.

9. RETURN TO OPEN SESSION; REPORT ON CLOSED SESSION

Chairman Shoals announced "that on a unanimous 3-0 vote the board has decided to settle the case with the Water Board. The Sanitation District and the Regional Water

Board have reached an agreement of the 2010 spill litigation and agree to pay to \$555,000 of penalty towards local and regional community projects of the \$1,190,000. This allows the District to not only settle but guarantees that 50% of the money to be paid, rather than all of it going to Sacramento, will be guaranteed to be spent locally improving the plant and to the benefit of local rate payers. The Board believes that given what they inherited, given the tough decisions and the process, this is a good as deal as they could have gotten. This settlement is a major accomplishment for the District and allows us to move forward on new initiatives including investing in the District's wastewater infrastructure and exploring ways to use our wastewater for beneficial use through future regional reclamation options. Whereas the original decision and order required the District to pay a \$1.19 million fine/penalty with the money going to Sacramento, this settlement guarantees that 50% (\$555,000) will be invested locally. This came about thorough diligent work of all the folks involved Board members and staff. Mr. Hubner was instrumental in being able to negotiate this agreement because of his relationships with the folks of the Regional Quality Board and because of his experience he was able to put forth and advise on projects that were likely to be approved by the Board of Directors. He has played a huge part in reaching this settlement and this agreement."

Director Hill thanked the members of the public for hanging in there. He echoed the comments of Chairman Shoals and thanked District Board, Regional Water Quality Control Board and Administrator Hubner for reaching this settlement which he thinks is in the best interest of all.

Alternate Guerrero joined those comments and thanked Mr. Hubner and Chairman Shoals for building this consensus and bringing this to a resolution.

There being no further business to come before the Board, Chairman Shoals adjourned the meeting at approximately 7:07 p.m.

THESE MINUTES ARE DRAFT AND NOT OFFICIAL UNTIL APPROVED BY THE BOARD OF DIRECTORS AT A SUBSEQUENT MEETING.

SOUTH SAN LUIS OBISPO COUNTY SANITATION DISTRICT

OCSD Board Room
1655 Front Street
Oceano, California 93445

Minutes of the Meeting of Wednesday August 17, 2016
6 P.M.

1. CALL TO ORDER AND ROLL CALL

Present: Chairman John Shoals, City of Grover Beach; Director Mary Lucey, Oceano Community Services District; Director Jim Hill, City of Arroyo Grande

District Staff in Attendance: Gerhardt Hubner, District Administrator; Gilbert Trujillo, District Legal Counsel; John Clemons, Plant Superintendent

2. FLAG SALUTE

3. AGENDA REVIEW – Accepted as presented.

4. PUBLIC COMMENTS ON ITEMS NOT APPEARING ON THE AGENDA

Chairman Shoals opened the public comment period.

Stella Lopez has questions regarding her Sanitation bill. The board directed Mr. Hubner to take her information and follow up with her questions.

Ron Holt thanked everybody for the final resolution with the State Water Board litigation and requested more board members be added to the board of directors.

Beatrice Spencer thanked the firefighters for working so hard on all the fires around California. She also mentioned she had reached out to Gregg Davidson of NBS Consultants regarding a property with an incorrect parcel number. She let the Board know he had gotten back to her and explained that the address belonged to a property management office for a mobile home park and that they have corrected the addresses.

Chairman Shoals closed the Public Comment.

5. CONSENT AGENDA

5A. Approval of Minutes of Meeting of July 20, 2016

5B. Approval of Minutes of Meeting of August 03, 2016

5C. Approval of Warrants

Director Hill pulled the minutes of both meetings. He requested the minutes give a brief discussion of public comment, what was said or if the person spoke in favor or opposed to a certain item. He also stated that the vote needs to be fully recorded to show how each director voted or if the vote carried unanimously.

Chairman Shoals opened the public comment period.

There being no public comment, Chairman Shoals closed public comment.

Chairman Hill requested more of an itemized description on the warrants.

District Administrator Hubner clarified that the August 3, 2016 minutes contained more detail as the Board had directed vs. July 20, 2016 minutes.

Motion: Director Lucey made a motion to accept the warrants as presented.

Second: Director Hill

Action: Approved unanimously by roll call vote.

The minutes of July 20th and August 3rd will be brought back at the meeting of September 7, 2016

6. DISTRICT ADMINISTRATOR AND PLANT SUPERINTENDENT'S REPORT

District Administrator Hubner presented the first part of this report. He highlighted current projects and gave updates on each project.

Superintendent Clemons presented the second part of the report discussing plant numbers and operations.

Chairman Shoals recommended having a future discussion on power outages at the plant.

Director Hill and Chairman Shoals requested the attachments to the Coastal Commission response be given on a flash drive to all Board members and that a link to these attachments be put on the District website.

Chairman Shoals opened the item to public comment.

There being no public comment, Chairman Shoals closed the public comment period.

Action: The Board received and filed this report.

7. ACTION ITEMS:

7A. FISCAL YEAR 2015/16 FOURTH (4th) QUARTER BUDGET PERFORMANCE REVIEW

District Administrator Hubner gave a power point presentation where he showed the fourth quarter end of year revenues, expenses and fund balances.

Action: The Board received and filed this report.

7B. CONSIDERATION OF RESOLUTION NO. 2016-355, AMENDING THE DISTRICT'S CONFLICT OF INTEREST CODE

District Administrator Hubner gave a verbal report on this item.

Chairman Shoals opened the item to public comment.

There being no public comment, Chairman Shoals closed the public comment period.

Motion: Director Lucey made a motion to adopt Resolution No. 2016-355, including Appendix A and B.

Second: Director Hill

Action: Approved unanimously by roll call vote.

There being no further business to come before the Board, Chairman Shoals adjourned

the meeting at approximately 6:54 p.m.

THESE MINUTES ARE DRAFT AND NOT OFFICIAL UNTIL APPROVED BY THE BOARD OF DIRECTORS AT A SUBSEQUENT MEETING.

DRAFT

SOUTH SAN LUIS OBISPO COUNTY SANITATION DISTRICT
WARRANT REGISTER
09/07/2016 FY 2016/17

	BUDGET LINE ITEM		WARRANT NO.	ACCT	ACCT BRKDN	TOTAL
ALICIA LARA	HUMAN RESOURCES	OPEB	090716-1546	7076	1,350.00	4,350.00
	HUMAN RESOURCES	PERSONNEL POLICY		7076	1,100.00	
	HUMAN RESOURCES	VARIOUS MISC. ITEMS		7076	710.00	
	HUMAN RESOURCES	PROMOTIONAL PROCESS		7076	1,190.00	
ALL STAR INDUSTRIAL	SAFETY SUPPLY'S	1772	1547	8056	105.35	105.35
ARAMARK	UNIFORMS	08/19; 08/26	1548	7025	433.65	433.65
AT&T	COMMUNICATIONS	08/08-09/07	1549	7013	291.03	291.03
AUTOSYS	SCADA	929; 930; 940	1550	20-8010	5,900.00	7,894.48
	EQUIPMENT MAINTENANCE	929; 930; 940		8030	1,994.48	
BRENNTAG	PLANT CHEMICALS	BPI652523	1551	8050	5,725.57	5,725.57
CALPERS MEDICAL	EMPLOYEE HEALTH	SEPTEMBER	1552	6010	16,544.26	16,544.26
CALPERS FISCAL DIVISION	FISCAL SERVICES	GASB 68 REPORT	1553	7083	1,300.00	1,300.00
CENTRAL COAST TECH CONSULT.	COMPUTER SUPPORT	547; 541	1554	7082	605.00	705.00
	EQUIPMENT	547		7015	100.00	
CHARTER	COMMUNICATIONS	08/29-09/26	1555	7013	368.33	368.33
EMPLOY. DEV. DEPT.	UNEMPLOYMENT REIMBURSE	04/01-06/30	1556	6095	3,600.00	3,600.00
FANNY MUI	MEDICAL REIMB	FY 16/17	1557	6075	117.69	117.69
FARM SUPPLY	EQUIPMENT MAINTENANCE	AMIAD FILTERS	1558	8030	3,691.44	3,691.44
FED EX	CHEMICAL ANALYSIS	LUBE WATCH	1559	7078	52.75	52.75
GERHARDT HUBNER	MEETINGS	C.A.S.A.	1560	7050	709.34	709.34
GORDON SAND CO.	SOLIDS HANDLING	SLUDGE BED SAND	1561	7085	1,061.89	1,061.89
GRAINGER	EQUIPMENT MAINTENANCE	BELT DRIVE FAN MOTOR	1562	8030	73.60	73.60
I.I. SUPPLY	STRUCTURE MAINTENANCE	FFR BYPASS PROJECT	1563	8061	415.13	415.13
JIM HILL	BOARD SERVICE	AUGUST	1564	7075	200.00	200.00
JOHN SHOALS	BOARD SERVICE	AUGUST	1565	7075	200.00	954.70
	MEETINGS	C.A.S.A.		7050	754.70	
JOHNSON'S BOILER & CONTROL	EQUIPMENT MAINTENANCE	SERVICE BOILER	1566	8030	1,810.18	1,810.18
JOSLYN HODSON ACCOUNTING	FISCAL SERVICES	14-36	1567	7083	357.50	1,267.50
	OCSD BILLING	14-37		7074	910.00	
MARY LUCEY	BOARD SERVICE	AUGUST	1568	7075	100.00	100.00
MATTHEW GUERRERO	BOARD SERVICE	AUGUST	1569	7075	100.00	100.00
MKN	GRIT REMOVAL	2658	1570	20-8015	6,551.39	11,680.29
	HEADWORKS IMPROVEMENT	2569		26-8065	2,315.40	
	REDUNDANCY PROJ. MNGMNT	2554		20-7080	2,277.56	
	GIS	2205		7015	365.94	
	WWTP SITE ALTERNATIVES	2555		7077	170.00	
OEC	CHEMICAL ANALYSIS	1602936	1571	7078	45.00	45.00
PG&E	ELECTRICITY	07/11-08/09	1572	7091	15,233.96	15,233.96
PRAXAIR	EQUIPMENT RENTAL	55535701	1573	7032	29.42	29.42
SPIESS CONSTRUCTION	SOLIDS HANDLING	2016-15	1574	7085	1,720.00	1,720.00
SURFACE PUMPS, INC.	EQUIPMENT MAINTENANCE	MIXING DIGESTER PUMP	1575	8030	1,249.96	1,249.96
STATE FUND	PREMIUM	AUGUST	1576	6080	5,580.67	5,580.67
TLT TRUCKING	SOLIDS HANDLING	TRUCKING SLUDGE BED SAND	1577	7085	255.00	255.00
TOTAL COMP. SYSTEMS, INC.	FISCAL SERVICES	GASB 45 VALUATION	1578	7083	2,800.00	2,800.00
VWR	EQUIPMENT MAINTENANCE	8045928536	1579	8030	283.99	586.12
	LAB SUPPLIES	MULTIPLE		8040	302.13	
WATER SYSTEMS CONSULTING	SATELLITE WATER FACILITY STUDY	JULY	1580	20-7090	18,107.86	18,107.86
WEST COAST INDUST. SUPPLY	STRUCTURE MAINTENANCE	FFR BYPASS PROJECT	1581	8060	5,208.56	5,208.56
GRAND TOTAL					\$ 114,368.73	\$ 114,368.73
	PAYROLL 08/19/16	\$30,838.43				
GRAND TOTAL					\$ 114,368.73	\$ 114,368.73

We hereby certify that the demands numbered serially from 090716-1546 to 090716-1581 together with the supporting evidence have been examined, and that they comply with the requirements of the SOUTH SAN LUIS OBISPO COUNTY SANITATION DISTRICT. The demands are hereby approved by motion of the SOUTH SAN LUIS OBISPO COUNTY SANITATION DISTRICT, together with warrants authorizing and ordering the issuance of checks numbered identically with the particular demands and warrants.

BOARD OF DIRECTORS:

DATE: _____

Chairman

Board Member

Board Member

Secretary



SOUTH SAN LUIS OBISPO COUNTY SANITATION DISTRICT

Post Office Box 339, Oceano, California 93475-0339
1600 Aloha Place, Oceano, California 93445-9735
Telephone (805) 489-6666 FAX (805) 489-2765
www.sslocsd.org

Date: August 30, 2016
To: Board of Directors
From: Amy Simpson, District Bookkeeper/Secretary
Via: Gerhardt Hubner, District Administrator
Subject: **Financial Review as of July 31, 2016**

Overall Financial Summary

As of July 31, 2016, the District has received total revenues of \$377,608. Of this amount, \$374,316 is for operating revenues, and \$3,292 is for non-operating revenues.

District operating expenses as of this date totaled \$330,742. Operating expenses totaled \$199,851 and non-operating expenses totaled \$130,890 as of July 31, 2016.

Local Agency Investment Fund

The balance in the District's LAIF account was \$2,422,794 as of July 31, 2016.

County of San Luis Obispo Treasury Pool

As of July 31, 2016, the reconciled cash balance with the County of San Luis Obispo Treasury Pool was \$2,796,373. The County issues the majority of the District's checks, and the majority of the District's revenues are deposited with this agency. As such, the County provides 'banking services' to the District and provides some accounting documents for internal control purposes.

Rabobank Funds

At July 31, 2016, the reconciled cash balance in the District's Rabobank account totaled \$213,967. This account has been used to process the District's contracted payroll provider service and other District expenditures.



SOUTH SAN LUIS OBISPO COUNTY SANITATION DISTRICT

Post Office Box 339 Oceano, California 93475-0339

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Telephone (805) 489-6666 FAX (805) 489-2765

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SOUTH SAN LUIS OBISPO COUNTY SANITATION DISTRICT MONTHLY CASH REPORT JULY 2016

Cash Balance at 06/30/16	\$ 5,547,229.17
Deposits	\$ 350,786.75
Warrant Register 07/06/16	(155,878.24)
Warrant Register 07/20/16	(246,410.21)
Pay Roll 07/08/16	(30,849.50)
Pay Roll 07/22/16	(30,999.15)
Rabobank July Activity	(745.36)
Total July Activity	(114,095.71)

Cash Balance at 07/31/16	5,433,133.46
---------------------------------	---------------------

Cash by Institution	CASH BALANCE
	@ 07/31/2016
Cash with County Treasury	2,796,372.92
Cash with LAIF	2,422,793.58
Cash with Rabobank	213,966.96
	\$ 5,433,133.46



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STAFF REPORT

Date: September 7, 2016

To: Board of Directors

From: Gerhardt Hubner

Subject: DISTRICT'S LONG-RANGE REDUNDANCY PROJECT - SECONDARY CLARIFIER AND AERATION TANKS, CONSIDERATION OF RESOLUTION NO. 2016-357, A RESOLUTION CONCURRING THAT NO FURTHER ENVIRONMENTAL REVIEW IS REQUIRED FOR THIS PROJECT

RECOMMENDATION

Staff recommends:

1. Adoption of Resolution No. 2016-357, a Resolution Concurring that No Further Environmental Review is Required for the Long Range Redundancy Project, Secondary Clarifier and Aeration Tanks

BACKGROUND

At least as far back as calendar year 2005, the District has discussed and evaluated the need for a project that would construct and operate additional or redundant secondary treatment processes at the District wastewater treatment plant (District's WWTP).

As the Board will recall, on July 7, 2010, following a public hearing, the Board approved Resolution No. 2010-275 which adopted a Mitigated Negative Declaration and Monitoring Program for such a project. Resolution No. 2010-275 including several findings including one(s) that found the construction of a secondary clarifier and aeration tanks project (Project) at the District WWTP, as conditioned, would not have a significant impact on the environment; and would improve the District's WWTP ability to reliably meet discharge standards at all times.

Within the past year, the Board pursued and approved funding for the first phase of this Project, and has directed staff to embark on initiating Project permitting and design. However, in order to initiate construction, the District first has to obtain a Coastal Development Permit (CDP) from the California Coastal Commission, since they have original jurisdiction at the District's WWTP site. This is different than originally envision in 2015 when it opined that the County of San Luis Obispo had land use and permit jurisdiction over the District's site.

DISCUSSION

To initiate the process for permitting on the Project, on March 15, 2016, the District submitted its CDP application to the California Coastal Commission. On April 15, 2016, the District received a written reply from Coastal Commission staff stating its application was incomplete, but also outlining the type of information, data and studies Coastal Commission staff needed on the Project in order to deem the CDP application complete, thus allowing it to proceed to the Coastal Commission at some future date for consideration and approval of the CDP.

In general, the type of topics Coastal Commission staff requested to receive more information and analysis regarding the Project at the District WWTP site included:

- Climate Change and Sea Level Rise
- Flooding
- Biological Resources
- Updated Project Description and Site Plan
- District CEQA Determination
- San Luis Obispo County Permitting Determination

To assist with this significant effort, the Board earlier this year authorized consultant assistance for the District in regards to Project management, design, environmental review and permitting. The list of consultant assistance included: Kennedy Jenks, Mike Nunley and Associates, and John F. Richenbach, Inc. of JFR Consulting. District staff also contracted with Kevin Merk, LLCs to help delineate the waters of U.S and State of California (biological resources) at the District WWTP. Kennedy Jenks, already under an approved contract with the District, utilized existing authorized funds under their contract, and obtained the services of Environmental Science Associates (ESA) to undertake and complete the requested climate change/sea level rise and flooding analyses. ESA has a known reputation for this type work and a good working relationship and knowledge of Coastal Commission permitting needs.

On August 5, 2015, District staff submitted a response to the Coastal Commission staff letter dated April 15, 2016. Included with that response cover letter were five attachments comprising the requested studies, reports, data and site information listed below:

- Waters of U.S. Delineation and State of California (including wetland delineation) dated August, 2016, prepared by Kevin Merk Associates;
- Sea Level Rise Analysis dated August 3, 2016, prepared by ESA;
- Technical Memorandum regarding flood risk strategy, dated July 29, 2016, prepared by Kennedy/Jenks; and
- Proposed Updated Site Plan, dated 2016, prepared by Kennedy/Jenks.
- Site Photos

In addition, the County of San Luis Obispo provide a signed form, which was subsequently transmitted to the Coastal Commission staff on August 16th.

On August 16, 2016, District staff and its consultant team participated in a teleconference with Coastal Commission staff from the Commission's Santa Cruz office. The purpose of the meeting was to go over the District's August 5th transmittal and above listed associated studies, reports and information. Furthermore, through this conference call, the District staff has the opportunity to discuss the subject of Project CEQA status and Coastal Commission staff relayed in the conference call that they believed the District's approach through an Addendum of its 2010 MND, supported by the recently completed studies and information provided in our August 5th submittal, was appropriate for their review and permitting effort.

CEQA ADDENDUM (Attachment No. 1)

This CEQA Addendum to the 2010 MND has been prepared in accordance with the relevant provisions of the California Environmental Quality Act (CEQA) of 1970 (as amended) and the State CEQA Guidelines as implemented by the District. According to §15164(b) of the State CEQA Guidelines, an Addendum to a Negative Declaration is the appropriate environmental document in instances when “only minor technical changes or additions are necessary or none of the conditions described in Section 15262 calling for the preparation of a subsequent Negative Declaration have occurred”.

This Addendum to the 2010 MND is intended to bring the existing CEQA documentation up to date. Because the proposed Project has not substantially changed, and there are no new significant impacts, District staff believes an Addendum is the appropriate CEQA document to address the updated Project.

Attachment No. 1 contains the original adopted 2010 MND, Resolution No. 2010-275 and related documents.

Reasons Why an Addendum is Appropriate (Attachment No. 2, Attachments A-F)

The updated Project is substantially similar to the one examined in the MND adopted for the Project in 2010. However, as described above, in its initial review of the CDP application (Coastal Commission staff letter of April 15, 2016, included as **Attachment B**), Coastal Commission staff requested additional information with respect to the following environmental issues, in order to confirm that the analysis in adopted MND was still valid:

- Biological Resources
- Sea Level Rise
- Flood Hazard

New studies that address these issues are included as attachments to this Addendum (**Attachments C, D and E**). Although they shed additional technical light on these issues, and provide more detailed analysis, they do not identify any new significant impacts that would require a substantive redesign of the project, or fundamentally revised mitigation measures that were not already contemplated. Any required changes to the Project design are minor in nature. In addition, this new information or potential design changes would not substantially increase the magnitude or severity of impacts that were previously identified in the adopted 2010 MND. The District cover letter dated August 5, 2015 provides an additional summary of the findings for each of the above reports/studies.

The Addendum includes a section that addresses key environmental issue areas for which new information has been prepared since the adoption of the 2010 MND for the Project. Except as noted otherwise in the Addendum, none of the analysis or discussion included in the adopted MND has changed.

Resolution No. 2016-357 (Attachment No. 3)

In order to comply with the Coastal Commission staff request regarding the pending CDP application, District staff and counsel drafted Resolution No. 2016-357.

In accordance with Section 15164 of the CEQA Guidelines, the District, through Resolution No. 2016-357 is determining that this Addendum to the adopted Mitigated Negative Declaration is necessary to document changes or additions that have occurred in the Project and/or its

description since the MND was originally adopted in 2010. The District Board is also making a determination that it has reviewed and considered the information contained in this Addendum in its consideration of the adopted MND, and finds the preparation of subsequent CEQA analysis requiring public circulation is not necessary.

Resolution No. 2016-357 also confirms the adoption of the Mitigated Negative Declaration and Mitigation Monitoring Program for the Project, and concurs that the Mitigated Negative Declaration continues to meet the requirements of the CEQA for the Project with the addition of the Addendum, and no further environmental review under CEQA is necessary or required for the Project.

A mitigation monitoring program was included in the adopted 2010 CEQA document. Mitigation measures were included to ensure that potential identified impacts related to air quality and cultural resources would be reduced to a less than significant level. These measures will be included in the Project design and implementation.

The Addendum documents that no substantial changes are proposed to the Project, and there have been no substantial changes in circumstances such that the Project would have new significant impacts or a substantial increase in environmental impacts. Furthermore, no new information of substantial importance is shown that the Project will have one or more significant effects not discussed in the previous 2010 Mitigated Negative Declaration.

CONCLUSION

For all the reasons and rationale described above, District staff recommends the Board consider and adopt Resolution No. 2016-357 for the District Long Range Secondary Treatment Process Redundancy Project.

ATTACHMENTS:

1. CEQA Addendum to an Adopted Mitigated Negative Declaration, for the Long-Range Redundancy Project
2. Attachments to CEQA Addendum (A-F)
3. Resolution No. 2016-357

**ADDENDUM TO AN ADOPTED MITIGATED NEGATIVE DECLARATION
FOR THE
SOUTH SAN LUIS OBISPO COUNTY SANITATION DISTRICT
REDUNDANCY PROJECT**

SEPTEMBER 7, 2016

A. INTRODUCTION

This document is an Addendum to the adopted Mitigated Negative Declaration (MND) prepared for the proposed Redundancy Project. The MND was adopted by the lead agency, South San Luis Obispo County Sanitation District (SSLOCSD) on July 7, 2010 (see SSLOCSD Resolution 2010-275). The Addendum is intended to bring the existing CEQA documentation up to date as appropriate. Because the proposed project has not substantially changed, and there are no new significant impacts, an Addendum is the appropriate CEQA document to address the updated project.

The California Coastal Commission (CCC) will need to issue a Coastal Development permit (CDP) in order for this project to be constructed. CCC staff concurs that the Addendum is the appropriate review document for this effort (Daniel Robinson, CCC staff, August 16, 2016).

B. ADDENDUM REQUIREMENTS

The Addendum has been prepared in accordance with the relevant provisions of the California Environmental Quality Act (CEQA) of 1970 (as amended) and the State CEQA Guidelines as implemented by the SSLOCSD. According to §15164(b) of the State CEQA Guidelines, an Addendum to a Negative Declaration is the appropriate environmental document in instances when “only minor technical changes or additions are necessary or none of the conditions described in Section 15262 calling for the preparation of a subsequent Negative Declaration have occurred”. Section 15162(a) of the State CEQA Guidelines states that no subsequent Negative Declaration shall be prepared for a project unless the lead agency determines, on the basis of substantial evidence in the light of the whole record, one or more of the following:

(1) Substantial changes are proposed in the project which will require major revisions of the previous Negative Declaration due to the involvement of new significant environmental effects or a substantial increase in the severity of previously identified significant effects;

(2) Substantial changes occur with respect to the circumstances under which the project is undertaken which will require major revisions of the previous Negative Declaration due to the involvement of new significant environmental effects or a substantial increase in the severity of previously identified significant effects; or

(3) New information of substantial importance, which was not known and could not have been known with the exercise of reasonable diligence at the time the previous Negative Declaration was adopted, shows any of the following:

(A) The project will have one or more significant effects not discussed in the previous Negative Declaration;

(B) Significant effects previously examined will be substantially more severe than shown in the previous Negative Declaration;

(C) Mitigation measures or alternatives previously found not to be feasible would in fact be feasible, and would substantially reduce one or more significant effects of the project, but the project proponents decline to adopt the mitigation measure or alternative; or

(D) Mitigation measures or alternatives which are considerably different from those analyzed in the previous Negative Declaration would substantially reduce one or more significant effects on the environment, but the project proponents decline to adopt the mitigation measure or alternative.

This Addendum does not require circulation because it does not provide significant new information that changes the original MND in a way that deprives the public of a meaningful opportunity to comment upon a substantial adverse environmental effect of the project or a feasible way to mitigate or avoid such an effect.

This Addendum includes this introduction, a description of the proposed project, and a discussion of the impacts for all environmental issues areas listed in Appendix G of the State CEQA Guidelines. The originally adopted MND is included as an attachment to this document for reference (**Attachment A**).

The SSLOCSD shall consider this Addendum with the adopted MND as part of the approval of the updated project. The CCC will use the same Addendum to support the approval of the Coastal Development Permit for the project, consistent with direction provided by CCC staff.

The CEQA documentation for this project, including this Addendum, is available for review at the South San Luis Obispo County Sanitation District (SSLOCSD) office, located at 1600 Aloha Place, Oceano, CA 93445.

C. PREVIOUS CEQA DOCUMENTATION

The Redundancy Project was analyzed in an Initial Study prepared pursuant to CEQA Guidelines Section 15063. Based on this analysis, a Mitigated Negative Declaration (MND) was adopted by the lead agency, South San Luis Obispo County Sanitation District (SSLOCSD) on July 7, 2010 (see SSLOCSD Resolution 1010-275). The adopted resolution also approved the project at that time, stating that the *“District resolves to move forward with these improvements to its facilities.”* These adopted MND and associated resolution are included as **Attachment A** to this Addendum.

The required 30-day public review period for the Mitigated Negative Declaration prior to its adoption was from May 6 to June 10, 2010. During that period, correspondence was received from the State Office of Planning and Research and the State Water Resources Control Board.

The project is near the Oceano Airport. CEQA Guidelines Section 15154 requires special consideration of airport hazards for projects located near airports to ensure that impacts, if any, are fully mitigated. The Federal Aviation Administration (FAA) determined in a letter dated November 23, 2009, proposed structures associated with the project would pose no hazard to air navigation. This letter was included in the MND documentation.

A mitigation monitoring program was included in the adopted CEQA document. Mitigation measures were included to ensure that potential identified impacts related to air quality and cultural resources would be reduced to a less than significant level. These measures will be included in the project design and implementation.

A Notice of Determination (NOD) pursuant to CEQA Guidelines Section 15075 was filed on July 12, 2010, following project approval. This began a 30-day period during which any potential court challenges to the project could have been filed. However, no challenges were filed during that time, and the statute of limitations for court challenges related to the project based on the CEQA documentation expired (CEQA Guidelines Section 15075(g)). The CEQA process for the originally approved project was completed at that time.

D. REASONS WHY AN ADDENDUM IS APPROPRIATE

The updated proposed project is substantially similar to the one examined in the MND adopted for the project in 2010. However, in its initial review of the CDP application (CCC letter of April 15, 2016, included as **Attachment B**), Coastal Commission staff requested additional information with respect to the following environmental issues, in order to confirm that the analysis in adopted MND is still valid:

- Biological Resources
- Sea Level Rise
- Flood Hazard

New studies that address these issues are included as attachments to this Addendum (**Attachments C, D and E**). Although they shed additional technical light on these issues, and provide more detailed analysis, they do not identify any new significant impacts that would require a substantive redesign of the project, or fundamentally revised mitigation measures that were not already contemplated in the proposed design. Any required changes to the design are minor in nature. In addition, this new information or potential design changes would not substantially increase the magnitude or severity of impacts that were previously identified in the adopted MND.

E. PROPOSED PROJECT ELEMENTS

The following summarizes the key project elements covered by the CEQA documentation for this project, including both the adopted MND and this Addendum.

The South San Luis Obispo County Sanitation District (SSLOCSD) owns and operates a wastewater treatment facility (WWTF) that is permitted under National Pollutant Discharge Elimination System (NPDES) No. CA0048003/Waste Discharge Requirements Order No. R3-2009-0046. The existing plant uses mechanical screens, primary clarifiers, fixed film reactors (FFR), one secondary clarifier, and chlorination to provide secondary treatment with disinfection to treat wastewater. The plant is designed and permitted to treat a peak dry weather flow of 5.0 million gallons per day (MGD).

The proposed project is within the boundaries of the SSLOCSD's existing wastewater treatment facility (WWTF), located on a 10.84-acre parcel (APN 061-093-047).

The existing treatment plant cannot meet effluent limits at the permitted design flow if the FFR or the secondary clarifier is out of service. There is no redundant unit for either process.

The project is intended to provide redundancy to allow these major process units to be removed from service for maintenance or repairs without risking violation of effluent permit limits. The project is not intended to add capacity to handle higher flows than currently permitted, and no additional treatment capacity will be pursued by the District.

Project components are summarized below:

- Two activated sludge (AS) aeration basins
- One new secondary clarifier

- Fixed film reactor (FFR) effluent pump station
- Waste activated sludge (WAS) thickening centrifuge with modifications to existing dewatering platform
- Blower, electrical, and motor control center (MCC) building
- Dewatered sludge conveyor
- Yard piping
- Site improvements
- Instrumentation and controls
- Electrical systems
- Miscellaneous flood proofing measures for existing facilities (including elevation of flood barriers or walls)

The project will be completed within the existing plant site on property that has been previously disturbed. No additional property or offsite work will be required. The attached site plan (**Attachment F**) identifies the location within the treatment plant property where the new process units will be located.

F. UPDATED ENVIRONMENTAL IMPACT ANALYSIS

This section addresses the key environmental issue areas for which new information has been prepared since the adoption of the 2010 MND for the project. Except as noted below, none of the analysis or discussion included in the adopted MND has changed.

Detailed analysis supporting the summarized discussion below is included in **Attachments C, D and E**, which are:

- Delineation of Waters of the U.S. and the State of California (including wetland delineation) of the SSLOCSDD WWTP site and immediate vicinity (Kevin Merk Associates, dated August 2016);
- Sea level rise analysis that complies with state guidelines from Ocean Protection Council and California Coastal Commission (ESA, dated August 3, 2016); and
- Technical Memorandum describing the proposed flood risk mitigation strategy, which responds to the two above-mentioned studies (Kennedy Jenks, July 29, 2016)

These studies address the following environmental issues:

- **Biological Resources (Attachment C).** The Delineation of Waters of the U.S. and State of CA at the site provides technical biological resource information related to key resources, including wetlands and ESHA. The study concludes that no biological resources would be impacted by the Redundancy Project, and provides direction to ensure that such resources, including ESHA, are avoided.

The discussion above and in **Attachment C** augment Item 4 in the Initial Study, as included in the adopted 2010 MND.

- **Sea Level Rise and Flooding (Attachments D and E).** The sea level rise study (ESA, 2016) provides a detailed analysis of the potential effects of long-term sea level rise, and frames this in the context of existing flood hazards that are present on the site. As described in the technical memorandum by Kennedy/Jenks (Attachment E), current flood proofing measures protect critical components of the plant up to and above the sea level rise predictions.

The memorandum discusses past flood proofing measures that were implemented as part of major plant upgrades. New facilities will be designed with flood proofing measures above the predicted elevations from the ESA study, and also above the FEMA Flood Insurance Study (FIS) base flood elevations (BFE). Existing flood barriers at critical structures may need to be raised by 1 to 3 feet to protect above the BFE but these improvements will not require an increase in footprint of structures, nor will any of these minor flood proofing improvements impact other coastal resources (viewshed, habitat, and offsite flood potential, for example)

The discussion above and in **Attachments D and E** augment Item 6 in the Initial Study, as included in the adopted 2010 MND.

G. DETERMINATION

In accordance with Section 15164 of the CEQA Guidelines, the South San Luis Obispo County Sanitation District (SSLOCSD) has determined that this Addendum to the adopted Mitigated Negative Declaration is necessary to document changes or additions that have occurred in the project description since the MND was originally adopted. The SSLOCSD has reviewed and considered the information contained in this Addendum in its consideration of the adopted MND and finds that the preparation of subsequent CEQA analysis that would require public circulation is not necessary.

ATTACHMENTS:

Attachment A – Adopted Mitigated Negative Declaration and related resolutions (July 7, 2010)

Attachment B – California Coastal Commission letter responding to CDP application (April 15, 2016)

Attachment C – Delineation of the Waters of the U.S. and the State of California (including wetland delineation) of the SSLOCSD WWTP site and immediate vicinity (Kevin Merk Associates; August 2016);

Attachment D – Sea level rise analysis that complies with state guidelines from Ocean Protection Council and California Coastal Commission (ESA; August 3, 2016)

Attachment E – Technical Memorandum describing the proposed flood risk mitigation strategy (Kennedy/Jenks; July 29, 2016)

Attachment F – Proposed Updated Site Plan (Kennedy/Jenks; 2016)

Attachment A

Adopted Mitigated Negative Declaration and Related Documents (July 7, 2010)

- *Staff Report for Adoption of MND (July 7, 2010)*
- *Resolution 2010-275 (Adopting Mitigated Negative Declaration)*
- *Mitigated Negative Declaration and Notice of Determination (May 10, 2010)*
- *Mitigation Monitoring Program*
- *Related Correspondence*
- *Notice of Adoption of Mitigated Negative Declaration*
- *Notice of Determination (filed July 12, 2010)*



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Staff Report

To: Board of Directors
From: John Wallace, District Administrator
Date: July 7, 2010 Meeting

Subject: Public Hearing for the Adoption of CEQA Findings for Mitigated Negative Declaration for the Long Range Projects, Secondary Clarifier and Aeration Tanks

Recommendation:

Staff recommends the Board:

1. Open the public hearing and take any comments regarding this project and related environmental documents.
2. Close the Public Hearing.
3. Certify as complete and accurate the mitigated negative declaration for a project located at the District's Wastewater Treatment Facility, 1600 Aloha Place, in the community of Oceano, between the Oceano Airport and Arroyo Grande Creek, in San Luis Obispo County, California involving a new Secondary Clarifier and Aeration Tanks.
4. Adopt the attached Resolution 2010-275, with findings that the proposed secondary clarifier and aeration tanks are necessary and the project have been reviewed in compliance with requirements of the California Environmental Quality Act (CEQA).
5. Direct the General Manager to sign and file the Notice of Determination to the State Office of Planning and Research and the San Luis Obispo County Clerk.
6. Direct Staff to file the Environmental Document and pay the Environmental Document Filing Fee (\$2,060.25) to the County Clerk Recorder for the California Department of Fish and Game per section 711.4 of the California Fish and Game Code.

Funding:

The FY 2009-10 Budget includes Major Budget Item 07 MBI 14 – *Long Range Plant Expansion* – which is for the construction of a new Activated Sludge Basin and new Final Clarifier to provide mandated process redundancy for the plant. The current budget for this Fiscal year is **\$700,000**. These monies were set aside to pay for the SRF application process, as well as preliminary design engineering.

	Expenditures to date	Proposed expenditures	Totals
Budget	\$700,000.00	\$	\$700,000.00
Equipment expenditures	\$	\$	\$
Studies/SRF expenditures	\$26,076.44	\$3,346.17	\$29,422.61
Construction expenditures	\$	\$	\$
CA expenditures	\$	\$	\$
Retainage	\$	\$	\$
Balance to Complete	\$673,923.56	NA	\$670,577.39

Staff is continuing to move forward with application process for State Revolving Fund Loan funds to finance this project. The estimated amount of the SRF loan is \$12,400,000. Carollo Engineers performed a cost estimate review and revised the project costs to between \$5.0 Million and \$7.3 Million. In the meantime, the District has been processing the SRF loan applications including the CEQA document preparation. SWCA was hired June 17, 2009 to prepare the necessary CEQA documents with a budget of \$9,200. SWCA has spent \$5,230.72 or 57% of the budget at this time and will complete the process within budget.

Discussion:

In July 2005, Kennedy Jenks Consultants completed a Long Range Plan for the wastewater treatment plant. The report determined that no expansion of capacity or flow is necessary and the plant meets current discharge requirements. However, a lack of critical backup systems threatens the plant's ability to reliably meet discharge standards at all times, particularly during maintenance and repair operations. The study recommended improvements that will provide sufficient system redundancy to insure uninterrupted meeting of current and future standards under all circumstances.

The three major components of the recommended system upgrade are a replacement biosolids centrifuge, a secondary clarifier, and an aeration tank. These improvements will assure the ability to meet current and future standards and ensure operational reliability, but will not increase the plant's capacity. The new centrifuge will replace obsolete equipment in a new, more operationally efficient location, and will be housed within a new equipment building on a new pad. Final design of the centrifuge building will be completed by middle of June. However, the new machine is at the plant and operating in a temporary location. The environmental review for the centrifuge was completed in February 2009.

The aeration tank structure, necessary to provide dual process support to the existing fixed film reactor will feature two basins and associated blower equipment in an enclosed housing. The improvements include a new 124-foot by 40-foot dual-basin aeration tank (18 feet deep, constructed approximately ten feet below grade) and an 87-foot diameter secondary clarifier (14.5 feet deep of which 7 feet is constructed below grade), and associated piping. The improvements would occur within the currently fenced boundaries of the facility, and would not require expansion of the existing facility footprint. Implementation of the project would result in approximately 13,000 square feet of disturbance, including approximately 3,360 cubic yards of cut and 5,679 cubic yards of over-excavation and re-compaction for construction of the tank and clarifier. Approximately 3,000 cubic yards of excess soil would be hauled offsite by the contractor.

Existing Site Conditions

The facility is separated from Arroyo Grande Creek by a levee, the top of which provides a public trail outside the facility's fencing. Although the District property is surrounded on two sides by wetland and willow habitat, none exists within the boundary of the District plant site, which is enclosed by chain link fence. Most of the ground surface within the facility is paved, with an area on the north side in compacted base fill. There are two small lawn areas near the office and storage buildings but no significant wildlife habitat exists on site. All of the proposed projects will be constructed within the District's existing boundary and will not affect the creek, willow habitat, or public access.

Initial Study Summary

The Initial Study reviewed the categories outlined in State's approved environmental checklist. The results of the initial study review are identified below and any impacts identified have been mitigated.

Air Quality

The San Luis Obispo County Air Pollution Control District provided comments to the project. The District has agreed to implement standard APCD measures to mitigate potential air quality impacts during grading and construction activities (refer to Exhibit B). In addition, the District will obtain all required permits from the APCD. Implementation of these measures would mitigate potential air quality impacts to less than significant, and would reduce the generation of greenhouse gas emissions.

Biological Resources

The proposed project consists of improvements to an existing wastewater treatment facility in a previously disturbed area. No improvements would occur outside of the existing access road and fenced facility area. The Arroyo Grande Creek Levee runs along the south boundary. The proposed project site is located a minimum of 50 feet from the top of the levee and 100 feet from the creek channel. The mapped ESHA (Wetlands) extends to the fenced boundary of the facility.

Wetlands, coastal streams (including Arroyo Grande Creek), and adjacent riparian areas are considered environmentally sensitive habitat areas (ESHAs) by the California Coastal Commission, and are granted special protection under the Streams and Riparian Vegetation (SRV) and Wetland (W) designation by the County of San Luis Obispo Local Coastal Plan. The California Coastal Commission requires special protection of coastal wetland habitat.

All equipment used for grading and construction will be entering the site from the Aloha Place entrance on existing improved access road and will work entirely within the fence line of the plant facility. Based on the location of the proposed project, special-status species would not be significantly affected by the proposed project.

As part of the project, to protect the adjacent environmentally sensitive habitat areas (wetlands), the setback area between the tank and the property line will be paved in concrete to contain leaks and spills. Curbs or asphalt berms will provide secondary containment. Runoff will be captured by an underground drainage network which is routed back into the treatment plant system. Based on the location of the proposed project, and implementation of measures to avoid offsite discharge of pollutants into sensitive habitat areas, potential impacts to biological resources, including coastal wetlands, would be less than significant.

In addition, the increased reliability of the treatment process will reduce potential for off-site pollution during emergencies or natural disaster events such as earthquakes.

Cultural Resources

A records search and Phase I surface survey was conducted for the project. Based on the Cultural Resources Survey for the South San Luis Obispo County Sanitation District Secondary Clarifier & Aeration Tank Project, San Luis Obispo County, California (SWCA, 2009), the entire project site has been subject to significant disturbance from construction and grading activities associated with the various existing facilities. Approximately 90 percent of the facility is paved and/or built over, and the

remaining ten percent consists of a mix of imported fill soils and disturbed native soils. The records search indicates that 40 cultural resources studies have been conducted within a 0.25-mile radius of the project site, four of which included a portion of the project area. Due to the context of the findings, it is unlikely they represent an intact surface cultural deposit. Nevertheless, it is possible that an intact subsurface deposit exists below the depth of the original construction disturbance. Over-excavation for proposed facilities may impact intact sub-surface resources, resulting in a potentially significant impact, therefore, the District has agreed to retain an archaeological monitor for initial grading associated with over-excavation work within the facility site. The monitor shall submit a Monitoring Plan for approval by the District prior to initiation of construction. Based on implementation of these measures, potential impacts would be less than significant.

Hazards & Hazardous Materials

The project is not located in an area of known hazardous material contamination. Hazardous materials currently stored onsite include: diesel, acetylene, argon, argon/carbon dioxide, ethylene glycol, ferric chloride, oxygen, petroleum distillates, petroleum hydrocarbon, sodium bisulfate, sodium hydroxide, and sodium hypochlorite. The fire severity risk is moderate.

The project is within the County of San Luis Obispo Airport Review area, and is located adjacent to the San Luis Obispo County Oceano Airport. Based on the Oceano County Airport Land Use Plan (ALUP) (May 2007), the project site is within Airport Planning Area Oa, which is defined as “open space areas exposed to severe/significant airport impact”. Area Oa lies within the Runway Protection Zones, Inner Approach/Departure Zones, Inner Turning Zones, and Sidelane Zones of the Oceano County Airport. The land use plan requires that “Area Oa remain as is”.

The project is not expected to conflict with any regional evacuation plan. Implementation of the proposed project would not significantly increase the potential fire hazard, and proposed development and operation of the facility would be required to comply with current Fire Code regulations. A project referral was submitted to the Oceano Fire Department for review, and no concerns were submitted. The existing wastewater treatment facility is considered a “public utility facility”, which is not listed in the ALUP Airport Land Matrix, which identifies permitted and un-permitted land uses within each Airport Planning Area. The ALUP notes that “existing non-residential land uses that are inconsistent with the ALUP will be considered nonconforming land uses and will be subject to the nonconforming provisions contained in the applicable local land use regulations with the following applicable exceptions:

- a. Redevelopment of an existing nonconforming land use with a new use will be allowed only if the new use is consistent with the ALUP. ‘Redevelopment’ means any construction, renovation, or other activity that entails demolition of 80% or more of the floor area of existing structures on a site
- c. A lot occupied by a nonconforming non-residential use may be further developed by the addition of conforming uses and/or structures only if such new uses or structures are consistent with the ALUP”.

The proposed improvements would be located within the facility boundary of the existing wastewater treatment plant (a viable reason for location), and would not qualify as “redevelopment”, as defined by the ALUP. An increase in density (onsite employees) is not proposed. Implementation of the proposed project would not intensify or increase the potential for impacts related to airport hazards; the overall land use would remain the same.

A project referral was submitted to the Airport Manager for review. The Airport Manager noted that the project is required to be reviewed by the Federal Aviation Administration (FAA). The FAA reviewed the proposed project, and provided a *Determination of No Hazard to Air Navigation* (November 23, 2009). The project referral and FAA determination were submitted to the County Airport Manager for review. The Airport Manager determined that their concerns have been addressed by the FAA (Craig Piper, January 19, 2009). Both agencies noted that if any changes to the project are proposed, which would

modify the location or increase the height of proposed structures, the project shall be re-evaluated by the FAA. Based on the review and response from the FAA and Airport Manager, potential impacts related to airport hazards would be less than significant.

The State Water Quality Control Board provided comments regarding including the Air Quality and Cultural Resources mitigation measures from the Mitigation Monitoring Program into the Initial Study and to provide further explanation to determine that objectionable odors were an insignificant impact. Additionally, the State requested that the District include a list of best management measures to be used.

After analysis of each project component, the site location, and the many environmental reports on file for the District, Staff concluded that these projects will not have a significant impact on the environment. The conclusion is based on evidence in the record that the site contains no significant cultural resources; that the biologically sensitive habitat surrounding the District property will not be disturbed or impacted by the projects, and the projects constitute repair and maintenance of an existing facility with no expansion of capacity or use.

Public Noticing

On May 6, 2010, the District notified the surrounding property owners, and submitted a copy of the draft Mitigated Declaration to the State Clearinghouse requesting comments by June 10, 2010. The District has incorporated and addressed comments received to date. A separate public notice was published in the San Luis Obispo "The Tribune" on June 23, 2010.

Other Agency Involvement:

The site is located within retained jurisdiction of the Coastal Zone, and the currently applicable Coastal Development Permits issued by the Coastal Commission are 4-86-129, #152/31, 197/11, and 417/34. A Coastal Development Permit Waiver (03-08-056-W) was approved on January 22, 2009 for the replacement of the existing centrifuge and modifications to the drying basin. The District is in the process of submitting a Land Use Permit application (site plan) with the County Planning and Building Department for local compliance. This application is in conformance with the original District's use permits and therefore a site plan application review was requested by County Planning Department. Since the wastewater treatment plant property does lie within the retained jurisdiction of the California Coastal Commission, a separate Coastal application is necessary. An application to the Coastal Commission will be submitted by the middle of July 2010.

Results:

Adoption of this Mitigated Negative Declaration with required posting will complete the environmental review phase of this project. The project will provide sufficient system redundancy to insure uninterrupted service meeting current and future standards. Through design and mitigation, any potential adverse environmental impacts will be minimized to a less than significant level.

Attachments:

Resolution 2010-275

Initial Study

Exhibit Mitigation Monitoring Program

Figures 1-5

Comments Received

July 6, 2009 San Luis Obispo County Division of Environmental health

July 6, 2009 San Luis Obispo County Public Works

July 3, 2009/Aug 4, 2009 Central Coast Regional Water Quality Control Board

July 15, 2009 Air Pollution Control District

November 23, 2009 Federal Aviation Administration Response- Aeration Tank and Secondary Clarifier-2009-AWP-4072-OE

November 23, 2009 Federal Aviation Administration Response- Secondary Clarifier-2009-AWP-4073-OE

January 19, 2010 San Luis Obispo County Airport

June 7, 2010 State Water Resources Control Board

June 14, 2010 Governor's Office of Planning and Research

Notice of Determination

Environmental Filing Fee Documents (Department of Fish and Game)

May 4, 2010 Public Notice to Responsible Agencies, Trustee Agencies, other concerned County and City Agencies, All property owners within 300 feet of the project site.

June 23, 2010 Tribune Public Notice

**SOUTH SAN LUIS OBISPO COUNTY SANITATION DISTRICT
RESOLUTION NO. 2010 - 275**

**A RESOLUTION OF THE BOARD OF DIRECTORS OF THE
SOUTH SAN LUIS OBISPO COUNTY SANITATION DISTRICT
ADOPTING A MITIGATED NEGATIVE DECLARATION FOR THE LONG
RANGE PROJECT: SECONDARY CLARIFIER AND AERATION TANKS**

WHEREAS, the governing body of the South San Luis Obispo County Sanitation District (the District) has considered the recommendations of the District's 2005 Long-Range Plan to provide adequate redundancy in the WWTP facility systems;

WHEREAS, the Long Range Plan identified major improvement projects, necessary to meet current and future standards, consisting of: construction of a two-basin aeration tank with associated blower equipment housing to support the fixed film reactor; and construction of a backup secondary clarifier tank structure;

WHEREAS, the District finds these improvements are necessary to ensure that public health and safety standards will continue to be met in the future, and has directed Staff to move forward with preliminary design and cost analysis for these improvements;

WHEREAS, the District finds that on the basis of the Initial Study and all the comments received, there is no substantial evidence that the project as conditioned will have a significant effect on the environment. The potential impacts can and will be mitigated to less than significant level and comply with California Environmental Quality Act requirements under CEQA Section 15070;

WHEREAS, the District has made known its intent to pursue funding for these projects through the State Water Resources Control Board's State Revolving Fund loan program;

NOW, THEREFORE, BE IT RESOLVED that:

1. The above findings are true; and
2. The governing body of the South San Luis Obispo County Sanitation District resolves to move forward with these improvements to its facilities, adopt the findings for the mitigated negative declaration and to pursue funding from the State Water Resources Control Board, as set forth above.

PASSED, APPROVED AND ADOPTED by the Board of Directors of the South San Luis Obispo County Sanitation District this 7th day of July, 2010.

AYES:

NOES:

ABSTAIN:

ABSENT:

Tony Ferrara, Chairman

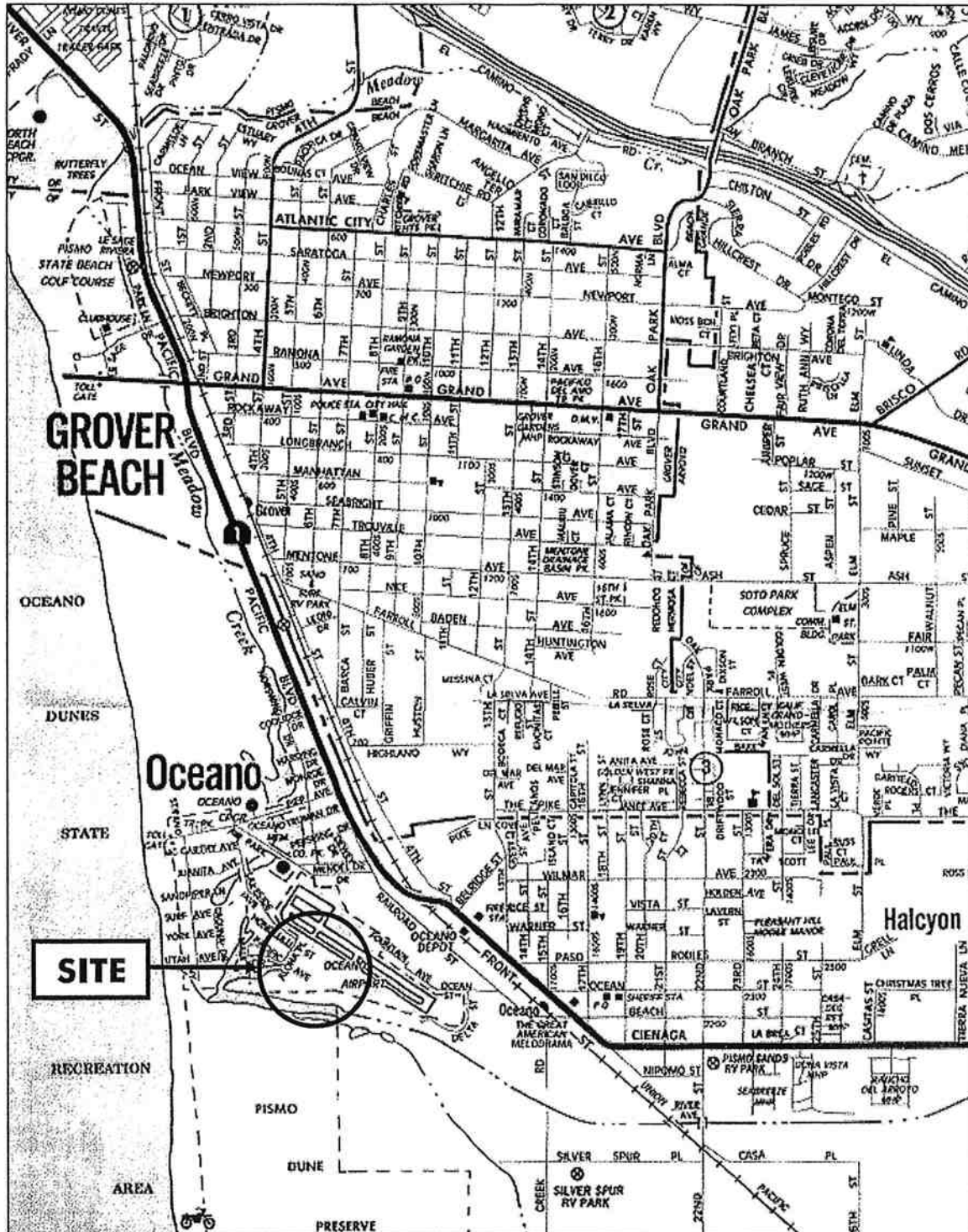
ATTEST:

JOHN WALLACE, Secretary to the Board

APPROVED AS TO FORM:

MICHAEL W. SEITZ, District Legal Counsel

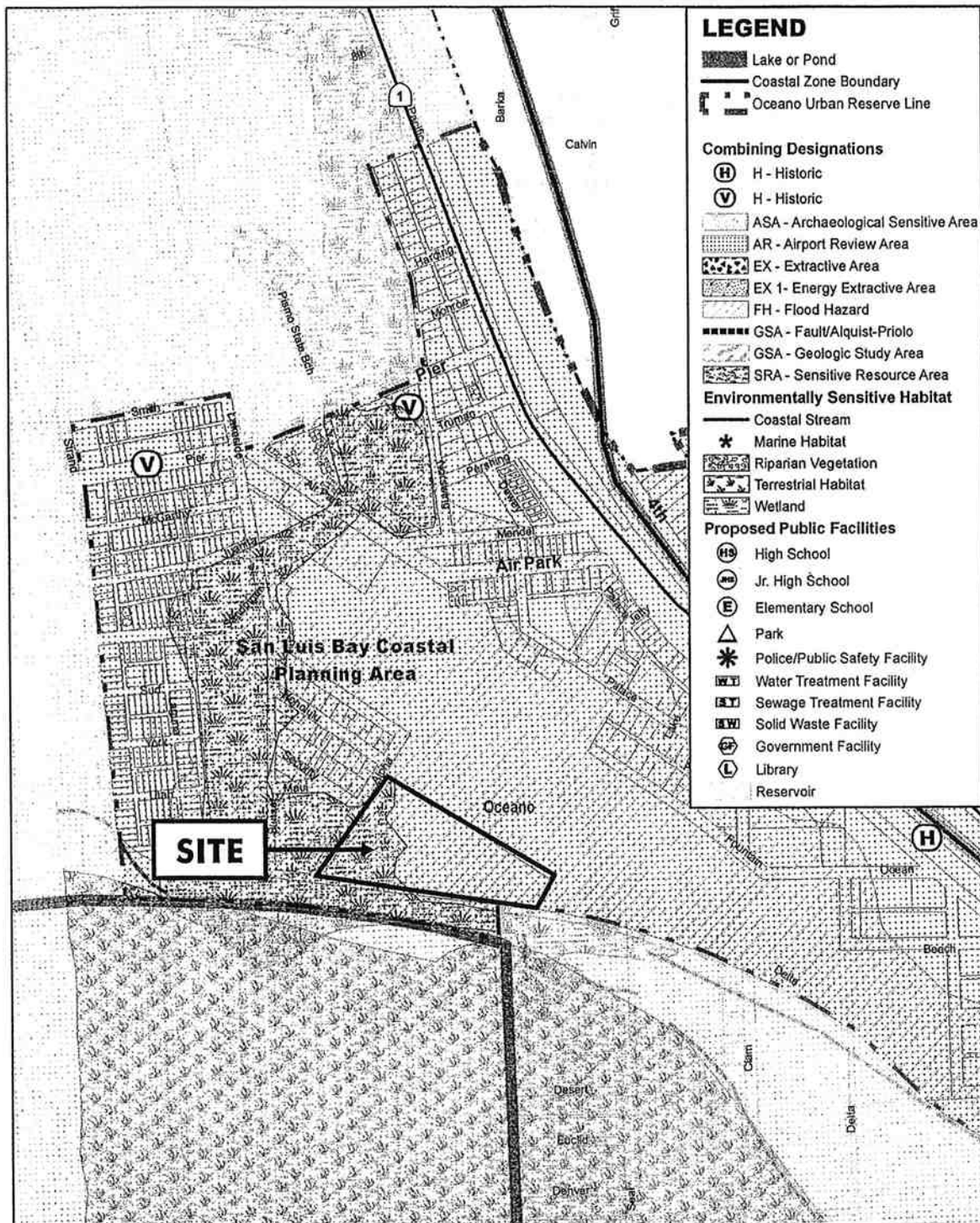
Figure 1: Project Vicinity Map



Source: Automobile Association of America



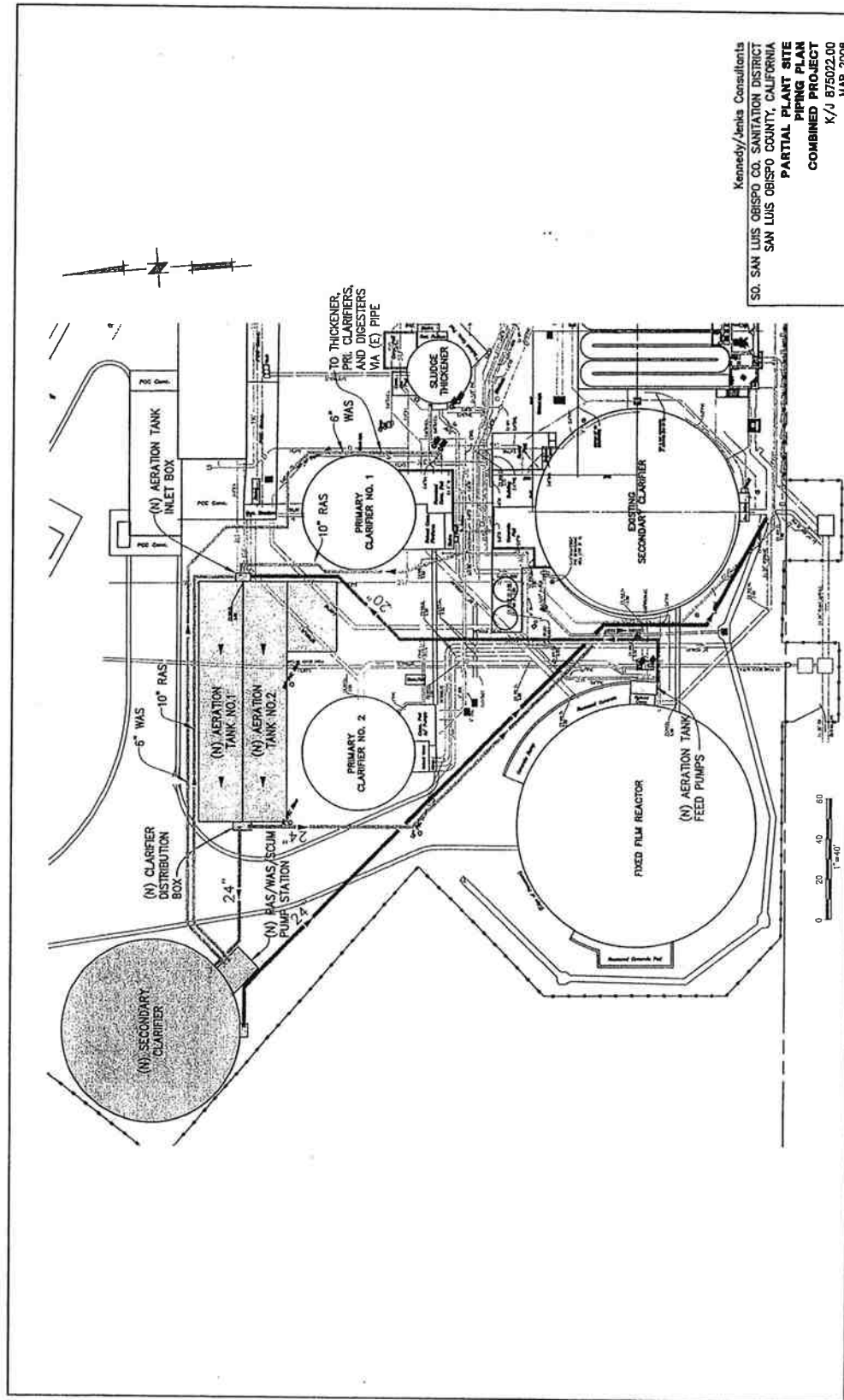
Figure 3: Combining Designation Map



Source: County of San Luis Obispo



Figure 5: Proposed Piping Plan



**SOUTH SAN LUIS OBISPO COUNTY SANITATION DISTRICT
RESOLUTION NO. 2010 - 275**

**A RESOLUTION OF THE BOARD OF DIRECTORS OF THE
SOUTH SAN LUIS OBISPO COUNTY SANITATION DISTRICT
ADOPTING A MITIGATED NEGATIVE DECLARATION FOR THE LONG
RANGE PROJECT: SECONDARY CLARIFIER AND AERATION TANKS**

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WHEREAS, the Long Range Plan identified major improvement projects, necessary to meet current and future standards, consisting of: construction of a two-basin aeration tank with associated blower equipment housing to support the fixed film reactor; and construction of a backup secondary clarifier tank structure;

WHEREAS, the District finds these improvements are necessary to ensure that public health and safety standards will continue to be met in the future, and has directed Staff to move forward with preliminary design and cost analysis for these improvements;

WHEREAS, the District finds that on the basis of the Initial Study and all the comments received, there is no substantial evidence that the project as conditioned will have a significant effect on the environment. The potential impacts can and will be mitigated to less than significant level and comply with California Environmental Quality Act requirements under CEQA Section 15070;

WHEREAS, the District has made known its intent to pursue funding for these projects through the State Water Resources Control Board's State Revolving Fund loan program;

NOW, THEREFORE, BE IT RESOLVED that:

1. The above findings are true; and
2. The governing body of the South San Luis Obispo County Sanitation District resolves to move forward with these improvements to its facilities, adopt the findings for the mitigated negative declaration and to pursue funding from the State Water Resources Control Board, as set forth above.

PASSED, APPROVED AND ADOPTED by the Board of Directors of the South San Luis Obispo County Sanitation District this 7th day of July, 2010.

AYES:

NOES:

ABSTAIN:

ABSENT:

Tony Ferrara, Chairman

ATTEST:

JOHN WALLACE, Secretary to the Board

APPROVED AS TO FORM:

MICHAEL W. SEITZ, District Legal Counsel



NEGATIVE DECLARATION & NOTICE OF DETERMINATION

SOUTH SAN LUIS OBISPO COUNTY SANITATION DISTRICT

P.O. BOX 339 OCEANO, CALIFORNIA 93475-0339 ♦ 1600 ALOHA PLACE, OCEANO, CALIFORNIA 93445-9735
TELEPHONE (805) 489-6666 ♦ FAX (805) 489-2765 ♦ HTTP://SSLOCSD.ORG/

DATE: May 10, 2010

PROJECT/ENTITLEMENT: Secondary Clarifier and Aeration Tank Project

APPLICANT NAME: South San Luis Obispo County Sanitation District

ADDRESS: PO Box 339 / Aloha Place, Oceano, CA 93445

CONTACT PERSON: Jeremy Freund, Wallace Group

Telephone: 805-544-4011

PROPOSED USES/INTENT: Proposed improvements include a new 124-foot by 40-foot dual-basin aeration tank, an 87-foot diameter secondary clarifier, and associated piping. Implementation of the project would result in approximately 13,000 square feet of disturbance of a primary disturbed area, including approximately 3,360 cubic yards of cut and 5,679 cubic yards of over-excavation and re-compaction for construction of the tank and clarifier.

LOCATION: 1600 Aloha Place, within the facility boundary of the South San Luis Obispo County Sanitation District treatment facility, in the community of Oceano, between the Oceano Airport and Arroyo Grande Creek, in San Luis Obispo County.

LEAD AGENCY: South San Luis Obispo County Sanitation District
PO Box 339 / Aloha Place
Oceano, CA 93445

OTHER POTENTIAL PERMITTING AGENCIES: California Coastal Commission, Regional Water Quality Control Board, Air Pollution Control District

ADDITIONAL INFORMATION: Additional information pertaining to this environmental determination may be obtained by contacting the above Lead Agency address or (805) 781-5600.

"REQUEST FOR REVIEW" PERIOD ENDS AT 5 p.m. on (2 wks from above DATE)

30-DAY PUBLIC REVIEW PERIOD begins at the time of public notification

Notice of Determination

State Clearinghouse No. -2010051010

This is to advise that the South San Luis Obispo County Sanitation District as ☒ *Lead Agency*
☐ *Responsible Agency* approved/denied the above described project on _____, and has made the following determinations regarding the above described project:

The project will not have a significant effect on the environment. A Negative Declaration was prepared for this project pursuant to the provisions of CEQA. Mitigation measures were made a condition of the approval of the project. A Statement of Overriding Considerations was not adopted for this project. Findings were made pursuant to the provisions of CEQA.

This is to certify that the Negative Declaration with comments and responses and record of project approval is available to the General Public at:

South San Luis Obispo County Sanitation District
PO Box 339 / Aloha Place, Oceano, CA 93445

John Wallace, District Administrator

SSLOCSD

Signature

Project Manager Name

Date

Public Agency



Environmental Document Filing Fee

SOUTH SAN LUIS OBISPO COUNTY SANITATION DISTRICT

P.O. BOX 339 OCEANO, CALIFORNIA 93475-0339 ♦ 1600 ALOHA PLACE, OCEANO, CALIFORNIA 93445-97
TELEPHONE (805) 489-6666 ♦ FAX (805) 489-2765 ♦ HTTP://SSLOCSD.ORG/

Lead Agency: South San Luis Obispo County Sanitation District Date: _____

County: San Luis Obispo Project No. 07 MBI 14

Project Title: Secondary Clarifier and Aeration Tank Project

Project Applicant

Name: South San Luis Obispo County Sanitation District

Address: PO Box 339 / 1600 Aloha Place

City, State, Zip Code: Oceano, CA 93445

Telephone #: (805) 489-6666

Action Taken

- ☐ The CDFG environmental filing fee was collected previously for this project and no additional fee is necessary. Please attach copy of environmental filing fee payment receipt from County Clerk's Office and indicate project name and number if it differs from current project.

Project Name _____

Project Number _____

- ☒ This project will have an effect on fish and wildlife resources. Therefore, the applicant will be assessed an environmental filing fee pursuant to section 711.4 of the California Fish and Game Code. The California Environmental Quality Act (Section 21089) provides that this project is not operative, vested or final until the filing fee is paid.

The applicant shall remit the following amount to the **County Clerk-Recorder:**

() Environmental Impact Report	\$2,792.25
(X) Negative Declaration	\$2,010.25
() Certified Regulatory Program (PRC Section 21080.5)	\$949.50
(X) <u>County Clerk Filing Fee</u>	<u>\$50.00</u>
Total amount due	\$2060.25

AMOUNT ENCLOSED: _____

Important Filing Notes:

- 1) Filing of the Notice of Determination (NOD) for the attached environmental document requires a filing fee in the amount specified above. If the fee is not paid when required, the NOD cannot be filed. Filing of the NOD reduces the legal filing period from 180 to 30 days. CEQA requires the Negative Declaration/EIR to be filed within 5 days of project approval.



Initial Study Summary – Environmental Checklist

SOUTH SAN LUIS OBISPO COUNTY SANITATION DISTRICT

P.O. Box 339 OCEANO, CALIFORNIA 93475-0339 • 1600 ALOHA PLACE, OCEANO, CALIFORNIA 93445-9735

TELEPHONE (805) 489-6666 • FAX (805) 489-2765 • HTTP://SSLOCSD.ORG/

Project Title: South San Luis Obispo County Sanitation District Secondary Clarifier and Aeration Tank Project

ENVIRONMENTAL FACTORS POTENTIALLY AFFECTED: The proposed project could have a "Potentially Significant Impact" for at least one of the environmental factors checked below. Please refer to the attached pages for discussion on mitigation measures or project revisions to either reduce these impacts to less than significant levels or require further study.

<input type="checkbox"/> Aesthetics	<input type="checkbox"/> Geology and Soils	<input type="checkbox"/> Recreation
<input type="checkbox"/> Agricultural Resources	<input type="checkbox"/> Hazards/Hazardous Materials	<input type="checkbox"/> Transportation/Circulation
<input checked="" type="checkbox"/> Air Quality	<input type="checkbox"/> Noise	<input type="checkbox"/> Wastewater
<input type="checkbox"/> Biological Resources	<input type="checkbox"/> Population/Housing	<input type="checkbox"/> Water
<input checked="" type="checkbox"/> Cultural Resources	<input type="checkbox"/> Public Services/Utilities	<input type="checkbox"/> Land Use

DETERMINATION: (To be completed by the Lead Agency)

On the basis of this initial evaluation, the District finds that:

- ☐ The proposed project COULD NOT have a significant effect on the environment, and a NEGATIVE DECLARATION will be prepared.
- ☒ Although the proposed project could have a significant effect on the environment, there will not be a significant effect in this case because revisions in the project have been made by or agreed to by the project proponent. A MITIGATED NEGATIVE DECLARATION will be prepared.
- ☐ The proposed project MAY have a significant effect on the environment, and an ENVIRONMENTAL IMPACT REPORT is required.
- ☐ The proposed project MAY have a "potentially significant impact" or "potentially significant unless mitigated" impact on the environment, but at least one effect 1) has been adequately analyzed in an earlier document pursuant to applicable legal standards, and 2) has been addressed by mitigation measures based on the earlier analysis as described on attached sheets. An ENVIRONMENTAL IMPACT REPORT is required, but it must analyze only the effects that remain to be addressed.
- ☐ Although the proposed project could have a significant effect on the environment, because all potentially significant effects (a) have been analyzed adequately in an earlier EIR or NEGATIVE DECLARATION pursuant to applicable standards, and (b) have been avoided or mitigated pursuant to that earlier EIR or NEGATIVE DECLARATION, including revisions or mitigation measures that are imposed upon the proposed project, nothing further is required.

Shawna Scott, SWCA Environmental Consultants

Prepared by (Print)

Signature

07/01/10

Date

Reviewed by (Print)

Signature

(for)

Date

Project Environmental Analysis

The District's environmental review process incorporates all of the requirements for completing the Initial Study as required by the California Environmental Quality Act (CEQA) and the CEQA Guidelines. The Initial Study includes an on-site inspection of the project site and surroundings and a detailed review of the information in the file for the project. In addition, available background information is reviewed for each project. Relevant information regarding soil types and characteristics, geologic information, significant vegetation and/or wildlife resources, water availability, wastewater disposal services, existing land uses and surrounding land use categories and other information relevant to the environmental review process are evaluated for each project. Exhibit A includes the references used, as well as the agencies or groups that were contacted as a part of the Initial Study. The District uses the checklist to summarize the results of the research accomplished during the initial environmental review of the project.

Persons, agencies or organizations interested in obtaining more information regarding the environmental review process for a project should contact the District at 1600 Aloha Place / Post Office Box 339, Oceano, California 93475-0339, or by telephone at (805) 489-6666.

A. PROJECT

DESCRIPTION: The South San Luis Obispo County Sanitation District proposes to implement the Secondary Clarifier and Aeration Tank Project at the District Wastewater Treatment Facility. Proposed improvements include a new 124-foot by 40-foot dual-basin aeration tank (18 feet deep, constructed approximately ten feet below grade) and an 87-foot diameter secondary clarifier (14.5 feet deep of which 7 feet is constructed below grade), and associated piping. Proposed improvements would occur within the currently fenced boundaries of the facility, and would not require expansion of the existing facility footprint. Implementation of the project would result in approximately 13,000 square feet of disturbance, including approximately 3,360 cubic yards of cut and 5,679 cubic yards of over-excavation and re-compaction for construction of the tank and clarifier. Approximately 3,000 cubic yards of excess soil would be hauled offsite by the contractor.

LOCATION: The proposed project site is located at 1600 Aloha Place, in the community of Oceano, between the Oceano Airport and Arroyo Grande Creek, in San Luis Obispo County, California (refer to Figure 1). The approximately 10.84-acre parcel is located within the Public Facilities land use category in the San Luis Bay Planning Area (refer to Figure 2). Based on the County of San Luis Obispo General Plan, the project site is within Coastal Original Jurisdiction and Coastal Appealable Zone, and is within the following combining designation areas: Airport Review, Archaeologically Sensitive, Local Coastal Plan, Flood Hazard, Sensitive Resource Area, and Wetlands.

BACKGROUND: The South San Luis Obispo County Sanitation District (District) is a Special District serving the communities of Oceano, Arroyo Grande and Grover Beach. The District's original wastewater treatment plant and collection system were designed and built in 1966. A plant enlargement in 1986 increased capacity from the original 2.5 million gallons per day (mgd) to 3.3 mgd, and further improvements in 1990 increased overall flow capacity to 5.0 mgd to accommodate the General Plan build-out of the member agencies. The facility is currently operating at approximately 54 percent of the average design flow (2.7 mgd). Hazardous materials currently stored onsite include: diesel, acetylene, argon, argon/carbon dioxide, ethylene glycol, ferric chloride, oxygen, petroleum distillates, petroleum hydrocarbon, sodium bisulfate, sodium hydroxide, sodium hypochlorite.

The site is located within retained jurisdiction of the Coastal Zone, and the currently applicable Coastal Development Permits issued by the Coastal Commission are 4-86-129, #152/31, 197/11, and 417/34. A Coastal Development Permit Waiver (03-08-056-W) was approved on January 22, 2009 for the replacement of the existing centrifuge and modifications to the drying basin.

Regulatory Changes Affecting Plant Operations:

1. Water conservation efforts in recent years have reduced the liquid-to-solids ratio increasing the wastewater strength reaching the plant, affecting the efficiency and operations of a facility originally designed for 1960's wastewater strength.
2. During recent years, the Central Coast Regional Water Quality Control Board (RWQCB) waste discharge requirements have been changed in respect to two significant factors: 1) new disinfection standards were imposed; and, 2) the standard for maximum allowable total suspended solids (SS) and effluent biological oxygen demand (BOD) was lowered to 40 mg/l. The basis for this treatment plant design was 45 mg/l for both of these constituents.
3. Changes in population projections have also occurred such that member agencies' projections of future development and population within District boundaries have been revised substantially downward. Current projections call for a build-out population of 43,862 within the District's service area. This is seen against the 1963 projections for build-out population within the District's service area of 115,000.
4. There have been two State of California legislative amendments to the State Water Code regulating treated wastewater discharge: Senate Bill No. 709 in 1999, with subsequent amendments resulting from Senate Bill No. 2165, which became effective January 1, 2001.
5. These amendments mandate the assessment of Mandatory Monetary Penalties (MMPs) for violations of Waste Discharge Requirements (WDRs) under a discharger's WDR permit. . Essentially, the law eliminates the RWQCB's discretionary powers to consider extenuating circumstances and real significance of the violation in applying enforcement action against a discharger for failure to literally meet requirements. For the District, this enforcement is compounded by the reduction in allowable effluent requirements from 45 mg/l to 40 mg/l.
6. The District is in the process of renewal of its NPDES permit.

In July 2005, Kennedy Jenks Consultants completed a Long Range Plan for the wastewater treatment system plant in response to these changes. A copy of the Long Range Plan was provided to Coastal Staff in July 2008. The report determined that no expansion of capacity or flow is necessary and the plant meets current discharge requirements. However, a lack of critical backup systems threatens the plant's ability to reliably meet discharge standards at all times, particularly during maintenance and repair operations important for an aging plant. This necessity was made more evident following the 2003 San Simeon earthquake when various system components had to be taken offline for inspection and repair. The Long Range Plan recommended improvements that will provide sufficient system redundancy to ensure compliance with current and future standards. Two of the recommended secondary treatment improvements include a new dual-basin aeration tank and a new secondary clarifier.

The existing 62-foot diameter fixed film reactor, constructed in 1986, is adequate in terms of size and capacity to meet treatment design objectives and is nearing design capacity for organic loading. However, with no back-up system, any shutdown for repairs or maintenance would lead to MMPs for as long as the fixed film reactor or final clarifier is out of operation. The basic function of secondary biologic wastewater treatment is to stabilize the organic materials in the wastewater through natural processes of biologic oxidation. Simply, this secondary treatment can be accomplished through one of two aerobic processes, "dispersed film" (activated sludge) and "fixed film" (trickling filter/fixed film reactor). Currently the District utilizes a single fixed film reactor (FFR), which was constructed as part of the 1986 plant improvement project. Since its construction, plant hydraulic loading flow has not increased as much as projected, but influent concentrations have increased. If hydraulic loading flows projects out as anticipated, the existing FFR will not be able to meet design objectives. Another consideration is the lack of a second equivalent biological process which would provide a degree of

redundancy in the event of a mechanical failure or routine maintenance. The proposed aeration basins would serve these needs.

Recommendations for Redundancy Improvements:

In 2008, a pre-design study was performed by Kennedy-Jenks Consultants to scope these recommended major process items. Results of the pre-design effort included confirmation of specific size, location, pipe-work connections, and equipment associated with the addition of two-basin aeration tanks with 295,000 gallon capacity each, and an 87 ft diameter secondary clarifier. The computer model verified that the recommended improvements, could achieve reduced discharge concentrations of BOD and TSS under six different operating scenarios at an influent flowrate of 5.0 MGD and influent BOD and TSS concentrations of 330 mg/L.

The study examined constructing the two components in a single phase or as a two-phased project, and provided preliminary cost estimates for the two scenarios. The District is pursuing loans and/or grant funding for these improvements through the State Water Resources Control Board's State Revolving Fund (SRF) program. The study provides sufficient information to determine the size and capacity of the improvements as well as site location, foundation design, support structures and piping. The intent is for a design-build construction approach with industry-standard Best Management Practices (BMPs) incorporated into the project. Additional site-specific geotechnical investigation will be conducted prior to construction to confirm the assumptions made in the pre-design study. Recommendations will be considered for incorporation into the project incorporated into the project. Lastly, the contractor will be notified and plans will note that in the unlikely event of encountering cultural deposits, all work must stop immediately and an archaeologist be consulted.

Detailed Project Description:

Secondary Clarifier: The new secondary clarifier will consist of a single cylindrical concrete tank proposed at 87 feet in diameter, slightly smaller than the existing 97-foot clarifier. The new structure will have an estimated total depth of 14.5 feet, of which approximately half will be above grade. The side water depth will be twelve feet, with a freeboard design depth of 2.5 feet. Total operating volume will be approximately 530,000 gallons. The clarifier will be designed to operate either in parallel with the existing clarifier or alone, to maximize flexibility. An enclosed pump station will be located outside the perimeter of the clarifier and will contain pumps, valves, motor control centers, instrumentation and ventilation equipment as required.

The clarifier will be located in an open previously graded area on the west side of the site inside the existing plant fenced area (refer to Figure 3, Proposed Improvements). The clarifier will be located on top of an existing stormwater pumping system that will be relocated to the north or east of the new tank. Piping for the new system will be routed approximately as shown on Figure 4 (Piping Plan), and smaller piping and utilities located in close proximity will be relocated as necessary. The tank structure will be set back from the perimeter fence line a minimum of twenty-five feet in order to accommodate the over excavation within the District's property. Sheet piling may be used to reduce the tank setback from the perimeter fence to six feet.

To protect any spillage to offsite wetlands, the setback area between the tank and the property line will be paved concrete to contain leaks and spills. Curbs or asphalt berms will provide secondary containment. Spills and runoff will be captured by an underground drainage network which will be retained onsite and routed back into the treatment plant system.

Based on geotechnical reports prepared for previous treatment facility improvements, the soil on the

site has a relatively high potential for liquefaction due to the sandy soils and the high water table. The entire site was filled to a depth of four to five feet during initial construction in 1968. To address liquefaction potential and minimize settlement, the foundation for the tank structure will be over-excavated, dewatered and recompact three feet below and outside of the foundation. Grading will consist of approximately 1,700 cubic yards of cut for the tank and 2,530 cubic yards of over-excavation and re-compaction below and around it. The over-excavation and re-compaction quantity is reduced to 1900 cubic yards if sheet piling is used.

Aeration Tank: The proposed aeration tank will measure approximately 124 feet in length by 40 feet in width, to be located west of the maintenance building and north of the primary clarifiers, again in a previously graded area and within the fenced plant area (refer to Figure 3). The aeration tank will have two independent aeration basins which could operate singly, in parallel, or in series, with a combined design flowrate of 5.0 MGD and a total capacity of 295,000 gallons. The tanks would be 18 feet deep, with 8 feet of the structure extending above grade. The structure would include access stairways and sufficient concrete walkways with guardrails to provide access to key locations. The tanks will be open to the atmosphere. Odors are not anticipated to be a problem due to the short detention time and high oxygen levels.

Blowers for the aeration tank will be housed within a contiguous enclosed structure of 20 feet by 30 feet with other appurtenant support facilities, including pipe-work, pumps, and electrical system components. The blower housing will incorporate noise-dampening insulation and the blowers would be equipped with silencers and designed to meet all applicable Air Pollution Control District requirements.

The 18" Pismo Beach Outfall pipe runs north to south under the proposed aeration tank site which is 8 feet below grade. The current design includes a concrete slab base of the aerator that will extend down to encase this line and protect it from breakage due to differential settlement. In the event this proves infeasible to put the tank over the top of the outfall, the outfall line will likely be re-routed around the structure within the over-excavated area. Other lines will either be protected in place or relocated to accommodate the new structure. The foundation will be over-excavated and re-compacted for a distance of 3 feet below and outside of the footprint. Grading will consist of approximately 1,660 cubic yards of cut for the tank and 3,140 yards of over-excavation and re-compaction below and around it. The blower housing will be slab on grade with subgrade conditioning as noted above.

Best Management Practices:

Erosion control measures for wind, water, material stockpiles, and tracking shall be implemented on this project and shall include source control, including protection of stockpiles, protection of slopes, protection of all disturbed areas, protection of accesses, and perimeter containment measures. Erosion control shall be placed prior to the commencement of grading and site disturbance activities. The intent of erosion control measures shall be to keep all generated sediments from entering a swale, drainage way, watercourse, atmosphere, or migrate onto adjacent properties or onto the public right-of-way. The site has measures in place to direct surface runoff, and yard drainage to the plant storm drain system. Additional measures such as temporary berms, straw wattles, and grading modifications may be used as necessary to direct plant surface waters to the plant storm drain system. This storm drain system pipes flow of collected runoff back through the plant treatment system preventing flow into county storm drains, or public waters. The contractor will be required to prevent wind erosion, implement dust control measures, and to avoid tracking mud or debris onto adjoining private or county streets. Site inspections and appropriate maintenance of all erosion control measures will be conducted during construction and especially prior to, during, and after rain events.

ASSESSOR PARCEL NUMBER(S): 061-093-001

Latitude: 35 degrees ' " N Longitude: 120 degrees ' " W

B. EXISTING SETTING

COUNTY PLANNING AREA: San Luis Bay, Coastal, Oceano

COUNTY LAND USE CATEGORY: Public Facilities

COUNTY COMBINING DESIGNATION(S): Local Coastal Plan/Program, Coastal Original Jurisdiction, Coastal Appealable Zone, Airport Review, Archaeologically Sensitive, Flood Hazard, Sensitive Resource Area, Wetlands

EXISTING USES: South San Luis Obispo County Sanitation District Wastewater Treatment Facility

TOPOGRAPHY: Nearly level

VEGETATION: Turf, ornamental (within facility)

PARCEL SIZE: 10.84 acres

SURROUNDING LAND USE CATEGORIES AND USES:

<i>North:</i> Public Facilities, Residential Multi-family; Oceano Airport, residential development	<i>East:</i> Public Facilities, Recreation; Oceano Airport
<i>South:</i> Public Facilities, Recreation; Arroyo Grande Creek and levee	<i>West:</i> Public Facilities, Residential Multi-family, Recreation; residential development, undeveloped, Oceano Dunes Recreation Area

C. ENVIRONMENTAL ANALYSIS

During the Initial Study process, several issues were identified as having potentially significant environmental effects (see following Initial Study). Those potentially significant items associated with the proposed uses can be minimized to less than significant levels.

COUNTY OF SAN LUIS OBISPO INITIAL STUDY CHECKLIST

1.	AESTHETICS - Will the project:	Potentially Significant	Impact can & will be mitigated	Insignificant Impact	Not Applicable
a)	Create an aesthetically incompatible site open to public view?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
b)	Introduce a use within a scenic view open to public view?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
c)	Change the visual character of an area?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
d)	Create glare or night lighting, which may affect surrounding areas?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
e)	Impact unique geological or physical features?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
f)	Other: _____	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>

Setting. The proposed project site is located east of Aloha Place, south of the Oceano Airport, within the fenced boundary of the South San Luis Obispo County Sanitation District Wastewater Treatment Plant. The project site consists of an access road, entry gates, wastewater treatment facilities, and fencing. The entry gate to the wastewater treatment plant is visible from Aloha Place. The existing facilities are screened from view by landscaping surrounding the facility.

Impact. Proposed improvements would be located within an existing developed area, and would be similar to existing development. Minimal lighting consistent with the existing plant is proposed. The height of proposed improvements would be approximately eight feet above grade. Based on the location of the proposed project, no significant visual impacts are expected to occur.

Mitigation/Conclusion. No mitigation measures are necessary.

2.	AGRICULTURAL RESOURCES - Will the project:	Potentially Significant	Impact can & will be mitigated	Insignificant Impact	Not Applicable
a)	Convert prime agricultural land to non-agricultural use?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
b)	Impair agricultural use of other property or result in conversion to other uses?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>

2. AGRICULTURAL RESOURCES

- Will the project:

	Potentially Significant	Impact can & will be mitigated	Insignificant Impact	Not Applicable
c) Conflict with existing zoning or Williamson Act program?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
d) Other: _____	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>

Setting. The following area-specific elements relate to the property's importance for agricultural production:

Land Use Category: Public Facilities

Historic/Existing Commercial Crops: None

State Classification: Prime when irrigated (native soils); not rated

In Agricultural Preserve? No

Under Williamson Act contract? No

The soil type(s) and characteristics on the subject property include:

Mocho fine sandy loam (0 - 2 % slope). This gently sloping fine sandy, loamy soil is considered well drained. The soil's land capability classification is 3s without irrigation and 2s when irrigated.

Dune Land. This fine sandy soil is considered well drained. The soil's land capability classification is 8e without irrigation and 8e when irrigated.

The project site is within the Public Facilities County land use category, within the Urban Reserve Line (URL) for the unincorporated community of Oceano. The native soils underlying the existing facility are considered prime if irrigated (NRCS Web Soil Survey, accessed July 2, 2009). The project site and surrounding areas do not support agricultural production.

Impact. The District proposes upgrades to an existing wastewater treatment facility, within an area currently disturbed and developed. No impacts to agricultural resources would occur as a result of the project.

Mitigation/Conclusion. No significant impacts to agricultural resources were identified; therefore, no mitigation measures are necessary.

3. AIR QUALITY - Will the project:

	Potentially Significant	Impact can & will be mitigated	Insignificant Impact	Not Applicable
a) Violate any state or federal ambient air quality standard, or exceed air quality emission thresholds as established by County Air Pollution Control District?	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
b) Expose any sensitive receptor to substantial air pollutant concentrations?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
c) Create or subject individuals to objectionable odors?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>

3. AIR QUALITY - <i>Will the project:</i>	Potentially Significant	Impact can & will be mitigated	Insignificant Impact	Not Applicable
d) <i>Be inconsistent with the District's Clean Air Plan?</i>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
e) <i>Other:</i> _____	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>

Setting. The Air Pollution Control District (APCD) has developed the 2003 CEQA Air Quality Handbook to evaluate project specific impacts and help determine if air quality mitigation measures are needed, or if potentially significant impacts could result. To evaluate long-term emissions, cumulative effects, and establish countywide programs to reach acceptable air quality levels, a Clean Air Plan has been adopted (prepared by APCD).

Based on consultation with the APCD, one public complaint regarding odor was received in 2004. No additional complaints have been received since that time (personal communication, Tim Fuhs, 2010).

Impact. As proposed, the project will result in the disturbance of approximately 13,000 square feet, including approximately 3,360 cubic yards of cut and 5,679 cubic yards of over-excavation and re-compaction. Construction of the project would require the excavation and export of approximately 3,000 cubic yards of soil. An estimated 300 truck trips would be required to export the soil. This will result in the creation of construction dust, as well as short-term vehicle emissions.

Odors generated by wastewater treatment facilities are generally a result of anaerobic or septic conditions. Odors can be prevented by oxidization of the wastewater. Currently, the District utilizes a single fixed film reactor (FFR), an aerobic process. In addition to the FFR, the proposed project would include an aeration tank. Based on the design of the existing plant and proposed improvements, including a short detention time and high oxygen levels, potential generation of odors would result in a less than significant impact.

The proposed project was referred to the County APCD for review. The APCD determined that proposed earth-moving and construction activities would not likely exceed 185 lbs of emissions per day and 2.5 tons of emissions per quarter (Gary Arcemont, July 15, 2009). The APCD noted potential concerns including exposure of naturally-occurring asbestos, materials containing asbestos, developmental burning, and generation of dust. Implementation of the proposed project would not exceed thresholds for particulate matter (PM10); however, generation of dust may occur resulting in a nuisance for adjacent land uses. In addition, the District is required to comply with standard APCD regulations and permit requirements regarding use of portable equipment during construction, and operation of the facility. The project is consistent with the general level of development anticipated and projected in the Clean Air Plan.

Assembly Bill 32 (AB 32), the Global Warming Solutions Act of 2006, sets goals for reducing GHGs sufficiently to protect future resources. Interim goals are set for 2020 with a final goal of approximately 80 percent GHG reduction by 2050. Climate change refers to any significant change in measures of climate (such as temperature, precipitation, or wind) lasting for an extended period of time (decades or longer) (Environmental Protection Agency, 2007). Climate change may result from:

- Natural factors, such as changes in the sun's intensity or slow changes in the Earth's orbit around the sun;
- Natural processes within the climate system (e.g., changes in ocean circulation); or

- Human activities that change the atmosphere's composition (e.g., through burning fossil fuels) and/or the land surface (e.g., deforestation, reforestation, urbanization, desertification, etc.).

Human activities, such as fossil fuel combustion and land use changes, release carbon dioxide and other compounds, cumulatively termed greenhouse gases (GHGs). GHGs are any gases that absorb infrared radiation in the atmosphere and tend to increase the average planetary temperature (EPA 2007). GHGs, as defined in AB 32, include the following: carbon dioxide (CO₂); methane (CH₄); nitrous oxide (N₂O); hydrofluorocarbons (HFCs); and, perfluorocarbons (PFCs). Greenhouse gas emissions would occur during construction of proposed improvements, and continued operation of the facility, including the generation of carbon dioxide (CO₂), methane (CH₄), and nitrous oxide (N₂O).

In California, the main sources of GHG emissions are from the transportation and energy sectors. According to the Air Resources Board (ARB) draft GHG emission inventory for the year 2004, 39 percent of GHG emissions result from transportation and 25 percent of GHG emissions result from electricity generation. California produced 497 million metric tons of CO₂ equivalents in 2004 (ARB 2007). California currently produces about two percent of the world's GHG emissions, with about 0.55 percent of the population.

Climate change may have the following effects on northern, inland, San Luis Obispo County:

- Agriculture: reduced crop yields, increased irrigation demands, plant damage from tropospheric ozone. Every two degree Fahrenheit temperature increase reduces food crop yields by about ten percent due to pollination failure (Lobell and Field 2007)
- Public health: increased smog and commensurate respiratory illness and weather-related mortality (California Climate Change Portal [CCCCP] 2007)
- Water resources: reduced Sierra snow pack, reduced late-summer water supplies, increased water demands, changed flood hydrology. San Luis Obispo County is increasingly reliant on water imported from other areas of the state, which in turn, comes primarily from mountain precipitation

Mitigation/Conclusion. The District has agreed to implement standard APCD measures to mitigate potential air quality impacts during grading and construction activities (refer to Exhibit B). In addition, the District will obtain all required permits from the APCD. Implementation of these measures would mitigate potential air quality impacts to less than significant, and would reduce the generation of greenhouse gas emissions.

Mitigation Measures

- AQ-1 Prior to any grading activities at the site, the District shall ensure that a geologic evaluation is conducted to determine if naturally occurring asbestos (NOA) is present within the area that will be disturbed. If NOA is not present, an exemption request must be filed with the APCD. If NOA is found at the site, the District shall comply with all requirements outlined in the Asbestos ATCM.
- AQ-2 All required PM₁₀ measures shall be shown on applicable grading or construction plans. In addition, the Sanitation District shall designate personnel to insure compliance and monitor the effectiveness of the required dust control measures (as conditions dictate, monitor duties may be necessary on weekends and holidays to insure compliance); the name and telephone number of the designated monitor(s) shall be provided to the APCD prior to construction/grading permit issuance). Prior to commencement of construction activities, the applicant shall notify the APCD, by letter, that the above air quality mitigation measures have been applied.

- a. Reduce the amount of the disturbed area where possible;
- b. Use of water trucks or sprinkler systems in sufficient quantities to prevent airborne dust from leaving the site. Increased watering frequency would be required whenever wind speeds exceed 15 mph. Reclaimed (nonpotable) water should be used whenever possible;
- c. All dirt stock-pile areas should be sprayed daily as needed;
- d. Permanent dust control measures identified in revegetation and landscape plans shall be implemented as soon as possible following completion of any soil disturbing activities;
- e. Exposed ground areas that are planned to be reworked at dates greater than one month after initial grading shall be sown with a fast germinating native grass seed and watered until vegetation is established;
- f. All disturbed soil areas not subject to revegetation shall be stabilized using approved chemical soil binders, jute netting, or other methods approved in advance by the APCD;
- g. All roadways and driveways to be paved shall be completed as soon as possible. In addition, structure pads shall be laid as soon as possible after grading unless seeding or soil binders are used;
- h. Vehicle speed for all construction vehicles shall not exceed 15 mph on any unpaved surface at the construction site;
- i. All trucks hauling dirt, sand, soil, or other loose materials are to be covered or should maintain at least two feet of freeboard (minimum vertical distance between top of load and top of trailer) in accordance with CVC Section 23114;
- j. Install wheel washers where vehicles enter and exit unpaved roads onto streets, or wash off trucks and equipment leaving the site; and,
- k. Sweep streets at the end of each day if visible soil material is carried onto adjacent paved roads. Water sweepers with reclaimed water shall be used where feasible.

AQ-3 Prior to construction, the Sanitation District shall contact APCD regarding proposed portable equipment requiring APCD or CARB registration, such as: 50-hp portable generators, IC engines, unconfined abrasive blasting operations, concrete batch plants, rock and pavement crushing, tub grinders, trammel screens, etc. Should any of these types of equipment be used during construction activities California statewide portable equipment registration (issued by the California Air Resources Board) or an APCD permit may be required.

AQ-4 Prior to construction, the Sanitation District shall contact APCD regarding proposed operational equipment, and shall obtain an Authority to Construct (ATC) to modify the existing permit.

4. BIOLOGICAL RESOURCES - <i>Will the project:</i>	Potentially Significant	Impact can & will be mitigated	Insignificant Impact	Not Applicable
a) <i>Result in a loss of unique or special status species or their habitats?</i>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
b) <i>Reduce the extent, diversity or quality of native or other important vegetation?</i>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
c) <i>Impact wetland or riparian habitat?</i>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>

4. BIOLOGICAL RESOURCES - <i>Will the project:</i>	Potentially Significant	Impact can & will be mitigated	Insignificant Impact	Not Applicable
d) <i>Introduce barriers to movement of resident or migratory fish or wildlife species, or factors, which could hinder the normal activities of wildlife?</i>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
e) <i>Other:</i> _____	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>

Setting. The following are existing elements on or near the proposed project relating to potential biological concerns:

On-site Vegetation: Turf, ornamental (within facility area); riparian and wetland habitat (within parcel, outside of facility area).

Name and distance from blue line creek(s): Arroyo Grande Creek is located approximately 100 feet south of the facility area.

Habitat(s): Riparian, wetland (outside of facility area)

Special-Status Habitats and Species

The project site is currently fully developed and disturbed and does not support habitat for any special-status species.

Adjacent areas outside of the facility site include:

The Arroyo Grande Creek corridor and associated riparian and wetlands habitat and coastal dunes are within mapped Environmentally Sensitive Habitat Areas (ESHAs) including Wetlands under the County of San Luis Obispo Local Coastal Plan. Special-status habitats in the area include Central Foredunes, Central Dune Scrub, and Coastal and Valley Freshwater Marsh.

The Pismo and Oceano dunes, lagoon, Arroyo Grande Creek corridor and floodplain, and surrounding areas support a variety of special-status habitats and plant and animal species including: California red-legged frog, southern steelhead trout, California brackishwater snail, sharp-shinned hawk, California black rail, western snowy plover, California least tern, tidewater goby, American badger, southwestern pond turtle, silvery legless lizard, sandy beach tiger beetle, white sand bear scarab beetle, Oso Flaco robber fly, Oso Flaco flightless moth, Morro Bay blue butterfly, Oso Flaco patch butterfly, monarch butterfly, mimic tryonia (California brackishwater snail), La Graciosa thistle, surf thistle, Blochman's leafy daisy, San Bernardino aster, beach spectaclepod, Gambel's water cress, marsh sandwort, sand mesa manzanita, Wells' manzanita, Nipomo Mesa lupine, crisp monardella, San Luis Obispo monardella, Pismo clarkia, short-lobed broomrape, dune larkspur, Kellogg's horkelia, California saw-grass, and Hoover's bent grass.

Native Vegetation

The area proposed for improvement consists of an existing, operational wastewater treatment facility ornamental landscaping/turf, and fencing. Several native plant habitats are present adjacent to the project site property boundary within the Arroyo Grande Creek corridor and Oceano Lagoon including wetland and marsh vegetation, riparian habitat, willows, and coast live oak woodland.

Riparian and Wetland Habitats

Arroyo Grande Creek and the Oceano Lagoon are located in the vicinity of the project site. Arroyo Grande Creek is located approximately 100 feet south of the southern project property boundary. The

creek flows into the Oceano Lagoon approximately 500 feet west of the project site. Wetland areas are present within the Arroyo Grande Creek corridor and Oceano Lagoon.

Impact. The proposed project consists of improvements to an existing wastewater treatment facility. No improvements would occur outside of the existing access road and fenced facility area. The Arroyo Grande Creek Levee runs along the south boundary. The proposed project site is located a minimum of 50 feet from the top of the levee and 100 feet from the creek channel. The mapped ESHA (Wetlands) extends to the fenced boundary of the facility.

Wetlands, coastal streams (including Arroyo Grande Creek), and adjacent riparian areas are considered environmentally sensitive habitat areas (ESHAs) by the California Coastal Commission, and are granted special protection under the Streams and Riparian Vegetation (SRV) and Wetland (W) designation by the County of San Luis Obispo Local Coastal Plan. The California Coastal Commission requires special protection of coastal wetland habitat.

All equipment used for grading and construction will be entering the site from the Aloha Place entrance on existing improved access road and will work entirely within the fence line of the plant facility. Based on the location of the proposed project, special-status species would not be significantly affected by the proposed project.

As part of the project, to protect the adjacent environmentally sensitive habitat areas (wetlands), the setback area between the tank and the property line will be paved in concrete to contain leaks and spills. Curbs or asphalt berms will provide secondary containment. Runoff of accidental spills will be captured by an underground drainage network which will be routed back into the treatment plant system. Based on the location of the proposed project, and implementation of measures to avoid offsite discharge of pollutants into sensitive habitat areas, potential impacts to biological resources, including coastal wetlands, would be less than significant.

In addition, the increased reliability of the treatment process will reduce potential for off-site pollution during emergencies or natural disaster events such as earthquakes.

Mitigation/Conclusion. No significant impacts were identified, and no mitigation measures beyond what is currently proposed are warranted.

5. CULTURAL RESOURCES - <i>Will the project:</i>	Potentially Significant	Impact can & will be mitigated	Insignificant Impact	Not Applicable
a) Disturb pre-historic resources?	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
b) Disturb historic resources?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
c) Disturb paleontological resources?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
d) Other: _____	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>

Setting. The proposed project site is located within an area historically occupied by the Obispeño Chumash. The project site is located within an area designated by the County of San Luis Obispo as Archaeologically Sensitive. There is a high likelihood of the existence of archaeological resources within these Archaeologically Sensitive designated areas. No historic structures are located on the project property. The project site is located on imported fill material, which overlies a historic marsh and sand dune deposits, which are not likely to contain paleontological resources due to their young age.

Impact. A records search and Phase I surface survey was conducted for the project. Based on the *Cultural Resources Survey for the South San Luis Obispo County Sanitation District Secondary Clarifier & Aeration Tank Project, San Luis Obispo County, California* (SWCA, 2009), the entire project site has been subject to significant disturbance from construction and grading activities associated with the various existing facilities. Approximately 90 percent of the facility is paved and/or built over, and the remaining ten percent consists of a mix of imported fill soils and disturbed native soils.

The records search indicates that 40 cultural resources studies have been conducted within a 0.25-mile radius of the project site, four of which included a portion of the project area. The records and literature search indicated 11 previously recorded cultural resources occur within the 0.25-mile radius; one of these resources, a prehistoric site (CA-SLO-846) was located within the project area. This site was purportedly destroyed during the original construction of the facility. Several weathered fragments of marine shell (*Tivela stultorum*, *Macoma nasuta*, *Ostrea lurida*) were observed out of context within the mixed fill soils along the western project site boundary fence. While it is possible that these shell fragments represent a surface manifestation of CA-SLO-846, the site vicinity lacks any integrity and the shells were observed intermingled with imported surface gravels. Due to the context of the findings, it is unlikely they represent an intact surface cultural deposit. Nevertheless, it is possible that an intact subsurface deposit exists below the depth of the original construction disturbance. Over-excavation for proposed facilities may impact intact sub-surface resources, resulting in a potentially significant impact.

Mitigation/Conclusion. The District has agreed to retain an archaeological monitor for initial grading associated with over-excavation work within the facility site. The monitor shall submit a Monitoring Plan for approval by the District prior to initiation of construction. Based on implementation of these measures, potential impacts would be less than significant.

Mitigation Measures

- CR-1 Prior to construction, a subsurface-qualified archaeologist shall submit a monitoring plan for the review and approval by the District. The monitoring plan shall include at a minimum:
- List of personnel involved in the monitoring activities;
 - Description of how the monitoring shall occur;
 - Description of frequency of monitoring (e.g. full-time, part time, spot checking);
 - Description of what resources are expected to be encountered;
 - Description of circumstances that would result in the halting of work at the project site (e.g. What is considered "significant" archaeological resources?);
 - Description of procedures for halting work on the site and notification procedures;
 - Description of monitoring reporting procedures.
- CR-2 Prior to initial grading activities involving over-excavation at a depth below existing foundations, the retained archaeologist shall observe the area of over-excavation. The District shall implement the recommendations of the archaeologist, pursuant to the approved Monitoring Plan. Upon completion of all monitoring/mitigation activities, the consulting archaeologist shall submit a letter to the District summarizing all monitoring/mitigation activities and confirming that all recommended mitigation measures have been met.

6. GEOLOGY AND SOILS - <i>Will the project:</i>	Potentially Significant	Impact can & will be mitigated	Insignificant Impact	Not Applicable
a) <i>Result in exposure to or production of unstable earth conditions, such as landslides, earthquakes, liquefaction, ground failure, land subsidence or other similar hazards?</i>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
b) <i>Be within a California Geological Survey "Alquist-Priolo" Earthquake Fault Zone"?</i>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
c) <i>Result in soil erosion, topographic changes, loss of topsoil or unstable soil conditions from project-related improvements, such as vegetation removal, grading, excavation, or fill?</i>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
d) <i>Change rates of soil absorption, or amount or direction of surface runoff?</i>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
e) <i>Include structures located on expansive soils?</i>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
f) <i>Change the drainage patterns where substantial on- or off-site sedimentation/ erosion or flooding may occur?</i>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
g) <i>Involve activities within the 100-year flood zone?</i>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
h) <i>Be inconsistent with the goals and policies of the County's Safety Element relating to Geologic and Seismic Hazards?</i>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
i) <i>Preclude the future extraction of valuable mineral resources?</i>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
j) <i>Other:</i> _____	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>

Setting

GEOLOGY - The following relates to the project's geologic aspects or conditions:

Topography: Nearly level

Within County's Geologic Study Area?: No

Landslide Risk Potential: Low

Liquefaction Potential: High

Nearby potentially active faults?: No

Area known to contain serpentine or ultramafic rock or soils?: No

Shrink/Swell potential of soil: Low to moderate

Other notable geologic features? None

DRAINAGE – The following relates to the project's drainage aspects:

Within the 100-year Flood Hazard designation? Yes

Closest creek? Arroyo Grande Creek Distance? More than 100 feet from project site to the south

Soil drainage characteristics: Well drained

Impact. As proposed, the project will result in the disturbance of approximately 13,000 square feet, including approximately 3,360 cubic yards of cut and 5,679 cubic yards of over-excavation and re-compaction for construction of the tank and clarifier. Standard best management practices (BMPs) including erosion control measures would be implemented to avoid discharge of sediment offsite. BMPs and erosion control measures for wind, water, material stockpiles, and tracking would be implemented, including source control, including protection of stockpiles, protection of slopes, protection of all disturbed areas, protection of accesses, and perimeter containment measures. Erosion control would be placed prior to the commencement of grading and site disturbance activities. The intent of erosion control measures shall be to keep all generated sediments from entering a swale, drainage way, watercourse, atmosphere, or migrate onto adjacent properties or onto the public right-of-way. Proposed measures include:

- The site has measures in place to direct surface runoff, and yard drainage to the plant storm drain system. Additional measures such as temporary berms, straw wattles, and grading modifications may be used as necessary to direct plant surface waters to the plant storm drain system. This storm drain system pipes flow of collected runoff back through the plant treatment system preventing flow into county storm drains, or public waters.
- The contractor will be required to prevent wind erosion, implement dust control measures, and to avoid tracking mud or debris onto adjoining private or county streets.
- Site inspections and appropriate maintenance of all erosion control measures will be conducted during construction and especially prior to, during, and after rain events.

Based on the Soils Engineering Report (Earth Systems Pacific, 2006) and Addendums (2009), the soil on the site has a relatively high potential for liquefaction due to the sandy soils and the high water table. The entire site was filled to a depth of four to five feet during initial construction. To address liquefaction potential and minimize settlement, the foundation for the tank structure will be over-excavated, dewatered and re-compacted three feet below and outside of the foundation.

The entire project site is within the mapped Flood Hazard designation for Arroyo Grande Creek; however, the wastewater treatment facility is constructed on fill material. The proposed project was referred to the County Public Works Department. The Department noted concerns regarding flood hazards, and noted that the County is required to comply with the federal requirements of the National Flood Insurance Program, and regulations noted in the County Coastal Zone Land Use Ordinance (Tim Tomlinson, July 28, 2009). Noted standards (Section 23.07.060 of the CZLUO) include, but are not limited to, the following:

“No construction or grading is to limit the capacity of the floodway or increase flood heights on existing structures...In no case shall flood heights be increased above that allowed under the Federal Flood Insurance Program.”

“Water supply and sanitary sewage systems shall be designed to minimize infiltration of flood waters into the system and discharge from systems into flood waters.”

The District proposes to address flood hazard concerns by project design. The facilities headworks is protected by a blockwall, which is above the 100-year flood elevation. Flood/silt gates protect windows, doors, and pump pits. The District has an emergency trailer-mounted diesel pump, which can bypass the plant in the event of an emergency. Implementation of the project would not result in a significant change from existing conditions. Potential impacts related to flooding are considered less than significant and the facilities will be flood protected.

Mitigation/Conclusion. Based on implementation of standard measures, and compliance with existing codes and regulations, potential geology, soils, and flood hazard impacts would be less than significant.

7. HAZARDS & HAZARDOUS MATERIALS - Will the project:	Potentially Significant	Impact can & will be mitigated	Insignificant Impact	Not Applicable
a) Result in a risk of explosion or release of hazardous substances (e.g. oil, pesticides, chemicals, radiation) or exposure of people to hazardous substances?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
b) Interfere with an emergency response or evacuation plan?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
c) Expose people to safety risk associated with airport flight pattern?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
d) Increase fire hazard risk or expose people or structures to high fire hazard conditions?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
e) Create any other health hazard or potential hazard?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
f) Other: _____	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>

Setting. The project is not located in an area of known hazardous material contamination. Hazardous materials currently stored onsite include: diesel, acetylene, argon, argon/carbon dioxide, ethylene glycol, ferric chloride, oxygen, petroleum distillates, petroleum hydrocarbon, sodium bisulfate, sodium hydroxide, sodium hypochlorite. The fire severity risk is moderate.

The project is within the County of San Luis Obispo Airport Review area, and is located adjacent to the San Luis Obispo County Oceano Airport. Based on the Oceano County Airport Land Use Plan (ALUP) (May 2007), the project site is within Airport Planning Area Oa, which is defined as "open space areas exposed to severe/significant airport impact". Area Oa lies within the Runway Protection Zones, Inner Approach/Departure Zones, Inner Turning Zones, and Sideline Zones of the Oceano County Airport. The land use plan requires that "Area Oa remain as is".

Impact. No changes to hazardous materials use and storage are proposed. The proposed project was referred to the County Division of Environmental Health. The Division noted that modifications or updates to the existing Hazardous Materials Business Plan may be necessary (Leslie Terry, July 6, 2009). No significant concerns were identified.

The project is not expected to conflict with any regional evacuation plan. Implementation of the proposed project would not significantly increase the potential fire hazard, and proposed development and operation of the facility would be required to comply with current Fire Code regulations. A project referral was submitted to the Oceano Fire Department for review, and no concerns were submitted.

The existing wastewater treatment facility is considered a “public utility facility”, which is not listed in the ALUP Airport Land Matrix, which identifies permitted and un-permitted land uses within each Airport Planning Area. The ALUP notes that “existing non-residential land uses that are inconsistent with the ALUP will be considered nonconforming land uses and will be subject to the nonconforming provisions contained in the applicable local land use regulations with the following applicable exceptions:

- a. Redevelopment of an existing nonconforming land use with a new use will be allowed only if the new use is consistent with the ALUP. ‘Redevelopment’ means any construction, renovation, or other activity that entails demolition of 80% or more of the floor area of existing structures on a site...
- c. A lot occupied by a nonconforming non-residential use may be further developed by the addition of conforming uses and/or structures only if such new uses or structures are consistent with the ALUP”.

The proposed improvements would be located within the facility boundary of the existing wastewater treatment plant (a viable reason for location), and would not qualify as “redevelopment”, as defined by the ALUP. An increase in density (onsite employees) is not proposed. Implementation of the proposed project would not intensify or increase the potential for impacts related to airport hazards; the overall land use would remain the same.

A project referral was submitted to the Airport Manager for review. The Airport Manager noted that the project is required to be reviewed by the Federal Aviation Administration (FAA). The FAA reviewed the proposed project, and provided a *Determination of No Hazard to Air Navigation* (November 23, 2009). The project referral and FAA determination were submitted to the County Airport Manager for review. The Airport Manager determined that their concerns have been addressed by the FAA (Craig Piper, January 19, 2009). Both agencies noted that if any changes to the project are proposed, which would modify the location or increase the height of proposed structures, the project shall be re-evaluated by the FAA. Based on the review and response from the FAA and Airport Manager, potential impacts related to airport hazards would be less than significant.

Mitigation/Conclusion. No significant impacts as a result of hazards or hazardous materials are anticipated, and no mitigation measures are necessary.

8. NOISE - <i>Will the project:</i>	Potentially Significant	Impact can & will be mitigated	Insignificant Impact	Not Applicable
a) <i>Expose people to noise levels that exceed the County Noise Element thresholds?</i>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
b) <i>Generate increases in the ambient noise levels for adjoining areas?</i>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
c) <i>Expose people to severe noise or vibration?</i>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
d) <i>Other:</i> _____	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>

Setting. The proposed project site is located adjacent to San Luis Obispo County Oceano Airport. Employees of the facility are currently exposed to airport noise resulting from the recreational aircraft landing and taking off at the airport. Based on the Oceano Airport Land Use Plan, the project site is within the 85 decibel noise contour. A residential area, which is considered a noise sensitive land use, is located 230 feet northwest of the existing facility. The Pismo Dune Preserve is located approximately 100 feet south of the facility.

Impacts. An increase in onsite employees is not proposed as part of the project. Current employees at this public facility would continue to be exposed to airport noise; however, based on current conditions, this impact is not considered significant.

Blowers for the aeration tank will be housed within a contiguous enclosed structure of 20 feet by 30 feet with other appurtenant support facilities, including pipe-work, pumps, and electrical system components. The blower housing will incorporate noise-dampening insulation and the blowers would be equipped with silencers and otherwise designed to meet all applicable Air Pollution Control District requirements. Implementation of the proposed project would not significantly increase the ambient noise level, as experienced by noise-sensitive land uses in the vicinity.

Temporary noise impacts during construction would be minimized through implementation of Best Management practices during construction, including baffling of noise-generating equipment.

Mitigation/Conclusion. Based on the location of the project site, and lack of new significant noise-generating uses associated with the upgrade, noise impacts would be less than significant and no mitigation is necessary.

9. POPULATION/HOUSING - <i>Will the project:</i>	Potentially Significant	Impact can & will be mitigated	Insignificant Impact	Not Applicable
a) <i>Induce substantial growth in an area either directly or indirectly (e.g., through projects in an undeveloped area or extension of major infrastructure)?</i>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
b) <i>Displace existing housing or people, requiring construction of replacement housing elsewhere?</i>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
c) <i>Create the need for substantial new housing in the area?</i>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
d) <i>Use substantial amount of fuel or energy?</i>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
e) <i>Other:</i> _____	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>

Setting. In its efforts to provide for affordable housing, the county currently administers the Home Investment Partnerships (HOME) Program and the Community Development Block Grant (CDBG) program, which provides limited financing to projects relating to affordable housing throughout the county. The County has recently adopted a revised Housing Element. One of the new Housing Element Programs (Program HE 1.9) indicates that the County will prepare an Inclusionary Housing Ordinance during 2006. Upon adoption of the ordinance, future commercial development may be required to pay a fee to support development of new affordable housing.

Impact. The project will not result in a need for a significant amount of new housing, and will not displace existing housing.

Mitigation/Conclusion. No significant population and housing impacts are anticipated, and no mitigation measures are necessary.

10. PUBLIC SERVICES/UTILITIES - <i>Will the project have an effect upon, or result in the need for new or altered public services in any of the following areas:</i>	Potentially Significant	Impact can & will be mitigated	Insignificant Impact	Not Applicable
a) Fire protection?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
b) Police protection (e.g., Sheriff, CHP)?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
c) Schools?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
d) Roads?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
e) Solid Wastes?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
f) Other public facilities?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
g) Other: _____	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>

Setting. The project area is served by the following public services/facilities:

Police: County Sheriff

Location: Oceano

Fire: Community Service District

Hazard Severity: Moderate

Response Time: 5-10 minutes

Location: Oceano

School District: Lucia Mar Unified School District.

Impact. Implementation of the project is limited to an upgrade to existing treatment facilities. During construction, local roadways and landfills would be utilized. These facilities have the capacity to serve the project. Police/sheriff response may be required in the event of an incident onsite. No significant project-specific impacts to utilities or public services were identified.

Mitigation/Conclusion. No mitigation is necessary.

11. RECREATION - Will the project:	Potentially Significant	Impact can & will be mitigated	Insignificant Impact	Not Applicable
a) Increase the use or demand for parks or other recreation opportunities?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
b) Affect the access to trails, parks or other recreation opportunities?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
c) Other _____	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>

Setting. According to the County Parks and Recreation Element (December 2006), the County of San Luis Obispo Parks Division is potentially considering trails adjacent to Arroyo Grande Creek, extending from Lopez Regional Park to the Pacific Ocean. The trail would be constructed along the Arroyo Grande Creek levee, south of the wastewater treatment facility. The Oceano Dunes Recreation Area is located to the west, and the Pismo Dunes Preserve is located to the south. Oceano Memorial Park and the Oceano Memorial Campground are located at Air Park Road/Mendel Drive, north of the Oceano Airport.

Impact. The proposed project will not create a significant need for additional park or recreational resources. Implementation of the proposed project would be limited to the existing facility area, and public access to the dune areas would not be restricted in any way. Temporary construction impacts to noise and air quality will be minimized through implementation of Best Management practices during construction, including standard dust control measures and baffling of construction equipment. A project referral was submitted to the County Parks Division. The Parks Division noted that the Arroyo Grande Creek Trail is located along the levee, adjacent to the parcel's southern property line. The Parks Division did not identify any concerns (Shaun Cooper; August 5, 2009). Based on the location of the proposed project, no significant impacts to recreation would occur.

Mitigation/Conclusion. No significant recreation impacts are anticipated, and no mitigation measures are necessary.

12. TRANSPORTATION/ CIRCULATION - <i>Will the project:</i>	Potentially Significant	Impact can & will be mitigated	Insignificant Impact	Not Applicable
a) <i>Increase vehicle trips to local or areawide circulation system?</i>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
b) <i>Reduce existing "Levels of Service" on public roadway(s)?</i>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
c) <i>Create unsafe conditions on public roadways (e.g., limited access, design features, sight distance, slow vehicles)?</i>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
d) <i>Provide for adequate emergency access?</i>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
e) <i>Result in inadequate parking capacity?</i>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
f) <i>Result in inadequate internal traffic circulation?</i>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
g) <i>Conflict with adopted policies, plans, or programs supporting alternative transportation (e.g., pedestrian access, bus turnouts, bicycle racks, etc.)?</i>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
h) <i>Result in a change in air traffic patterns that may result in substantial safety risks?</i>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
i) <i>Other:</i> _____	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>

Setting. The project site is accessed via Aloha Place, a local road as well as secondary access through airport property. Land uses south and west of the Oceano Airport are accessed via Pier Avenue, a collector.

Impact. Implementation of the project would result in the short-term increase in traffic trips during the construction period, including approximately 300 round-trip truck trips for export of soils. Due to the short-term nature of these trips, potential impacts would be less than significant. No new trips would be generated during operation of the facility upgrades. A project referral was submitted to the County Public Works Department, and no transportation/circulation concerns were identified (Tim Tomlinson, July 28, 2009).

As discussed in Section 7 (Hazards and Hazardous Materials), the project site is within the County Airport Review designation, and is located immediately south of the Oceano Airport. The proposed improvements would be located within the facility boundary of the existing wastewater treatment plant (a viable reason for location), and implementation of the proposed project would not intensify or increase the potential for impacts related to airport hazards; the overall land use would remain the same. Implementation of the project would not significantly affect air traffic patterns, or result in any traffic safety impacts. A previously discussed, the FAA reviewed the project and issued a "Determination of No Hazard to Air Navigation" (November 23, 2009).

Mitigation/Conclusion. No significant transportation/circulation or air traffic impacts were identified; therefore, no mitigation is necessary.

13. WASTEWATER - <i>Will the project:</i>	Potentially Significant	Impact can & will be mitigated	Insignificant Impact	Not Applicable
a) <i>Violate waste discharge requirements or Central Coast Basin Plan criteria for wastewater systems?</i>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
b) <i>Change the quality of surface or ground water (e.g., nitrogen-loading, day-lighting)?</i>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
c) <i>Adversely affect community wastewater service provider?</i>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
d) <i>Other:</i> _____	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>

Setting. The District's original wastewater treatment plant and collection system were designed and built in 1966. A plant enlargement in 1986 increased capacity from the original 2.5 million gallons per day (mgd) to 3.3 mgd, and further improvement in 1990 increased overall flow capacity to 5.0 mgd to accommodate the General Plan build-out of the member agencies. The facility is currently operating at approximately 64 percent of the average design flow (2.7 mgd).

Impact. As described in detail in the project description, the proposed project includes upgrades to the existing wastewater treatment facility in response to water conservation efforts (which affect the liquid-to-solids ratio in wastewater), RWQCB WDR permit requirements, and State Water Code amendments. The upgrade is also proposed to address the current deficiency related to a lack of a back-up system and potential MMPs due to discharge violations, which would potentially occur during

a seismic event or other loss of plant equipment. Proposed improvements include a new 124-foot by 40-foot dual-basin aeration tank and an 87-foot diameter secondary clarifier. No significant wastewater impacts would occur as a result of the proposed project.

Mitigation/Conclusion. No significant wastewater impacts were identified; no mitigation is necessary.

14. WATER - Will the project:		Potentially Significant	Impact can & will be mitigated	Insignificant Impact	Not Applicable
a)	<i>Violate any water quality standards?</i>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
b)	<i>Discharge into surface waters or otherwise alter surface water quality (e.g., turbidity, temperature, dissolved oxygen, etc.)?</i>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
c)	<i>Change the quality of groundwater (e.g., saltwater intrusion, nitrogen-loading, etc.)?</i>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
d)	<i>Change the quantity or movement of available surface or ground water?</i>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
e)	<i>Adversely affect community water service provider?</i>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
f)	<i>Other:</i> _____	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>

Setting. The project site is nearly level. Arroyo Grande Creek is located approximately 100 feet south of the southern property boundary, and the Oceano Lagoon is located immediately to the west of the project site. As described in the NRCS Soil Survey, the native soils are considered to have moderate erodibility. The wastewater treatment facility is constructed on fill material.

Impact. Implementation of the proposed project would not require an increase in current water demand. Regarding surface water quality, as proposed, the project will result in the disturbance of approximately 13,000 square feet. As discussed in Section 3 (Biological Resources) and Section 6 (Geology and Soils), setback area between the tank and the property line will be paved in concrete to contain leaks and spills. Curbs or asphalt berms will provide secondary containment. Runoff and accidental spills will be captured by an underground drainage network which will be collected and routed back into the treatment plant system. The proposed project was reviewed by the Regional Water Quality Control Board, and no water quality problems are anticipated (Sorrel Marks, July 31, 2009).

Based on the location of the proposed project, and implementation of measures to avoid offsite discharge of pollutants into sensitive habitat areas, potential impacts to surface water, including coastal wetlands, would be less than significant.

Mitigation/Conclusion. Based on implementation of proposed measures to protect surface waters, potential impacts would be less than significant and no additional mitigation is necessary.

15. LAND USE - <i>Will the project:</i>	Inconsistent	Potentially Inconsistent	Consistent	Not Applicable
a) <i>Be potentially inconsistent with land use, policy/regulation (e.g., general plan [county land use element and ordinance], local coastal plan, specific plan, Clean Air Plan, etc.) adopted to avoid or mitigate for environmental effects?</i>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
b) <i>Be potentially inconsistent with any habitat or community conservation plan?</i>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
c) <i>Be potentially inconsistent with adopted agency environmental plans or policies with jurisdiction over the project?</i>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
d) <i>Be potentially incompatible with surrounding land uses?</i>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
e) <i>Other:</i> _____	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>

Setting/Impact. Surrounding uses are identified on Page 2 of the Initial Study. The proposed project was reviewed for consistency with policy and/or regulatory documents relating to the environment and appropriate land use (e.g., County General Plan, Local Coastal Plan, etc.). Referrals were sent to outside agencies to review for policy consistencies (e.g., Oceano Fire Department for Fire Code, APCD for Clean Air Plan, ALUC for Airport Land Use Plan, etc.). The project was found to be consistent with these documents (refer also to Exhibit A on reference documents used).

The project is not within or adjacent to a Habitat Conservation Plan area. The project is consistent or compatible with the surrounding uses as summarized on page 2 of this Initial Study.

Mitigation/Conclusion. No inconsistencies were identified and therefore no additional measures above what will already be required were determined necessary.

16. MANDATORY FINDINGS OF SIGNIFICANCE - Will the project:

Potentially Significant

Impact can & will be mitigated

Insignificant Impact

Not Applicable

- a) *Have the potential to degrade the quality of the environment, substantially reduce the habitat of a fish or wildlife species, cause a fish or wildlife population to drop below self-sustaining levels, threaten to eliminate a plant or animal community, reduce the number or restrict the range of a rare or endangered plant or animal or eliminate important examples of the major periods of California history or prehistory?*
- ☐
☐
☒
☐
- b) *Have impacts that are individually limited, but cumulatively considerable? ("Cumulatively considerable" means that the incremental effects of a project are considerable when viewed in connection with the effects of past projects, the effects of other current projects, and the effects of probable future projects)*
- ☐
☐
☒
☐
- c) *Have environmental effects which will cause substantial adverse effects on human beings, either directly or indirectly?*
- ☐
☐
☒
☐

For further information on CEQA or the county's environmental review process, please visit the County's web site at "www.sloplanning.org" under "Environmental Information", or the California Environmental Resources Evaluation System at: http://www.ceres.ca.gov/topic/env_law/ceqa/guidelines for information about the California Environmental Quality Act.

Exhibit A - Initial Study References and Agency Contacts

The District has contacted various agencies for their comments on the proposed project. With respect to the subject application, the following have been contacted (marked with an ☒) and when a response was made, it is either attached or in the application file:

<u>Contacted</u>	<u>Agency</u>	<u>Response</u>
☒	County Environmental Coordinator	No Response
☒	County Public Works Department	Attached
☒	County Parks Division	Attached
☒	County Environmental Health Division	Attached
☒	Airport Land Use Commission	Attached
☒	Airport Manager	Attached
☒	Air Pollution Control District	Attached
☒	Regional Water Quality Control Board	Attached
☒	CA Coastal Commission	No Response
☒	CA Department of Fish and Game	No Response
☒	Oceano Community Service District (Fire)	No Response
☒	City of Arroyo Grande	No Response
☒	City of Grover Beach	No Response
☒	Oceano Advisory Council	No Response
☒	State Parks	No Response

*** "No comment" or "No concerns"-type responses are usually not attached*

The following checked ("☒") reference materials have been used in the environmental review for the proposed project and are hereby incorporated by reference into the Initial Study. The following information is available at the County Planning and Building Department.

☒ Project File	☒ San Luis Bay(Coastal) Area Plan and Update EIR
<u>County documents</u>	<input type="checkbox"/> Circulation Study
☒ Airport Land Use Plans	<u>Other documents</u>
☒ Annual Resource Summary Report	☒ Archaeological Resources Map
<input type="checkbox"/> Building and Construction Ordinance	☒ Area of Critical Concerns Map
☒ Coastal Policies	☒ Areas of Special Biological Importance Map
☒ Framework for Planning (Coastal & Inland)	☒ California Natural Species Diversity Database
☒ General Plan (Inland & Coastal), including all maps & elements; more pertinent elements considered include:	☒ Clean Air Plan
☒ Agriculture & Open Space Element	☒ Fire Hazard Severity Map
☒ Energy Element	☒ Flood Hazard Maps
☒ Environment Plan (Conservation, Historic and Esthetic Elements)	☒ Natural Resources Conservation Service Soil Survey for SLO County
☒ Housing Element	☒ Regional Transportation Plan
☒ Noise Element	☒ Uniform Fire Code
☒ Parks & Recreation Element	☒ Water Quality Control Plan (Central Coast Basin – Region 3)
☒ Safety Element	☒ GIS mapping layers (e.g., habitat, streams, contours, etc.)
☒ Land Use Ordinance	<input type="checkbox"/> Other _____
<input type="checkbox"/> Real Property Division Ordinance	
☒ Trails Plan	
<input type="checkbox"/> Solid Waste Management Plan	

In addition, the following project specific information and/or reference materials have been considered as a part of the Initial Study:

California Department of Fish and Game. CNDDDB Quickviewer, Oceano Quadrangle.
http://imaps.dfg.ca.gov/viewers/cnddb_quickviewer/app.asp (accessed July 2, 2009).

Earth Systems Pacific. (2006). Soils Engineering Report Centrifuge Building.

Earth Systems Pacific. (2008) Addendum No. 1 to Soils Engineering Report.

Earth Systems Pacific. (2008) Addendum No.2 to Soils Engineering Report.

Kennedy Jenks Consultants. (2002). Long-range Plan for Wastewater Treatment.

Kennedy Jenks Consultants. (2008). South San Luis Obispo County Sanitation District Long-range Plan Activated Sludge System Preliminary Design Report.

LSA (2007). A Cultural Resources Study for the Oceano Sewer Repair Project.

Natural Resources Conservation Service. NRCS Web Soil Survey.
<http://websoilsurvey.nrcs.usda.gov/app/WebSoilSurvey.aspx> (accessed July 2, 2009).

Sawyer, W.B. (1986). Archaeological Monitoring of North-South and East-West Transect Trenches.

SWCA. (2009). Phase One Archaeological Report for the South San Luis Obispo County Sanitation District Secondary Clarifier and Aeration Tank Project.

Exhibit B - Mitigation Monitoring Program

Mitigation Measure	Requirements of Measure	Administrative Action	Timing	Monitoring and Reporting Schedule	Party Responsible for Verification
AQ-1	Prior to any grading activities at the site, the District shall ensure that a geologic evaluation is conducted to determine if naturally occurring asbestos (NOA) is present within the area that will be disturbed. If NOA is not present, an exemption request must be filed with the APCD. If NOA is found at the site, the District shall comply with all requirements outlined in the Asbestos ATCM.	Conduct evaluation and submit applicable forms to the APCD.	Prior to grading and construction.	Verify completion of task prior to construction.	South San Luis Obispo County Sanitation District in consultation with the APCD.
AQ-2	<p>All required PM10 measures shall be shown on applicable grading or construction plans. In addition, the Sanitation District shall designate personnel to insure compliance and monitor the effectiveness of the required dust control measures (as conditions dictate, monitor duties may be necessary on weekends and holidays to insure compliance); the name and telephone number of the designated monitor(s) shall be provided to the APCD prior to construction/grading permit issuance). Prior to commencement of construction activities, the applicant shall notify the APCD, by letter, that the above air quality mitigation measures have been applied.</p> <ul style="list-style-type: none"> a. Reduce the amount of the disturbed area where possible; b. Use of water trucks or sprinkler systems in sufficient quantities to prevent airborne dust from leaving the site. Increased watering frequency would be required whenever wind speeds exceed 15 mph. Reclaimed (nonpotable) water should be used whenever possible; c. All dirt stock-pile areas should be sprayed 	Include on grading and construction plans. Assign person to monitor compliance.	Upon preparation of grading and construction plans. Implement prior to and during construction.	Note any inconsistencies with measures in weekly air quality monitoring reports during the construction period.	South San Luis Obispo County Sanitation District in consultation with the APCD.

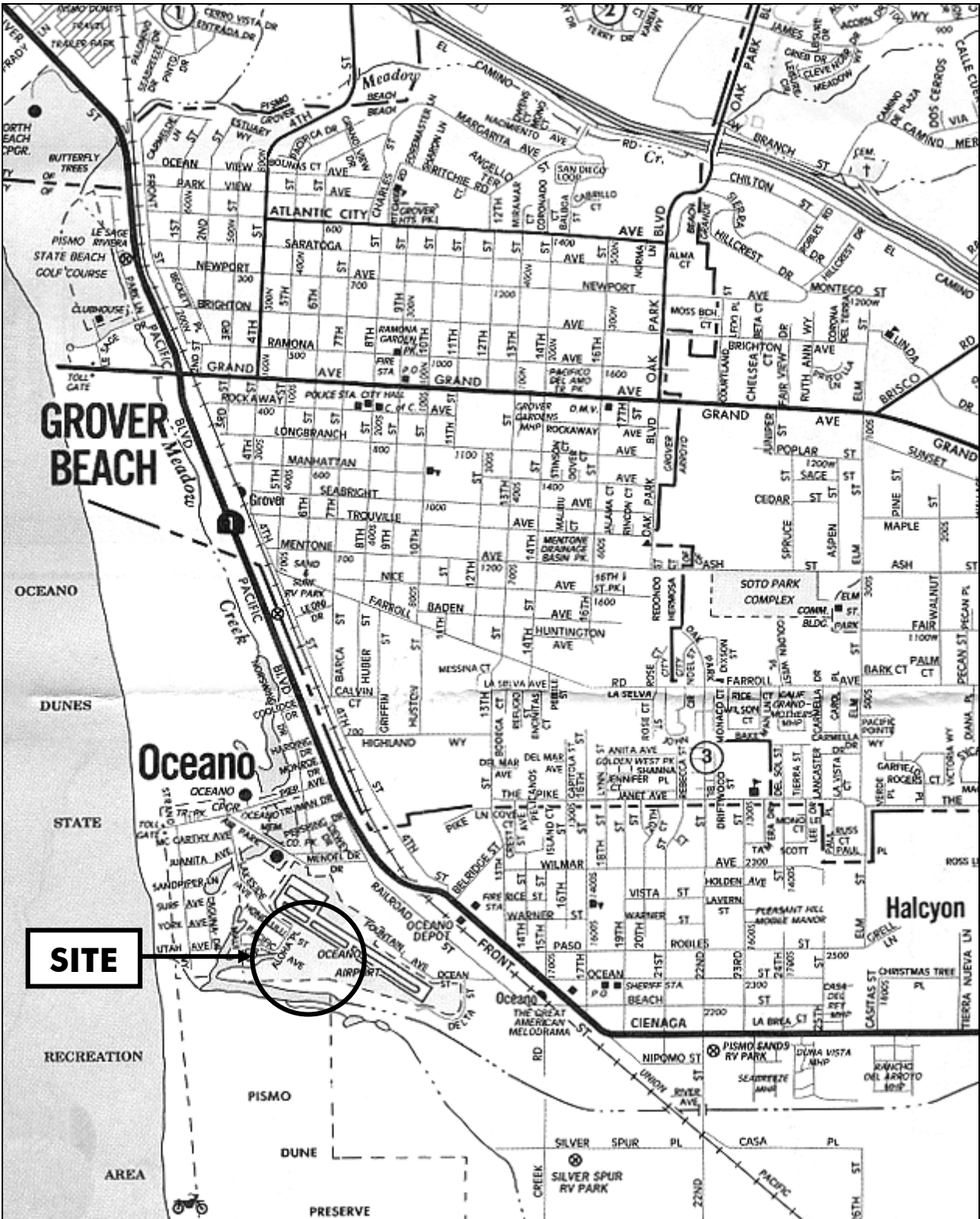
Mitigation Measure	Requirements of Measure	Administrative Action	Timing	Monitoring and Reporting Schedule	Party Responsible for Verification
	<p>daily as needed;</p> <p>d. Permanent dust control measures identified in revegetation and landscape plans shall be implemented as soon as possible following completion of any soil disturbing activities;</p> <p>e. Exposed ground areas that are planned to be reworked at dates greater than one month after initial grading shall be sown with a fast germinating native grass seed and watered until vegetation is established;</p> <p>f. All disturbed soil areas not subject to revegetation shall be stabilized using approved chemical soil binders, jute netting, or other methods approved in advance by the APCD;</p> <p>g. All roadways and driveways to be paved shall be completed as soon as possible. In addition, structure pads shall be laid as soon as possible after grading unless seeding or soil binders are used;</p> <p>h. Vehicle speed for all construction vehicles shall not exceed 15 mph on any unpaved surface at the construction site;</p> <p>i. All trucks hauling dirt, sand, soil, or other loose materials are to be covered or should maintain at least two feet of freeboard (minimum vertical distance between top of load and top of trailer) in accordance with CVC Section 23114;</p> <p>j. Install wheel washers where vehicles enter and exit unpaved roads onto streets, or wash off trucks and equipment leaving the site; and,</p>				

Exhibit B - Mitigation Monitoring Program

Mitigation Measure	Requirements of Measure	Administrative Action	Timing	Monitoring and Reporting Schedule	Party Responsible for Verification
	k. Sweep streets at the end of each day if visible soil material is carried onto adjacent paved roads. Water sweepers with reclaimed water shall be used where feasible.				
AQ-3	Prior to construction , the Sanitation District shall contact APCD regarding proposed portable equipment requiring APCD or CARB registration, such as: 50-hp portable generators, IC engines, unconfined abrasive blasting operations, concrete batch plants, rock and pavement crushing, tub grinders, trammel screens, etc. Should any of these types of equipment be used during construction activities California statewide portable equipment registration (issued by the California Air Resources Board) or an APCD permit may be required.	Include on grading and construction plans. Assign person to monitor compliance.	Upon preparation of grading and construction plans. Implement prior to and during construction.	Note any inconsistencies with measures in weekly air quality monitoring reports during the construction period.	South San Luis Obispo County Sanitation District in consultation with the APCD.
AQ-4	Prior to construction , the Sanitation District shall contact APCD regarding proposed operational equipment, and shall obtain an Authority to Construct (ATC) to modify the existing permit.	Contact and consult with APCD to obtain required permits.	Prior to construction.	Obtain permit prior to operation.	South San Luis Obispo County Sanitation District in consultation with the APCD.
CR-1	Prior to construction , a subsurface-qualified archaeologist shall submit a monitoring plan for the review and approval by the District. The monitoring plan shall include at a minimum: a. List of personnel involved in the monitoring activities; b. Description of how the monitoring shall occur; c. Description of frequency of monitoring (e.g. full-time, part time, spot checking); d. Description of what resources are expected to be encountered; e. Description of circumstances that would result	Retain archaeological monitor, review and approve monitoring plan.	Prior to initiation of construction activities.	Comply with monitoring plan, submit monitoring report to District.	South San Luis Obispo County Sanitation District

Mitigation Measure	Requirements of Measure	Administrative Action	Timing	Monitoring and Reporting Schedule	Party Responsible for Verification
	<p>in the halting of work at the project site (e.g. What is considered "significant" archaeological resources?);</p> <p>f. Description of procedures for halting work on the site and notification procedures;</p> <p>g. Description of monitoring reporting procedures.</p>				
CR-2	<p>Prior to initial grading activities involving over-excavation at a depth below existing foundations, the retained archaeologist shall observe the area of over-excavation. The District shall implement the recommendations of the archaeologist, pursuant to the approved Monitoring Plan. Upon completion of all monitoring/mitigation activities, the consulting archaeologist shall submit a letter to the District summarizing all monitoring/mitigation activities and confirming that all recommended mitigation measures have been met.</p>	Retain archaeological monitor.	Prior to initiation of construction activities.	Comply with monitoring plan, submit monitoring report to District.	South San Luis Obispo County Sanitation District

Figure 1: Project Vicinity Map



Source: Automobile Association of America



NORTH
Not to Scale

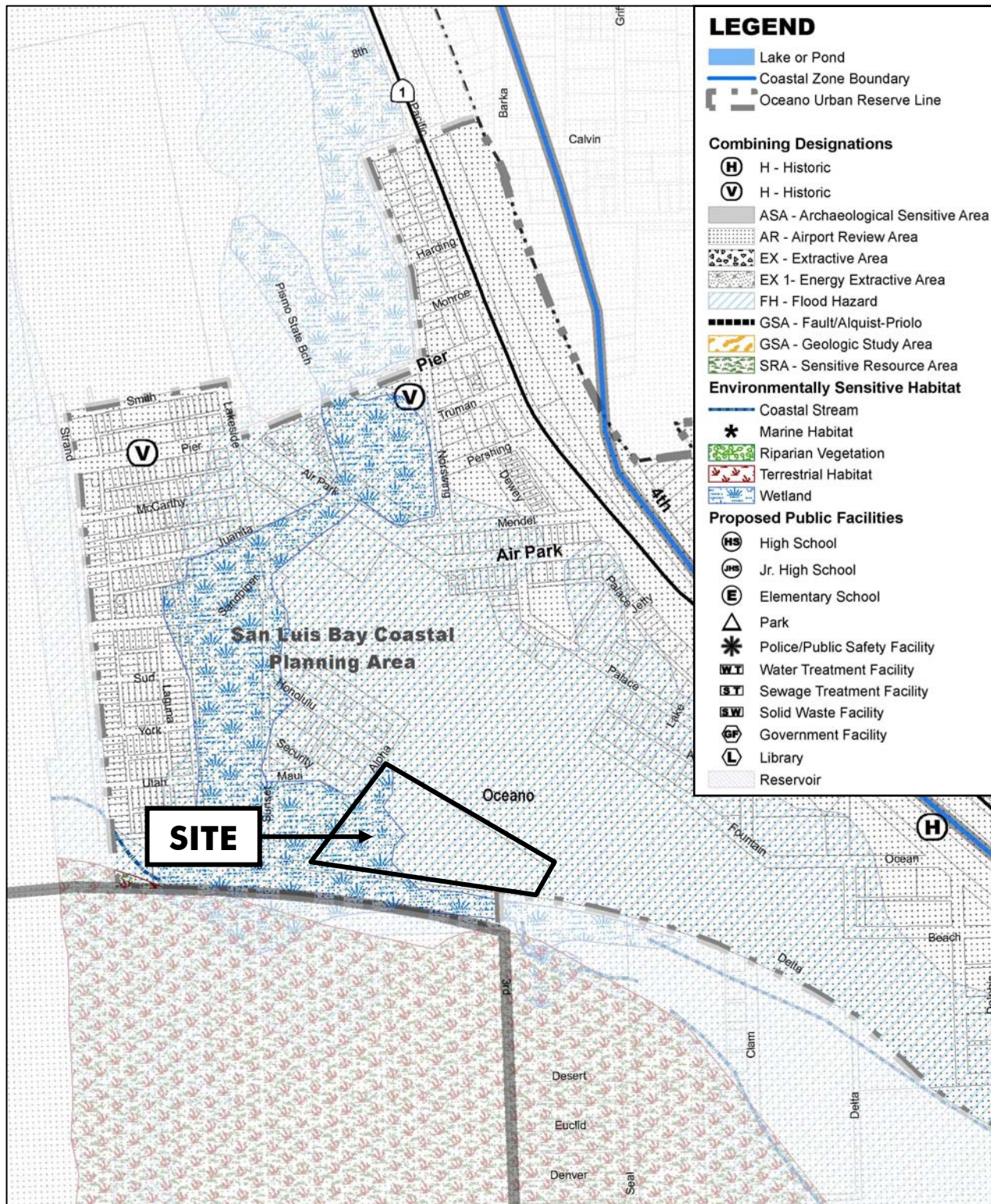
Figure 2: Land Use Category Map



Source: County of San Luis Obispo



Figure 3: Combining Designation Map

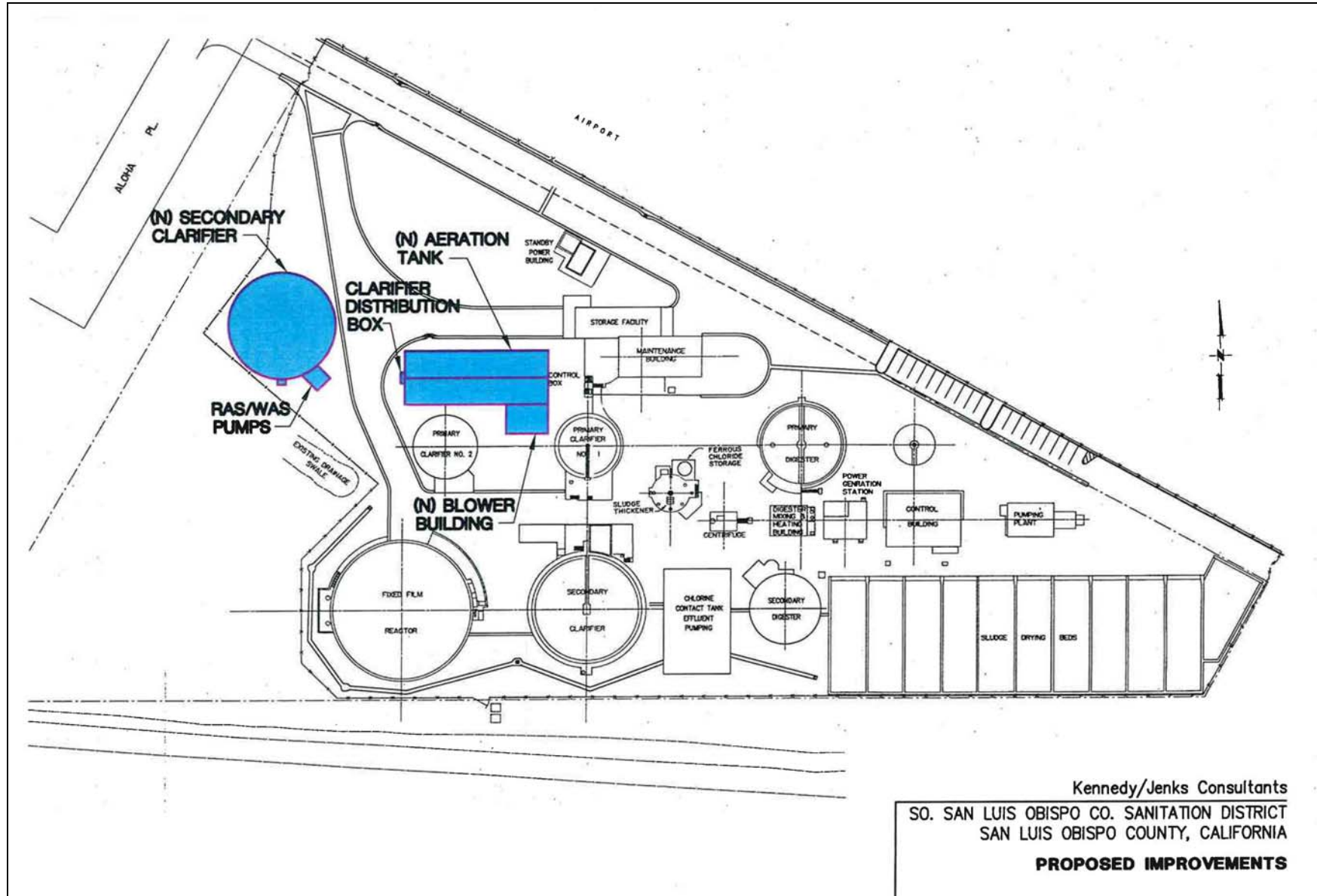


Source: County of San Luis Obispo



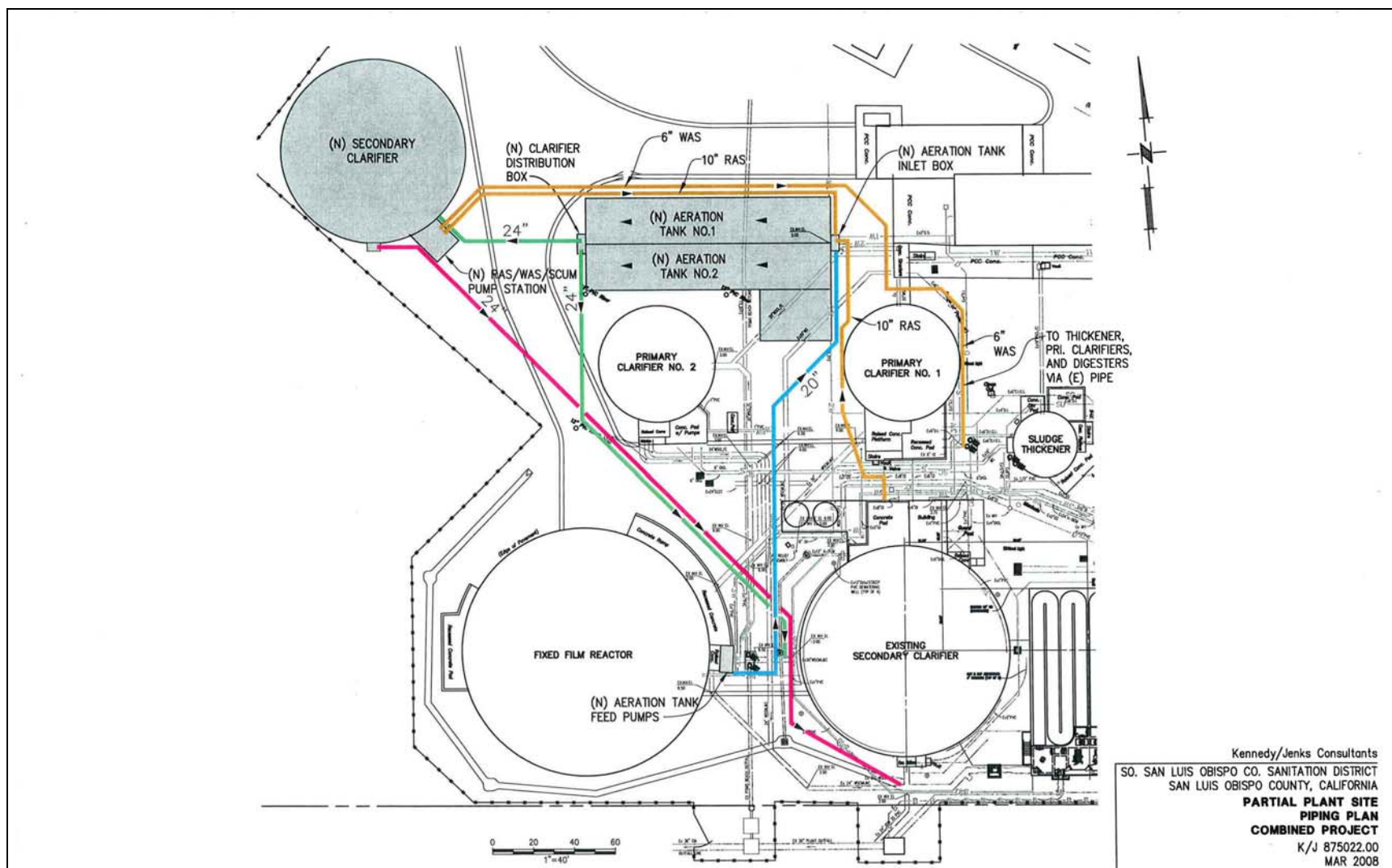
NORTH
Not to Scale

Figure 4: Proposed Improvements



Source: Kennedy / Jenks Consultants

Figure 5: Proposed Piping Plan



Source: Kennedy / Jenks Consultants

Comments Received

Jeremy Freund

From: Shawna Scott [sscott@swca.com]
nt: Tuesday, January 19, 2010 10:47 AM
J: Jeremy Freund
Subject: FW: FW: Oceano WWTP Upgrade Project Referral for the Airport Manager

Hi Jeremy,

Please see below. I will wrap up the Initial Study for your final review.

Thank you,
Shawna

Shawna Scott
Planning Program Manager

SWCA Environmental Consultants
1422 Monterey Street C200
San Luis Obispo, CA 93401
(805) 543-7095 extension 111
(805) 543-2367
Sound Science. Creative Solutions.(tm)
www.swca.com

-----Original Message-----

From: capiper@co.slo.ca.us [mailto:capiper@co.slo.ca.us]
Sent: Tuesday, January 19, 2010 9:41 AM
To: Shawna Scott
Cc: rhowell@co.slo.ca.us
Subject: Re: FW: Oceano WWTP Upgrade Project Referral for the Airport Manager

Shawna,

Thank you for checking back with us.

Our concern appears to have been address in that you completed the FAA form 7460 have received your determinations. The only comment we would have to offer at this point is if the location or elevations change from what was submitted to the FAA. If either of these change then the project would need to be re-evaluated by the FAA.

Thank you,

Craig Piper
Assistant General Manager
San Luis Obispo County Airport Services
805-781-4376

From: "Shawna Scott" <sscott@swca.com>

To: <capiper@co.slo.ca.us>



Federal Aviation Administration
Air Traffic Airspace Branch, ASW-520
2601 Meacham Blvd.
Fort Worth, TX 76137-0520

Aeronautical Study No.
2009-AWP-4073-OE

Issued Date: 11/23/2009

Jeremy Freund
South San Luis Obispo County Sanitation District
PO Box 339
1600 Aloha
Oceano, CA 93445

**** DETERMINATION OF NO HAZARD TO AIR NAVIGATION ****

The Federal Aviation Administration has conducted an aeronautical study under the provisions of 49 U.S.C., Section 44718 and if applicable Title 14 of the Code of Federal Regulations, part 77, concerning:

Structure:	Waste Management Facility Secondary Clarifier
Location:	Oceano, CA
Latitude:	35-06-03.36N NAD 83
Longitude:	120-37-30.62W
Heights:	8 feet above ground level (AGL) 18 feet above mean sea level (AMSL)

This aeronautical study revealed that the structure does not exceed obstruction standards and would not be a hazard to air navigation provided the following condition(s), if any, is(are) met:

Based on this evaluation, marking and lighting are not necessary for aviation safety. However, if marking and/or lighting are accomplished on a voluntary basis, we recommend it be installed and maintained in accordance with FAA Advisory circular 70/7460-1 K Change 2.

The structure considered under this study lies in proximity to an airport and occupants may be subjected to noise from aircraft operating to and from the airport.

This determination expires on 05/23/2011 unless:

- (a) extended, revised or terminated by the issuing office.
- (b) the construction is subject to the licensing authority of the Federal Communications Commission (FCC) and an application for a construction permit has been filed, as required by the FCC, within 6 months of the date of this determination. In such case, the determination expires on the date prescribed by the FCC for completion of construction, or the date the FCC denies the application.

NOTE: REQUEST FOR EXTENSION OF THE EFFECTIVE PERIOD OF THIS DETERMINATION MUST BE POSTMARKED OR DELIVERED TO THIS OFFICE AT LEAST 15 DAYS PRIOR TO THE EXPIRATION DATE.

This determination is based, in part, on the foregoing description which includes specific coordinates , heights, frequency(ies) and power . Any changes in coordinates , heights, and frequencies or use of greater power will void this determination. Any future construction or alteration , including increase to heights, power, or the addition of other transmitters, requires separate notice to the FAA.

This determination does include temporary construction equipment such as cranes, derricks, etc., which may be used during actual construction of the structure. However, this equipment shall not exceed the overall heights as indicated above. Equipment which has a height greater than the studied structure requires separate notice to the FAA.

This determination concerns the effect of this structure on the safe and efficient use of navigable airspace by aircraft and does not relieve the sponsor of compliance responsibilities relating to any law, ordinance, or regulation of any Federal, State, or local government body.

If we can be of further assistance, please contact our office at (310) 725-6557. On any future correspondence concerning this matter, please refer to Aeronautical Study Number 2009-AWP-4073-OE.

Signature Control No: 650305-120405438

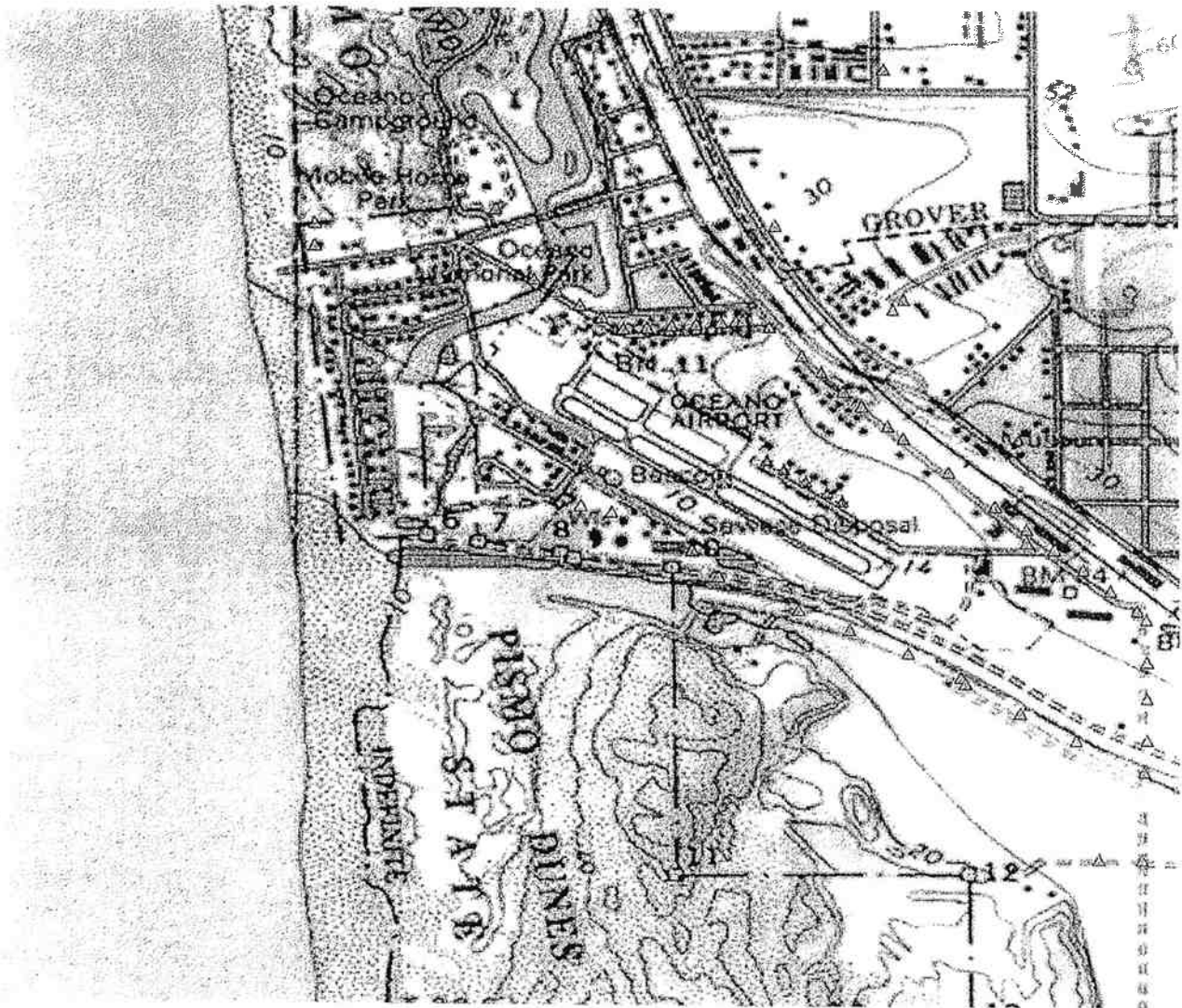
(DNE)

Karen McDonald
Specialist

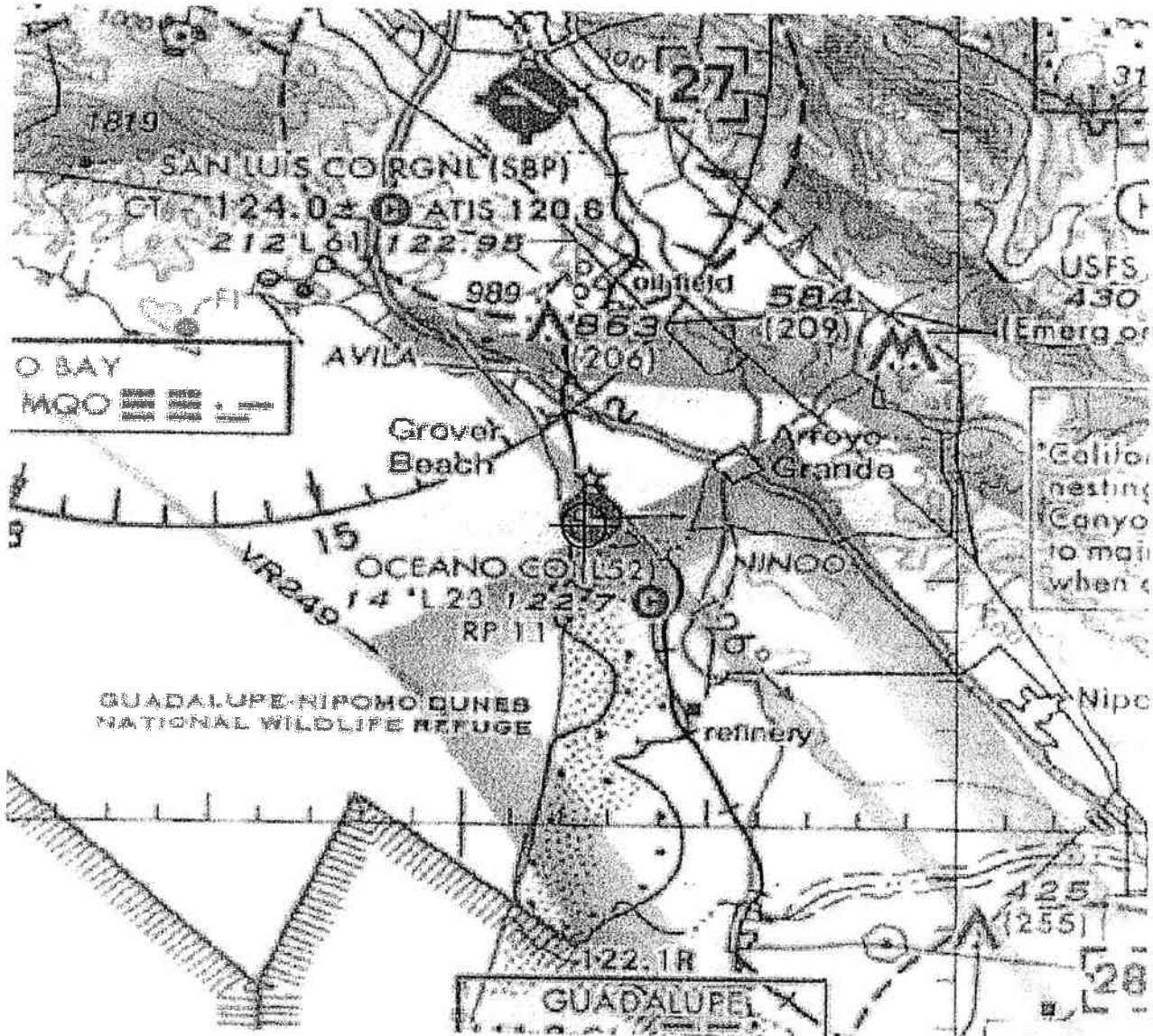
Attachment(s)
Case Description
Map(s)

Case Description for ASN 2009-AWP-4073-OE

New secondary clarifier. Height of structure will be 8 ft above ground level.



Sectional Map for ASN 2009-AWP-4073-OE





Federal Aviation Administration
Air Traffic Airspace Branch, ASW-520
2601 Meacham Blvd.
Fort Worth, TX 76137-0520

Aeronautical Study No.
2009-AWP-4072-OE

Issued Date: 11/23/2009

Jeremy Freund
South San Luis Obispo County Sanitation District
PO Box 339
1600 Aloha
Oceano, CA 93445

**** DETERMINATION OF NO HAZARD TO AIR NAVIGATION ****

The Federal Aviation Administration has conducted an aeronautical study under the provisions of 49 U.S.C., Section 44718 and if applicable Title 14 of the Code of Federal Regulations, part 77, concerning:

Structure:	Waste Management Facility Aeration Tank and Secondary Clarifier
Location:	Oceano, CA
Latitude:	35-06-02.89N NAD 83
Longitude:	120-37-28.42W
Heights:	8 feet above ground level (AGL) 18 feet above mean sea level (AMSL)

This aeronautical study revealed that the structure does not exceed obstruction standards and would not be a hazard to air navigation provided the following condition(s), if any, is(are) met:

Based on this evaluation, marking and lighting are not necessary for aviation safety. However, if marking and/or lighting are accomplished on a voluntary basis, we recommend it be installed and maintained in accordance with FAA Advisory circular 70/7460-1 K Change 2.

The structure considered under this study lies in proximity to an airport and occupants may be subjected to noise from aircraft operating to and from the airport.

This determination expires on 05/23/2011 unless:

- (a) extended, revised or terminated by the issuing office.
- (b) the construction is subject to the licensing authority of the Federal Communications Commission (FCC) and an application for a construction permit has been filed, as required by the FCC, within 6 months of the date of this determination. In such case, the determination expires on the date prescribed by the FCC for completion of construction, or the date the FCC denies the application.

NOTE: REQUEST FOR EXTENSION OF THE EFFECTIVE PERIOD OF THIS DETERMINATION MUST BE POSTMARKED OR DELIVERED TO THIS OFFICE AT LEAST 15 DAYS PRIOR TO THE EXPIRATION DATE.

This determination is based, in part, on the foregoing description which includes specific coordinates , heights, frequency(ies) and power . Any changes in coordinates , heights, and frequencies or use of greater power will void this determination. Any future construction or alteration , including increase to heights, power, or the addition of other transmitters, requires separate notice to the FAA.

This determination does include temporary construction equipment such as cranes, derricks, etc., which may be used during actual construction of the structure. However, this equipment shall not exceed the overall heights as indicated above. Equipment which has a height greater than the studied structure requires separate notice to the FAA.

This determination concerns the effect of this structure on the safe and efficient use of navigable airspace by aircraft and does not relieve the sponsor of compliance responsibilities relating to any law, ordinance, or regulation of any Federal, State, or local government body.

If we can be of further assistance, please contact our office at (310) 725-6557. On any future correspondence concerning this matter, please refer to Aeronautical Study Number 2009-AWP-4072-OE.

Signature Control No: 650304-120405437

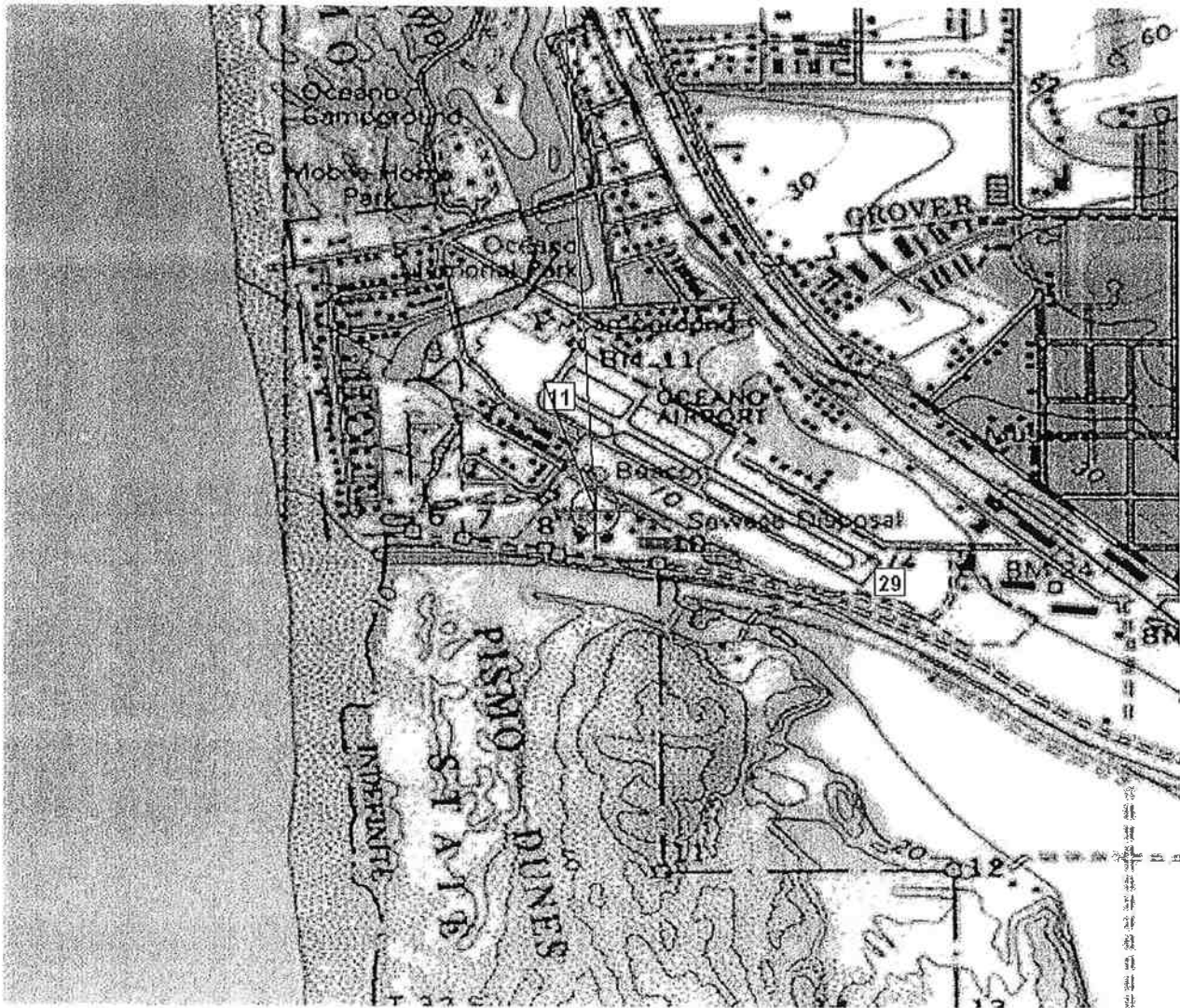
(DNE)

Karen McDonald
Specialist

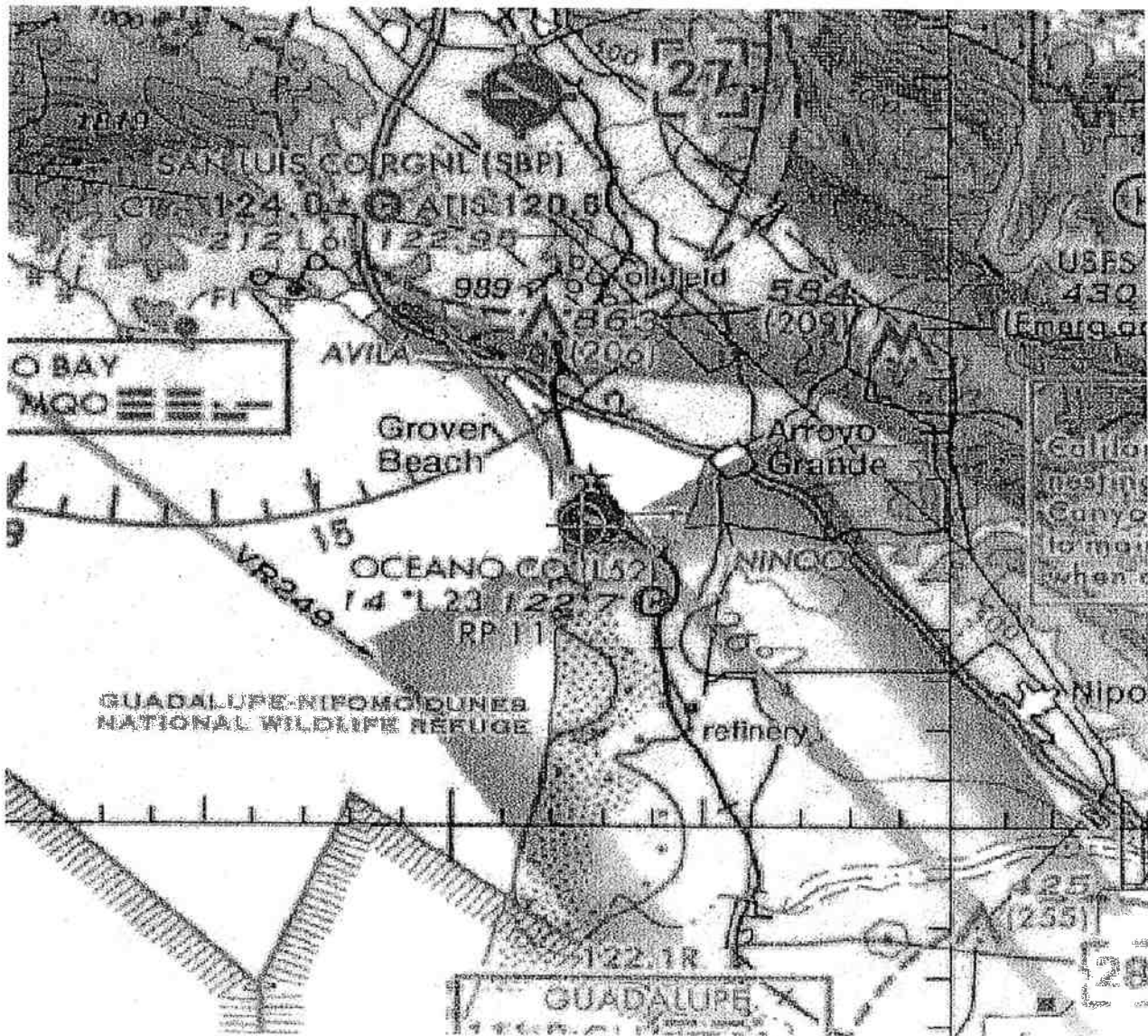
Attachment(s)
Case Description
Map(s)

Case Description for ASN 2009-AWP-4072-OE

New above ground aeration tank and above ground secondary clarifier tank.



Sectional Map for ASN 2009-AWP-4072-OE





**SOUTH SAN LUIS OBISPO COUNTY
SANITATION DISTRICT
PROJECT REFERRAL**

1600 Aloha Place
P.O. Box 339
Oceano, CA 93445
(805) 489-6666

DATE: July 1, 2009

TO: San Luis Obispo County Division of Environmental Health
2191 Johnson Avenue
San Luis Obispo, CA 93401

FROM: South San Luis Obispo County Sanitation District
c/o Shawna Scott, Morro Group, a division of SWCA

PROJECT DESCRIPTION: Please refer to attached project description and figures.

Please return this coverletter with your comments attached no later than 14 days from receipt of this referral, by July 17, 2009 to:

Shawna Scott, Environmental Analysis Project Manager
1422 Monterey St., Suite C-200, San Luis Obispo, CA 93401
(P): (805) 543-7095, ext. 111 ♦ (F): (805) 543-2367 ♦ sscott@swca.com

If you have any questions regarding the project, please contact: Jeremy Freund, South San Luis Obispo County Sanitation District Project Manager at (805) 544-4011.

IS THE ATTACHED INFORMATION ADEQUATE TO COMPLETE YOUR REVIEW?

- ☒ YES (Please go to next question)
☐ NO (Please contact me as soon as possible to discuss additional information you require)

ARE THERE ANY SIGNIFICANT CONCERNS, PROBLEMS, OR IMPACTS IN YOUR AREA OF REVIEW?

- ☐ YES (Please describe impacts, along with recommended mitigation measures to reduce the impacts to less than significant levels, and attach to this letter)
☒ NO (Please go to next question)

INDICATE YOUR RECOMMENDATION FOR FINAL ACTION.

Please attach any conditions of approval you recommend to be incorporated into the project's approval, or state reason for recommending denial.

IF YOU HAVE "NO COMMENT" PLEASE SO INDICATE, OR CALL.

____ Applicant to evaluate if project will necessitate modifications / updates to Hazardous
____ Materials Business Plan. To be considered includes but is not limited to: site lay-out,
____ chemical inventory, chemical quantities, emergency response plan and employee
____ training. If applicable, provide this office with copies of changes.

7/15/09
Date

[Signature]
Name

781-5551
Phone



**SOUTH SAN LUIS OBISPO COUNTY
SANITATION DISTRICT
PROJECT REFERRAL**

1600 Aloha Place
P.O. Box 339
Oceano, CA 93445
(805) 489-6666

DATE: July 1, 2009

TO: *PR* San Luis Obispo County Public Works
County Government Center Room 207
San Luis Obispo, CA 93408

Dean B
RECEIVED

JUL -6 2009

TO FROM: South San Luis Obispo County Sanitation District
c/o Shawna Scott, Morro Group, a division of SWCA

COUNTY OF SAN LUIS OBISPO
DEPARTMENT OF PUBLIC WORKS

PROJECT DESCRIPTION: Please refer to attached project description and figures.

Please return this coverletter with your comments attached no later than 14 days from receipt of this referral, by July 17, 2009 to:

Shawna Scott, Environmental Analysis Project Manager
1422 Monterey St., Suite C-200, San Luis Obispo, CA 93401
(P): (805) 543-7095, ext. 111 ♦ (F): (805) 543-2367 ♦ sscott@swca.com

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☒ YES (Please go to next question)

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ARE THERE ANY SIGNIFICANT CONCERNS, PROBLEMS, OR IMPACTS IN YOUR AREA OF REVIEW?

☐ YES (Please describe impacts, along with recommended mitigation measures to reduce the impacts to less than significant levels, and attach to this letter)

☒ NO (Please go to next question)

INDICATE YOUR RECOMMENDATION FOR FINAL ACTION.

Please attach any conditions of approval you recommend to be incorporated into the project's approval, or state reason for recommending denial.

IF YOU HAVE "NO COMMENT" PLEASE SO INDICATE, OR CALL.

Assure new facilities are protected from 100 Year flood level from
Arroyo Grande Creek. SEE ATTACHED COMMENTS FROM TIM T., CO.
FLOOD RISK MANAGER

7.10.09
Date

Dean Benedix
Name

805.701.5267
Phone

South San Luis Obispo County Sanitation District Project

The existing Sewer Plant lies wholly within the 100 year flood zone as shown by FEMA's Flood Insurance Rate Map. The County of San Luis Obispo as a participant in the National Flood Insurance Program is obligated to comply with the Federal Requirements of this program as well as our own ordinances governing construction within the Flood Hazard Zone. I have included the portions of Title 23 which are applicable below and italicized and emboldened those most significant. As I assume that there will not be any building permits associated with this construction, The likelihood for our enforcement of these requirements is nil.

23.07.060 - Flood Hazard Area (FH):

The Flood Hazard combining designation is applied to specific parcels by the Official Maps (Part III) of the Land Use Element to areas where terrain characteristics would present new developments and their users with potential hazards to life and property from potential inundation by a 100-year frequency flood or within coastal high hazard areas. These standards are also intended to minimize the effects of development on drainage ways and watercourses. The areas of special flood hazard identified by the Federal Insurance Administration, through the Federal Emergency Management Agency in a scientific and engineering report entitled "The Flood Insurance Study for the San Luis Obispo County," dated July 18, 1985, with accompanying flood insurance rate maps, and any subsequent revisions to the flood insurance rate maps or flood area boundary maps, are hereby adopted and incorporated into this title by reference as though they were fully set forth here. The flood insurance study is on file in the County Public Works office.
[Amended 1992, Ord. 2570; 2004, Ord. 3025]

23.07.062 - Applicability of Flood Hazard Standards:

All uses proposed within a Flood Hazard combining designation are subject to the standards of Sections 23.07.064 through 23.07.066, except:

- a. Temporary uses: With the approval of the Director of Public Works, the of Planning and Building Director may authorize construction or placement of a temporary structure or use within a Flood Hazard area pursuant to the required land use permit without meeting these standards, provided that the structure or use will not be in place from October 15, to April 15.
- b. Emergency work: Emergency work may be undertaken where necessary to preserve life or property. Within 48 hours after commencement of such work, the Director of Public Works is to be notified and an application filed with the Department of Planning and Building in compliance with the provisions of Section 23.07.064.
- c. Existing uses: The continuance, operation, repair, or maintenance of any lawful use of land existing on the effective date of this title is permitted. ***Any expansion or alteration of an existing structure or use, or grading of a site, shall be conducted in accordance with all applicable provisions of this title.***

23.07.066 - Construction Standards:

a. Construction, general:

- (1) No construction or grading is to limit the capacity of the floodway or increase flood

heights on existing structures unless the adverse effect of the increase is rectified to the satisfaction of the Director of Public Works. In no case shall flood heights be increased above that allowed under the Federal Flood Insurance Program.

(2) Structures shall be anchored to prevent collapse, lateral movement or flotation that could result in damage to other structures or restriction of bridge openings and narrow sections of the stream or river.

(3) Service facilities such as electrical and heating equipment are to be floodproofed or constructed at minimum of one-foot above the 100-year storm flood profile level for the site.

(4) Water supply and sanitary sewage systems shall be designed to minimize infiltration of flood waters into the system and discharge from systems into flood waters.

(5) On-site waste disposal systems shall be located to avoid their being impaired or contaminated during flooding.

(6) All buildings or structures shall be located landward of mean high tide.

(7) Residential, commercial and industrial development shall be prohibited outside of urban and village reserve lines.

(8) Whenever a watercourse is to be altered or relocated, the Department of Planning and Building shall notify adjacent communities and the California Department of Water Resources and evidence of such notification shall be sent to the Federal Insurance Administration.

(9) Fully enclosed areas below the lowest floor that are subject to flooding shall be designed to automatically equalize hydrostatic flood forces on exterior walls by allowing for the entry and exit of floodwaters. Designs for meeting this requirement must either be certified by a registered professional engineer or architect or meet or exceed the following minimum criteria:

(i) A minimum of two openings having a total net area of not less than one square inch for every square foot of enclosed area subject to flooding.

(ii) The bottom of all openings shall be no higher than one foot above grade.

(iii) Openings may be equipped with screens, louvers, valves or other coverings or devices provided that they permit the automatic entry and exit of flood waters.

COASTAL ZONE LAND USE ORDINANCE REVISED JANUARY 2009 7-9 COMBINING DESIGNATION STANDARDS

23.07.066

(10) On the basis of structural plans and the depth analysis, the ground floor of all structures is to be constructed at a minimum of one-foot above the 100-year storm flood profile level. Within any AO zone on the Flood Insurance Rate maps, this elevation shall be determined by adding one foot to the depth number specified. If no depth is specified, structures shall be elevated a minimum of two feet above adjacent natural grade.

(11) Non-residential construction shall either be elevated in conformance with Section 23.07.066a(10) above, or together with attendant utility and sanitary facilities, be elevated a minimum of two feet above the highest adjacent grade and be

floodproofed to a minimum of one-foot above the 100- year storm flood profile level.

Examples of floodproofing include, but are not limited to:

- (i) Installation of watertight doors, bulkheads, and shutters.
 - (ii) Reinforcement of walls to resist water pressure.
 - (iii) Use of paints, membranes, or mortars to reduce seepage through walls.
 - (iv) Addition of mass or weight to structure to resist flotation.
 - (v) Armor protection of all fill materials from scour and/or erosion.
- (12) All structures subject to inundation shall use flood resistant materials up to one foot above base flood elevation.

b. Storage and processing: The storage or processing of materials that in time of flooding are buoyant, flammable, or explosive; that could be injurious to human, animal, or plant life; or that may unduly affect the capacity of the floodway or unduly increase flood heights is not permitted. Storage of other material or equipment may be allowed if not subject to major damage by floods and if firmly anchored to prevent flotation, or if readily removable from the area within the time available after flood warning.

e. Exceptions to construction standards. The standards of this section may be waived or modified by the Board of Supervisors through the variance procedure set forth in Code of Federal Regulations, Title 44, Chapter 1, Section 60.6, instead of through the adjustment process described in Section 23.01.044 of this title. Requests for such waivers or modifications shall be filed with County Public Works for processing. Procedures for the granting of variances under Title 14 are available from the County Public Works Department.

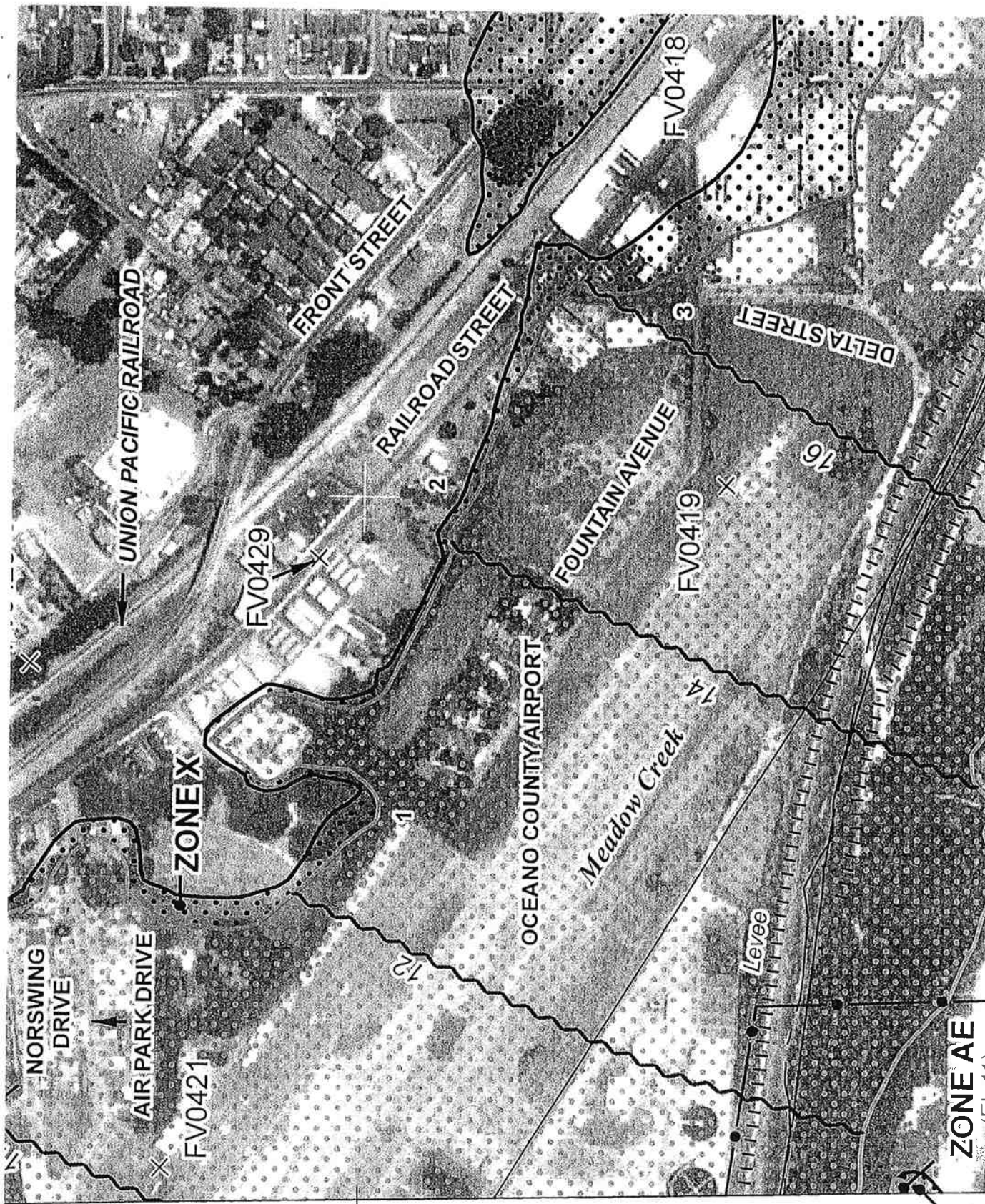
e. Tsunami Inundation Zone. Where feasible, development shall be sited outside of potential tsunami inundation zones, even if not currently designated FH. A Registered Civil Engineer with coastal experience shall make a determination, through examination of the most current tsunami inundation and run-up maps or a wave run-up analysis, whether the site is subject to inundation during a tsunami, pursuant to the criteria of Section 23.07.064b. If it is not feasible to site development outside of tsunami inundation zone, new development shall be in conformance with all provisions set forth in Section 23.07.066©.



Tim Tomlinson
San Luis Obispo County
Flood Plain Manager

x 781-5271

7-10-2009



ZONE X

ZONE AE

South San Luis Obispo County Sanitation District Secondary Clarifier & Aeration Tank Project

Project Description July 1, 2009

Summary:

The South San Luis Obispo County Sanitation District proposes to implement the Secondary Clarifier and Aeration Tank Project at the Oceano Community Services District Wastewater Treatment Facility. The proposed project site is located at 1600 Aloha Place, in the community of Oceano, between the Oceano Airport and Arroyo Grande Creek, in San Luis Obispo County, California (refer to Figure 1). The approximately 8.9-acre parcel is located within the Public Facilities land use category in the San Luis Bay Planning Area (refer to Figure 2). Based on the County of San Luis Obispo General Plan, the project site is within Coastal Original Jurisdiction and Coastal Appealable Zone, and is within the following combining designation areas: Airport Review, Archaeologically Sensitive, Local Coastal Plan, Flood Hazard, Sensitive Resource Area, and Wetlands.

Proposed improvements include a new 124-foot by 40-foot dual-basin aeration tank (18 feet deep, constructed approximately ten feet below grade) and an 87-foot diameter secondary clarifier (14.5 feet deep, constructed seven feet underground), and associated piping. Proposed improvements would occur within the currently fenced boundaries of the facility, and would not require expansion of the existing footprint. Implementation of the project would result in approximately 13,000 square feet of disturbance, including approximately 3,360 cubic yards of cut and 5,679 cubic yards of over-excavation and re-compaction for construction of the tank and clarifier. Excess soil would be hauled offsite by contractor.

Background:

The South San Luis Obispo County Sanitation District (District) is a Special District serving the communities of Oceano, Arroyo Grande and Grover Beach. The District's original wastewater treatment plant and collection system were designed and built in 1966. A plant enlargement in 1986 increased capacity from the original 2.5 million gallons per day (mgd) to 3.3 mgd, and further improvement in 1990 increased overall flow capacity to 4.2 mgd to accommodate the General Plan buildout of the member agencies. The facility is currently operating at approximately 64 percent of the average design flow (2.7 mgd). Hazardous materials currently stored onsite include: diesel, acetylene, argon, argon/carbon dioxide, ethylene glycol, ferric chloride, oxygen, petroleum distillates, petroleum hydrocarbon, sodium bisulfate, sodium hydroxide, sodium hypochlorite.

The site is located within retained jurisdiction of the Coastal Zone, and the currently applicable Coastal Development Permits issued by the Coastal Commission are #152/31, 197/11, and 417/34. A Coastal Development Permit Waiver (03-08-056-W) was approved on January 22, 2009 for the replacement of the centrifuge and modifications to the drying basin.

Changes Affecting Plant Operations:

1. Water conservation efforts in recent years have reduced the liquid-to-solids ratio increasing the wastewater strength reaching the plant, affecting the efficiency and operations of a facility originally designed for 1960's level water consumption.
2. During recent years, the Central Coast Regional Water Quality Control Board (RWQCB) waste discharge requirements have been changed in respect to two significant factors: 1) entirely new disinfection standards were imposed; and, 2) the standard for maximum allowable residual suspended solids (SS) was lowered to 40 mg/l. The basis for treatment plant design was 45 mg/l SS residual.
3. Changes in population projections have also occurred such that member agencies' projections of future development and population within District boundaries have been revised substantially downward. Current projections call for a build-out population of 43,862 within the District's service area. This is seen against the 1963 projections for build-out population within the District's service area of 115,000.
4. There have been two State of California legislative amendments to the State Water Code regulating treated wastewater discharge: Senate Bill No. 709 in 1999, with subsequent amendments resulting from Senate Bill No. 2165, which became effective January 1, 2001.
5. These amendments provide for mandatory monetary fines against waste dischargers for reported violation of waste discharge requirements (WDR). Essentially, the law eliminates the RWQCB's discretionary powers to consider extenuating circumstances and real significance of the violation in applying enforcement action against a discharger for failure to literally meet requirements. For the District, this strict enforcement is compounded by the reduction in allowable residual suspended solids from 45 mg/l to 40 mg/l. The District has been notified that even more stringent discharge requirements will be enforced at the time of the District's WDR renewal in September of 2009.
6. The District is in the process of renewal of the NPDES permit. The District is permitted to have a 40 mg/l biochemical oxygen demand (BOD) / 40 mg/l residual suspended solids (SS) thresholds. The State is considering reducing the amounts to 30/30 and the installation of these two facilities assist the efforts to meet these possible new standards.

In July 2005, Kennedy Jenks Consultants completed a Long Range Plan for the wastewater treatment plant in response to these changes. A copy of the Long Range Plan was provided to Coastal Staff previously, in July 2008. The report determined that no expansion of capacity or flow is necessary and the plant meets current discharge requirements. However, a lack of critical backup systems threatens the plant's ability to reliably meet discharge standards at all times, particularly during maintenance and repair operations important for an aging plant. This necessity was made more evident following the 2003 San Simeon earthquake when various system components had to be taken offline for inspection and repair. The Long Range Plan recommended improvements that will provide sufficient system redundancy to help ensure uninterrupted meeting of current and future standards. Two of the recommended secondary treatment improvements include a new dual-basin aeration tank and a new secondary clarifier.

The existing 62-foot diameter fixed film reactor, constructed in 1986, is adequate in terms of size and capacity to meet treatment design objectives. However, with no back-up system, any

shutdown for repairs or maintenance could immediately lead to violations for as long as the clarifier is out of operation. The basic function of secondary biologic wastewater treatment is to stabilize the mostly organic materials in the wastewater through natural processes of biologic oxidation. Simply, this secondary treatment can be accomplished through one of two aerobic processes, "dispersed film" (activated sludge) and "fixed film" (trickling filter/fixed film reactor). Currently the District utilizes a single fixed film reactor (FFR), which was constructed as part of the 1986 plant improvement project. Since its construction, plant flow has not increased as projected, but influent concentrations have increased. If flows project out as anticipated at these concentrations, the existing FFR will not be able to meet design objectives. Another consideration is the lack of a second equivalent biological process which could provide some degree of redundancy in the event of a mechanical failure or during routine maintenance. The proposed aeration basins would serve these needs.

Recommendations for Redundancy Improvements:

In 2008, a pre-design study was performed by Kennedy-Jenks Consultants to help the District scope and cost these recommended major process items. Results of the pre-design effort included confirmation of specific size, location, pipe-work connections, and equipment associated with the addition of two-basin aeration tank with 295,000 gallon capacity each, and an 87 ft diameter secondary clarifier. The computer model verified that with the recommended improvements, anticipated waste discharge requirements of 30 mg/L BOD and TSS could be met consistently and reliably under six different operating scenarios at an influent flowrate of 5.0 MGD and influent BOD and TSS concentrations of 330 mg/L. A copy of the pre-design study is available upon request.

The study examined constructing the two components in a single phase and as a two-phased project, and provided preliminary cost estimates for the two scenarios. The District is pursuing loans and/or grant funding for these improvements through the State Water Resources Control Board's State Revolving Fund (SRF) program. The study provides sufficient information to determine the size and capacity of the improvements as well as site location, foundation design, support structures and piping. The intent is for a design-build construction approach with industry-standard Best Management Practices incorporated into the project. Additional site-specific geotechnical investigation will be conducted prior to construction to confirm the assumptions made in the pre-design study, and all recommendations will be incorporated into the project. In addition, the contractor will be notified and plans will note that in the unlikely event of encountering cultural deposits, all work must stop immediately and an archaeologist be consulted.

Detailed Project Description:

Secondary Clarifier:

The new secondary clarifier will consist of a single cylindrical concrete tank proposed at 87 feet in diameter, slightly less than 100% of the existing 97-foot clarifier. The new structure will have an estimated total depth of 14.5 feet, of which approximately half will be above grade. The side water depth will be twelve feet, with a freeboard design depth of 2.5 feet. Total operating volume will be approximately 530,000 gallons. The clarifier will be designed to operate either in parallel with the existing clarifier or alone, to maximize flexibility. An enclosed pump station will extend outside the perimeter of the clarifier and will contain pumps, valves, motor control centers, instrumentation and ventilation equipment as required.

The clarifier will be located in an open area on the west side of the site (refer to Figure 3, Proposed Improvements). The clarifier will be located on top of an existing stormwater pumping

system that will be relocated to the north or east of the new tank. Piping for the new system will be routed approximately as shown on Figure 4 (Piping Plan), and smaller piping and utilities located in close proximity will be relocated as necessary. The tank structure would need to be set back from the perimeter fence line a minimum of twenty-five feet in order to accommodate the over excavation within the District's property. Sheet piling may be used to reduce the tank setback from the perimeter fence to six feet.

To protect the adjacent wetlands, the setback area between the tank and the property line will be paved in Portland cement concrete to contain leaks and spills. Curbs or asphalt berms will provide secondary containment. Spills will be captured by an underground drainage network which will be routed back into the treatment plant system.

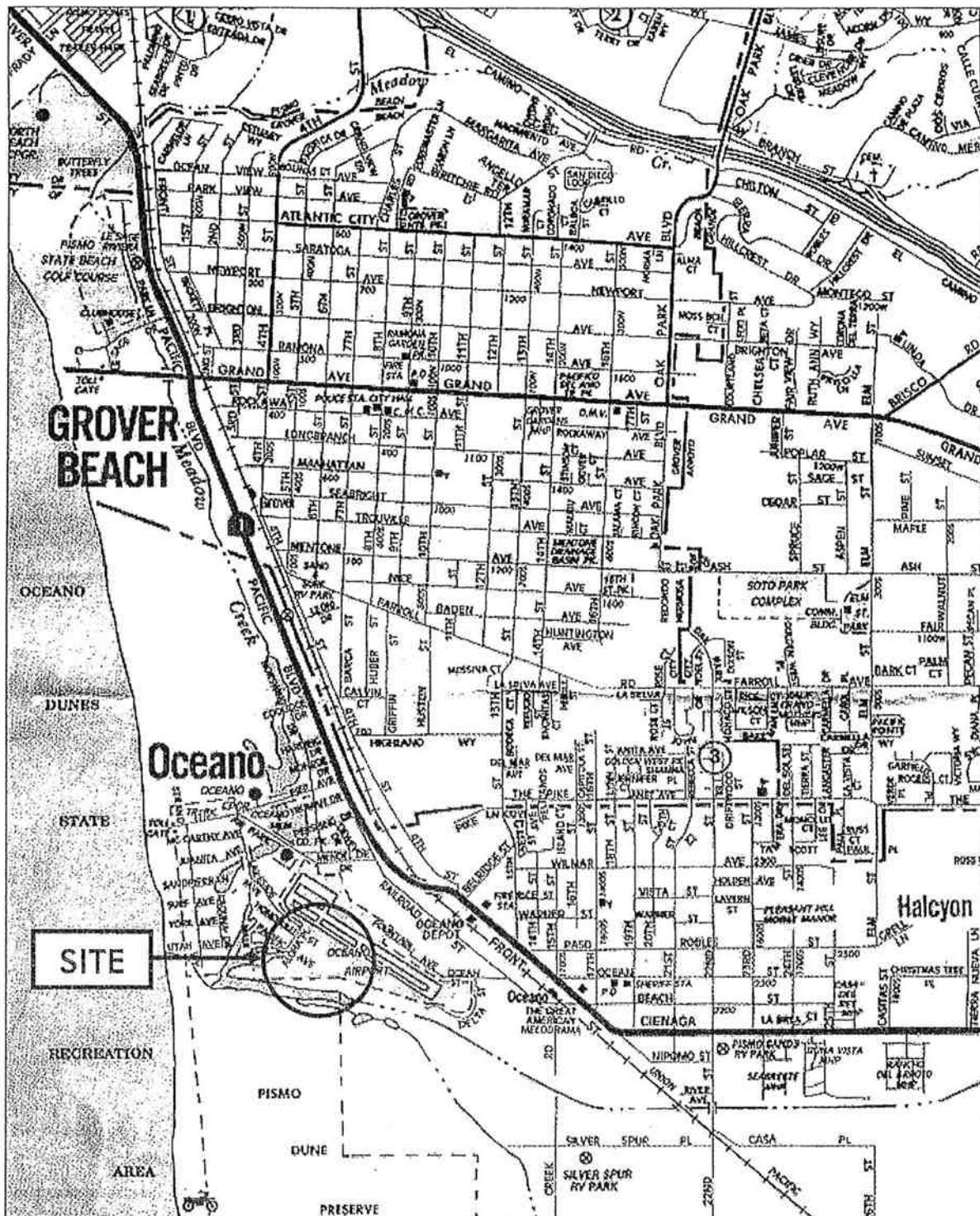
Based on geotechnical reports prepared for previous treatment facility improvements, the soil on the site has a relatively high potential for liquefaction due to the sandy soils and the high water table. The entire site was filled to a depth of four to five feet during initial construction. To address liquefaction potential and minimize settlement, the foundation for the tank structure will be over-excavated, dewatered and recompact three feet below and outside of the foundation. Grading will consist of approximately 1,700 cubic yards of cut for the tank and 2,530 cubic yards of over-excavation and re-compaction below and around it. The over-excavation and re-compaction quantity is reduced to 1900 cubic yards if sheet piling is used.

Aerator:

The proposed aeration tank will measure approximately 124 feet in length by 40 feet in width, to be located west of the maintenance building and north of the primary clarifiers (refer to Figure 3). The aeration tank will have two independent aeration basins which could operate singly, in parallel, or in series, with a combined design flowrate of 4.2 MGD and a total capacity of 295,000 gallons. The tanks would be 18 feet deep, with 8 feet of the structure extending above grade. The structure would include access stairways and sufficient concrete walkways with guardrails to provide access to key locations. The tanks will be open to the atmosphere, but odors are not anticipated to be a problem due to the short detention time and high oxygen levels.

Blowers for the aeration tank will be housed within a contiguous enclosed structure of 20 feet by 30 feet with other appurtenant support facilities, including pipe-work, pumps, and electrical system components. The blower housing will incorporate noise-dampening insulation and the blowers would be equipped with silencers and otherwise designed to meet all applicable Air Pollution Control District requirements.

The 18" Pismo Beach Outfall pipe runs north to south under the proposed aeration tank site which is 8 feet below grade. The current design includes a concrete slab base of the aerator that will extend down to encase this line and protect it from breakage due to differential settlement. In the event this proves infeasible to put the tank over the top of the outfall, the outfall line will likely be re-routed around the structure within the over-excavated area. Other lines will either be protected in place or relocated to accommodate the new structure. The foundation will be over-excavated and re-compacted for a distance of 3 feet below and outside of the footprint. Grading will consist of approximately 1,660 cubic yards of cut for the tank and 3,140 yards of over-excavation and re-compaction below and around it. The blower housing will be slab on grade with subgrade conditioning as noted above.



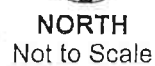
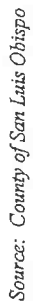
Source: Automobile Association of America



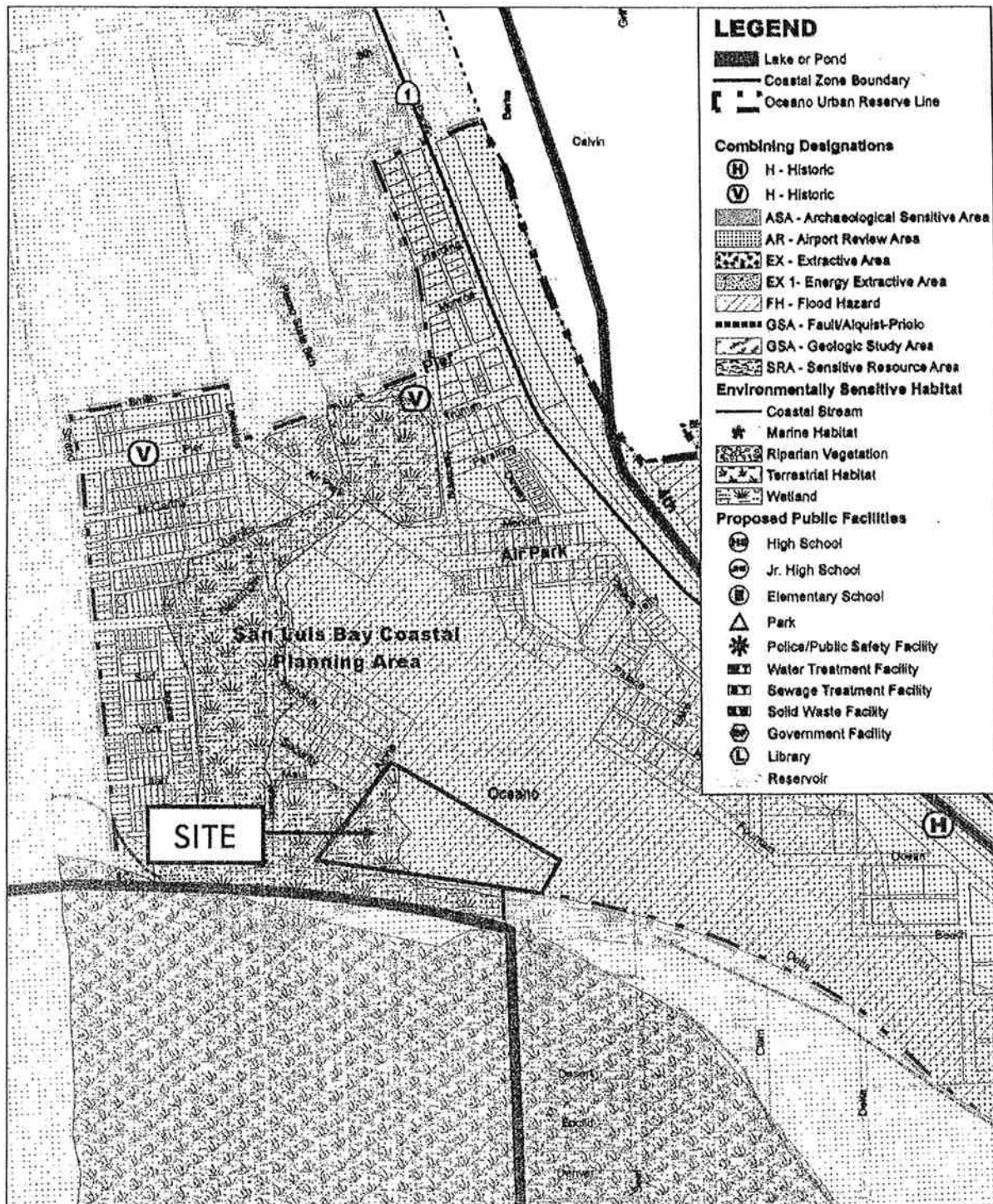
NORTH
 Not to Scale

PROJECT VICINITY MAP
 FIGURE 1

Morro Group, a Division of SWCA



Morro Group, a Division of SWCA



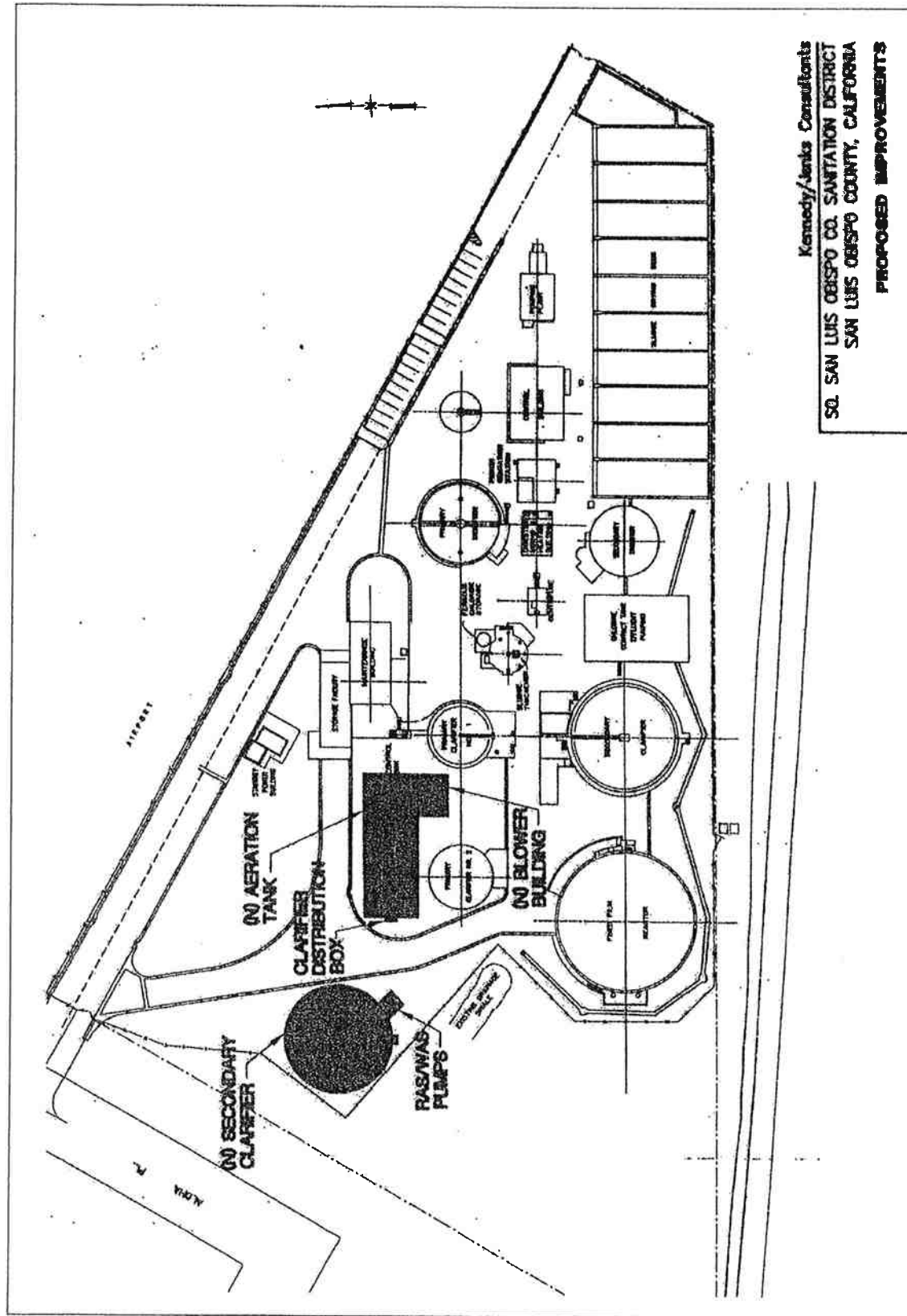
Source: County of San Luis Obispo



NORTH
Not to Scale

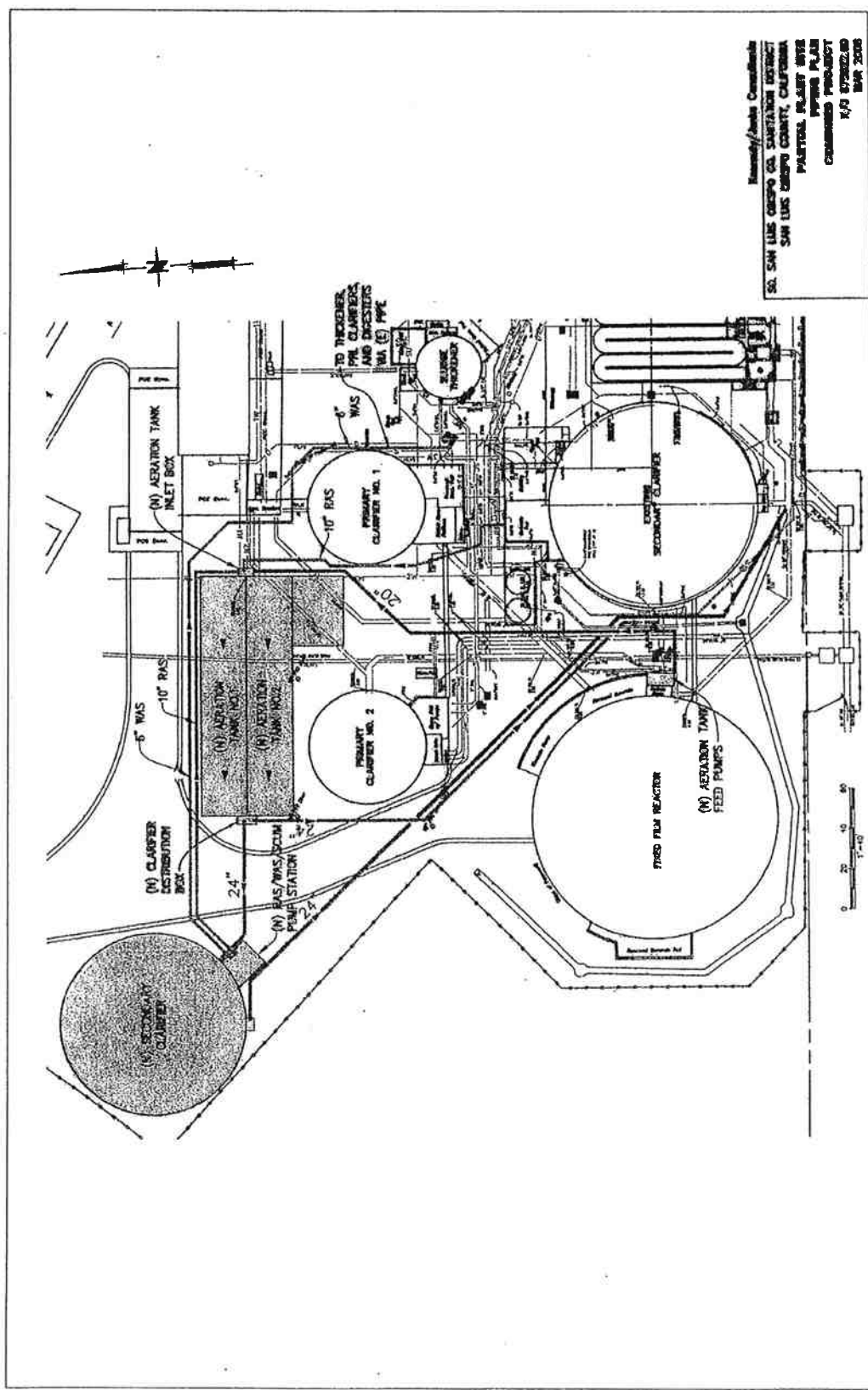
COUNTY COMBINING DESIGNATION MAP
FIGURE 3

Morro Group, a Division of SWCA



PROPOSED IMPROVEMENTS
FIGURE 4

Morro Group, a Division of SWCA



PROPOSED PIPING PLAN
FIGURE 5

Morro Group, a Division of SWCA



July 15, 2009

Jeremy Freund
Wallace Group
South San Luis Obispo County Sanitation District
P.O. Box 339
Oceano, CA 93445

SUBJECT: APCD Comments Regarding the Oceano WWTP Upgrade Project Project Referral.

Dear Mr. Freund,

Thank you for including the San Luis Obispo County Air Pollution Control District (APCD) in the environmental review process. We have completed our review of the proposed Secondary Clarifier and Aeration Tank Project located at the South San Luis Obispo County Sanitation District facility in Oceano. *The following are APCD comments that are pertinent to this project.*

GENERAL COMMENTS

As a commenting agency in the California Environmental Quality Act (CEQA) review process for a project, the APCD assesses air pollution impacts from both the construction and operational phases of a project, with separate significant thresholds for each. **Please address the action items contained in this letter that are highlighted by bold and underlined text.**

CONSTRUCTION PHASE MITIGATION

The APCD staff considered the construction impacts of this development comparing it against screening models within the APCD's Air Quality Handbook. This indicated that construction phase impacts will likely be less than the APCD's significance threshold values of 185 lbs of emissions per day and 2.5 tons of emissions per quarter. Therefore, with the exception of the requirements below, the APCD is not requiring other construction phase mitigation measures for this project.

Naturally Occurring Asbestos

The project site is located in a candidate area for Naturally Occurring Asbestos (NOA), which has been identified as a toxic air contaminant by the California Air Resources Board (ARB). Under the ARB Air Toxics Control Measure (ATCM) for Construction, Grading, Quarrying, and Surface Mining Operations, **prior to any grading activities at the site, the project proponent shall ensure that a geologic evaluation is conducted to determine if NOA is present within the area that will be disturbed. If NOA is not present, an exemption request must be filed with the District (see Attachment 1). If NOA is found at the site, the applicant must comply with all requirements outlined in the Asbestos ATCM.** This may include development of an Asbestos Dust Mitigation Plan and an Asbestos Health and Safety Program for approval by the APCD. Please refer to the APCD web page at <http://www.slcleanair.org/business/asbestos.asp> for more information or contact the APCD Enforcement Division at 781-5912.

3433 Roberto Court • San Luis Obispo, CA 93401 • 805-781-5912 • FAX: 805-781-1002
info@slcleanair.org ♦ www.slcleanair.org

♻️ printed on recycled paper

Developmental Burning

Effective February 25, 2000, **the APCD prohibited developmental burning of vegetative material within San Luis Obispo County.** Under certain circumstances where no technically feasible alternatives are available, limited developmental burning under restrictions may be allowed. This requires prior application, payment of fee based on the size of the project, APCD approval, and issuance of a burn permit by the APCD and the local fire department authority. The applicant is required to furnish the APCD with the study of technical feasibility (which includes costs and other constraints) at the time of application. If you have any questions regarding these requirements, contact the APCD Enforcement Division at 781-5912.

Demolition Activities

The project referral did not indicate whether there are existing structures on the proposed site that will be demolished. Demolition activities can have potential negative air quality impacts, including issues surrounding proper handling, demolition, and disposal of asbestos containing material (ACM). Asbestos containing materials could be encountered during demolition or remodeling of existing buildings. Asbestos can also be found in utility pipes/pipelines (transite pipes or insulation on pipes). **If utility pipelines are scheduled for removal or relocation; or building(s) are removed or renovated this project may be subject to various regulatory jurisdictions, including the requirements stipulated in the National Emission Standard for Hazardous Air Pollutants (40CFR61, Subpart M - asbestos NESHAP).** These requirements include but are not limited to: 1) notification requirements to the District, 2) asbestos survey conducted by a Certified Asbestos Inspector, and, 3) applicable removal and disposal requirements of identified ACM. Please contact the APCD Enforcement Division at 781-5912 for further information.

Dust Control Measures

Construction activities can generate fugitive dust, which could be a nuisance to local residents and businesses in close proximity to the proposed construction site. Dust complaints could result in a violation of the APCD's 402 "Nuisance" Rule. **This project is near sensitive receptors and shall be conditioned to comply with all applicable Air Pollution Control District regulations pertaining to the control of fugitive dust (PM10) as contained in section 6.5 of the Air Quality Handbook. All site grading and demolition plans noted shall list the following regulations:**

- a. Reduce the amount of the disturbed area where possible,
- b. Use of water trucks or sprinkler systems in sufficient quantities to prevent airborne dust from leaving the site. Increased watering frequency would be required whenever wind speeds exceed 15 mph. Reclaimed (non-potable) water should be used whenever possible,
- c. All dirt stock pile areas should be sprayed daily as needed,
- d. Permanent dust control measures identified in the approved project revegetation and landscape plans should be implemented as soon as possible following completion of any soil disturbing activities,
- e. Exposed ground areas that are planned to be reworked at dates greater than one month after initial grading should be sown with a fast germinating native grass seed and watered until vegetation is established,
- f. All disturbed soil areas not subject to revegetation should be stabilized using approved chemical soil binders, jute netting, or other methods approved in advance by the APCD,
- g. All roadways, driveways, sidewalks, etc. to be paved should be completed as soon as

- possible. In addition, building pads should be laid as soon as possible after grading unless seeding or soil binders are used,
- h. Vehicle speed for all construction vehicles shall not exceed 15 mph on any unpaved surface at the construction site,
 - i. All trucks hauling dirt, sand, soil, or other loose materials are to be covered or should maintain at least two feet of freeboard (minimum vertical distance between top of load and top of trailer) in accordance with CVC Section 23114,
 - j. Install wheel washers where vehicles enter and exit unpaved roads onto streets, or wash off trucks and equipment leaving the site, and
 - k. Sweep streets at the end of each day if visible soil material is carried onto adjacent paved roads. Water sweepers with reclaimed water should be used where feasible.

All PM₁₀ mitigation measures required should be shown on grading and building plans. In addition, the contractor or builder should designate a person or persons to monitor the dust control program and to order increased watering, as necessary, to prevent transport of dust offsite. Their duties shall include holidays and weekend periods when work may not be in progress. **The name and telephone number of such persons shall be provided to the APCD prior to land use clearance for map recordation and finished grading of the area.**

Construction Permit Requirements

Based on the information provided, we are unsure of the types of equipment that may be present during the project's construction phase. Portable equipment, 50 horsepower (hp) or greater, used during construction activities will require California statewide portable equipment registration (issued by the California Air Resources Board) or an APCD permit. The following list is provided as a guide to equipment and operations that may have permitting requirements, but should not be viewed as exclusive. For a more detailed listing, refer to page A-5 in the District's CEQA Handbook.

- Power screens, conveyors, diesel engines, and/or crushers;
- Portable generators and equipment with engines that are 50 hp or greater;
- Internal Combustion engines;
- Unconfined abrasive blasting operations;
- Concrete batch plants;
- Rock and pavement crushing;
- Tub grinders; and
- Trommel screens.

To minimize potential delays, prior to the start of the project, please contact the APCD Engineering Division at (805) 781-5912 for specific information regarding permitting requirements.

OPERATIONAL PHASE MITIGATION

Operational Permit Requirements

Based on the information provided, we are unsure of the types of equipment that may be associated with the facility upgrade. This facility currently has an APCD permit (703-2). The applicant is

Project Referral for Oceano WWTP Upgrade Project
July 15, 2009
Page 4 of 4

advised to work with the APCD prior to construction to obtain an Authority To Construct (ATC) to modify the permit. Please contact the APCD for ATC and permit modification requirements.

The following list is provided as a guide to equipment and operations that may have permitting requirements, but should not be viewed as exclusive. For a more detailed listing, refer to page A-5 in the District's CEQA Handbook.

- Portable generators and equipment with engines that are 50 hp or greater;
- Electrical generator plants or use of a standby generator;
- Power screens, conveyors, diesel engines, and/or crushers;
- Internal Combustion engines;
- Pipelines;
- Public utility facilities;
- Unconfined abrasive blasting operations;
- Rock and pavement crushing;
- Tub grinders; and
- Trommel screens.

To minimize potential delays, prior to the start of the project, please contact the APCD Engineering Division at (805) 781-5912 for specific information regarding permitting requirements.

Again, thank you for the opportunity to comment on this proposal. If you have any questions or comments, feel free to contact me at 781-5912.

Sincerely,



Gary Arcemont
Air Quality Specialist

GJA/AAG/ar

cc: Mr. Jeremy Freund
Ms. Shawna Scott
Tim Fuhs, Enforcement Division, APCD
Karen Brooks, Enforcement Division, APCD
Gary Willey, Engineering Division, APCD

Attachments:

1. Naturally Occurring Asbestos -- Construction & Grading Project Exemption Request Form,
Construction & Grading Project Form

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**SOUTH SAN LUIS OBISPO COUNTY
SANITATION DISTRICT
PROJECT REFERRAL**

1600 Aloha Place
P.O. Box 339
Occano, CA 93445
(805) 489-6666

DATE: July 1, 2009

TO: Central Coast Regional Water Quality Control Board
895 Aerovista Place, Suite 101
San Luis Obispo, CA. 93401-7906

FROM: South San Luis Obispo County Sanitation District
c/o Shawna Scott, Morro Group, a division of SWCA

PROJECT DESCRIPTION: Please refer to attached project description and figures.

Please return this coverletter with your comments attached no later than 14 days from receipt of this referral, by July 17, 2009 to:

Shawna Scott, Environmental Analysis Project Manager
1422 Monterey St., Suite C-200, San Luis Obispo, CA 93401
(P): (805) 543-7095, ext. 111 ♦ (F): (805) 543-2367 ♦ sscott@swca.com

If you have any questions regarding the project, please contact: Jeremy Freund, South San Luis Obispo County Sanitation District Project Manager at (805) 544-4011.

IS THE ATTACHED INFORMATION ADEQUATE TO COMPLETE YOUR REVIEW?

☒ YES (Please go to next question)

☐ NO (Please contact me as soon as possible to discuss additional information you require)

ARE THERE ANY SIGNIFICANT CONCERNS, PROBLEMS, OR IMPACTS IN YOUR AREA OF REVIEW?

☐ YES (Please describe impacts, along with recommended mitigation measures to reduce the impacts to less than significant levels, and attach to this letter)

☒ NO (Please go to next question)

INDICATE YOUR RECOMMENDATION FOR FINAL ACTION.

Please attach any conditions of approval you recommend to be incorporated into the project's approval, or state reason for recommending denial.

IF YOU HAVE "NO COMMENT" PLEASE SO INDICATE, OR CALL.

No water quality problems anticipated. Project description is incorrect with regard to changes in permit limits, no change is anticipated.

7/21/09
Date

Jeremy Freund
Name

805/544-3695
Phone



**SOUTH SAN LUIS OBISPO COUNTY
SANITATION DISTRICT
PROJECT REFERRAL**

1600 Aloha Place
P.O. Box 339
Oceano, CA 93445
(805) 489-6666

DATE: July 3, 2009

TO: San Luis Obispo County Parks
Jan DiLeo, jdileo@co.slo.ca.us

FROM: South San Luis Obispo County Sanitation District
c/o Shawna Scott, Morro Group, a division of SWCA

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Date

Name

Phone

South San Luis Obispo County Sanitation District Secondary Clarifier & Aeration Tank Project

Project Description

July 1, 2009

Summary:

The South San Luis Obispo County Sanitation District proposes to implement the Secondary Clarifier and Aeration Tank Project at the Oceano Community Services District Wastewater Treatment Facility. The proposed project site is located at 1600 Aloha Place, in the community of Oceano, between the Oceano Airport and Arroyo Grande Creek, in San Luis Obispo County, California (refer to Figure 1). The approximately 8.9-acre parcel is located within the Public Facilities land use category in the San Luis Bay Planning Area (refer to Figure 2). Based on the County of San Luis Obispo General Plan, the project site is within Coastal Original Jurisdiction and Coastal Appealable Zone, and is within the following combining designation areas: Airport Review, Archaeologically Sensitive, Local Coastal Plan, Flood Hazard, Sensitive Resource Area, and Wetlands.

Proposed improvements include a new 124-foot by 40-foot dual-basin aeration tank (18 feet deep, constructed approximately ten feet below grade) and an 87-foot diameter secondary clarifier (14.5 feet deep, constructed seven feet underground), and associated piping. Proposed improvements would occur within the currently fenced boundaries of the facility, and would not require expansion of the existing footprint. Implementation of the project would result in approximately 13,000 square feet of disturbance, including approximately 3,360 cubic yards of cut and 5,679 cubic yards of over-excavation and re-compaction for construction of the tank and clarifier. Excess soil would be hauled offsite by contractor.

Background:

The South San Luis Obispo County Sanitation District (District) is a Special District serving the communities of Oceano, Arroyo Grande and Grover Beach. The District's original wastewater treatment plant and collection system were designed and built in 1966. A plant enlargement in 1986 increased capacity from the original 2.5 million gallons per day (mgd) to 3.3 mgd, and further improvement in 1990 increased overall flow capacity to 4.2 mgd to accommodate the General Plan buildout of the member agencies. The facility is currently operating at approximately 64 percent of the average design flow (2.7 mgd). Hazardous materials currently stored onsite include: diesel, acetylene, argon, argon/carbon dioxide, ethylene glycol, ferric chloride, oxygen, petroleum distillates, petroleum hydrocarbon, sodium bisulfate, sodium hydroxide, sodium hypochlorite.

The site is located within retained jurisdiction of the Coastal Zone, and the currently applicable Coastal Development Permits issued by the Coastal Commission are #152/31, 197/11, and 417/34. A Coastal Development Permit Waiver (03-08-056-W) was approved on January 22, 2009 for the replacement of the centrifuge and modifications to the drying basin.

Changes Affecting Plant Operations:

1. Water conservation efforts in recent years have reduced the liquid-to-solids ratio increasing the wastewater strength reaching the plant, affecting the efficiency and operations of a facility originally designed for 1960's level water consumption.
2. During recent years, the Central Coast Regional Water Quality Control Board (RWQCB) waste discharge requirements have been changed in respect to two significant factors: 1) entirely new disinfection standards were imposed; and, 2) the standard for maximum allowable residual suspended solids (SS) was lowered to 40 mg/l. The basis for treatment plant design was 45 mg/l SS residual.
3. Changes in population projections have also occurred such that member agencies' projections of future development and population within District boundaries have been revised substantially downward. Current projections call for a build-out population of 43,862 within the District's service area. This is seen against the 1963 projections for build-out population within the District's service area of 115,000.
4. There have been two State of California legislative amendments to the State Water Code regulating treated wastewater discharge: Senate Bill No. 709 in 1999, with subsequent amendments resulting from Senate Bill No. 2165, which became effective January 1, 2001.
5. These amendments provide for mandatory monetary fines against waste dischargers for reported violation of waste discharge requirements (WDR). Essentially, the law eliminates the RWQCB's discretionary powers to consider extenuating circumstances and real significance of the violation in applying enforcement action against a discharger for failure to literally meet requirements. For the District, this strict enforcement is compounded by the reduction in allowable residual suspended solids from 45 mg/l to 40 mg/l. The District has been notified that even more stringent discharge requirements will be enforced at the time of the District's WDR renewal in September of 2009.
6. The District is in the process of renewal of the NPDES permit. The District is permitted to have a 40 mg/l biochemical oxygen demand (BOD) / 40 mg/l residual suspended solids (SS) thresholds. The State is considering reducing the amounts to 30/30 and the installation of these two facilities assist the efforts to meet these possible new standards.

In July 2005, Kennedy Jenks Consultants completed a Long Range Plan for the wastewater treatment plant in response to these changes. A copy of the Long Range Plan was provided to Coastal Staff previously, in July 2008. The report determined that no expansion of capacity or flow is necessary and the plant meets current discharge requirements. However, a lack of critical backup systems threatens the plant's ability to reliably meet discharge standards at all times, particularly during maintenance and repair operations important for an aging plant. This necessity was made more evident following the 2003 San Simeon earthquake when various system components had to be taken offline for inspection and repair. The Long Range Plan recommended improvements that will provide sufficient system redundancy to help ensure uninterrupted meeting of current and future standards. Two of the recommended secondary treatment improvements include a new dual-basin aeration tank and a new secondary clarifier.

The existing 62-foot diameter fixed film reactor, constructed in 1986, is adequate in terms of size and capacity to meet treatment design objectives. However, with no back-up system, any

shutdown for repairs or maintenance could immediately lead to violations for as long as the clarifier is out of operation. The basic function of secondary biologic wastewater treatment is to stabilize the mostly organic materials in the wastewater through natural processes of biologic oxidation. Simply, this secondary treatment can be accomplished through one of two aerobic processes, "dispersed film" (activated sludge) and "fixed film" (trickling filter/fixed film reactor). Currently the District utilizes a single fixed film reactor (FFR), which was constructed as part of the 1986 plant improvement project. Since its construction, plant flow has not increased as projected, but influent concentrations have increased. If flows project out as anticipated at these concentrations, the existing FFR will not be able to meet design objectives. Another consideration is the lack of a second equivalent biological process which could provide some degree of redundancy in the event of a mechanical failure or during routine maintenance. The proposed aeration basins would serve these needs.

Recommendations for Redundancy Improvements:

In 2008, a pre-design study was performed by Kennedy-Jenks Consultants to help the District scope and cost these recommended major process items. Results of the pre-design effort included confirmation of specific size, location, pipe-work connections, and equipment associated with the addition of two-basin aeration tank with 295,000 gallon capacity each, and an 87 ft diameter secondary clarifier. The computer model verified that with the recommended improvements, anticipated waste discharge requirements of 30 mg/L BOD and TSS could be met consistently and reliably under six different operating scenarios at an influent flowrate of 5.0 MGD and influent BOD and TSS concentrations of 330 mg/L. A copy of the pre-design study is available upon request.

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Detailed Project Description:

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The clarifier will be located in an open area on the west side of the site (refer to Figure 3, Proposed Improvements). The clarifier will be located on top of an existing stormwater pumping

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To protect the adjacent wetlands, the setback area between the tank and the property line will be paved in Portland cement concrete to contain leaks and spills. Curbs or asphalt berms will provide secondary containment. Spills will be captured by an underground drainage network which will be routed back into the treatment plant system.

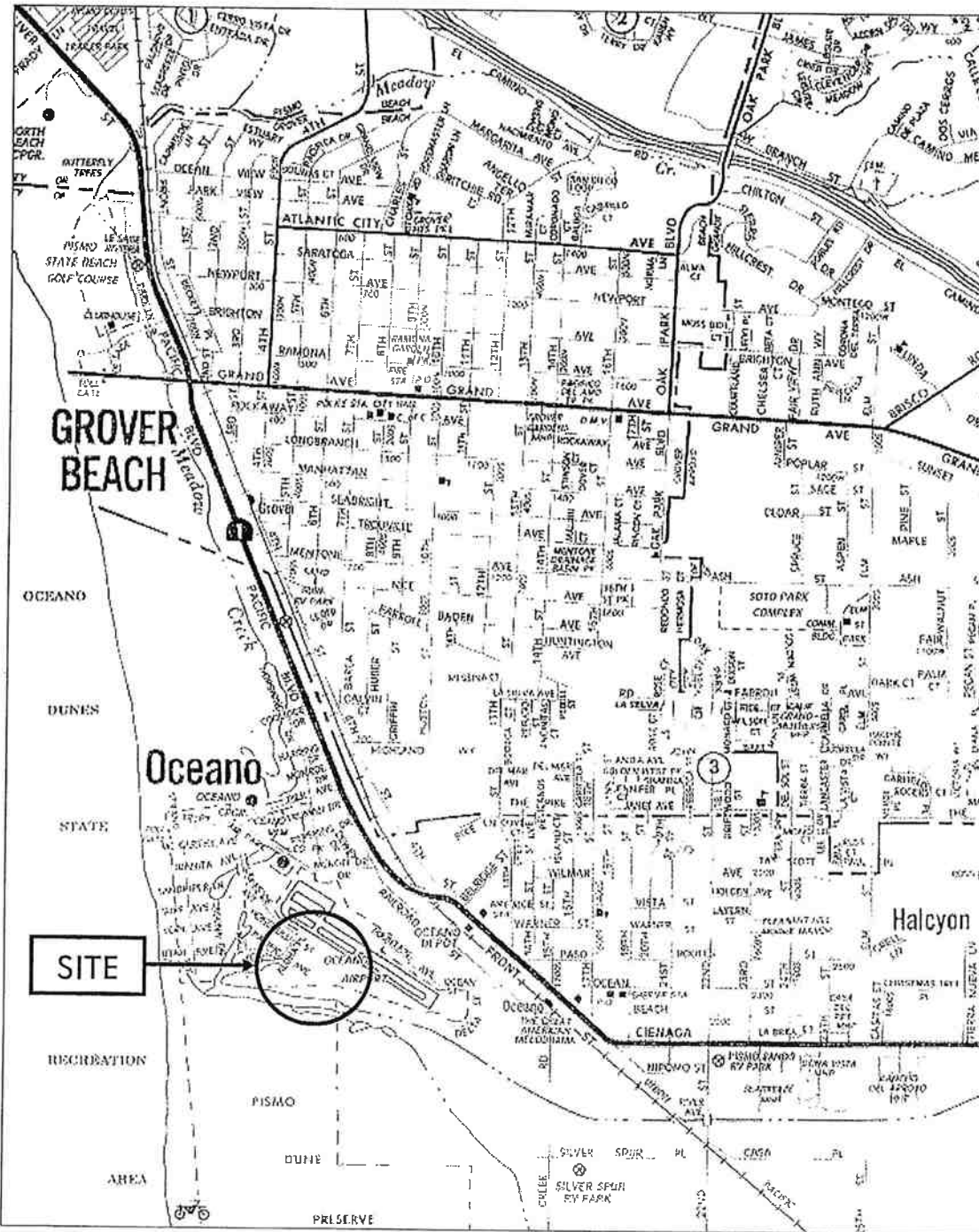
Based on geotechnical reports prepared for previous treatment facility improvements, the soil on the site has a relatively high potential for liquefaction due to the sandy soils and the high water table. The entire site was filled to a depth of four to five feet during initial construction. To address liquefaction potential and minimize settlement, the foundation for the tank structure will be over-excavated, dewatered and recompact three feet below and outside of the foundation. Grading will consist of approximately 1,700 cubic yards of cut for the tank and 2,530 cubic yards of over-excavation and re-compaction below and around it. The over-excavation and re-compaction quantity is reduced to 1900 cubic yards if sheet piling is used.

Aerator:

The proposed aeration tank will measure approximately 124 feet in length by 40 feet in width, to be located west of the maintenance building and north of the primary clarifiers (refer to Figure 3). The aeration tank will have two independent aeration basins which could operate singly, in parallel, or in series, with a combined design flowrate of 4.2 MGD and a total capacity of 295,000 gallons. The tanks would be 18 feet deep, with 8 feet of the structure extending above grade. The structure would include access stairways and sufficient concrete walkways with guardrails to provide access to key locations. The tanks will be open to the atmosphere, but odors are not anticipated to be a problem due to the short detention time and high oxygen levels.

Blowers for the aeration tank will be housed within a contiguous enclosed structure of 20 feet by 30 feet with other appurtenant support facilities, including pipe-work, pumps, and electrical system components. The blower housing will incorporate noise-dampening insulation and the blowers would be equipped with silencers and otherwise designed to meet all applicable Air Pollution Control District requirements.

The 18" Pismo Beach Outfall pipe runs north to south under the proposed aeration tank site which is 8 feet below grade. The current design includes a concrete slab base of the aerator that will extend down to encase this line and protect it from breakage due to differential settlement. In the event this proves infeasible to put the tank over the top of the outfall, the outfall line will likely be re-routed around the structure within the over-excavated area. Other lines will either be protected in place or relocated to accommodate the new structure. The foundation will be over-excavated and re-compacted for a distance of 3 feet below and outside of the footprint. Grading will consist of approximately 1,660 cubic yards of cut for the tank and 3,140 yards of over-excavation and re-compaction below and around it. The blower housing will be slab on grade with subgrade conditioning as noted above.



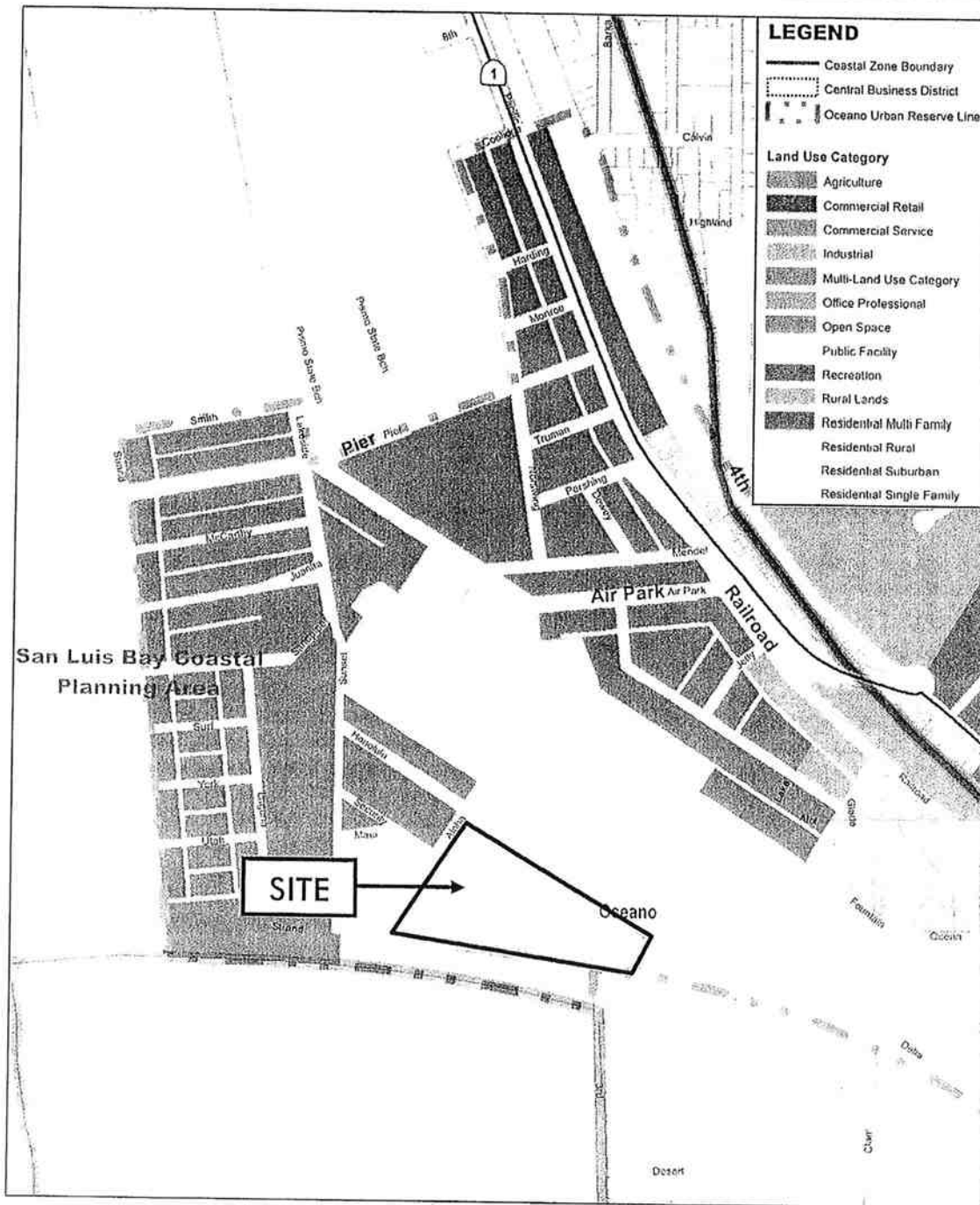
Source: Automobile Association of America



NORTH
Not to Scale

PROJECT VICINITY MAP
FIGURE 1

Morro Group, a Division of SWCA



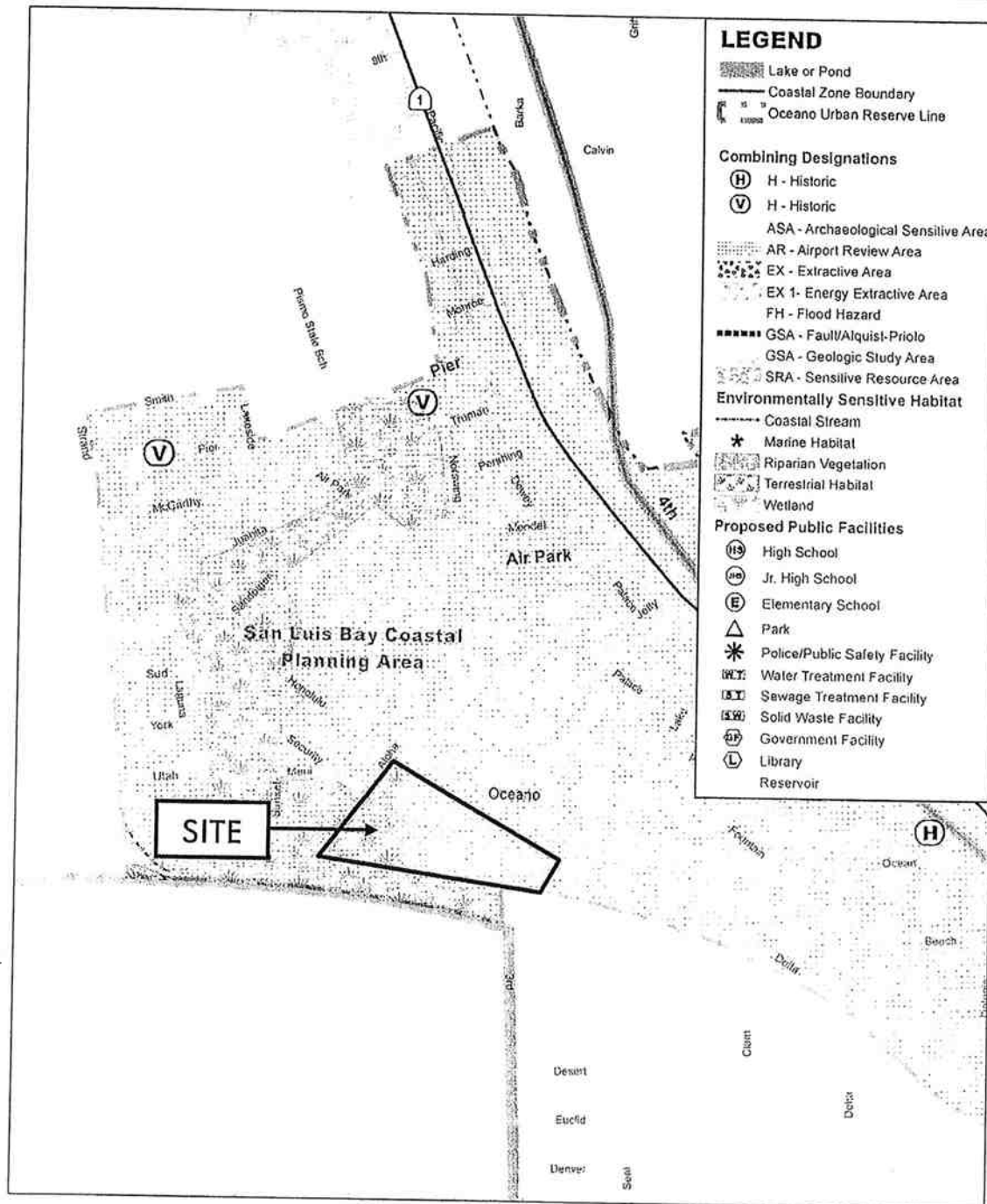
Source: County of San Luis Obispo



NORTH
Not to Scale

COUNTY LAND USE CATEGORY MAP
FIGURE 2

Morro Group, a Division of SWCA



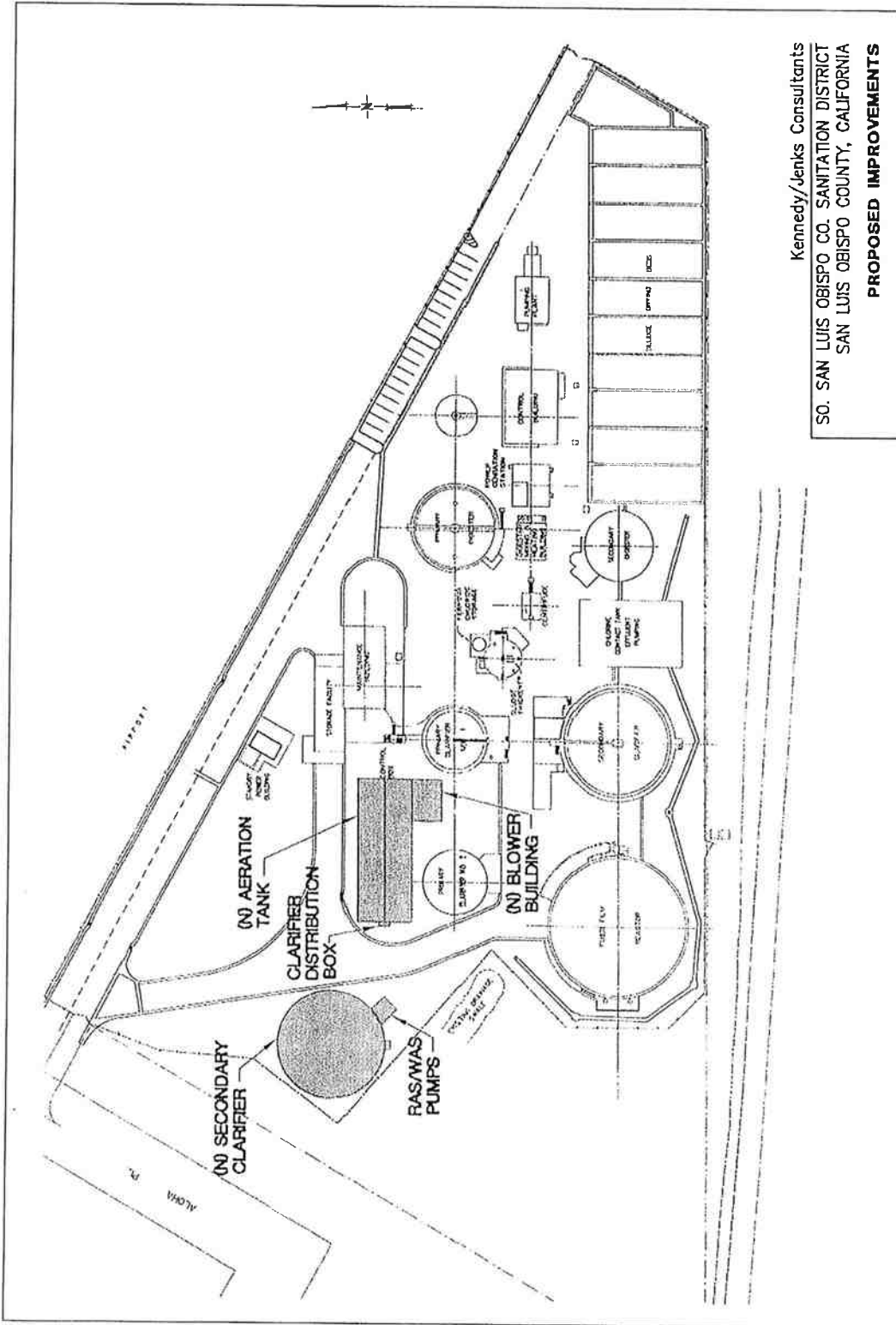
Source: County of San Luis Obispo



NORTH
Not to Scale

COUNTY COMBINING DESIGNATION MAP
FIGURE 3

Morro Group, a Division of SWCA



PROPOSED IMPROVEMENTS
FIGURE 4

Morro Group, a Division of SWCA





Linda S. Adams
Secretary for
Environmental Protection

State Water Resources Control Board

Division of Financial Assistance

1001 I Street, Sacramento, California 95814 • (916) 341-5700
Mailing Address: P.O. Box 944212 • Sacramento, California 94244-2120
FAX (916) 341-5707 • <http://www.waterboards.ca.gov>



Arnold Schwarzenegger
Governor

JUN - 7 2010

Mr. Jeremy Freund
South San Luis Obispo County Sanitation District
612 Clarion Court
San Luis Obispo, CA 93445

Dear Mr. Freund:

DRAFT INITIAL STUDY/MITIGATED NEGATIVE DECLARATION (IS/MND) FOR SOUTH SAN LUIS OBISPO COUNTY SANITATION DISTRICT (DISTRICT); SECONDARY CLARIFIER AND AERATION TANK PROJECT (PROJECT); STATE CLEARINGHOUSE NO. 2010051010.

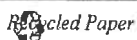
We understand the District will be pursuing Clean Water State Revolving Fund (CWSRF) financing for this Project (CWSRF No. C-06-5388-110). As a funding agency and a state agency with jurisdiction by law to preserve, enhance, and restore the quality of California's water resources, the State Water Resources Control Board (State Water Board) is providing the following information for the environmental document prepared for the Project.

We would appreciate notice of any hearings or meetings held regarding environmental review of any projects to be funded by the State Water Board, and look forward to receiving the final IS/MND. Once the final IS/MND is adopted, please provide the following documents applicable to the Project: (1) Two copies of the draft and final IS/MND, (2) the resolution adopting the IS/MND, adopting a Mitigation Monitoring Program (MMP), and making California Environmental Quality Act (CEQA) findings, (3) all comments received during the review period and the District response to those comments, (4) the final MMP, and (5) a date stamped copy of the Notice of Determination filed with the County Clerk and with the Governor's Office of Planning and Research.

The CWSRF Program is partially funded by the U.S. Environmental Protection Agency (USEPA), and requires additional "CEQA-Plus" environmental documentation and review. Enclosed are four information sheets that further explain the CWSRF environmental compliance process and the additional federal requirements of the CWSRF Program, and environmental evaluation form for the District to complete and submit to the State Water Board Project Manager. The State Water Board can consult directly with agencies responsible for implementing federal environmental laws and regulations. Any environmental issues raised by federal agencies or their representatives will need to be resolved prior to State Water Board approval of a CWSRF financing commitment for the Project. For further information on the environmental compliance process for the CWSRF Program, please contact me at (916) 341-6983.

It is important to note that prior to a CWSRF financing commitment, projects are subject to provisions of the federal Endangered Species Act and must obtain approval from the U.S. Fish and Wildlife Service (USFWS), and/or National Marine Fisheries Service (NMFS) for any potential effects to special status species. Please be advised that the State Water Board can consult with the USFWS and NMFS on behalf of the District regarding all federal special status species the Project has the potential to impact.

California Environmental Protection Agency



JUN - 7 2010

The District will need to identify whether the Project will have any direct effects from construction activities, or indirect effects, such as growth inducement, that may affect federally listed threatened, endangered, or candidate species that are known, or have a potential to occur on-site, in the surrounding areas, or in the service area. Please identify applicable conservation measures to reduce such impacts, if any.

CWSRF projects must comply with Section 106 of the National Historic Preservation Act. The State Water Board has been delegated responsibility for carrying out the requirements of Section 106 under a Nationwide Programmatic Agreement executed for the CWSRF Program by the USEPA, the Advisory Council on Historic Preservation, and the National Conference of State Historic Preservation Officers.

As stated above, the State Water Board has responsibility for ensuring compliance with Section 106 and the State Water Board's Cultural Resources Officer (CRO) consults directly with the State Historic Preservation Officer (SHPO). SHPO consultation is initiated when sufficient information is provided by the CWSRF applicant for projects having the potential to impact cultural resources. Please contact the CRO Ms. Cookie Hirn at 916-341-5690, for questions on how to begin the Section 106 compliance process. Note that the District will need to identify the Area of Potential Effects (APE), including construction areas, staging areas, and depth of any excavations.

Please provide the CRO with a copy of the current Records Search for the Project area, and include maps that show all recorded sites and surveys in relation to the APE for the Project. The APE is three-dimensional and includes all areas that may be affected by the Project. The APE includes the surface area and extends below ground to the depth of any Project excavations. The Records Search request should be made for an area larger than the APE. The appropriate area varies for different projects, but should be drawn large enough to provide information on what types of sites may exist in the vicinity.

Native American and Interested Party Consultation are required for Section 106 compliance:

- A Project description and map should be sent to the Native American Heritage Commission (NAHC). The NAHC will provide a list of Native American tribes and individuals that are culturally affiliated with your Project area and recommend that they all be contacted
- A Project description and map should be sent to everyone on the list provided by the NAHC, asking for information on the Project area
- Similar letters should be sent to local historical organizations
- Follow-up contact should be made by phone and a phone log should be included

Comments from the NAHC, local tribes and historical organizations affiliated with the Project area, as well as the District response to these comments must be included in the submittal to the CRO.



JUN - 7 2010

Other federal requirements pertinent to the Project under the CWSRF Program include:

- A. Compliance with the federal Clean Air Act: (a) Provide air quality studies that may have been done for the Project; and (b) if the Project is in a nonattainment area or attainment area subject to a maintenance plan; (i) provide a summary of the estimated emissions (in tons per year) that are expected from both the construction and operation of the Project for each federal criteria pollutant in a nonattainment or maintenance area, and indicate if the nonattainment designation is moderate, serious, severe, or extreme; (ii) if emissions are above the federal de minimis levels, but the Project is sized to meet only the needs of current population projections that are used in the approved State Implementation Plan for air quality, quantitatively indicate how the proposed capacity increase was calculated using population projections.
- B. Compliance with the Wild and Scenic Rivers Act: Identify whether or not Wild and Scenic Rivers would be potentially impacted by the Project, and include conservation measures to minimize such impacts.
- C. Protection of Wetlands: Identify whether or not the Project or construction activities will impact streams, flood control, or wetlands.
- D. Compliance with the Migratory Bird Treaty Act (MBTA): List any birds that are protected under the MBTA that may be impacted by the Project, and identify conservation measures to minimize such impacts.

Following are specific comments on the Draft IS/MND:

- 1. Part A of the Air Quality checklist on page 8 states "Violate any state or federal ambient air quality emissions thresholds as established by County Air Pollution Control District?" The box marked "Impact can & will be mitigated" is checked, yet the IS/MND contains no mitigation measures to reduce Project related air quality impacts. The MMP does contain Air Quality mitigation measures applicable to the Project, but these measures are not in the IS/MND. Please include the Air Quality mitigation measures from the MMP in the IS/MND
- 2. Please include the Cultural Resources mitigation measures from the MMP in the IS/MND.
- 3. Part C of the Air Quality checklist on page 8 states "Create or subject individuals to objectionable odors." The box marked "Insignificant Impact" is checked. The Setting, Impact, and Mitigation/Conclusion section on Air Quality does not address part C on the Air Quality checklist. The District provides no analysis or supporting evidence to substantiate its statement that the Project will not create objectionable odors. Please include in the IS/MND the analysis of Project impacts to objectionable odors that supports the District's determination.
- 4. The Geology and Soils section on page 14, states "Standard best management practices, including erosion control measures would be implemented to avoid discharge of sediment offsite." Please include the best management practices that the Project will utilize to avoid discharge of sediment offsite.



Mr. Jeremy Freund

-4-

JUN - 7 2010

Thank you once again for the opportunity to review the IS/MND. We have no further comments on the IS/MND at this time. If you have any questions or concerns about the State Water Board environmental compliance process please feel free to contact me at (916) 341-6983, or by email at MLobo@waterboards.ca.gov. For all other comments or questions please contact Parker Thaler at (916) 341-7388, or by email at PThaler@waterboards.ca.gov.

Sincerely,



Michelle Lobo
Environmental Scientist

cc: State Clearinghouse
(Re: SCH#2010051010)
P. O. Box 3044
Sacramento, CA 95812-3044





ARNOLD SCHWARZENEGGER
GOVERNOR

STATE OF CALIFORNIA

GOVERNOR'S OFFICE of PLANNING AND RESEARCH

STATE CLEARINGHOUSE AND PLANNING UNIT



CYNTHIA BRYANT
DIRECTOR

June 14, 2010

Jeremy Freund
South San Luis Obispo County Sanitation District
612 Clarion Court
San Luis Obispo, CA 93444

Subject: Secondary Clarifier and Aeration Tank Project
SCH#: 2010051010

Dear Jeremy Freund:

The State Clearinghouse submitted the above named Mitigated Negative Declaration to selected state agencies for review. On the enclosed Document Details Report please note that the Clearinghouse has listed the state agencies that reviewed your document. The review period closed on June 10, 2010, and the comments from the responding agency (ies) is (are) enclosed. If this comment package is not in order, please notify the State Clearinghouse immediately. Please refer to the project's ten-digit State Clearinghouse number in future correspondence so that we may respond promptly.

Please note that Section 21104(c) of the California Public Resources Code states that:

"A responsible or other public agency shall only make substantive comments regarding those activities involved in a project which are within an area of expertise of the agency or which are required to be carried out or approved by the agency. Those comments shall be supported by specific documentation."

These comments are forwarded for use in preparing your final environmental document. Should you need more information or clarification of the enclosed comments, we recommend that you contact the commenting agency directly.

This letter acknowledges that you have complied with the State Clearinghouse review requirements for draft environmental documents, pursuant to the California Environmental Quality Act. Please contact the State Clearinghouse at (916) 445-0613 if you have any questions regarding the environmental review process.

Sincerely,

Scott Morgan
Acting Director, State Clearinghouse

Enclosures

cc: Resources Agency

**Document Details Report
State Clearinghouse Data Base**

SCH# 2010051010
Project Title Secondary Clarifier and Aeration Tank Project
Lead Agency South San Luis Obispo County Sanitation District

Type MND Mitigated Negative Declaration
Description NOTE: Review Per Lead

Proposed improvements include a new 124 ft x 40 ft dual-basin aeration tank, an 87 ft diameter secondary clarifier, and associated piping. Implementation of the project would result in ~13,000 sf of disturbance of a primary disturbed area, including ~3,360 cy of cut and 5,679 cy of over-excavation and re-compaction for construction of the tank and clarifier. The project is located within District's property boundary, 1600 Aloha Place, in the community of Oceano, between the Oceano Airport and Arroyo Grande Creek, in San Luis Obispo County.

Lead Agency Contact

Name Jeremy Freund
Agency South San Luis Obispo County Sanitation District
Phone 805-544-4011 **Fax**
email
Address 612 Clarion Court
City San Luis Obispo **State** CA **Zip** 93444

Project Location

County San Luis Obispo
City
Region
Lat / Long 35° 06' 3.36" N / 120° 37' 30.62" W
Cross Streets 1600 Aloha St
Parcel No. 061-093-001

Township	Range	Section	Base
-----------------	--------------	----------------	-------------

Proximity to:

Highways 1
Airports Oceano
Railways
Waterways Arroyo Grande Creek, Pacific Oceano
Schools
Land Use Public Facilities

Project Issues Air Quality; Archaeologic-Historic

Reviewing Agencies Resources Agency; California Coastal Commission; Department of Fish and Game, Region 4; Department of Parks and Recreation; Department of Water Resources; California Highway Patrol; Caltrans, District 5; Air Resources Board, Major Industrial Projects; Regional Water Quality Control Board, Region 3; Department of Toxic Substances Control; Native American Heritage Commission; State Lands Commission; State Water Resources Control Board, Division of Financial Assistance

Date Received 05/06/2010 **Start of Review** 05/06/2010 **End of Review** 06/10/2010



State Water Resources Control Board



Linda S. Adams
Secretary for
Environmental Protection

Division of Financial Assistance
1001 I Street, Sacramento, California 95814 • (916) 341-5700
Mailing Address: P.O. Box 944212 • Sacramento, California 94244-2120
FAX (916) 341-5707 • <http://www.waterboards.ca.gov>

Arnold Schwarzenegger
Governor

JUN - 7 2010

Mr. Jeremy Freund
South San Luis Obispo County Sanitation District
612 Clarion Court
San Luis Obispo, CA 93445

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JUN 09 2010

STATE CLEARING HOUSE

Dear Mr. Freund:

DRAFT INITIAL STUDY/MITIGATED NEGATIVE DECLARATION (IS/MND) FOR SOUTH SAN LUIS OBISPO COUNTY SANITATION DISTRICT (DISTRICT); SECONDARY CLARIFIER AND AERATION TANK PROJECT (PROJECT); STATE CLEARINGHOUSE NO. 2010051010.

We understand the District will be pursuing Clean Water State Revolving Fund (CWSRF) financing for this Project (CWSRF No. C-06-5388-110). As a funding agency and a state agency with jurisdiction by law to preserve, enhance, and restore the quality of California's water resources, the State Water Resources Control Board (State Water Board) is providing the following information for the environmental document prepared for the Project.

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JUN - 7 2010

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JUN - 7 2010

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Mr. Jeremy Freund

-4-

JUN - 7 2010

Thank you once again for the opportunity to review the IS/MND. We have no further comments on the IS/MND at this time. If you have any questions or concerns about the State Water Board environmental compliance process please feel free to contact me at (916) 341-6983, or by email at MLobo@waterboards.ca.gov. For all other comments or questions please contact Parker Thaler at (916) 341-7388, or by email at PTHaler@waterboards.ca.gov.

Sincerely,



Michelle Lobo
Environmental Scientist

cc: State Clearinghouse
(Re: SCH#2010051010)
P. O. Box 3044
Sacramento, CA 95812-3044





SOUTH SAN LUIS OBISPO COUNTY SANITATION DISTRICT

Post Office Box 339 Oceano, California 93475-0339

1600 Aloha Oceano, California 93445-9735

Telephone (805) 489-6666 FAX (805) 489-2765

<http://www.sslocsd.org/>

NOTICE OF ADOPTION OF MITIGATED NEGATIVE DECLARATION

DATE: May 4, 2010

TO: Responsible Agencies and Trustee Agencies, Other Concerned County and City Agencies, All Property Owners Within 300 Feet of the Project Site, and Other Concerned Citizens.

FROM: South San Luis Obispo County Sanitation District
PO Box 339 / Aloha Place, Oceano, CA 93445
c/o Jeremy Freund, Wallace Group

RE: Notice of proposed adoption for Initial Study and Mitigated Negative Declaration for the South San Luis Obispo County Sanitation District for a dual-basin aeration tank, secondary clarifier, and associated piping

Proposed improvements include a new 124-foot by 40-foot dual-basin aeration tank, an 87-foot diameter secondary clarifier, and associated piping. Implementation of the project would result in approximately 13,000 square feet of disturbance of a primary disturbed area, including approximately 3,360 cubic yards of cut and 5,679 cubic yards of over-excavation and re-compaction for construction of the tank and clarifier. The project is located within District's property boundary, 1600 Aloha Place, in the community of Oceano, between the Oceano Airport and Arroyo Grande Creek, in San Luis Obispo County.

The South San Luis Obispo County Sanitation District has completed an Initial Study and Mitigate Negative Declaration of the possible environmental impacts for the proposed project described above. The Initial Study and Mitigated Negative Declaration describes any potential significant or significant adverse impacts the project may have. If any potentially significant or significantly adverse impacts have been identified, the Initial Study describes a recommended course of action and mitigation measures to reduce the impacts to a less than significant level. The SSLOCSD Board will hold a public hearing in June 16, 2010 to adopt the Mitigated Negative Declaration.

PUBLIC HEARING:

The project is scheduled for a Hearing before the South San Luis Obispo County Sanitation District Board of Directors at 6:00 PM on June 16, 2010. The meeting is located at the OCSD Meeting Room located at 1655 Front Street, Oceano.

THE Newspaper of the Central Coast TRIBUNE

3825 South Higuera • Post Office Box 112 • San Luis Obispo, California 93406-0112 • (805) 781-7800

In The Superior Court of The State of California
In and for the County of San Luis Obispo
AFFIDAVIT OF PUBLICATION

AD #6892663
WALLACE GROUP

STATE OF CALIFORNIA

ss.

County of San Luis Obispo

I am a citizen of the United States and a resident of the County aforesaid; I am over the age of eighteen and not interested in the above entitled matter; I am now, and at all times embraced in the publication herein mentioned was, the principal clerk of the printers and publishers of THE TRIBUNE, a newspaper of general Circulation, printed and published daily at the City of San Luis Obispo in the above named county and state; that notice at which the annexed clippings is a true copy, was published in the above-named newspaper and not in any supplement thereof – on the following dates to wit; JUNE 23, 2010 that said newspaper was duly and regularly ascertained and established a newspaper of general circulation by Decree entered in the Superior Court of San Luis Obispo County, State of California, on June 9, 1952, Case #19139 under the Government Code of the State of California.

I certify (or declare) under the penalty of perjury that the foregoing is true and correct.


(Signature of Principal Clerk)

DATED: JUNE 23, 2010
AD COST: \$80.40

Public Notice

NOTICE IS HEREBY GIVEN that the South San Luis Obispo County Sanitation District Board of Directors will conduct a public hearing on July 7, 2010 at 1655 Front Street in Oceano, California 93445 at 6:00 p.m. to consider the following:

Adoption of a Mitigated Negative Declaration of Environmental Impact associated with the District's proposal to implement the Secondary Clarifier and Aeration Tank Project at the District Treatment Facility. The proposed improvements include a new 124-foot by 40-foot dual-basin aeration tank and 87-foot diameter secondary clarifier, and associated piping. Copies of the draft Negative Declaration and supporting data are available for public review at the District office location. Additional information may be obtained by contacting Jeremy Freund, Senior Planner. The comment and review period is now closed and ended on June 10, 2010.

All interested persons are invited to attend the South San Luis Obispo County Sanitation District Board of Directors hearing on July 7, 2010.
June 23, 2010 6892663



SOUTH SAN LUIS OBISPO COUNTY SANITATION DISTRICT

Post Office Box 339 Oceano, California 93475-0339

1600 Aloha Oceano, California 93445-9735

Telephone (805) 489-6666 FAX (805) 489-2765

<http://sslocsd.org/>

Public Notice

NOTICE IS HEREBY GIVEN that the South San Luis Obispo County Sanitation District Board of Directors will conduct a public hearing on July 7, 2010 at 1655 Front Street in Oceano, California 93445 at 6:00 p.m. to consider the following:

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All interested persons are invited to attend the South San Luis Obispo County Sanitation District Board of Directors hearing on July 7, 2010.



NEGATIVE DECLARATION & NOTICE OF DETERMINATION

SOUTH SAN LUIS OBISPO COUNTY SANITATION DISTRICT

P.O. BOX 339 OCEANO, CALIFORNIA 93475-0339 * 1600 ALOHA PLACE, OCEANO, CALIFORNIA 93426-0335
TELEPHONE (805) 489-6666 * FAX (805) 489-2765 * HTTP://SSLOCSO.ORG/

FILED

DATE: May 10, 2010

JUL 12 2010

PROJECT/ENTITLEMENT: Secondary Clarifier and Aeration Tank Project

JULIE L. RODEWALD, COUNTY CLERK

BY *Julie L. Rodewald*
COUNTY CLERK

APPLICANT NAME: South San Luis Obispo County Sanitation District

ADDRESS: PO Box 339 / Aloha Place, Oceano, CA 93445

CONTACT PERSON: Jeremy Freund, Wallace Group

Telephone: 805-544-4011

PROPOSED USES/INTENT: Proposed improvements include a new 124-foot by 40-foot dual-basin aeration tank, an 87-foot diameter secondary clarifier, and associated piping. Implementation of the project would result in approximately 13,000 square feet of disturbance of a primary disturbed area, including approximately 3,360 cubic yards of cut and 5,679 cubic yards of over-excavation and re-compaction for construction of the tank and clarifier.

LOCATION: 1600 Aloha Place, within the facility boundary of the South San Luis Obispo County Sanitation District treatment facility, in the community of Oceano, between the Oceano Airport and Arroyo Grande Creek, in San Luis Obispo County.

LEAD AGENCY: South San Luis Obispo County Sanitation District
PO Box 339 / Aloha Place
Oceano, CA 93445

OTHER POTENTIAL PERMITTING AGENCIES: California Coastal Commission, Regional Water Quality Control Board, Air Pollution Control District

ADDITIONAL INFORMATION: Additional information pertaining to this environmental determination may be obtained by contacting the above Lead Agency address or (805) 781-5600.

"REQUEST FOR REVIEW" PERIOD ENDS AT 5 p.m. on (2 wks from above DATE)

30-DAY PUBLIC REVIEW PERIOD begins at the time of public notification

Notice of Determination

State Clearinghouse No. : 2010051010

This is to advise that the South San Luis Obispo County Sanitation District as ☒ **Lead Agency**
☐ **Responsible Agency** approved/denied the above described project on _____, and has made the following determinations regarding the above described project:

The project will not have a significant effect on the environment. A Negative Declaration was prepared for this project pursuant to the provisions of CEQA. Mitigation measures were made a condition of the approval of the project. A Statement of Overriding Considerations was not adopted for this project. Findings were made pursuant to the provisions of CEQA.

This is to certify that the Negative Declaration with comments and responses and record of project approval is available to the General Public at:

South San Luis Obispo County Sanitation District
PO Box 339 / Aloha Place, Oceano, CA 93445

John Wallace
Signature

John Wallace, District Administrator

SSLOCSO

Project Manager Name

Date 7/8/10

Public Agency



State of California—The Resources Agency
DEPARTMENT OF FISH AND GAME
2010 ENVIRONMENTAL FILING FEE CASH RECEIPT

RECEIPT# **399828**

STATE CLEARING HOUSE # (If applicable)

SEE INSTRUCTIONS ON REVERSE. TYPE OR PRINT CLEARLY

LEAD AGENCY South San Luis Obispo Co. Sanitation District		DATE 7/12/2010
COUNTY/STATE AGENCY OF FILING SAN LUIS OBISPO		DOCUMENT NUMBER 07 MBI 14
PROJECT TITLE SECONDARY CLARIFIER AND Aeration Tank Project		
PROJECT APPLICANT NAME South San Luis Obispo Co. Sanitation District		PHONE NUMBER 805 (481) 6666
PROJECT APPLICANT ADDRESS 1600 ALPHA PL / PO BOX 339	CITY OCESAJO	STATE CA
		ZIP CODE 93445

PROJECT APPLICANT (Check appropriate box):

- ☐ Local Public Agency ☐ School District ☒ Other Special District ☐ State Agency ☐ Private Entity

CHECK APPLICABLE FEES:

- | | | | |
|---|------------|----|----------------|
| <input type="checkbox"/> Environmental Impact Report (EIR) | \$2,792.25 | \$ | |
| <input checked="" type="checkbox"/> Mitigated/Negative Declaration (ND)(MND) | \$2,010.25 | \$ | 2010.25 |
| <input type="checkbox"/> Application Fee Water Diversion (State Water Resources Control Board Only) | \$850.00 | \$ | |
| <input type="checkbox"/> Projects Subject to Certified Regulatory Programs (CRP) | \$949.50 | \$ | |
| <input checked="" type="checkbox"/> County Administrative Fee | \$50.00 | \$ | 50.00 |
| <input type="checkbox"/> Project that is exempt from fees | | | |
| <input type="checkbox"/> Notice of Exemption | | | |
| <input type="checkbox"/> DFG No Effect Determination (Form Attached) | | | |
| <input type="checkbox"/> Other | | \$ | |

PAYMENT METHOD:

- ☐ Cash ☐ Credit ☒ Check ☐ Other

TOTAL RECEIVED \$ **2060.25**

SIGNATURE X Julie Rolow	TITLE CLERK-RECORDS
-----------------------------------	-------------------------------

WHITE - PROJECT APPLICANT

YELLOW - DFG/ASB

PINK - LEAD AGENCY

GOLDEN ROD - COUNTY CLERK

FG 753.5a (Rev. 11/09)



State of California—The Resources Agency
DEPARTMENT OF FISH AND GAME
2010 ENVIRONMENTAL FILING FEE CASH RECEIPT

RECEIPT# **399828**

STATE CLEARING HOUSE # (If applicable)

SEE INSTRUCTIONS ON REVERSE. TYPE OR PRINT CLEARLY

LEAD AGENCY South San Luis Obispo Co. Sanitation District		DATE 7/12/2010
COUNTY/STATE AGENCY OF FILING SAN LUIS OBISPO		DOCUMENT NUMBER 07 MBI 14
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PROJECT APPLICANT ADDRESS 1600 ALPHA PL / PO BOX 339	CITY OCESAJO	STATE CA
		ZIP CODE 93445

PROJECT APPLICANT (Check appropriate box):

- ☐ Local Public Agency ☐ School District ☒ Other Special District ☐ State Agency ☐ Private Entity

CHECK APPLICABLE FEES:

- | | | | |
|---|------------|----|----------------|
| <input type="checkbox"/> Environmental Impact Report (EIR) | \$2,792.25 | \$ | |
| <input checked="" type="checkbox"/> Mitigated/Negative Declaration (ND)(MND) | \$2,010.25 | \$ | 2010.25 |
| <input type="checkbox"/> Application Fee Water Diversion (State Water Resources Control Board Only) | \$850.00 | \$ | |
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| <input checked="" type="checkbox"/> County Administrative Fee | \$50.00 | \$ | 50.00 |
| <input type="checkbox"/> Project that is exempt from fees | | | |
| <input type="checkbox"/> Notice of Exemption | | | |
| <input type="checkbox"/> DFG No Effect Determination (Form Attached) | | | |
| <input type="checkbox"/> Other | | \$ | |

PAYMENT METHOD:

- ☐ Cash ☐ Credit ☒ Check ☐ Other

TOTAL RECEIVED \$ **2060.25**

SIGNATURE X Julie Rolow	TITLE CLERK-RECORDS
-----------------------------------	-------------------------------

WHITE - PROJECT APPLICANT

YELLOW - DFG/ASB

PINK - LEAD AGENCY

GOLDEN ROD - COUNTY CLERK

FG 753.5a (Rev. 11/09)

Julie Rodewald
San Luis Obispo County
Clerk/Recorder

Cashier JR
Register #2509150

P Public

Receipt # 382755 07/12/10 01:23PM
SD SLD SANITATION DIST

Description	Fee
Env. Det.-Rev	\$50.00
Env. Det-State	\$2,010.25
Total Amount Due	\$2,060.25
Total Paid	\$2,060.25
Check#	

PLEASE KEEP FOR REFERENCE

California Home

Tuesday, June 8, 2010

[OPR Home](#) > [CEQAnet Home](#) > [CEQAnet Query](#) > [Search Results](#) > [Document Description](#)

Secondary Clarifier and Aeration Tank Project

SCH Number: 2010051010**Document Type:** MND - Mitigated Negative Declaration**Project Lead Agency:** South San Luis Obispo County Sanitation District

Project Description

NOTE: Review Per Lead Proposed improvements include a new 124 ft x 40 ft dual-basin aeration tank, an 87 ft diameter secondary clarifier, and associated piping. Implementation of the project would result in ~13,000 sf of disturbance of a primary disturbed area, including ~3,360 cy of cut and 5,679 cy of over-excavation and re-compaction for construction of the tank and clarifier. The project is located within District's property boundary, 1600 Aloha Place, in the community of Oceano, between the Oceano Airport and Arroyo Grande Creek, in San Luis Obispo County.

Contact Information

Primary Contact:

Jeremy Freund
South San Luis Obispo County Sanitation District
805-544-4011
612 Clarion Court
San Luis Obispo, CA 93444

Project Location

County: San Luis Obispo
City:
Region:
Cross Streets: 1600 Aloha St
Latitude/Longitude: 35° 06' 3.36" / 120° 37' 30.62" [Map](#)
Parcel No: 061-093-001
Township:
Range:
Section:
Base:
Other Location Info: City/Nearest Community: Oceano

Proximity To

Highways: 1
Airports: Oceano
Railways:
Waterways: Arroyo Grande Creek, Pacific Oceano
Schools:
Land Use: Public Facilities

Development Type

Waste Treatment: Other

Local Action

Site Plan, Local Coastal Permit

Project Issues

Air Quality, Archaeologic-Historic

Reviewing Agencies (Agencies in **Bold Type** submitted comment letters to the State Clearinghouse)

Resources Agency; California Coastal Commission; Department of Fish and Game, Region 4; Department of Parks and Recreation; Department of Water Resources; California Highway Patrol; Caltrans, District 5; Air Resources Board, Major Industrial Projects; Regional Water Quality Control Board, Region 3; Department of Toxic Substances Control; Native American Heritage Commission; State Lands Commission

Date Received: 5/6/2010 **Start of Review:** 5/6/2010 **End of Review:** 6/10/2010

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Attachment B

California Coastal Commission letter responding to CDP application (April 15, 2016)

CALIFORNIA COASTAL COMMISSION

CENTRAL COAST DISTRICT OFFICE
725 FRONT STREET, SUITE 300
SANTA CRUZ, CA 95060
PHONE: (831) 427-4863
FAX: (831) 427-4877
WWW.COASTAL.CA.GOV



April 15, 2016

John F. Rickenbach
7675 Bella Vista Road
Atascadero, California 93422

**Subject: Coastal Development Permit (CDP) Application Number 3-16-0233 (SSLOCSD
Wastewater Treatment Facility Redundancy Project)**

Dear John:

We received on March 15, 2016 the above-referenced coastal development permit (CDP) application that you submitted on behalf of the South San Luis Obispo County Sanitation District (SSLOCSD). The proposed project includes upgrades to the South San Luis Obispo County Sanitation District's ("District") wastewater treatment facility (WWTF) located at 1600 Aloha Place in Oceano. The project description states that the proposed project includes the following components: 1) two activated sludge aeration basins; 2) one secondary clarifier; 3) one fixed-film-reactor effluent pump station; 4) one waste-activated sludge thickening centrifuge with modifications to the existing dewatering platform; 5) one blower, electrical and motor control center building; 6) one dewatered sludge conveyor; 7) yard piping; 8) site improvements; 9) instrumentation and controls; and 10) electrical systems.

Because the project is located within the Commission's original permitting jurisdiction, the standard of review for the proposed development is Chapter 3 of the Coastal Act, with San Luis Obispo (SLO) County Local Coastal Program (LCP) policies and standards providing non-binding guidance. We have reviewed the materials that you have submitted to date and are in need of additional information to adequately analyze the proposed project for Coastal Act conformance. Towards this end, we are unable to file this application until the following is submitted:

- 1. Project Description.** As described on page 2 of the application (and referenced above), the District is proposing to add a variety of structural components and upgrades to the site. However, it appears that the site plans associated with the submittal, e.g. in Attachment 3, do not completely describe the totality of these components and upgrades. For example, Staff does not understand where the "fixed-film-reactor (FFR) effluent pump station" is to be constructed, or what the specific "site improvements" are and where they are to be undertaken. Figure No. 7 in Attachment 4 provides additional detail (e.g. piping) on some project components, but these are not shown in Attachment 3. Each component, including electrical and piping (and including the area to be paved "between the tank and the property line") should be explained in full detail in the project description and should also be shown on a site plan. Thus, please provide two full-scale and two reduced-sized (8 ½" x 11") plan sheets showing the totality of the proposed project components and where they are located on the site.

2. **Sea Level Rise Analysis.** Initial phone conversations with the District about this project focused on the proper coastal development permit jurisdiction, including because of the low-lying nature of this site. Because of the physical realities of the site (e.g. the site is located within the County's Flood Hazard combining designation) and subject to flooding (e.g. the 2010 heavy storms that caused spills) existing and future flood/erosion impacts associated with sea level rise will need to be considered and addressed.

In review of the application (including the 2010 CEQA document), it is our understanding that the District is proposing to "address flood hazard concerns by project design." Staff is unclear what this means and thus additional information is needed to understand the existing flood hazards on the site and how additional project components will be protected from flooding and other coastal hazards, including via the adjacent creeks and lagoons, exacerbated by potential sea level rise, now and in the future. For example, how will the components proposed to be built below grade be protected from flood hazards? To better understand this, please describe in writing and show the facility's "block wall" on the project plans, including its current elevation and depth. Please also describe the nature and elevations of existing and proposed project components in relation to the block wall (e.g., have any of the existing facility components been elevated in the past to address flood hazards? If so, please describe how much the facilities were elevated and provide copies of the permits that allowed for such elevation. If it was previously necessary to elevate certain facilities, please describe why the proposed redundancy project components are not being elevated in the same manner.

Lastly, has the District undertaken, or does the District plan on undertaking, a site-wide sea level rise analysis to ensure that proposed project components will be safe from current and future expected sea level rise and other coastal hazards? The Commission's *Sea Level Rise Policy Guidance*, found on the Commission's website at <http://www.coastal.ca.gov/climate/slrguidance.html> provides a detailed overview of the best available science on sea level rise for California and the recommended methodology for addressing sea level rise. We highly recommend that an analysis of the effects of sea level rise on the site be undertaken to determine the risks facing the WWTF. Please note that previous disturbance would have little bearing on whether the project would now or in the future be at risk from rising sea level.

3. **Mitigated Negative Declaration.** The submitted material includes a Mitigated Negative Declaration from May of 2010. Because it is now April of 2016, staff will need evidence (e.g. a concurrence letter) from the lead agency (i.e. the SSLOCSD) that the CEQA document, including all project components and mitigations, remain accurate and appropriate, especially for the Project, Biological Resources, Geology and Soils, Wastewater, and Water sections.
4. **Alternatives and Biological Resources.** Section 13053.5 of the Commission's administrative regulations requires that project descriptions contained in a permit

application include any feasible¹ alternatives that would substantially lessen any significant adverse impact the development may have on the environment. In this case, while the WWTF site is heavily disturbed, there are mapped wetlands (as shown on the County's combining designation map, as submitted) on the western and southwestern portions of the site. The Commission, as well as the County's LCP, considers wetlands to be a type of environmentally sensitive habitat area (ESHA).

Some project components are located immediately adjacent to these wetlands (e.g. the proposed secondary and associated piping). It is unclear from the submitted graphics and aerials whether there is a block wall or some other boundary wall separating this area from the wetlands, and how this new development may impact these wetlands. In particular, staff is unclear of where paving between the tank and the property line is proposed to occur. Please note that the Coastal Act and LCP do not allow paving over wetlands, and only resource dependent uses (e.g. public trails or restoration) are allowed in ESHA in most cases. In addition, the Coastal Act (and County LCP) requires **buffers** from sensitive habitat. Staff will need to ensure that the project components are set back an appropriate distance so as to not significantly degrade the adjacent ESHA, as well as be compatible with the continuance of that ESHA. Thus, staff will require more information on the nature of this area adjacent to wetlands, and how specific existing (e.g. the block wall) and proposed project components may impact these wetlands. Alternatives may need to include relocation of components outside of a 100 foot buffer and alternatives that elevate the project components.

5. **Photographs of Project Site.** Please submit current photographs of the project site, including photos of where the proposed project components are to be built or undertaken. Please submit these photographs in jpeg format, along with 8 1/2" x 11" color copies.
6. **Other Agency Approvals.** Please describe and submit all other agency approvals necessary for this project or evidence that no approvals are necessary.
7. **Appendix B.** It does not appear that Appendix B (Local Agency Review Form) has been filled out correctly or completely. The form requires that the local planning or building department fill out and complete this form. While a submitted SSLOCSD resolution indicates the project is exempt from SLO County zoning and ordinances, we do require Appendix B to be completed so that we can be assured that the Applicant has secured all other local agency approvals, or submitted evidence that no other local agency approvals are necessary, before the Commission acts on the CDP.

We will hold the application for three months from today's date (i.e., until July 15, 2016) pending receipt of these materials. After all of the above-listed materials have been received, the

¹ "Feasible" as defined by Section 30108 of the Coastal Act, means capable of being accomplished in a successful manner within a reasonable period of time, taking into account economic, environmental, social, and technological factors.

John Rickenbach
3-16-0233 (SSLOCSD Wastewater Treatment Facility Redundancy Project)
April 15, 2016
Page 4

package will again be reviewed and will be filed if it contains materials sufficient for a thorough and complete review. Please note that there may be additional materials necessary for filing purposes depending upon the nature of the information provided pursuant to the above-listed materials. If all of the above-listed materials are not received within six months, CDP Application 3-16-0233 will be considered withdrawn and will be returned to you. This submittal deadline may be extended for good cause if such request is made prior to July 15, 2016. I look forward to working with you on this project. Please do not hesitate to contact me at (831) 427-4863 if you have any questions regarding the above information requests.

Sincerely,

Daniel Robinson
Coastal Planner
Central Coast District Office

Attachment C

*Biological resource inventory (including wetland delineation) of
the SSLOCSD WWTP site and immediate vicinity
(Kevin Merk Associates; August 2016)*

**SOUTH SAN LUIS OBISPO COUNTY SANITATION
DISTRICT WASTEWATER FACILITY
REDUNDANCY PROJECT**

**DELINEATION OF WATERS OF THE UNITED STATES
AND STATE OF CALIFORNIA**



Prepared for:

South San Luis Obispo County Sanitation District
1600 Aloha Place
Oceano, California 93445
Contact: Mr. Gerhardt Hubner

Prepared by:



Kevin Merk Associates, LLC
P.O. Box 318
San Luis Obispo, California 93406

August 2016

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APPENDICES

Appendix A – Wetland Determination Data Forms
Appendix B – Photo Plate

1.0 INTRODUCTION

Kevin Merk Associates, LLC (KMA) conducted a delineation of potential waters of the United States and State of California on the South San Luis Obispo County Sanitation District's (SSLOCSD) Wastewater Facility Redundancy Project study area. The Wastewater Facility is situated in the south coast of San Luis Obispo County in the town of Oceano, California (Please refer to Figures 1 and 2). The site is located at 1600 Aloha Place, west of the Oceano County Airport, north of Arroyo Grande Creek and east of the Pacific Ocean. The town of Oceano is located to the north and northwest of the site.

The investigation was conducted on an approximately 11.5 acre study area, including the fenced and developed portions of the site, as well as the undeveloped areas along the western and southern edges of the property. The purpose of the delineation was to evaluate the extent of wetland and riparian habitat subject to Sections 404 and 401 of the Clean Water Act and Section 1600 et seq. of the California Fish and Game Code. In addition, the investigation evaluated onsite habitats to determine if they meet the definition as Environmentally Sensitive Habitat pursuant to the California Coastal Act.

The delineation was conducted to determine the location and extent of area within the study area boundaries that meet the jurisdictional criteria for the following federal and state agencies:

- U.S. Army Corps of Engineers (Corps) criteria as waters of the United States, including wetlands, pursuant to Section 404 of the Clean Water Act (1972);
- Regional Water Quality Control Board (RWQCB) jurisdiction under Section 401 of the Clean Water Act, and under the Porter-Cologne Water Quality Act;
- California Department of Fish and Wildlife (CDFW) jurisdiction, under the California Fish and Game Code Section 1600 et seq.; and,
- California Coastal Commission and the County of San Luis Obispo pursuant to the California Coastal Act and Local Coastal Plan (LCP) criteria as Environmentally Sensitive Habitat Area (ESHA).

The Redundancy Project would construct a secondary clarifier and aeration tank within the existing footprint of the Wastewater Facility, to provide system redundancy necessary to ensure compliance with current and future treatment standards. All aspects of the project will occur within and adjacent to the existing facilities, within the fenced and developed portions of the site.

The preliminary jurisdictional determination used standard Corps methodology as detailed in Section 3.0 to identify federal and state boundaries. KMA also reviewed relevant background documents, recent and historic aerial photographs of the site, regional and site-specific topographic maps, and U.S. Department of Agriculture soils data to better characterize the nature and extent of potential regulatory agency jurisdiction within the study area. The findings included in this report are subject to review by the affected agencies and should be submitted to the Corps, CDFW, RWQCB, and CCC for verification as needed during the environmental review and future permitting phases of the project.

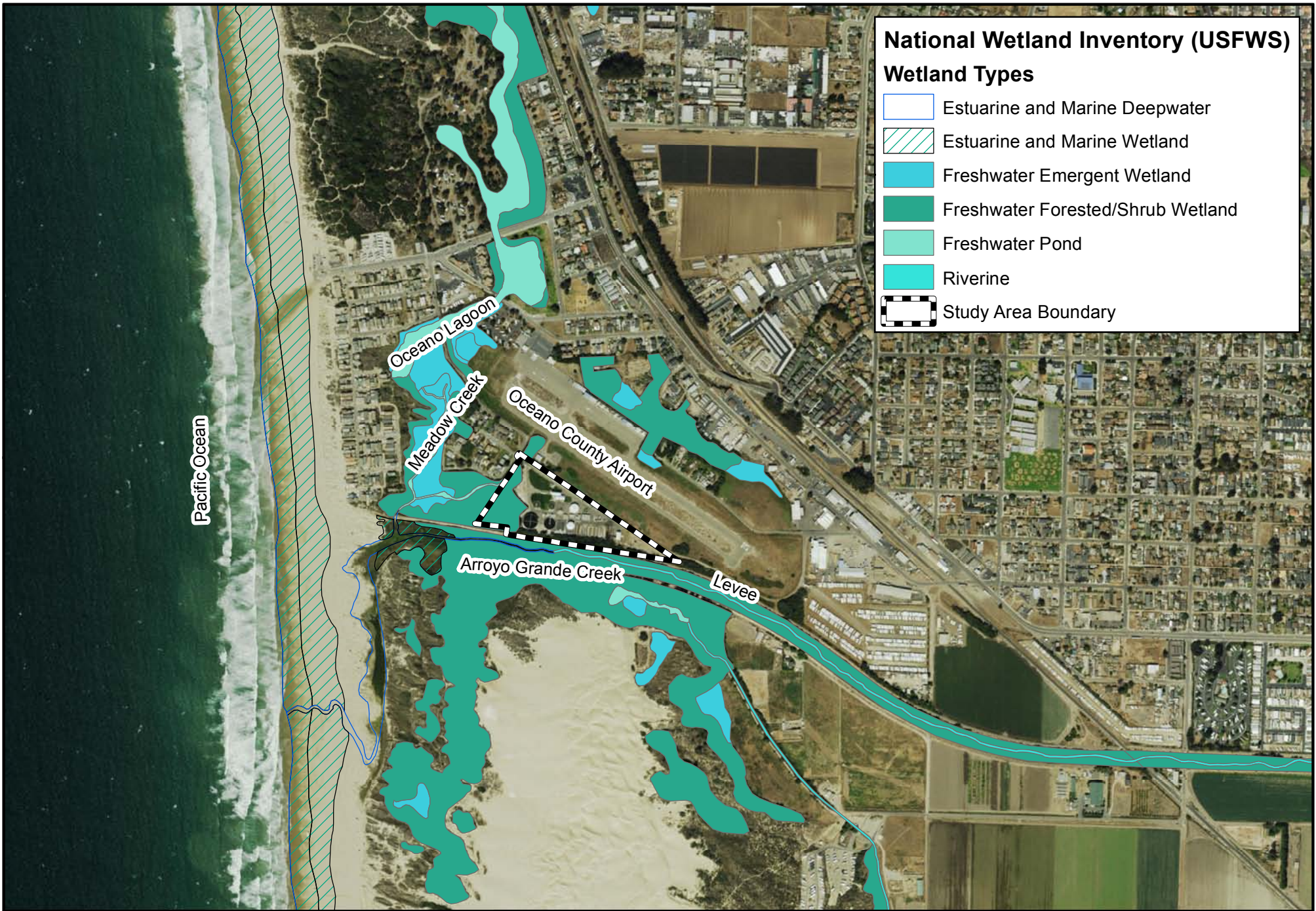


Redundancy Project

South San Luis Obispo County Sanitation District

Figure 1

Site Location
Item 6A Attachment 2 Page 124



2.0 REGULATORY OVERVIEW AND DEFINITIONS

2.1 Federal Regulatory Authority

The U.S. Army Corps of Engineers (Corps), under provisions of Section 10 of the Rivers and Harbors Act and Section 404 of the Clean Water Act, has jurisdiction over “waters of the United States” and authorization to issue permits for the discharge of dredge or fill material into “waters of the U.S.” “Waters of the U.S.” are defined to include: all waters used in interstate or foreign commerce, including all waters subject to the ebb and flow of the tide; all interstate waters and wetlands; all other waters such as intrastate lakes, rivers, streams, mudflats, sandflats, wetlands, sloughs, wet meadows, playa lakes, or natural ponds, that could affect interstate or foreign commerce; all impoundments of waters otherwise defined as “waters of the U.S.”; tributaries of waters otherwise defined as “waters of the U.S.”; territorial seas; and wetlands adjacent to “waters of the U.S.”

Waters generally not considered to be Corps-jurisdictional include non-tidal drainage and irrigation ditches excavated on dry land, artificially-irrigated areas, artificial lakes or ponds excavated on dry land used for irrigation or stock watering, small artificial water bodies such as swimming pools, and water filled depressions (51 Fed. Reg. 41, 217 1986).

In 2001, the Supreme Court (*Solid Waste Agency of Northern Cook County v. U.S. Army Corps of Engineers*) ruled that the Corps exceeded its statutory authority by asserting Clean Water Act jurisdiction over “an abandoned sand and gravel pit in northern Illinois, which provides habitat for migratory birds.” The Supreme Court determined that “non-navigable, isolated, intrastate” waters were not subject to federal jurisdiction based solely on the use of such waters by migratory birds (i.e., solely invoking the “Migratory Bird Rule” was insufficient justification) (Guzy/Anderson 2001).

The Supreme Court further addressed the extent of the Corps’ jurisdiction in the consolidated cases *Rapanos v. United States* and *Carabell v. United States* (June 19, 2006), referred to as “*Rapanos*.” In *Rapanos*, a sharply-divided Court issued multiple opinions, none of which garnered the support of a majority of Justices. This created substantial uncertainty as to which jurisdictional test should be used in routine jurisdictional determinations. The Ninth Circuit Court of Appeal, which encompasses California, answered this in *Northern California River Watch v. City of Healdsburg* (August 11, 2006). In this case, the Court held that Justice Kennedy’s opinion in *Rapanos* provided the controlling rule of law. Under that rule, wetlands or other waters that are not in fact navigable are subject to Corps jurisdiction if they have “a (significant nexus) to waters that are navigable in fact.” Presence of a “significant nexus” must be decided on a case-by-case basis, depending on site-specific circumstances. The U.S. Environmental Protection Agency (EPA) and Corps subsequently developed an instructional guidebook on how to apply these rulings for all future jurisdictional determinations (U.S. Army Corps of Engineers and U.S. EPA 2007), and a memorandum providing guidance to implement the Supreme Court’s decision in *Rapanos* (Grumbles and Woodley 2007).

Waters of the U.S. determined by KMA to be under the jurisdiction of the EPA and Corps under the Clean Water Act have thus conformed to the instructional guidebook and memorandum providing guidance to implement the U.S. Supreme Court’s decision in *Rapanos*. Delineated wetland features that are not adjacent to (i.e., bordering, contiguous, or neighboring) a traditional navigable water (TNW) or abutting a relatively permanent water (RPW) that is tributary to a TNW are not likely to be subject to federal jurisdiction and are thus determined to not be subject to federal jurisdiction. It is advised to note that the U.S. Supreme Court determined that jurisdictional waters of the U.S. shall

be determined on a case-by-case basis, by the Corps (and EPA), based on a determination of whether a particular wetland or “other water” has a “significant nexus” to a TNW.

To summarize, the jurisdictional status determination for a potential waters of the U.S. feature was evaluated in accordance with the Rapanos guidance as follows. If the feature did not have a hydrologic surface connection to a TNW (e.g., a seasonally inundated wetland abuts an RPW and subject RPW conveys surface water to a TNW) or did not demonstrate a “significant nexus” to a TNW, it was not considered subject to federal jurisdiction. This report describes the observed features that exhibit the physical characteristics of wetlands or other waters and documents the maximum areal extent of such features that may qualify as “waters of the United States” and be subject to Corps jurisdiction.

2.2 State Regulatory Agencies

The federal rulings discussed above do not alter the extent of State jurisdiction over “waters of the State” (which are subject to Regional Water Quality Control Board jurisdiction), “rivers, lakes or streams” subject to California Department of Fish and Wildlife jurisdiction, and areas subject to the California Coastal Act. State regulatory authority over wetlands and other waters are discussed below.

Regional Water Quality Control Board

The State Water Resources Control Board and nine Regional Water Quality Control Boards regulate discharges of fill and dredged material in California, under Section 401 of the Clean Water Act, and under the State Porter-Cologne Water Quality Control Act, through the State Water Quality Certification Program. State Water Quality Certification is necessary for all projects that require a Corps permit, or fall under other federal jurisdiction, and have the potential to impact waters of the State. Waters of the State are defined by the Porter-Cologne Act as: “. . . any surface water or groundwater, including saline waters, within the boundaries of the state.”

In order for a Section 404 permit to be valid, Section 401 of the Clean Water Act requires a Water Quality Certification or waiver to be obtained. The Water Quality Certification (or waiver) determines that the permitted activities will not violate water quality standards individually or cumulatively over the term of the action. Water quality certification must be consistent with the requirements of the Federal Clean Water Act, California Environmental Quality Act (CEQA), California Endangered Species Act, and Porter-Cologne Act.

California Department of Fish and Wildlife

The CDFW has regulatory authority over any work within rivers, lakes and streams in the State of California (California Fish and Game Code Sections 1601-1603) on public, private and agricultural lands. Features that are regulated by the CDFW include all rivers, streams, or lakes including man-made watercourses with or without wetlands, if they contain a definable bed and bank and support fish or wildlife resources or contribute to that support. The riparian vegetation associated with the rivers, streams, and lakes is also typically included within CDFW jurisdiction.

California Coastal Commission

The California Coastal Commission, in partnership with coastal cities and counties, plans and regulates the use of land and water in the coastal zone. The Coastal Act includes specific policies (see Division 20 of the Public Resources Code) that address issues, including terrestrial and marine habitat protection. The policies of the Coastal Act constitute the statutory standards applied to

planning and regulatory decisions made by the CCC and by local governments, pursuant to the Coastal Act. Because a CCC-approved Local Coastal Program is in place, the County of San Luis Obispo issues permits for development or projects within the coastal zone area under its jurisdiction.

The CCC, with the assistance of CDFW, is responsible for determining the presence of wetlands subject to regulation under the Coastal Act. The CDFW as stated above essentially relies on the USFWS wetland definition and classification system (Cowardin et al., 1979, *Classification of Wetlands and Deep Water Habitats of the United States*), with some minor changes in classification terminology, as the methodology for wetland determinations. The CDFW and the CCC require the presence of only one wetland parameter (e.g., hydrology, hydric soils, or hydrophytic vegetation) for an area to qualify as a wetland. Section 30121 of the California Coastal Act (1976), the statute governing the CCC, broadly defines wetlands as:

"Lands within the coastal zone which may be covered periodically or permanently with shallow water and include saltwater marshes, freshwater marshes, open or closed brackish water marshes, swamps, mudflats, or fens."

However, the CCC Administrative Regulations (Section 13577 (b)) provides a more explicit definition:

"Wetlands are lands where the water table is at, near, or above the land surface long enough to promote the formation of hydric soils or to support the growth of hydrophytes, and shall also include those types of wetlands where vegetation is lacking and soil is poorly developed or absent as a result of frequent or drastic fluctuations of surface water levels, wave action, water flow, turbidity or high concentrations of salt or other substance in the substrate. Such wetlands can be recognized by the presence of surface water or saturated substrate at some time during each year and their location within, or adjacent to, vegetated wetlands or deepwater habitats."

Habitats containing sensitive plant or animal species, or dominated by wetland and/or riparian plants or native grasses are also typically regulated by the CCC as Environmentally Sensitive Habitat Areas (ESHAs) as defined in the California Coastal Act of 1976.

The Coastal Act defines ESHA as "any area in which plant or animal life or their habitats are either rare or especially valuable because of their nature or role in an ecosystem and which could be easily disturbed or degraded by human activities and developments." Under this definition, unique plant habitats; rare and endangered animal habitats; wetlands; coastal streams; rocky points; intertidal areas; and kelp beds are typically considered ESHA.

2.3 Local Regulatory Authority

The South San Luis Obispo County Sanitation District is the Lead Agency for the project. The California Coastal Act established a comprehensive plan to protect resources and regulate development along California's coast, and requires every city and county located partly or wholly within the designated Coastal Zone to prepare a Local Coastal Program (LCP), which is reviewed and certified by the California Coastal Commission. The San Luis Obispo County Local Coastal Program (LCP) as certified by the CCC, provides the guidelines and policies for development and use of coastal resources in the area per California Coastal Act requirements.

2.4 Federal Criteria for Wetlands and Other Waters

Hydrophytic vegetation occurs in areas where frequency and duration of inundation and/or soil saturation exerts a primary controlling influence on plant species composition. Plant species are assigned a wetland indicator status according to the probability of occurrence in wetlands. More than fifty percent of the dominant plant species must have a wetland indicator status of Facultative, Facultative Wetland, or Obligate Wetland to meet the hydrophytic vegetation criterion. The National Wetland Plant List: 2016 Wetland Ratings (NWPL), separates vascular plants into the following four basic categories based on plant species frequency of occurrence in wetlands:

- Obligate wetland (OBL). Occur almost always (estimated probability >99%) under natural conditions in wetlands.
- Facultative Wetland (FACW). Usually occur in wetlands (estimated probability 67%-99%), but occasionally found in non-wetlands.
- Facultative (FAC). Equally likely to occur in wetlands or non-wetlands (estimated probability 34%-66%).
- Facultative Upland (FACU). Usually occur in non-wetlands (estimated probability 67%-99%), but occasionally found in wetlands (estimated probability 1%-33%).
- Obligate Upland (UPL). May occur in wetlands in another region, but occur almost always (estimated probability >99%) under natural conditions in non-wetlands in the region specified.

An area is considered to have hydrophytic vegetation when greater than 50 percent of the dominant species in each vegetative stratum (tree, shrub, and herb) are assigned with the FAC, FACW, and/or OBL status categories. Any species not appearing on the current NWPL is assumed to be an upland species, which almost never occurs in wetlands (<1%).

Hydric soils occur in areas that are saturated and/or inundated for a sufficient duration during the growing season to develop anaerobic or reducing conditions. Sufficient duration cannot be defined due to the vast differences in chemistry and mineral composition in soils from site to site and region to region, but can be as short as two weeks during the growing season. Field indicators of hydric soils include, but are not limited to observation of redoximorphic features (e.g., concentrations of oxidized minerals such as iron) and detection of hydrogen sulphide gas. Documentation of a soil as hydric must be verified in the field.

Wetland hydrology typically occurs in areas subject to inundation and/or soil saturation with a frequency and duration long enough to cause the development of hydric soils and plant communities dominated by hydrophytic vegetation. If direct observation of wetland hydrology is not possible (as in seasonal wetlands) or records of wetland hydrology are not available (such as stream gauges), assessment of wetland hydrology is frequently supported by primary and secondary indicators such as surface soil cracks and drainage patterns.

Ordinary High Water Mark (OHWM) is the line on the shore or bank of a feature that is established by fluctuations and/or flow of water. The OHWM is located through examination of physical characteristics such as a clear natural line impressed on the bank, shelving, changes in the character of soil, destruction of terrestrial vegetation, the presence of litter and debris, and other appropriate physical characteristics that consider the nature of the surrounding area.

3.0 METHODS

KMA principal biologist Kevin Merk and senior biologist Bob Sloan conducted the delineation of potential Corps “waters of the United States,” CCC and RWQCB “waters of the State,” and CDFW jurisdictional areas on the study area in May 2016. The delineation followed the routine methodology as detailed in the *Corps of Engineers Wetlands Delineation Manual* (Environmental Laboratory 1987) and refined in the *Regional Supplement to the Corps of Engineers Wetland Delineation Manual: Arid West Region* (Version 2.0; U.S. Army Corps of Engineers 2008).

The *Classification of Wetlands and Deepwater Habitats of the United States* (Cowardin 1979) and *Wetlands of the Central and Southern California Coast and Coastal Watershed: A Methodology for Their Classification* (Ferren et al. 1995) were also utilized to assist in characterizing on-site wetlands, other waters, and other potential jurisdictional areas. In addition, KMA reviewed recent and historical aerial photographs of the study area (ESRI, Google Earth), the U.S. Geological Survey (USGS) Oceano, California 7.5-minute topographic quadrangle (USGS 1993), the *Soil Survey for San Luis Obispo County, Coastal Part, California* (National Resources Conservation Service), and the Hydric Soils List for San Luis Obispo County, California to analyze the nature and extent of potential jurisdictional areas on the site.

All potential waters of the U.S. within the study area were mapped based on the presence of positive indicators for hydrophytic vegetation, hydric soils and wetland hydrology for wetlands, and presence of an OHWM pursuant to Corps regulations (33 CFR 328.3 and 33 CFR 328.4) for other waters. The final determination of potential waters of the U.S. within the site was based on the presence of three parameter wetlands with hydrologic connectivity to a TNW or RPW. CDFW jurisdiction was determined based on the extent of the bed, bank, and associated riparian vegetation of drainages within the project area. The presence of a single wetland parameter, such as a predominance of wetland plants and/or the presence of hydric soils or hydrology indicators was employed to determine the extent of CCC jurisdiction under the California Coastal Act.

Data observation points were placed in representative potential wetland features and adjacent upland areas to characterize the boundaries of federal and State jurisdiction (i.e., identify the wetland edge). This examination utilized the Arid West wetland data forms to characterize the presence or absence of wetland criteria on-site. Information recorded at each data point location included plant species composition (to determine the presence/absence of hydrophytic vegetation), presence/absence of indicators of wetland hydrology, and in areas containing potential wetland habitat, indicators of hydric soils in accordance with *Field Indicators of Hydric Soils in the United States* (U.S. Department of Agriculture, Natural Resources Conservation Service 2006). A soil pit was excavated at each data observation point to examine the soil for positive indicators of hydric soils and wetland hydrology. Soil pits were excavated to a depth of 12-16 inches during the delineation. Hydric soils were presumed absent in areas devoid of hydrophytic vegetation and lack of direct observation of any hydrologic indicators. Evidence of wetland hydrology was evaluated in the field, based on presence or absence of observable indicators, such as saturated soils in the upper 18 inches and the presence of oxidized rhizospheres. Colors of moist soils and redoximorphic features were compared with the Munsell® soil color chart and recorded on wetland determination data forms.

A data point was considered to be within a Corps-defined wetland (an “in” point) if the area contained all three wetland parameters (i.e., criteria), which included a dominance of wetland plant

species, positive wetland hydrology indicators, and presence of hydric soil indicators. If one or more of these parameters was not met, the area was considered to not be within a Corps-defined wetland. Areas containing only one of the wetland criteria, such as the predominance of hydrophytes (i.e.: greater than 50% of wetland plants), positive indicators of hydric soils, or wetland hydrology were sufficient to meet the CCC/County LCP one parameter wetland criterion.

3.1 Jurisdictional Mapping

Federal and State jurisdictional features including tops of banks, OWHMs (per the *Field Guide to the Identification of the Ordinary High Water Mark (OHWM) in the Arid West Region*), extent of hydric vegetation, culvert inlets and outlets, and adjacent or in-stream wetland boundaries were mapped where present during the field investigation, using a Trimble Geo XH 6000 Global Positioning System (GPS) unit capable of decimeter accuracy. Jurisdictional polygons were plotted on an aerial photograph of the project area. Perimeters of jurisdictional areas were mapped at the interface between jurisdictional indicators and dominant upland characteristics.

4.0 RESULTS

4.1 Summary

Wetland and riparian habitats were identified and mapped along the western and southern portion of the study area. Features observed included Corps (or USACE) wetland waters, CDFW/RWQCB top of bank and limits of riparian habitat, and CCC wetland ESHA and riparian ESHA boundaries. Three sample points were established along a transect located on the western edge of the study area to characterize the nature of the site. Two additional data points were situated on the southern edge of the site to riparian habitat near the study area growing on the Arroyo Grande Creek levee. Observations noted at data points are summarized below. Additional sample points were considered unnecessary due to the clearly defined and developed conditions within the fenced facility, the dominant cover of willow trees outside the fence, and the levee that separates the southern edge of the site from Arroyo Grande Creek.

Please refer to Figures 1 and 2 for site location information and study area boundaries. Figure 3 is a soils map illustrating the soil map units present in the area, and Figure 4 is the wetland delineation map, which identifies data point locations and illustrates the extent of Corps, RWQCB, CDFW, and CCC jurisdictional areas onsite. Appendix A contains the Wetland Determination Data Forms, and Appendix B provides a photo plate with representative photographs of the study area. The following provides a summary of observations made at each data point.

Data Point #1 documents conditions at the western portion of the site, at the fenceline within the active portion of the Facility. The area consisted of bare soils and base rock with little to no vegetative. Immediately adjacent to the fence were planted sycamore and oak trees, with small inclusions of willow and native vines at the edge of the sample area. This point contained bare sandy clay fill soils, with gravels and some larger cobbles also present. The soil did not meet the hydric soil criteria. The point location is within the 100-year flood zone, but did not exhibit any positive indicators of wetland hydrology.

Data Point #2 documents conditions at the top of a small earthen berm that generally forms the top of bank of the wetland associated with the Oceano Lagoon system, including a small roadside channel along Aloha Place. Vegetative cover consisted of a dense canopy of arroyo willows and

vines (creek Clematis and blackberry) rooted in the riparian area behind the planted sycamore trees. This point contained a layer of leaf litter above dry, single grain sand. No hydric soil indicators were observed, and therefore, did not meet the hydric soil criterion. The location could potentially flood under extreme ponding conditions in the Oceano Lagoon following large storm events, but did not exhibit any evidence of wetland hydrology during the investigation.

Data Point #3 documents conditions within the bottomlands associated with the Oceano Lagoon including hydrologic input from the small roadside channel along Aloha Place. Vegetative cover consisted of a dense canopy of arroyo willows and vines rooted in the riparian area, and a small amount of California bulrush in the lowest portion of the channel. This point contained a layer of leaf litter above moist sandy loam and sandy clay soils, with faint redoximorphic features present in the lower horizon. The soil did not meet any hydric criteria as described in the Arid West Manual, but is assumed to function as a hydric soil due to location, vegetation, prolonged saturation and adjacency to ponded water. The location contained standing water within the sample area, and is expected to contain flowing and ponded water on a seasonal basis.

Data Point #4 documents conditions on the southern side of the facility, between the fenceline and the outer edge of the levee berm. Vegetative cover consisted of a mixed canopy of Monterey cypress and arroyo willow. This point contained dry sandy and clayey soils with gravels (likely associated with the construction of the levee), and did not meet any hydric criteria. The location is within the 100-year flood zone, but did not exhibit any evidence of ponding or flowing water during the investigation, and therefore, no positive indicators of wetland hydrology were present.

Data Point #5 documents conditions within the facility fence, on the southern side of the facility, opposite Data Point 4. No vegetation was rooted in or near the data point. Vegetative cover consisted primarily of Monterey cypress canopy with a small amount of arroyo willow branches hanging over the fence. This point contained dry sandy clay fill soils with gravels and cobbles, and did not meet any hydric criteria. The location is within the 100-year flood zone, but did not exhibit any positive evidence of wetland hydrology.

4.2 Site Overview

The facility is located at 1600 Aloha Place, between the Oceano Airport to the north and Arroyo Grande Creek to the south. Residential development is located to the north and northwest, and the Pacific Ocean and coastal dunes are located to the west. The site is relatively flat ranging between 10 and 15 feet above mean sea level, and is situated in the northwestern portion of the U.S.G.S. Oceano 7.5-minute topographic quadrangle. The fenced portion of the facility consists of developed areas including pavement, base rock, structures, and equipment storage areas associated with operation and maintenance of the facility. Small areas of landscape trees and shrubs, and two lawn areas are present around existing structures. The northern site boundary separating the site from the airport contains ornamental plantings of rosemary and arroyo willow for visual screening. Scattered occurrences of weedy annual plants are present along fence lines and stockpile areas. Landscape trees are also scattered throughout the site and along the margin of the facility. A roadside ditch along Aloha Place collects runoff from the surrounding neighborhood and airport, and directs it along the northern edge of the study area into the Oceano Lagoon and Meadow Creek system.

Areas outside the fence along the western and southern sides of the facility are dominated by native riparian habitat associated with the eastward extent of the confluence of Meadow Creek and Arroyo

Grande Creek. The construction of flood control structures including the levee and flood gate controlling the confluence of Meadow Creek and Arroyo Grande Creek has affected the historic flow regime in the area, creating the Oceano Lagoon and areas of ponded surface water to the northwest of the plant. Given shallow groundwater in the vicinity, arroyo willow riparian scrub is able to persist along the outside of the levee confining Arroyo Grande Creek as well as in topographic low areas surrounding the site. As shown on Figures 2 and 4, Arroyo Grande Creek is separated from the facility by a constructed levee and maintenance road.

The region is characterized as a Mediterranean climate with mild, wet winters and warm, dry summers. Due to the site's proximity to the Pacific Ocean, daily temperatures do not fluctuate as much as the County's interior north or east of the Santa Lucia Mountains. Average annual temperature is approximately 58 degrees Fahrenheit, and annual precipitation in the Oceano area is approximately 17 inches depending on location (Western Regional Climate Center and National Oceanic and Atmospheric Administration, 2016). Most of the rainfall occurs between November and March with a small amount attributed to coastal fog during the summer months.

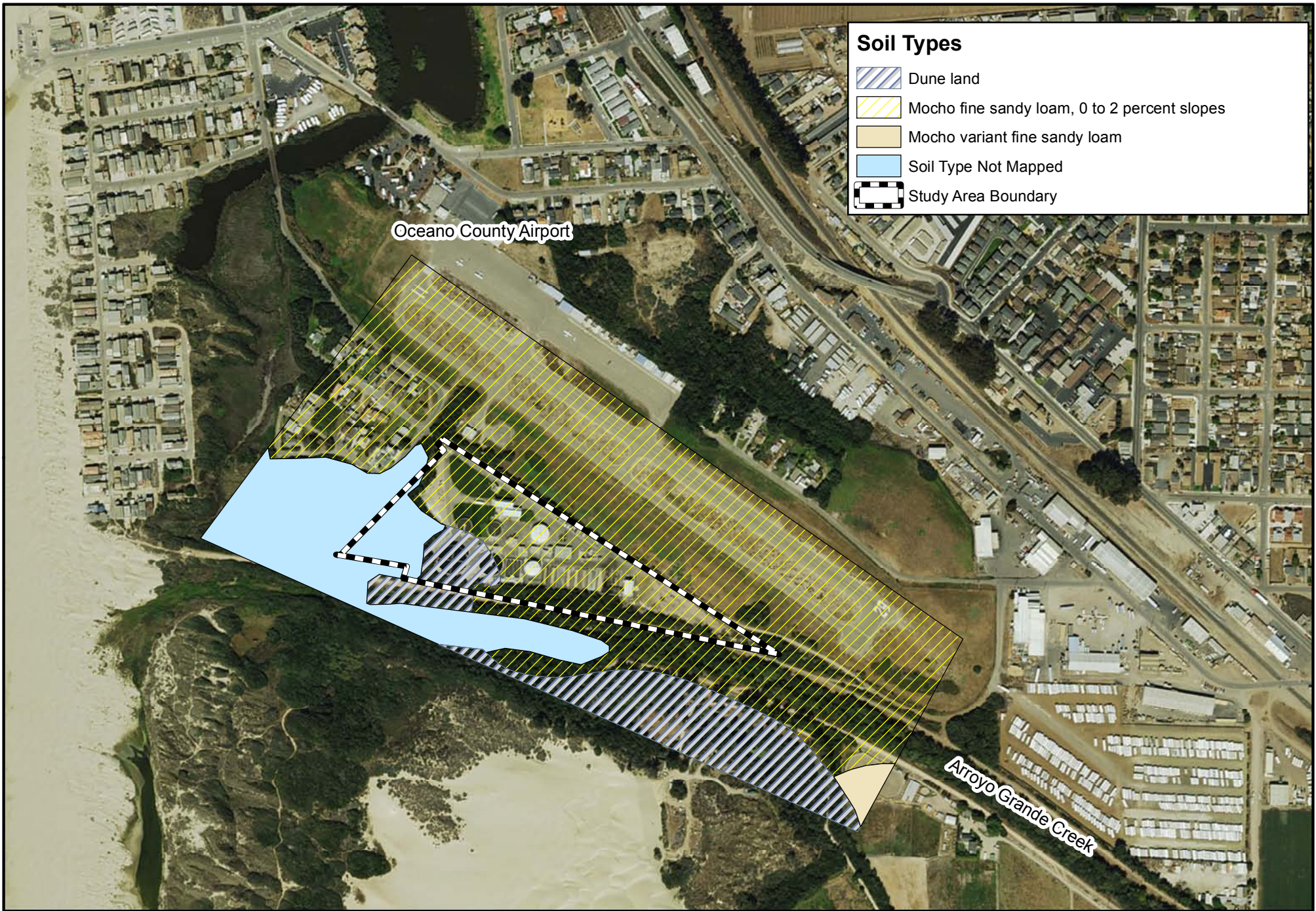
4.3 Vegetation

The developed portion of the facility does not contain any naturally occurring native vegetation and consists of pavement, concrete, structures, and treatment facilities including machinery used during daily operations. The riparian habitat located outside the fences along the southern and western sides are dominated by arroyo willow (*Salix lasiolepis*- FACW), California blackberry (*Rubus ursinus*- FAC), and virgin's bower or creek clematis (*Clematis ligusticifolia*- FAC), creating a dense cover over the ground surface. A row of planted western sycamore (*Platanus racemosa* - FAC) and coast live oak (*Quercus agrifolia* - UPL) trees are present along the western fenceline near the entrance. The investigation found an area of shallow ponded water containing California bulrush (*Schoenoplectus californicus*- OBL) along the western site boundary along Aloha Place (see Data Point 3). This area appears to be a remnant channel or topographic low area associated with the greater Arroyo Grande Creek and Meadow Creek confluence.

The northern fence line separating the site from the adjacent Oceano Airport contains a mix of planted rosemary (*Rosmarinus officinalis* - UPL), coast live oak, and arroyo willows, all planted as landscape trees and shrubs along the property boundary to aid in screening the plant from surrounding areas. The adjacent areas on airport property are dominated by annual non-native upland plants including slender wild oat (*Avena barbata* - UPL), perennial mustard (*Hirschfeldia incana* - UPL), and Italian thistle (*Carduus pycnocephalus* - UPL). Patches of arroyo willow are also present in the general area in topographic low points persisting due to shallow groundwater.

4.4 Soils

The NRCS identified two soil map units as occurring on the study area, which included Mocho fine sandy loam, 0-2 percent slopes, and Dune land. The two soil map units are not listed as hydric soils by the NRCS California Hydric Soils List for San Luis Obispo County, although both can have hydric inclusions. The Mocho fine sandy loam is a well drained nearly level soil on alluvial fans and plains. Dune land consists of hilly areas along the coast that are composed of sand-sized particles that shift with the wind.



The upper 12-16 inches of the soil profile were examined at five sample points to determine presence or absence of positive indicators for hydric soils, and to determine if the soil map units mapped and described by the NRCS were consistent with observed soil characteristics. Below are brief characterizations of the two soil map units identified within the study area.

Mocho fine sandy loam, 0-2 percent slopes, is a very deep, excessively drained, nearly level soil found on alluvial fans and plains, formed in alluvium weathered from sedimentary rocks. The surface layer is typically brown (10YR 4/3 to 5/3 moist) fine sandy loam approximately 18 inches thick. Underlying material is pale brown (10YR 6/3 moist) silty clay loam to a depth of approximately 45 inches. The profile is moderately alkaline and calcareous. Permeability of Mocho fine sandy loam is moderately slow, and available water capacity is moderate. Surface runoff is slow, with slight to moderate water erosion hazard and moderate hazard of soil blowing.

Dune Land soils are found on beach dunes and hilly areas along the coast, and consist of sand-sized particles that shift in the wind. Most areas are unvegetated, but stabilized areas may contain sagebrush or beachgrass. This gently rolling soil is considered excessively drained due to rapid permeability and low water capacity. Surface runoff is slow, and the hazard of soil blowing is high.

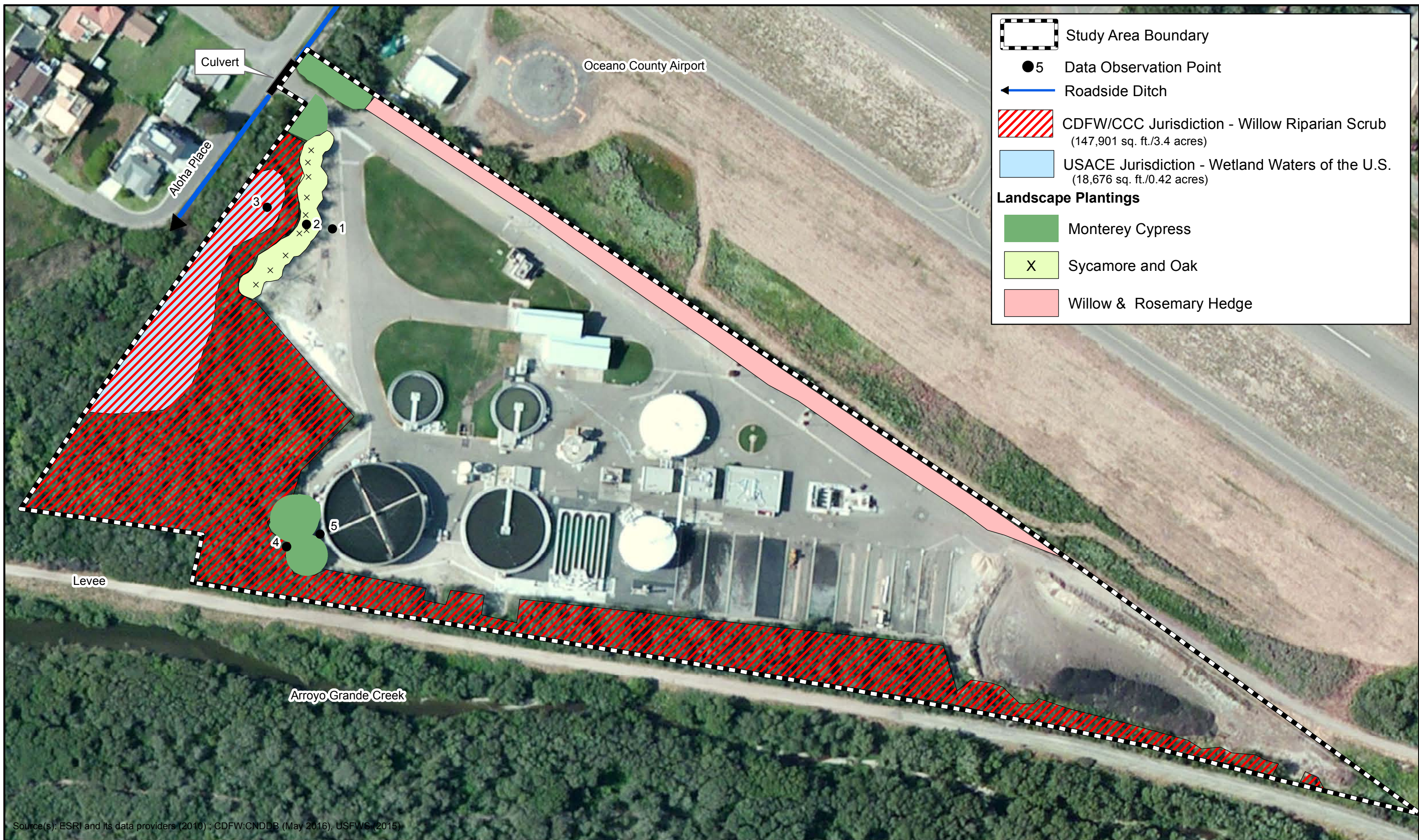
4.5 Hydrology

The entire project site is within the mapped Flood Hazard designation for Arroyo Grande Creek; however, the wastewater treatment facility is constructed on fill material estimated at six to ten feet thick. No wetland or riparian habitats were found within the fenced portion of the facility. The eastern extent of Meadow Creek and the Oceano Lagoon are located west-northwest of the site. A small roadside ditch along Aloha Place collects runoff from portions of the Oceano Airport and neighborhoods/streets along the northern edge of the site. Arroyo Grande Creek is located over 100 feet south of the southern property boundary, and the active creek channel is separated from the facility by a chain link fence, and a constructed levee and maintenance road.

Arroyo Grande Creek, Meadow Creek and the Oceano Lagoon, and the roadside ditch have connectivity to the Pacific Ocean; and therefore fall within the jurisdiction of the Corps pursuant to Section 404 of the Clean Water Act, the RWQCB under Section 401 of the Clean Water Act, and the CDFW under California Fish and Game Code Section 1600 et seq.

4.6 Discussion

The investigation found wetland and riparian habitat associated with the Aloha Place roadside drainage ditch, Meadow Creek and Oceano Lagoon on the northwestern portion of the study area. Riparian habitat (arroyo willow riparian scrub) was also observed growing on the Arroyo Grande Creek levee along the southern edge of the facility. Based on the presence of defined bed and bank and/or ordinary high water mark features, hydrologic connectivity with Meadow Creek and the Oceano Lagoon and Arroyo Grande Creek and the Pacific Ocean, in concert with a predominance of hydrophytic vegetation and hydric soils conditions, it is expected that the wetland waters of the U.S. shown on Figure 4 would fall under the jurisdiction of the Corps pursuant to Section 404 of the Clean Water Act. The RWQCB and CDFW would be expected to take jurisdiction over all wetland and riparian areas shown on Figure 4. Similarly, all wetland and riparian habitats shown on Figure 4 would qualify as ESHA pursuant to the California Coastal Act.



Source(s): ESRI and its data providers (2010) ; CDFW:CNDDDB (May 2016), USFWS (2015)

It is important to note that the no wetland or riparian areas were identified within the active operations area of the plant including the area proposed for the Redundancy project. All of the jurisdictional features identified during this investigation and listed in Table 1 below are located outside the fenced and developed portion of the site.

Table 1. Jurisdictional Areas and ESHA Pursuant to California Coastal Act.

Jurisdictional Feature	Responsible Agency	Area (square feet / acre)
Wetland Waters of the U.S. (Wetland ESHA)	USACE RWQCB CDFW CCC	18,676 / 0.4
Willow Riparian Scrub (Riparian ESHA)	RWQCB CDFW CCC	147,901 / 3.4

The entire arroyo willow-dominated area shown on Figure 4 is associated with the Meadow Creek and Arroyo Grande Creek confluence, and was mapped by the National Wetlands Inventory (NWI) as Freshwater Forested/Shrub Wetland (please refer to Figure 2). Per the USFWS *Classification of Wetlands and Deep Water Habitats of the United States* (Cowardin et al., 1979), the riparian area would be classified as palustrine shrub wetland, and the entire willow dominated area would meet the California Coastal Act's definition of riparian ESHA. Although the willow habitat growing on the levee berm along the south side of the facility is not mapped as wetland habitat by the NWI, the vegetation appears tied to the hydrology of Arroyo Grande Creek and the shallow groundwater in the region. Therefore, this area would also constitute riparian ESHA in addition to being subject to RWQCB and CDFW permitting requirements.

5.0 CONCLUSION

This report identifies potential federal and state jurisdictional boundaries within the study area shown on Figure 4, as determined by KMA during field investigations conducted in May 2016. Waters of the U.S. and State of California identified within this report are subject to verification by federal and state agencies. As shown on Figure 4, no areas considered to be potentially jurisdictional Waters of the U.S. under the Clean Water Act, or that fall under the jurisdiction of the RWQCB and CDFW as waters of the state, or that constitute wetland or riparian ESHA under the Coastal Act, are present within the existing facility, but are rooted outside the fenceline with occasional overhanging branches extending over the fence.

The delineation established clear boundaries for federal and state jurisdictional areas along the southern and western edges of the study area, and show that current operations as well as the proposed Redundancy Project would not directly impact jurisdictional areas. As such, project activities occurring within the existing facility footprint would not require permit authorization under Sections 404 and 401 of the Clean Water Act, or under Section 1600 et seq. of the California Fish and Game Code.

As stated above, the wetland and riparian habitats delineated on Figure 4 qualify as ESHA pursuant to the California Coastal Act. Sections 30240 (a) and (b) of the Coastal Act state: "Environmentally

sensitive habitat areas shall be protected against any significant disruption of habitat values, and only uses dependent on such resources shall be allowed within such areas. (b) Development in areas adjacent to environmentally sensitive habitat areas and parks and recreation areas shall be sited and designed to prevent impacts which would significantly degrade such areas, and shall be compatible with the continuance of such habitat areas."

In addition, the San Luis Obispo County Local Coastal Program Policy Document includes the following Coastal Plan Policy on Page 6-5, under Policies For Environmentally Sensitive Habitats: Policy 2: Permit Requirement - *As a condition of permit approval, the applicant is required to demonstrate that there will be no significant impact on sensitive habitats and that proposed development or activities will be consistent with the biological continuance of the habitat. This shall include an evaluation of the site prepared by a qualified professional which provides: a) the maximum feasible mitigation measures (where appropriate), and b) a program for monitoring and evaluating the effectiveness of mitigation measures where appropriate.*

As proposed, the project would be constructed on existing fill within the actively managed facility, which is devoid of ESHA. The project would maintain a setback from areas identified as ESHA that is consistent with current and ongoing facility activities. In addition, the project would not disrupt or degrade ESHA within or adjacent to the site. The separation of the site and ESHA established by the fenceline and actively maintained vegetation management zone between the fence and edge of riparian canopy constitutes an appropriate buffer based on the ongoing activities, and on existing setbacks from adjacent residential and airport uses. An increased setback requirement for the proposed project from identified ESHA within the existing facility would not provide any significant benefit to these resources, and would be inconsistent with current and ongoing uses on the site and in the surrounding area.

The jurisdictional results presented in this report are subject to review by federal and state agencies and the County of San Luis Obispo during the project review process. The involved regulatory agencies may request a site visit to verify the conditions and jurisdictional areas identified in this report, and will either approve or request amendments to the report based on their findings. KMA advises all interested parties to treat the information contained herein as preliminary pending written verification of jurisdictional boundaries by the reviewing agencies.

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APPENDIX A

Wetland Determination Data Forms



WETLAND DETERMINATION DATA FORM – Arid West Region

Project/Site: Wastewater Facility Redundancy Project City/County: San Luis Obispo Sampling Date: 5/18/16
 Applicant/Owner: South San Luis Obispo County Sanitation District State: CA Sampling Point: 1
 Investigator(s): Merk, Sloan Section, Township, Range: _____
 Landform (hillslope, terrace, etc.): graded Local relief (concave, convex, none): none Slope (%): 2
 Subregion (LRR): C Lat: _____ Long: _____ Datum: _____
 Soil Map Unit Name: Mocho fine sandy loam NWI classification: Upland

Are climatic / hydrologic conditions on the site typical for this time of year? Yes ☒ No _____ (If no, explain in Remarks.)
 Are Vegetation ☒, Soil ☒, or Hydrology _____ significantly disturbed? Are "Normal Circumstances" present? Yes _____ No ☒
 Are Vegetation _____, Soil _____, or Hydrology _____ naturally problematic? (If needed, explain any answers in Remarks.)

SUMMARY OF FINDINGS – Attach site map showing sampling point locations, transects, important features, etc.

Hydrophytic Vegetation Present? Yes <input checked="" type="checkbox"/> No _____	Is the Sampled Area within a Wetland? Yes _____ No <input checked="" type="checkbox"/>
Hydric Soil Present? Yes _____ No <input checked="" type="checkbox"/>	
Wetland Hydrology Present? Yes _____ No <input checked="" type="checkbox"/>	
Remarks: Data Point located at edge of fence in fill soils under landscape tree canopy. Point documents conditions at edge of developed portion of the facility.	

VEGETATION – Use scientific names of plants.

Tree Stratum (Plot size: <u>20 ft circle</u>)	Absolute % Cover	Dominant Species?	Indicator Status	Dominance Test worksheet: Number of Dominant Species That Are OBL, FACW, or FAC: <u>3</u> (A) Total Number of Dominant Species Across All Strata: <u>3</u> (B) Percent of Dominant Species That Are OBL, FACW, or FAC: <u>100</u> (A/B)
1. <u>Platanus racemosa - planted</u>	<u>25</u>	<u>Y</u>	<u>FAC</u>	
2. <u>Salix lasiolepis</u>	<u>5</u>	<u>N</u>	<u>FACW</u>	
3. _____	_____	_____	_____	
4. _____	_____	_____	_____	
<u>30</u> = Total Cover				
Sapling/Shrub Stratum (Plot size: _____)				Prevalence Index worksheet: Total % Cover of: _____ Multiply by: _____ OBL species _____ x 1 = _____ FACW species _____ x 2 = _____ FAC species _____ x 3 = _____ FACU species _____ x 4 = _____ UPL species _____ x 5 = _____ Column Totals: _____ (A) _____ (B) Prevalence Index = B/A = _____
1. _____	_____	_____	_____	
2. _____	_____	_____	_____	
3. _____	_____	_____	_____	
4. _____	_____	_____	_____	
5. _____	_____	_____	_____	
_____ = Total Cover				
Herb Stratum (Plot size: _____)				Hydrophytic Vegetation Indicators: <input checked="" type="checkbox"/> Dominance Test is >50% <input type="checkbox"/> Prevalence Index is ≤3.0 ¹ <input type="checkbox"/> Morphological Adaptations ¹ (Provide supporting data in Remarks or on a separate sheet) <input type="checkbox"/> Problematic Hydrophytic Vegetation ¹ (Explain)
1. _____	_____	_____	_____	
2. _____	_____	_____	_____	
3. _____	_____	_____	_____	
4. _____	_____	_____	_____	
5. _____	_____	_____	_____	
6. _____	_____	_____	_____	
7. _____	_____	_____	_____	
8. _____	_____	_____	_____	
_____ = Total Cover				
Woody Vine Stratum (Plot size: <u>20 ft circle</u>)				¹ Indicators of hydric soil and wetland hydrology must be present, unless disturbed or problematic.
1. <u>Rubus ursinus</u>	<u>2</u>	<u>Y</u>	<u>FAC</u>	
2. <u>Clematis ligustifolia</u>	<u>2</u>	<u>Y</u>	<u>FAC</u>	
<u>4</u> = Total Cover				
% Bare Ground in Herb Stratum <u>66</u> % Cover of Biotic Crust _____				Hydrophytic Vegetation Present? Yes <input checked="" type="checkbox"/> No _____

Remarks:
Dominant vegetation consists of a planted row of sycamore along the facility fence. Naturally occurring willows and vines extend from and are rooted in the riparian area behind the planted trees. None of the species listed are rooted inside the fence. The fenceline area is maintained regularly to remove encroaching vegetation.

Sampling Point: 1

HYDROLOGY

US Army Corps of Engineers

WETLAND DETERMINATION DATA FORM – Arid West Region

Project/Site: Wastewater Facility Redundancy Project City/County: San Luis Obispo Sampling Date: 5/18/16
 Applicant/Owner: South San Luis Obispo County Sanitation District State: CA Sampling Point: 2
 Investigator(s): Merk, Sloan Section, Township, Range: _____
 Landform (hillslope, terrace, etc.): bank top above channel Local relief (concave, convex, none): none Slope (%): 1
 Subregion (LRR): C Lat: _____ Long: _____ Datum: _____
 Soil Map Unit Name: Mocho fine sandy loam NWI classification: Upland

Are climatic / hydrologic conditions on the site typical for this time of year? Yes ☒ No _____ (If no, explain in Remarks.)
 Are Vegetation ☒, Soil ☒, or Hydrology _____ significantly disturbed? Are "Normal Circumstances" present? Yes _____ No ☒
 Are Vegetation _____, Soil _____, or Hydrology _____ naturally problematic? (If needed, explain any answers in Remarks.)

SUMMARY OF FINDINGS – Attach site map showing sampling point locations, transects, important features, etc.

Hydrophytic Vegetation Present? Yes <input checked="" type="checkbox"/> No _____	Is the Sampled Area within a Wetland? Yes _____ No <input checked="" type="checkbox"/>
Hydric Soil Present? Yes _____ No <input checked="" type="checkbox"/>	
Wetland Hydrology Present? Yes _____ No <input checked="" type="checkbox"/>	
Remarks: Data Point located on top of bank along roadside channel. Point documents conditions at top of bank of small roadside channel that connects to the extreme eastern end of the Oceano Lagoon.	

VEGETATION – Use scientific names of plants.

Tree Stratum (Plot size: <u>20 ft circle</u>)	Absolute % Cover	Dominant Species?	Indicator Status	Dominance Test worksheet: Number of Dominant Species That Are OBL, FACW, or FAC: <u>4</u> (A) Total Number of Dominant Species Across All Strata: <u>4</u> (B) Percent of Dominant Species That Are OBL, FACW, or FAC: <u>100</u> (A/B)
1. <u>Platanus racemosa - planted</u>	<u>25</u>	<u>Y</u>	<u>FAC</u>	
2. <u>Salix lasiolepis</u>	<u>45</u>	<u>Y</u>	<u>FACW</u>	
3. _____	_____	_____	_____	
4. _____	_____	_____	_____	
<u>70</u> = Total Cover				
Sapling/Shrub Stratum (Plot size: _____)				
1. _____	_____	_____	_____	Prevalence Index worksheet: Total % Cover of: _____ Multiply by: _____ OBL species _____ x 1 = _____ FACW species _____ x 2 = _____ FAC species _____ x 3 = _____ FACU species _____ x 4 = _____ UPL species _____ x 5 = _____ Column Totals: _____ (A) _____ (B) Prevalence Index = B/A = _____
2. _____	_____	_____	_____	
3. _____	_____	_____	_____	
4. _____	_____	_____	_____	
5. _____	_____	_____	_____	
_____ = Total Cover				
Herb Stratum (Plot size: _____)				
1. _____	_____	_____	_____	Hydrophytic Vegetation Indicators: <input checked="" type="checkbox"/> Dominance Test is >50% ____ Prevalence Index is ≤3.0 ¹ ____ Morphological Adaptations ¹ (Provide supporting data in Remarks or on a separate sheet) ____ Problematic Hydrophytic Vegetation ¹ (Explain) ¹ Indicators of hydric soil and wetland hydrology must be present, unless disturbed or problematic.
2. _____	_____	_____	_____	
3. _____	_____	_____	_____	
4. _____	_____	_____	_____	
5. _____	_____	_____	_____	
6. _____	_____	_____	_____	
7. _____	_____	_____	_____	
8. _____	_____	_____	_____	
_____ = Total Cover				
Woody Vine Stratum (Plot size: <u>20 ft circle</u>)				
1. <u>Rubus ursinus</u>	<u>20</u>	<u>Y</u>	<u>FAC</u>	Hydrophytic Vegetation Present? Yes <input checked="" type="checkbox"/> No _____
2. <u>Clematis ligustifolia</u>	<u>25</u>	<u>Y</u>	<u>FAC</u>	
<u>45</u> = Total Cover				
% Bare Ground in Herb Stratum <u>0</u> % Cover of Biotic Crust <u>0</u>				

Remarks:
Dominant vegetation consists of naturally occurring willows and vines rooted in the riparian area behind the planted Sycamore trees. Dense leaf litter from both natural fall and maintenance pruning along fence zone covers ground surface.

SOIL

Sampling Point: 2

Profile Description: (Describe to the depth needed to document the indicator or confirm the absence of indicators.)

Depth (inches)	Matrix		Redox Features				Texture	Remarks
	Color (moist)	%	Color (moist)	%	Type ¹	Loc ²		
0-2							OM	leaf litter
2-8	10YR3/3	100					sand	dry, single grain, many roots
8-16	10YR3/3	100					sand	dry, single grain, few roots

¹Type: C=Concentration, D=Depletion, RM=Reduced Matrix, CS=Covered or Coated Sand Grains. ²Location: PL=Pore Lining, M=Matrix.

Hydric Soil Indicators: (Applicable to all LRRs, unless otherwise noted.)

- ☐ Histosol (A1)
- ☐ Histic Epipedon (A2)
- ☐ Black Histic (A3)
- ☐ Hydrogen Sulfide (A4)
- ☐ Stratified Layers (A5) (LRR C)
- ☐ 1 cm Muck (A9) (LRR D)
- ☐ Depleted Below Dark Surface (A11)
- ☐ Thick Dark Surface (A12)
- ☐ Sandy Mucky Mineral (S1)
- ☐ Sandy Gleyed Matrix (S4)

- ☐ Sandy Redox (S5)
- ☐ Stripped Matrix (S6)
- ☐ Loamy Mucky Mineral (F1)
- ☐ Loamy Gleyed Matrix (F2)
- ☐ Depleted Matrix (F3)
- ☐ Redox Dark Surface (F6)
- ☐ Depleted Dark Surface (F7)
- ☐ Redox Depressions (F8)
- ☐ Vernal Pools (F9)

Indicators for Problematic Hydric Soils³:

- ☐ 1 cm Muck (A9) (LRR C)
- ☐ 2 cm Muck (A10) (LRR B)
- ☐ Reduced Vertic (F18)
- ☐ Red Parent Material (TF2)
- ☐ Other (Explain in Remarks)

³Indicators of hydrophytic vegetation and wetland hydrology must be present, unless disturbed or problematic.

Restrictive Layer (if present):

Type: _____

Depth (inches): _____

Hydric Soil Present? Yes _____ No ☒

Remarks:

Dry sand on berm above small channel. No hydric indicators noted.

HYDROLOGY

Wetland Hydrology Indicators:

Primary Indicators (minimum of one required; check all that apply)

- ☐ Surface Water (A1)
- ☐ High Water Table (A2)
- ☐ Saturation (A3)
- ☐ Water Marks (B1) (Nonriverine)
- ☐ Sediment Deposits (B2) (Nonriverine)
- ☐ Drift Deposits (B3) (Nonriverine)
- ☐ Surface Soil Cracks (B6)
- ☐ Inundation Visible on Aerial Imagery (B7)
- ☐ Water-Stained Leaves (B9)

- ☐ Salt Crust (B11)
- ☐ Biotic Crust (B12)
- ☐ Aquatic Invertebrates (B13)
- ☐ Hydrogen Sulfide Odor (C1)
- ☐ Oxidized Rhizospheres along Living Roots (C3)
- ☐ Presence of Reduced Iron (C4)
- ☐ Recent Iron Reduction in Tilled Soils (C6)
- ☐ Thin Muck Surface (C7)
- ☐ Other (Explain in Remarks)

Secondary Indicators (2 or more required)

- ☐ Water Marks (B1) (Riverine)
- ☐ Sediment Deposits (B2) (Riverine)
- ☐ Drift Deposits (B3) (Riverine)
- ☐ Drainage Patterns (B10)
- ☐ Dry-Season Water Table (C2)
- ☐ Crayfish Burrows (C8)
- ☐ Saturation Visible on Aerial Imagery (C9)
- ☐ Shallow Aquitard (D3)
- ☐ FAC-Neutral Test (D5)

Field Observations:

Surface Water Present? Yes _____ No ☒ Depth (inches): _____

Water Table Present? Yes _____ No ☒ Depth (inches): _____

Saturation Present? Yes _____ No ☒ Depth (inches): _____
(includes capillary fringe)

Wetland Hydrology Present? Yes _____ No ☒

Describe Recorded Data (stream gauge, monitoring well, aerial photos, previous inspections), if available:

Remarks:

Top of berm above channel could flood under extremely high flow conditions, but does not normally pond water or conduct flows. No evidence of hydrology observed.

WETLAND DETERMINATION DATA FORM – Arid West Region

Project/Site: Wastewater Facility Redundancy Project City/County: San Luis Obispo Sampling Date: 5/18/16
 Applicant/Owner: South San Luis Obispo County Sanitation District State: CA Sampling Point: 3
 Investigator(s): Merk, Sloan Section, Township, Range: _____
 Landform (hillslope, terrace, etc.): channel bottom Local relief (concave, convex, none): concave Slope (%): 1
 Subregion (LRR): C Lat: _____ Long: _____ Datum: _____
 Soil Map Unit Name: Mocho fine sandy loam NWI classification: Upland

Are climatic / hydrologic conditions on the site typical for this time of year? Yes ☒ No _____ (If no, explain in Remarks.)
 Are Vegetation _____, Soil _____, or Hydrology _____ significantly disturbed? Are "Normal Circumstances" present? Yes ☒ No _____
 Are Vegetation _____, Soil _____, or Hydrology _____ naturally problematic? (If needed, explain any answers in Remarks.)

SUMMARY OF FINDINGS – Attach site map showing sampling point locations, transects, important features, etc.

Hydrophytic Vegetation Present? Yes <input checked="" type="checkbox"/> No _____	Is the Sampled Area within a Wetland? Yes _____ No _____
Hydric Soil Present? Yes _____ No _____	
Wetland Hydrology Present? Yes <input checked="" type="checkbox"/> No <input checked="" type="checkbox"/>	
Remarks: Data Point located at bottom edge of channel. Point documents conditions in the channel, including shallow ponding.	

VEGETATION – Use scientific names of plants.

Tree Stratum (Plot size: <u>20 ft circle</u>)	Absolute % Cover	Dominant Species?	Indicator Status	Dominance Test worksheet: Number of Dominant Species That Are OBL, FACW, or FAC: <u>5</u> (A) Total Number of Dominant Species Across All Strata: <u>5</u> (B) Percent of Dominant Species That Are OBL, FACW, or FAC: <u>100</u> (A/B)
1. <u>Platanus racemosa - planted</u>	<u>5</u>	<u>N</u>	<u>FAC</u>	
2. <u>Salix lasiolepis</u>	<u>65</u>	<u>Y</u>	<u>FACW</u>	
3. _____	_____	_____	_____	
4. _____	_____	_____	_____	
<u>70</u> = Total Cover				
Sapling/Shrub Stratum (Plot size: _____)				
1. _____	_____	_____	_____	Prevalence Index worksheet: Total % Cover of: _____ Multiply by: _____ OBL species _____ x 1 = _____ FACW species _____ x 2 = _____ FAC species _____ x 3 = _____ FACU species _____ x 4 = _____ UPL species _____ x 5 = _____ Column Totals: _____ (A) _____ (B) Prevalence Index = B/A = _____
2. _____	_____	_____	_____	
3. _____	_____	_____	_____	
4. _____	_____	_____	_____	
5. _____	_____	_____	_____	
_____ = Total Cover				
Herb Stratum (Plot size: _____)				
1. <u>Schoenoplectus californicus</u>	<u>5</u>	<u>Y</u>	<u>OBL</u>	Hydrophytic Vegetation Indicators: <input checked="" type="checkbox"/> Dominance Test is >50% _____ Prevalence Index is ≤3.0 ¹ _____ Morphological Adaptations ¹ (Provide supporting data in Remarks or on a separate sheet) _____ Problematic Hydrophytic Vegetation ¹ (Explain) ¹ Indicators of hydric soil and wetland hydrology must be present, unless disturbed or problematic.
2. _____	_____	_____	_____	
3. _____	_____	_____	_____	
4. _____	_____	_____	_____	
5. _____	_____	_____	_____	
6. _____	_____	_____	_____	
7. _____	_____	_____	_____	
8. _____	_____	_____	_____	
<u>5</u> = Total Cover				
Woody Vine Stratum (Plot size: <u>20 ft circle</u>)				
1. <u>Rubus ursinus</u>	<u>45</u>	<u>Y</u>	<u>FAC</u>	Hydrophytic Vegetation Present? Yes <input checked="" type="checkbox"/> No _____
2. <u>Clematis ligustifolia</u>	<u>50</u>	<u>Y</u>	<u>FAC</u>	
<u>95</u> = Total Cover				
% Bare Ground in Herb Stratum <u>0</u> % Cover of Biotic Crust <u>0</u>				

Remarks:

Dominant vegetation consists of naturally occurring willows and vines rooted in the riparian area behind the planted sycamore trees. Bulrush is rooted in lowest portion of channel in saturated soils. Dense leaf litter from natural fall covers ground surface.

SOIL

Sampling Point: 3

Profile Description: (Describe to the depth needed to document the indicator or confirm the absence of indicators.)

Depth (inches)	Matrix		Redox Features				Texture	Remarks
	Color (moist)	%	Color (moist)	%	Type ¹	Loc ²		
0-3							OM	leaf litter
3-7	10YR3/2	100					sandyloam	moist, few large roots
7-14	10YR3/3	95	10YR4/4	5	rm	m	scloam	moist, faint mottles

¹Type: C=Concentration, D=Depletion, RM=Reduced Matrix, CS=Covered or Coated Sand Grains. ²Location: PL=Pore Lining, M=Matrix.

Hydric Soil Indicators: (Applicable to all LRRs, unless otherwise noted.)

- ☐ Histosol (A1)
- ☐ Histic Epipedon (A2)
- ☐ Black Histic (A3)
- ☐ Hydrogen Sulfide (A4)
- ☐ Stratified Layers (A5) (LRR C)
- ☐ 1 cm Muck (A9) (LRR D)
- ☐ Depleted Below Dark Surface (A11)
- ☐ Thick Dark Surface (A12)
- ☐ Sandy Mucky Mineral (S1)
- ☐ Sandy Gleyed Matrix (S4)

- ☐ Sandy Redox (S5)
- ☐ Stripped Matrix (S6)
- ☐ Loamy Mucky Mineral (F1)
- ☐ Loamy Gleyed Matrix (F2)
- ☐ Depleted Matrix (F3)
- ☐ Redox Dark Surface (F6)
- ☐ Depleted Dark Surface (F7)
- ☐ Redox Depressions (F8)
- ☐ Vernal Pools (F9)

Indicators for Problematic Hydric Soils³:

- ☐ 1 cm Muck (A9) (LRR C)
- ☐ 2 cm Muck (A10) (LRR B)
- ☐ Reduced Vertic (F18)
- ☐ Red Parent Material (TF2)
- ☐ Other (Explain in Remarks)

³Indicators of hydrophytic vegetation and wetland hydrology must be present, unless disturbed or problematic.

Restrictive Layer (if present):

Type: _____
Depth (inches): _____

Hydric Soil Present? Yes ☒ No ☐

Remarks:

Lower horizon shows clay accumulation, faint redox, moist but not saturated soils. Due to location and vegetation, soil should be considered hydric.

HYDROLOGY

Wetland Hydrology Indicators:

Primary Indicators (minimum of one required; check all that apply)

- ☒ Surface Water (A1)
- ☒ High Water Table (A2)
- ☐ Saturation (A3)
- ☐ Water Marks (B1) (Nonriverine)
- ☐ Sediment Deposits (B2) (Nonriverine)
- ☐ Drift Deposits (B3) (Nonriverine)
- ☐ Surface Soil Cracks (B6)
- ☐ Inundation Visible on Aerial Imagery (B7)
- ☐ Water-Stained Leaves (B9)

- ☐ Salt Crust (B11)
- ☐ Biotic Crust (B12)
- ☐ Aquatic Invertebrates (B13)
- ☐ Hydrogen Sulfide Odor (C1)
- ☐ Oxidized Rhizospheres along Living Roots (C3)
- ☐ Presence of Reduced Iron (C4)
- ☐ Recent Iron Reduction in Tilled Soils (C6)
- ☐ Thin Muck Surface (C7)
- ☐ Other (Explain in Remarks)

Secondary Indicators (2 or more required)

- ☐ Water Marks (B1) (Riverine)
- ☐ Sediment Deposits (B2) (Riverine)
- ☐ Drift Deposits (B3) (Riverine)
- ☐ Drainage Patterns (B10)
- ☐ Dry-Season Water Table (C2)
- ☐ Crayfish Burrows (C8)
- ☐ Saturation Visible on Aerial Imagery (C9)
- ☐ Shallow Aquitard (D3)
- ☐ FAC-Neutral Test (D5)

Field Observations:

Surface Water Present? Yes ☒ No ☐ Depth (inches): 2
Water Table Present? Yes ☐ No ☒ Depth (inches): _____
Saturation Present? Yes ☐ No ☒ Depth (inches): _____
(includes capillary fringe)

Wetland Hydrology Present? Yes ☒ No ☐

Describe Recorded Data (stream gauge, monitoring well, aerial photos, previous inspections), if available:

Remarks:

Standing water present at edge of plot in lowest portion of channel, but no saturation noted at pit location. No evidence of flow or ponding at soil pit location due to dense cover of leaf litter, but area is expected to contain flows and ponding during normal rainfall events.

WETLAND DETERMINATION DATA FORM – Arid West Region

Project/Site: Wastewater Facility Redundancy Project City/County: San Luis Obispo Sampling Date: 5/18/16
 Applicant/Owner: South San Luis Obispo County Sanitation District State: CA Sampling Point: 4
 Investigator(s): Merk, Sloan Section, Township, Range: _____
 Landform (hillslope, terrace, etc.): outside toe of levee Local relief (concave, convex, none): none Slope (%): 1
 Subregion (LRR): C Lat: _____ Long: _____ Datum: _____
 Soil Map Unit Name: Dune Land NWI classification: Upland

Are climatic / hydrologic conditions on the site typical for this time of year? Yes ☒ No _____ (If no, explain in Remarks.)
 Are Vegetation ☒, Soil ☒, or Hydrology _____ significantly disturbed? Are "Normal Circumstances" present? Yes _____ No ☒
 Are Vegetation _____, Soil _____, or Hydrology _____ naturally problematic? (If needed, explain any answers in Remarks.)

SUMMARY OF FINDINGS – Attach site map showing sampling point locations, transects, important features, etc.

Hydrophytic Vegetation Present? Yes <input checked="" type="checkbox"/> No _____	Is the Sampled Area within a Wetland? Yes _____ No <input checked="" type="checkbox"/>
Hydric Soil Present? Yes _____ No <input checked="" type="checkbox"/>	
Wetland Hydrology Present? Yes _____ No <input checked="" type="checkbox"/>	
Remarks: Data Point located between levee and Facility fence. Point documents conditions in willow forest area along the southern side of the Facility. Areas not containing ornamental trees may exhibit stronger hydric vegetation attributes.	

VEGETATION – Use scientific names of plants.

Tree Stratum (Plot size: <u>20 ft circle</u>)	Absolute % Cover	Dominant Species?	Indicator Status	Dominance Test worksheet: Number of Dominant Species That Are OBL, FACW, or FAC: <u>3</u> (A) Total Number of Dominant Species Across All Strata: <u>5</u> (B) Percent of Dominant Species That Are OBL, FACW, or FAC: <u>60</u> (A/B)
1. <u>Monterey cypress - planted</u>	<u>25</u>	<u>Y</u>	<u>UPL</u>	
2. <u>Salix lasiolepis</u>	<u>30</u>	<u>Y</u>	<u>FACW</u>	
3. _____	_____	_____	_____	
4. _____	_____	_____	_____	
	<u>55</u>	= Total Cover		
Sapling/Shrub Stratum (Plot size: _____)				
1. _____	_____	_____	_____	Prevalence Index worksheet: Total % Cover of: _____ Multiply by: _____ OBL species _____ x 1 = _____ FACW species <u>35</u> x 2 = <u>70</u> FAC species <u>10</u> x 3 = <u>30</u> FACU species _____ x 4 = _____ UPL species <u>40</u> x 5 = <u>200</u> Column Totals: <u>85</u> (A) <u>300</u> (B) Prevalence Index = B/A = <u>3.53</u>
2. _____	_____	_____	_____	
3. _____	_____	_____	_____	
4. _____	_____	_____	_____	
5. _____	_____	_____	_____	
Herb Stratum (Plot size: <u>20 ft circle</u>)				
1. <u>Malva nicaensis</u>	<u>15</u>	<u>Y</u>	<u>UPL</u>	Hydrophytic Vegetation Indicators: _____ Dominance Test is >50% _____ Prevalence Index is ≤3.0 ¹ _____ Morphological Adaptations ¹ (Provide supporting data in Remarks or on a separate sheet) _____ Problematic Hydrophytic Vegetation ¹ (Explain) ¹ Indicators of hydric soil and wetland hydrology must be present, unless disturbed or problematic.
2. <u>Conium maculatum</u>	<u>5</u>	<u>Y</u>	<u>FACW</u>	
3. _____	_____	_____	_____	
4. _____	_____	_____	_____	
5. _____	_____	_____	_____	
6. _____	_____	_____	_____	
7. _____	_____	_____	_____	
8. _____	_____	_____	_____	
	<u>20</u>	= Total Cover		
Woody Vine Stratum (Plot size: <u>20 ft circle</u>)				
1. <u>Clematis ligustifolia</u>	<u>10</u>	<u>Y</u>	<u>FAC</u>	Hydrophytic Vegetation Present? Yes <input checked="" type="checkbox"/> No _____
2. _____	_____	_____	_____	
	<u>10</u>	= Total Cover		
% Bare Ground in Herb Stratum <u>40</u> % Cover of Biotic Crust <u>0</u>				

Remarks:
Dominant vegetation consists of ornamental and naturally occurring trees and vines, with an understory of non-native annual species. Sparse to dense leaf litter present on ground surface. Although the Dominance Test is met, the Prevalence Index indicates that true dominance by hydric species is lacking at this location.

SOIL

Sampling Point: 4

Profile Description: (Describe to the depth needed to document the indicator or confirm the absence of indicators.)

Depth (inches)	Matrix		Redox Features				Texture	Remarks
	Color (moist)	%	Color (moist)	%	Type ¹	Loc ²		
0-1							OM	leaf litter
2-6	10YR3/3	100					sand	dry, gravels, many roots
6-15	10YR3/3	100					sandy clay	dry, gravels, few roots

¹Type: C=Concentration, D=Depletion, RM=Reduced Matrix, CS=Covered or Coated Sand Grains. ²Location: PL=Pore Lining, M=Matrix.

Hydric Soil Indicators: (Applicable to all LRRs, unless otherwise noted.)

- ☐ Histosol (A1)
- ☐ Histic Epipedon (A2)
- ☐ Black Histic (A3)
- ☐ Hydrogen Sulfide (A4)
- ☐ Stratified Layers (A5) (LRR C)
- ☐ 1 cm Muck (A9) (LRR D)
- ☐ Depleted Below Dark Surface (A11)
- ☐ Thick Dark Surface (A12)
- ☐ Sandy Mucky Mineral (S1)
- ☐ Sandy Gleyed Matrix (S4)

- ☐ Sandy Redox (S5)
- ☐ Stripped Matrix (S6)
- ☐ Loamy Mucky Mineral (F1)
- ☐ Loamy Gleyed Matrix (F2)
- ☐ Depleted Matrix (F3)
- ☐ Redox Dark Surface (F6)
- ☐ Depleted Dark Surface (F7)
- ☐ Redox Depressions (F8)
- ☐ Vernal Pools (F9)

Indicators for Problematic Hydric Soils³:

- ☐ 1 cm Muck (A9) (LRR C)
- ☐ 2 cm Muck (A10) (LRR B)
- ☐ Reduced Vertic (F18)
- ☐ Red Parent Material (TF2)
- ☐ Other (Explain in Remarks)

³Indicators of hydrophytic vegetation and wetland hydrology must be present, unless disturbed or problematic.

Restrictive Layer (if present):

Type: _____

Depth (inches): _____

Hydric Soil Present? Yes _____ No ☒

Remarks:

Dry soils at outside toe of levee berm. Area historically disturbed by levee construction and possibly by airport and treatment facility construction. No hydric indicators noted.

HYDROLOGY

Wetland Hydrology Indicators:

Primary Indicators (minimum of one required; check all that apply)

- ☐ Surface Water (A1)
- ☐ High Water Table (A2)
- ☐ Saturation (A3)
- ☐ Water Marks (B1) (Nonriverine)
- ☐ Sediment Deposits (B2) (Nonriverine)
- ☐ Drift Deposits (B3) (Nonriverine)
- ☐ Surface Soil Cracks (B6)
- ☐ Inundation Visible on Aerial Imagery (B7)
- ☐ Water-Stained Leaves (B9)

- ☐ Salt Crust (B11)
- ☐ Biotic Crust (B12)
- ☐ Aquatic Invertebrates (B13)
- ☐ Hydrogen Sulfide Odor (C1)
- ☐ Oxidized Rhizospheres along Living Roots (C3)
- ☐ Presence of Reduced Iron (C4)
- ☐ Recent Iron Reduction in Tilled Soils (C6)
- ☐ Thin Muck Surface (C7)
- ☐ Other (Explain in Remarks)

Secondary Indicators (2 or more required)

- ☐ Water Marks (B1) (Riverine)
- ☐ Sediment Deposits (B2) (Riverine)
- ☐ Drift Deposits (B3) (Riverine)
- ☐ Drainage Patterns (B10)
- ☐ Dry-Season Water Table (C2)
- ☐ Crayfish Burrows (C8)
- ☐ Saturation Visible on Aerial Imagery (C9)
- ☐ Shallow Aquitard (D3)
- ☐ FAC-Neutral Test (D5)

Field Observations:

Surface Water Present? Yes _____ No ☒ Depth (inches): _____

Water Table Present? Yes _____ No ☒ Depth (inches): _____

Saturation Present? Yes _____ No ☒ Depth (inches): _____
(includes capillary fringe)

Wetland Hydrology Present? Yes _____ No ☒

Describe Recorded Data (stream gauge, monitoring well, aerial photos, previous inspections), if available:

Remarks:

Area could flood under extremely high water conditions in the Oceano Lagoon, but does not normally pond water or conduct flows. Area does not receive any surface flows from the adjacent Arroyo Grande Creek, but high groundwater levels in the area likely help support the willow habitat. No evidence of surface hydrology observed.

WETLAND DETERMINATION DATA FORM – Arid West Region

Project/Site: Wastewater Facility Redundancy Project City/County: San Luis Obispo Sampling Date: 5/18/16
 Applicant/Owner: South San Luis Obispo County Sanitation District State: CA Sampling Point: 5
 Investigator(s): Merk, Sloan Section, Township, Range: _____
 Landform (hillslope, terrace, etc.): graded Local relief (concave, convex, none): none Slope (%): 1
 Subregion (LRR): C Lat: _____ Long: _____ Datum: _____
 Soil Map Unit Name: Mocho fine sandy loam NWI classification: Upland

Are climatic / hydrologic conditions on the site typical for this time of year? Yes ☒ No _____ (If no, explain in Remarks.)
 Are Vegetation ☒, Soil ☒, or Hydrology _____ significantly disturbed? Are "Normal Circumstances" present? Yes _____ No ☒
 Are Vegetation _____, Soil _____, or Hydrology _____ naturally problematic? (If needed, explain any answers in Remarks.)

SUMMARY OF FINDINGS – Attach site map showing sampling point locations, transects, important features, etc.

Hydrophytic Vegetation Present? Yes _____ No <input checked="" type="checkbox"/>	Is the Sampled Area within a Wetland? Yes _____ No <input checked="" type="checkbox"/>
Hydric Soil Present? Yes _____ No <input checked="" type="checkbox"/>	
Wetland Hydrology Present? Yes _____ No <input checked="" type="checkbox"/>	
Remarks: Data Point located near edge of fence in fill soils within the facility. Point documents conditions at edge of developed portion of the facility opposite the levee.	

VEGETATION – Use scientific names of plants.

Tree Stratum (Plot size: <u>20 ft circle</u>)	Absolute % Cover	Dominant Species?	Indicator Status	Dominance Test worksheet: Number of Dominant Species That Are OBL, FACW, or FAC: <u>1</u> (A) Total Number of Dominant Species Across All Strata: <u>2</u> (B) Percent of Dominant Species That Are OBL, FACW, or FAC: <u>50</u> (A/B)
1. <u>Cupressus macrocarpus - planted</u>	<u>20</u>	<u>Y</u>	<u>UPL</u>	
2. <u>Salix lasiolepis</u>	<u>5</u>	<u>Y</u>	<u>FACW</u>	
3. _____	_____	_____	_____	
4. _____	_____	_____	_____	
<u>25</u> = Total Cover				
Sapling/Shrub Stratum (Plot size: _____)				Prevalence Index worksheet: Total % Cover of: _____ Multiply by: _____ OBL species _____ x 1 = _____ FACW species <u>5</u> x 2 = <u>10</u> FAC species _____ x 3 = _____ FACU species _____ x 4 = _____ UPL species <u>20</u> x 5 = <u>100</u> Column Totals: <u>25</u> (A) <u>110</u> (B) Prevalence Index = B/A = <u>4.4</u>
1. _____	_____	_____	_____	
2. _____	_____	_____	_____	
3. _____	_____	_____	_____	
4. _____	_____	_____	_____	
5. _____	_____	_____	_____	
_____ = Total Cover				
Herb Stratum (Plot size: _____)				Hydrophytic Vegetation Indicators: ___ Dominance Test is >50% ___ Prevalence Index is ≤3.0 ¹ ___ Morphological Adaptations ¹ (Provide supporting data in Remarks or on a separate sheet) ___ Problematic Hydrophytic Vegetation ¹ (Explain) ¹ Indicators of hydric soil and wetland hydrology must be present, unless disturbed or problematic.
1. _____	_____	_____	_____	
2. _____	_____	_____	_____	
3. _____	_____	_____	_____	
4. _____	_____	_____	_____	
5. _____	_____	_____	_____	
6. _____	_____	_____	_____	
7. _____	_____	_____	_____	
8. _____	_____	_____	_____	
_____ = Total Cover				
Woody Vine Stratum (Plot size: _____)				Hydrophytic Vegetation Present? Yes _____ No <input checked="" type="checkbox"/>
1. _____	_____	_____	_____	
2. _____	_____	_____	_____	
_____ = Total Cover				
% Bare Ground in Herb Stratum <u>100</u> % Cover of Biotic Crust _____				

Remarks:
No vegetation present within fenceline. Cypress and willows extend from and are rooted in the forested area along the levee. None of the species listed are rooted inside the fence. The fenceline area is maintained regularly to remove encroaching vegetation. Prevalence Index results indicate that dominance by hydric species is lacking at this location.

SOIL

Sampling Point: 5

Profile Description: (Describe to the depth needed to document the indicator or confirm the absence of indicators.)

[illegible]

¹Type: C=Concentration, D=Depletion, RM=Reduced Matrix, CS=Covered or Coated Sand Grains. ²Location: PL=Pore Lining, M=Matrix.

Hydric Soil Indicators: (Applicable to all LRRs, unless otherwise noted.)

Indicators for Problematic Hydric Soils³:

- | | | |
|--|---|---|
| <input type="checkbox"/> Histosol (A1) | <input type="checkbox"/> Sandy Redox (S5) | <input type="checkbox"/> 1 cm Muck (A9) (LRR C) |
| <input type="checkbox"/> Histic Epipedon (A2) | <input type="checkbox"/> Stripped Matrix (S6) | <input type="checkbox"/> 2 cm Muck (A10) (LRR B) |
| <input type="checkbox"/> Black Histic (A3) | <input type="checkbox"/> Loamy Mucky Mineral (F1) | <input type="checkbox"/> Reduced Vertic (F18) |
| <input type="checkbox"/> Hydrogen Sulfide (A4) | <input type="checkbox"/> Loamy Gleyed Matrix (F2) | <input type="checkbox"/> Red Parent Material (TF2) |
| <input type="checkbox"/> Stratified Layers (A5) (LRR C) | <input type="checkbox"/> Depleted Matrix (F3) | <input type="checkbox"/> Other (Explain in Remarks) |
| <input type="checkbox"/> 1 cm Muck (A9) (LRR D) | <input type="checkbox"/> Redox Dark Surface (F6) | |
| <input type="checkbox"/> Depleted Below Dark Surface (A11) | <input type="checkbox"/> Depleted Dark Surface (F7) | |
| <input type="checkbox"/> Thick Dark Surface (A12) | <input type="checkbox"/> Redox Depressions (F8) | |
| <input type="checkbox"/> Sandy Mucky Mineral (S1) | <input type="checkbox"/> Vernal Pools (F9) | |
| <input type="checkbox"/> Sandy Gleyed Matrix (S4) | | |
- ³Indicators of hydrophytic vegetation wetland hydrology must be present unless disturbed or problematic

³Indicators of hydrophytic vegetation and wetland hydrology must be present, unless disturbed or problematic.

Restrictive Layer (if present):

Type: _____

Depth (inches): _____

Hydric Soil Present? Yes _____ No ✓

Remarks:

Construction fill soil containing gravels and some cobbles. No hydric indicators noted.

HYDROLOGY

Wetland Hydrology Indicators:

Primary Indicators (minimum of one required; check all that apply)

Secondary Indicators (2 or more required)

- | | | |
|--|--|---|
| <input type="checkbox"/> Surface Water (A1) | <input type="checkbox"/> Salt Crust (B11) | <input type="checkbox"/> Water Marks (B1) (Riverine) |
| <input type="checkbox"/> High Water Table (A2) | <input type="checkbox"/> Biotic Crust (B12) | <input type="checkbox"/> Sediment Deposits (B2) (Riverine) |
| <input type="checkbox"/> Saturation (A3) | <input type="checkbox"/> Aquatic Invertebrates (B13) | <input type="checkbox"/> Drift Deposits (B3) (Riverine) |
| <input type="checkbox"/> Water Marks (B1) (Nonriverine) | <input type="checkbox"/> Hydrogen Sulfide Odor (C1) | <input type="checkbox"/> Drainage Patterns (B10) |
| <input type="checkbox"/> Sediment Deposits (B2) (Nonriverine) | <input type="checkbox"/> Oxidized Rhizospheres along Living Roots (C3) | <input type="checkbox"/> Dry-Season Water Table (C2) |
| <input type="checkbox"/> Drift Deposits (B3) (Nonriverine) | <input type="checkbox"/> Presence of Reduced Iron (C4) | <input type="checkbox"/> Crayfish Burrows (C8) |
| <input type="checkbox"/> Surface Soil Cracks (B6) | <input type="checkbox"/> Recent Iron Reduction in Tilled Soils (C6) | <input type="checkbox"/> Saturation Visible on Aerial Imagery (C9) |
| <input type="checkbox"/> Inundation Visible on Aerial Imagery (B7) | <input type="checkbox"/> Thin Muck Surface (C7) | <input type="checkbox"/> Shallow Aquitard (D3) |
| <input type="checkbox"/> Water-Stained Leaves (B9) | <input type="checkbox"/> Other (Explain in Remarks) | <input type="checkbox"/> FAC-Neutral Test (D5) |

Field Observations:

Surface Water Present? Yes _____ No ☒ Depth (inches): _____

Water Table Present? Yes _____ No ☒ Depth (inches): _____

Saturation Present? Yes _____ No ✓ Depth (inches): _____
(includes capillary fringe)

Wetland Hydrology Present? Yes No ✓

Describe Recorded Data (stream gauge, monitoring well, aerial photos, previous inspections), if available:

Remarks:

Facility border along outside of levee could flood temporarily under extremely high flow conditions, but sample point area does not normally pond water or conduct flows. Area does not receive any surface flows from the adjacent Arroyo Grande Creek. No evidence of hydrology observed.

APPENDIX B

PHOTO PLATE



Appendix B - Photo Plate



Photo 1. View southeast from facility entrance gate. Note buildings, lawn, and other developed features.



Photo 2. View north along western fenceline toward entrance gate. Note fenceline demarcating plant boundary with willows and planted sycamore and oak trees along fence outside the developed portions of the facility.



Photo 3. View southwest along western fence line showing general location of Data Point #5. Note cypress and willows outside fence with existing development within the facility.



Photo 4. View of southern fenceline opposite the Arroyo Grande Creek levee, looking east. Note maintained fenceline with occasional willows extending over the fence.



Photo 5. View of Data Point #1 inside the western fenceline looking west toward Aloha Place. Note approximate 10-wide vegetation maintenance zone along outside of fence.



Photo 6. View of Data Point #2, looking west toward Aloha Place. Soil pit located on berm above small channel, at edge of maintained zone along the fenceline.



Photo 7. View of Data Point #3, in the lower portion of the channel, looking west. Note dense riparian vegetation in this area. Surface water was present just beyond data point demarcated by shovel.



Photo 8. View through southern fenceline to Data Point #4 location, looking southwest toward the levee berm. Note cypress and willow trees, and sparse understory vegetation dominated by annual upland species. Data Point #5 was positioned inside fenceline on maintained base rock near the concrete ditch.



Photo 9. Westerly view of roadside ditch near facility entrance.



Photo 10. Northeasterly view of willow and rosemary hedge planted along parking lot. The fence in the background separates the site from the Oceano County Airport.

Attachment D

Sea level rise analysis that complies with state guidelines from Ocean Protection Council and California Coastal Commission (ESA; August 3, 2016)

SSLOCSD WASTEWATER TREATMENT FACILITY REDUNDANCY PROJECT

Sea Level Rise Analysis

Prepared for
South San Luis Obispo County
Sanitation District (under
contract to Kennedy/Jenks
Consultants)

August 3, 2016



Image © Environmental Science Associates

SSLOCSD WASTEWATER TREATMENT FACILITY REDUNDANCY PROJECT

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Appendices

Appendix A:	Description of ESA's Quantified Conceptual Model (QCM) for Small Coastal Lagoons
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1 INTRODUCTION

The South San Luis Obispo County Sanitation District (SSLOCSD; District) is undertaking a project to improve the redundancy of the wastewater treatment facility (WWTF) in Oceano, California (Figure 1). The project proposes additional development at the District's existing facility site, located adjacent to the Meadow Creek Lagoon and Arroyo Grande Creek. The project will require the California Coastal Commission (CCC) to issue a Coastal Development Permit (CDP), which may include special conditions that the project would need to address to comply with the California Coastal Act of 1976. The CCC recently adopted the Sea Level Rise Policy Guidance document, which provides the best available science on sea level rise (SLR) for California and a recommended methodology for addressing SLR in CCC planning and regulatory actions (CCC 2015). In accordance with CCC (2015) and OPC (2013), ESA conducted a SLR vulnerability analysis to evaluate the existing and future exposure of the WWTF to flooding. This report presents a summary of findings and a description of the analyses conducted to evaluate existing and future flooding at the site with SLR.



Source: ESRI 2016

Figure 1
Project Location and Vicinity Map

1.1 Background

The District's WWTF is situated approximately 2,000 feet from the Pacific Ocean shoreline in Oceano, California, at the confluence of Arroyo Grande and Meadow Creeks, which form a series of lagoons that are influenced by the elevation of the beach berm (Figure 2). These creeks convey the majority of runoff for the southern San Luis Obispo County region including portions of Pismo Beach, Oceano, Grover Beach and Arroyo Grande. A levee is located between the WWTF and Arroyo Grande Creek. The mouth of Arroyo Grande Creek forms a perched lagoon on the beach. The elevation of the beach berm controls the water surface elevation in Arroyo Grande Lagoon. Meadow Creek discharges to the Arroyo Grande Lagoon through a tide gate when the water levels in Arroyo Grande Lagoon lower below the water surface elevation of Meadow Creek Lagoon.

Historically, San Luis Obispo County (County) managed water levels in Meadow Creek Lagoon by inducing periodic breaching of the sand bar at the Arroyo Grande Lagoon, allowing water to drain out of the Meadow Creek Lagoon before reaching the residential flood thresholds of approximately 10.4 feet NAVD¹ (ESA PWA 2013). However, resource agencies now regulate breaching practices due to adverse impacts on habitats for Central Coast steelhead, requiring a permit to be issued for artificial breaches. The County recently implemented a mechanical breach of the Arroyo Grande Lagoon on January 29, 2016 as an emergency action to lower Arroyo Grande Lagoon water levels by six inches to create additional storm water capacity in the Meadow Creek Lagoon. This effort involved several resource agencies, including the California Coastal Commission, California Department of Fish and Wildlife, Central Coast Regional Water Quality Control Board, National Oceanic and Atmospheric Administration (NOAA) Fisheries, U.S. Fish and Wildlife Service, U.S. Army Corps of Engineers, California State Parks.

For extreme fluvial flood events on Arroyo Grande Creek, the County has developed an Emergency Response Plan (ERP) that describes preparedness measures and emergency procedures concerning the operation of the Arroyo Grande Creek levees by the County Public Works Department (SLO County 2016). The ERP defines flood triggers defined by specific creek stage measurements relative to the levee crest, as well as actions that the County will take, including manual breach of the levee about two miles upstream of the WWTF. The intention of the mechanical levee breach is to lower flood stage of the creek by allowing water to flow into agricultural fields south of Arroyo Grande Creek, relieving downstream flooding. Although these actions may provide flood relief to the WWTF site during a 100-year flow event on Arroyo Grande Creek, this study does not address the possible changes to flood stage associated with the emergency breach of the Arroyo Grande Creek levee.

¹ NAVD refers to the North American Vertical Datum of 1988, a fixed reference for elevations determined by geodetic leveling. The datum was derived from a general adjustment of the first-order terrestrial leveling nets of the United States, Canada, and Mexico.



SOURCE: Aerial-NAIP 2012

SSLOCSD WWTF Redundancy Project Sea Level Rise Analysis. D150915.00

Figure 2
Site Map

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The WWTF may be subject to flooding by three mechanisms:

- Existing and future coastal flooding and erosion impacts associated with wave overtopping of the levee and into the Meadow Creek Lagoon
- Fluvial flooding on Arroyo Grande Creek, associated with extreme rainfall-runoff events, which overtops the levee
- Estuarine flooding caused by elevated water levels in Meadow Creek Lagoon, and associated with moderate fluvial flows in combination with a closed and elevated Arroyo Grande Lagoon.

Current FEMA maps have indicated the Base Flood Elevations (BFE) at the site to be approximately 2.5 feet above the existing ground elevations. Cannon recently completed a survey of the site in 2016, including measurements of the elevations of the WWTF assets. The elevations of the assets were compared to the 100-year flood elevation, which was used to compute the required flood proofing elevation and height including freeboard. Site grades range from approximately 11 feet NAVD to over 14 feet NAVD, with much of the WWTF site between 12 and 13 feet NAVD.

1.2 Purpose

The purpose of this study is to assess the existing and future flood exposure of the WWTF, including estimates of the flood elevations and frequencies, which will be used to inform the environmental review, permitting, and design of the redundancy project. Descriptions of flood proofing concepts and adaptation alternatives are not addressed in this report, but are expected to be developed using information presented in this study. This SLR analysis complies with guidance issued by the state for addressing impacts of SLR (CCC 2015; OPC 2013).

1.3 Report Organization

This report is organized as follows:

- **Section 2: Summary of Findings** – the major findings and results of the analysis are presented
- **Section 3: Data Gathering and Description of Historical Flood Events** – summary of the data gathered to inform the technical analyses, and a description of known historical flood events that have occurred at and near the site
- **Section 4: Climate Change Background and Planning Horizons** – description of climate change projections and planning horizons used in this study
- **Section 5: Flood Exposure Analyses** – methods and results of technical studies conducted to evaluate coastal, fluvial, and estuarine flood exposure for existing and future conditions

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2 SUMMARY OF FINDINGS

The following summary of findings presents the primary conclusions of the various sections of this report. The summary of findings is organized to first present general findings, and then findings for each of the three flood sources analyzed: Coastal, Fluvial, and Estuarine.

2.1 General Findings

- Three flood sources were analyzed to evaluate their respective changes resulting from future sea level rise:
 - Coastal flood source: coastal flooding and erosion impacts associated with wave overtopping of the levee and into the Meadow Creek Lagoon
 - Fluvial flooding on Arroyo Grande Creek, associated with extreme rainfall-runoff events, which overtops the levee
 - Estuarine flooding caused by elevated water levels in Meadow Creek Lagoon, and associated with moderate fluvial flows in combination with a closed and elevated Arroyo Grande Lagoon
- Flood thresholds for the WWTF site were selected to evaluate the relative changes in flood exposure over time due to sea level rise, and were based on survey elevations. However, these thresholds do not necessarily imply damage would occur at these elevations. Critical facilities are protected with flood barriers and gates to approximately 14.4 feet NAVD according to District staff. The following thresholds are defined for the analysis:
 - County threshold for residences and WWTF access: 10.4 feet NAVD
 - December 2010 Event Benchmark: 12 feet NAVD
 - Existing Flood Protection: 14.4 feet NAVD
- The County of San Luis Obispo has a number of operational conditions, controls and plans in the Arroyo Grande Creek watershed that may be implemented depending upon the type, size and duration of a future flood event on Arroyo Grande Creek.
- Flood protection installed at the site since 2010, and additional flood protection resulting from the future design of the Redundancy Project, may be able to mitigate future flooding events and impacts.

2.2 Coastal Flood Source

- The coastal flood source, caused by wave overtopping and coastal erosion during extreme conditions, was determined not to be a dominant mechanism of flooding of Meadow Creek Lagoon for existing and future conditions with sea level rise.
- Assuming that the levee is maintained and raised over the century, the 100-year TWL is not expected to overtop the levee into Meadow Creek Lagoon.
- Coastal flood and erosion impacts to the WWTF are unlikely, unless the north levee at the mouth of Arroyo Grande Creek is not maintained or raised in the future. The existing elevation of the levee crest is sufficient to limit overtopping during extreme events. However, conservatively high estimates of coastal erosion indicate that the shore may migrate landward toward the levee, which would likely result in human response and

adaptation strategies that could affect the future wave runup heights. Therefore, some wave overtopping into Meadow Creek Lagoon could occur in the future depending on the future management strategies, but is not expected to have a significant impact on water levels.

- The geomorphic response of the shore to sea level rise is expected to cause the shore to transgress landward and upward, with the vertical change in elevation of the beach berm and the Arroyo Grande Lagoon to be equal to the amount of sea level rise.

2.3 Future Changes to Extreme Fluvial Flood Flows on Arroyo Grande Creek

- The existing 100-year fluvial flow on Arroyo Grande Creek will become more frequent under all emissions scenarios, increasing in frequency to a 76-year event in 2050 and to a 39-year event in 2100. Recurrence intervals describe the probability that an event will be exceeded in any given year. For example, the 100-year recurrence is equivalent to the 1% annual exceedance probability each year. However, over a 30-year period, the probability that the 100-year event will occur increases to 26%. A 76-year event has a 1.3% chance of occurrence in each year, and increases to 33% chance of occurring over a 30-year period.
- Climate change is expected to increase the extreme flows in Arroyo Grande Creek, and today's 100-year flow is expected to be 1.3 to 1.5 times more likely to occur by 2050, and 2.0 to 2.6 times more likely to occur by 2100. However, flooding at the WWTF associated with the extreme fluvial flows (like the 100-year storm event) is not expected to be affected by sea level rise.

2.4 Estuarine Flood Source

- The primary flood mechanism that will increase due to climate change is direct inundation from Meadow Creek Lagoon. This is called the "estuarine flood source" because it is not caused solely by ocean (coastal flood source) or rainfall runoff (fluvial flood source) conditions. The estuarine flood is manifested when high water levels in Arroyo Grande Lagoon block drainage through the tide gate and back up water levels in Meadow Creek Lagoon. The high Meadow Creek Lagoon water levels can flood the access road (and adjacent residential areas) at approximately 10.4 feet NAVD and parts of the WWTF site at approximately 12 feet NAVD. This type of flood event occurred in December 2010. The WWTF will be exposed to more frequent flooding in the future with sea level rise.
- The limited record of 7 years of data is not sufficient to conduct an extreme value analysis to estimate return periods of extreme events, and therefore we rely on describing the relative frequency of events using percent exceedance and by assigning categories. In the context of this study, we use the term frequency as a semi-quantitative approach that defines how often a given water level would occur over time in a general sense. To facilitate understanding of the percent exceedance, we define the following event frequencies:
 - **Rare (extreme) water levels:** less than 1% exceedance, expected to have a 10-year return period or greater and occur during a relatively large storm

- **Nuisance water levels:** between 1% and 10% exceedance, expected to have approximately a 1-year return period
- **Typical water levels:** greater than 10% exceedance, expected to be representative of typical conditions and daily water levels
- Our analysis indicates that extreme flood levels increase less than the amount of sea level rise. This is likely because of the flat land elevations at the higher flood levels (hypsoetry) surrounding the Meadow Creek Lagoon basin: the area of flooding increases dramatically above elevation 13 feet NAVD and “spreads out laterally” rather than rising as much as projected sea level.
- Typical water levels that occur regularly will increase approximately equal to the amount of sea level rise.
- Depth of flooding for a given recurrence interval will not change much in the future with climate change, but the extents of flooding will likely increase. In other words, the depth of 100-year flooding at the plant will not be measurably by sea level rise according to this analysis.
- The frequency of flooding of the site will increase with climate change and sea level rise, and specifically, the flood threshold will be crossed more frequently
 - Typical water levels will exceed the access thresholds of approximately 10.4 feet NAVD on a regular basis by mid-century.
 - Water levels will exceed the WWTF threshold of 12 feet NAVD rarely by 2050 (limited to storm events), and will exceed the threshold on a regular basis by the end of the century (typical water levels).
- Maximum simulated flood elevations for existing and future conditions are as follows:
 - Existing: 12.3 feet NAVD
 - 2050: 12.7 to 13.2 feet NAVD
 - 2100: 13.9 to 15.6 feet NAVD
- Existing flood protection installed since the December 2010 event will protect the WWTF against the estuarine flood source through about 2070 with the high sea level rise curve.
- Flood thresholds for the plant of 12 feet NAVD will continue to be exceeded somewhat rarely by 2050, but by the end of the century will be exceeded on a regular basis. Flooding will exceed the access threshold of approximately 10.4 feet NAVD on a regular basis by mid-century.

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3 DATA GATHERING AND DESCRIPTION OF HISTORICAL FLOOD EVENTS

3.1 Historical Flood Events

Historical flood events at the WWTF were researched for the study. While the nearby residences have been exposed to several historic floods, the WWTF is located at a site about two feet higher than much of the residential areas subject to flooding. Therefore, the analysis is based on one documented flood event. Prior to 2010, the primary practice of water level management in Meadow Creek Lagoon was to breach the sandbar manually at the Arroyo Grande Lagoon, which would allow the Arroyo Grande Lagoon water level to decrease and accommodate drainage from Meadow Creek Lagoon through the Sand Canyon Tide Gate structure. The following sections describe the December 2010 event and flood elevations, and the selected flood thresholds for the study.

3.1.1 December 2010 Event

Limited information on historical flooding of the WWTF is available, except for documentation of a flood that occurred December 19-20, 2010. The peak water level was reported by the County and the District to be approximately 12 feet NAVD. Floodwaters damaged several low-lying residences and access to the WWTF, which typically flood at elevation 10.4 feet NAVD (ESA PWA 2013). Key plant personnel that responded to the event, and were present at the WWTF, have testified that at its extreme, no more than one foot of standing water at the Emergency Generator Building drainage culvert was observed.² In no case was the entire plant ever underwater, nor did it have the same standing water conditions observed in the residential community directly outside the plant, and the vast majority of the plant continued to be accessible and undamaged/unaffected by this event.³ During the December 2010 event, flooding damaged the electrical system that powered the pumps, which resulted in a spill and operational failures.⁴ This is one reason the District is pursuing the Redundancy Project to reduce the risk to critical assets at the WWTF. District staff has indicated that the electrical and institutional failures that occurred at the plant were addressed after the 2010 flooding event so that a future flooding event does not cause a failure from similar causes.

3.1.2 Flood Threshold

ESA selected two flood thresholds to consider in the analysis: a flood threshold of 10.4 feet NAVD limited to access impacts, and a flood threshold of 12 feet NAVD related to prior experience at the plant. The elevation 12 feet NAVD threshold is selected as a benchmark that relates to prior experience at the plant. Although damages occurred at the WWTF, the damages

² Personal Communication, John Clemmons, SSLOCS D Plant Superintendent / CPO, July 26, 2016.

³ Personal Communication, John Clemmons, SSLOCS D Plant Superintendent / CPO, July 26, 2016.

⁴ Personal Communication, John Clemmons, SSLOCS D Plant Superintendent / CPO, June 30, 2016.

were attributed to other independent factors, and the District has asserted that these factors have been rectified if the event were to happen again. However, this elevation threshold is useful to use this as a benchmark even if it is not a damage threshold to the WWTF. The elevation 12 feet NAVD is a significant threshold to the County because the residents were flooded, and therefore it is useful to use as a benchmark. Higher threshold elevations may be warranted, but once the flood elevations reach 15 feet NAVD, the entire wastewater collection system is overwhelmed, according to District Staff. Since the occurrence of the December 2010 event, critical facilities have been protected with flood barriers and gates to approximately 14.4 feet NAVD.⁵

The 100-year base flood elevation (BFE) mapped in the FEMA FIRM for the site ranges from 14 to 15 feet NAVD (downstream to upstream). This BFE is calculated by FEMA and is based on the extreme 100-year flow in Arroyo Grande Creek. This regulatory flood elevation is used for regulating flood insurance, and is dependent on several assumptions. For example, it appears that the levee between Meadow Creek Lagoon and Arroyo Grande Creek is not certified, and therefore it is standard practice by FEMA not to consider that existing and protective feature. Overtopping of the levee by extreme fluvial flow may also contribute to defining the BFE at the WWTF. However, based on the analysis in Section 5.2 on changes to the extreme fluvial event with climate change, we found that this event is not likely to be affected by SLR. Therefore, the analysis is focused on the estuarine flood source described in Section 5.3, which was shown to be affected by SLR.

This approach is used to consider the maximum flooding of the site, assuming that no actions are taken in the future to protect the site or modify the drainage and flood protection systems. It should be noted that this is a very conservative approach since flood protection measures have already been installed at the plant since the December 2010 flood event, and additional flood protection measures are being contemplated. This study and the thresholds described here are used to develop an understanding of the potential exposure of the WWTF site to future flooding associated with SLR, to identify likely future flood elevations and timing of SLR impacts, and to provide information for the design engineer (Kennedy/Jenks) to develop additional flood mitigation measures for new and existing critical facilities.

3.2 Data Gathering

A variety of datasets were compiled and processed by ESA to analyze the Arroyo Grande-Meadow Creek System using the following models:

- A Hydraulic Engineering Center River Analysis System (HEC-RAS) model of the fluvial estuarine system
- A quantified conceptual model (QCM) for Arroyo Grande Lagoon
- Water balance model of the Meadow Creek Lagoon

These models utilize data collected by San Luis Obispo County and other government agencies, including the U.S. Geological Survey (USGS), National Oceanic and Atmospheric

⁵ Personal Communication, John Clemmons, SSLOCS D Plant Superintendent / CPO, July 26, 2016.

Administration (NOAA) and the State of California. The following sections briefly describe the data that was accessed and used in this study.

3.2.1 SLO County Water Level Data

SLO County Water Resources maintains a network of gages that monitor rainfall and water levels throughout the Arroyo Grande-Meadow Creek system. Table 1 lists the gages used in this project's analyses and Figure 3 shows the locations of the installed gages. The water level data for the listed gages are also plotted in Figure 3.

TABLE 1
SLO COUNTY WATER RESOURCES WATER LEVEL GAGES

Gage ID	Location	Established	Data
4615	Meadow Creek Lagoon at Pier Avenue	March 2011	Water Level
769	Arroyo Grande Lagoon on downstream side of flap gates	January 2009	Water Level
770	Meadow Creek Lagoon on upstream side of flap gates	February 2011	Water Level
734	Arroyo Grande Creek at 22nd Street	January 2008	Water Level
736	Arroyo Grande Creek at Highway 101	December 2011	Water Level

The County transmitted water level data collected between April 2011 and June 2016 to ESA. As part of a sand bar management study that ESA conducted for the County in 2013, the County also provided rating curves for Arroyo Grande Creek at 22nd Street and Highway 101 to convert water surface elevations to streamflow (ESA PWA 2013).

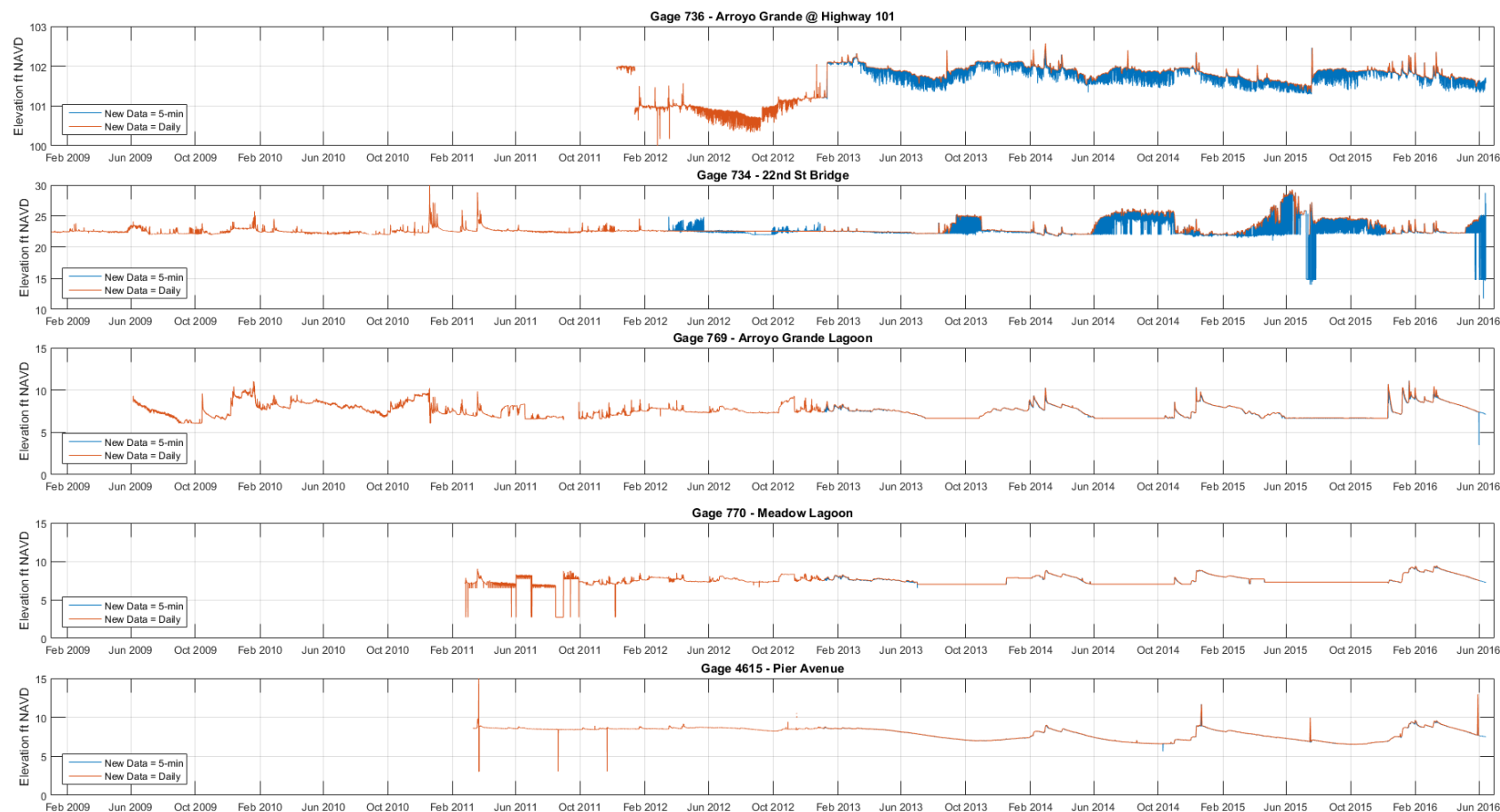


Source: ESRI

Figure 3
Location of SLO County water level gages

Note that the gages at Arroyo Grande Creek at 22nd Street and Highway 101 are radar gages. This type of gage is prone to report incorrect values when water depths are very low or zero. This error can be seen in the water level record at 22nd Street in the summer and fall of 2013, 2015, and 2015. Figure 4 shows that water level measurements in dry periods fluctuate multiple times per day between approximately 22 feet NAVD and 26 feet NAVD (or greater). Such rapid water level fluctuations are highly unlikely, and observations at the 22nd Street gage indicate that the creek was dry during these times. Adjustments to this data set to account for the sensor issues are discussed in the Section 3.2.5 Data Processing. There also appears to be noise and sensor datum inconsistencies in Arroyo Grande at Highway 101, though the gage was not used directly in any modeling for this project.

In Figure 4, the Arroyo Grande Lagoon and Meadow Creek Lagoon water elevations appear flat during much of the summer and fall in 2013, 2014, and 2015. This pattern is indicative of the lagoon's water surface lowering below the measurable gage elevation during periods of drought. This page intentionally left blank



Source: SLO County

Figure 4
SLO County gages
Water level time series

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3.2.2 Tides and Tidal Datums

Tides at the site are characterized by a mixed semi-diurnal tide signal, typical of the California coast, with two high tides and low tides occurring per day, each with unequal heights. The diurnal tide range, or the difference between mean higher high water (MHHW) and mean lower low water (MLLW), is approximately 5.3 feet. Table 2 presents the tidal datum used for the technical analyses described in this report. Tide data and tidal datums were based on the NOAA Tide Gage Station 9412110 at Port San Luis, located about eight miles from the project site, but assumed to be representative of the actual conditions at the site.

TABLE 2
TIDAL DATUMS AT PORT SAN LUIS GAGE – NOAA #9412110

Datum	Value (ft NAVD)	Description
HOWL	7.57	Highest Observed Water Level (1/18/73, 9 AM)
HAT	7.02	Highest Astronomical Tide
MHHW	5.25	Mean Higher-High Water
MHW	4.54	Mean High Water
MTL	2.75	Mean Tide Level
MSL	2.72	Mean Sea Level
MLW	0.96	Mean Low Water
NAVD88	0	North American Vertical Datum of 1988
MLLW	-0.08	Mean Lower-Low Water
LAT	-2.07	Lowest Astronomical Tide
LOWL	-2.48	Lowest Observed Water Level (1/7/51, 12 AM)
Tidal Datum Analysis Period: 01/01/1983-12/31/2001		

3.2.3 Waves

Hourly wave height, period, and direction near the Arroyo Grande Lagoon mouth was obtained from nearshore transformed wave data provided by the Coastal Data Information Program (CDIP) California Coastal Wave Monitoring and Prediction System (O'Reilly et al. 2016) at the CDIP model output point number SL068. MOP SL068 is located in about 45 feet of water approximately one-half mile offshore. Figure 5 presents hourly wave data at MOP SL068, transformed from deep water measurements using transformation coefficients computed by CDIP.⁶ Note the seasonal patterns, with large wave heights and long periods approaching the site with a narrow band from the west-northwest in the winter, and smaller waves with shorter periods approaching from a wide band ranging from west-southwest to northwest. The wave data is an important consideration in the analysis as it is a driver of the beach elevation that contributes to establishing the water levels in the Arroyo Grande Lagoon, and it influences the state of the lagoon (i.e. open, closed, perched overflow, etc.).

⁶ Data were furnished by the Coastal Data Information Program (CDIP), Integrative Oceanography Division, operated by the Scripps Institution of Oceanography, under the sponsorship of the U.S. Army Corps of Engineers and the California Department of Parks and Recreation, <http://cdip.ucsd.edu/>

Recent nearshore wave data from CDIP and historic water levels at the Port San Luis tide gauge (NOAA station 9412110) were used as input to the coastal erosion model and flooding calculations. Since these same meteorological and climatic conditions affect water levels and waves, these conditions are correlated. In fact, the worst coastal hazards are associated with coincident occurrences of high waves and high storm surge and the effect on coastal hazard responses such as total water level are not necessarily linear (FEMA, 2005; Garrity et al, 2006).

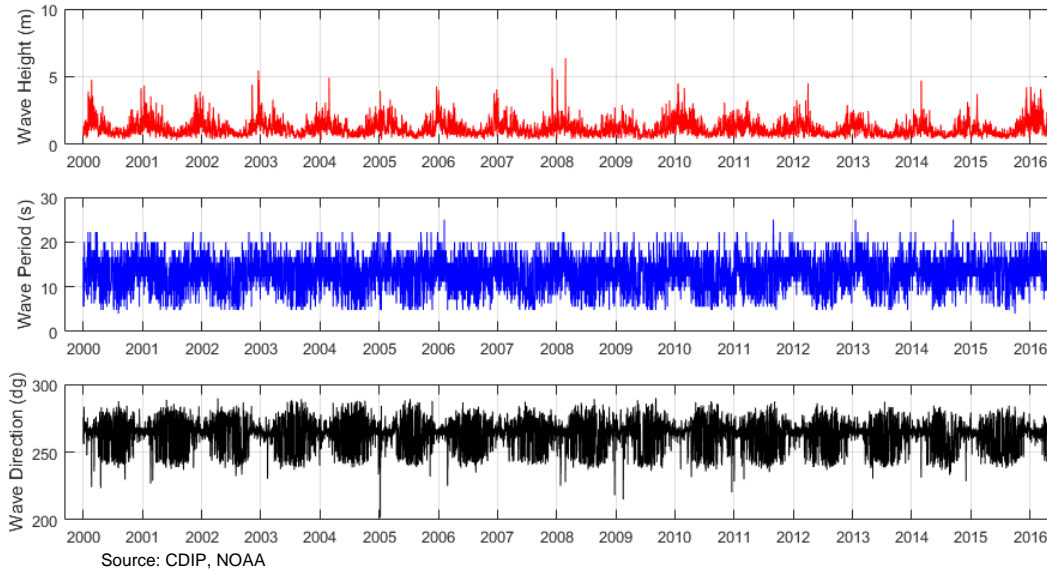


Figure 5
Wave parameters at MOP SL068

3.2.4 Precipitation and Evaporation

Precipitation and evaporation data were downloaded for the Nipomo CIMIS station #202. The site is assumed to be representative of rainfall in the drainages upstream from the WWTF. Precipitation data was obtained as daily rainfall totals. Evaporation data was obtained as hourly measurements. Figure 5 presents time series of the precipitation and evaporation data.

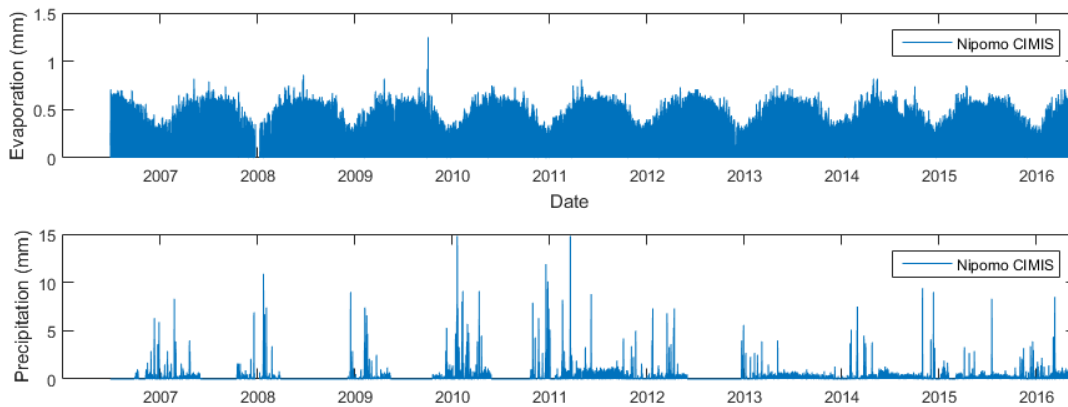


Figure 6
Evaporation and Precipitation data

3.2.5 Data Processing

In order to utilize the aforementioned datasets for the modeling, the data were adjusted slightly. All time series were converted into hourly intervals and abnormally high and low values were removed. Older water level data Arroyo Grande Creek at 22nd Street measured relative to the NGVD29 datum was converted to NAVD88 by adding 2.78 feet. Gaps in the tide data record were filled with the mean water level over the model period from 2009 to 2016.

The 22nd Street Gage was adjusted more substantially to account for sensor errors during periods of low to no flow. Based on the rating curve provided by the County, the bed elevation of the stream is at 21.6 feet NAVD. During periods when the Arroyo Grande Lagoon was very low or dry, the 22nd Street gage was set to 21.6 feet to indicate zero streamflow. During other periods in which water levels at 22nd Street appeared to be erroneous (rapid fluctuations of greater than about a foot), the data were adjusted to the stage approximately equal to the baseline stage before and after the period of suspect data.

3.2.6 Development of Existing Topography

A surface model of the existing topography and bathymetry of the project site was created by ESA in 2013 (ESA PWA 2013), and was used as the base for most of the Meadow Creek-Arroyo Grande Lagoon area. The surface model was based on topographic survey of the project site by ESA staff in December 2011 and spring 2012, bathymetry data of the Meadow Creek Lagoon collected by Cannon in 2011, and a recent survey of the WWTF site conducted by Cannon in 2016.⁷ The coverage of the area was expanded to include additional beach and upstream areas using LiDAR data from 2011 (NOAA 2013). Minor corrections were made to beach elevations to account for prior lagoon mouth positions during surveying. The updated surface was then delineated into Meadow Creek Lagoon basin and Arroyo Grande Lagoon basin for the generation of stage-storage and stage-area curves that were used in the technical analysis and modeling.

⁷ ESA performs land surveys and collects hydrographic data to augment traditional surveying services for the purposes of geomorphic interpretation, monitoring of project performance, and other specific uses consistent with Geologic and Landscape Surveys as defined in the Professional Land Surveyors' Act (California Business and Professions Code). ESA does not provide traditional land survey services such as property boundaries and maps for general use by others. ESA recommends that these traditional surveying services be accomplished by a licensed, professional land surveyor either under direct contract with the client or as a sub-consultant to ESA.

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4 CLIMATE CHANGE BACKGROUND AND PLANNING HORIZONS

4.1 Climate change scenarios

The accumulation of greenhouse gases in the Earth's atmosphere is causing and will continue to cause global warming and resultant climate change. For the coastal setting, the primary exposure will be an increase in mean SLR due to thermal expansion of the ocean's waters and melting of ice sheets.

State planning guidance for coastal flood vulnerability assessments call for considering a range of scenarios (OPC 2013; CCC 2015). These scenarios bracket the likely ranges of future greenhouse gas emissions and ice sheet loss, two key determinants of climate whose future values cannot be precisely predicted. Scenario-based analysis promotes the understanding of impacts from a range of scenarios and identifies the amounts of climate change that would cause impacts.

The guidance recommends using scenarios that represent low, medium, and high rates of climate change. Recent studies of current greenhouse gas emissions and projections of future loss of ice sheet indicate that the low scenario probably underrepresents future SLR (Rahmstorf et al. 2012; Horton et al. 2014). Also, note that even if SLR does not increase as fast as projected for the high scenario, SLR will undoubtedly continue beyond 2100, such that the medium scenario is likely to yield the same amount of SLR. It just would occur a few decades after 2100 instead of at the turn of the century.

While the interim state recommended SLR scenarios have not yet been finalized, we are expecting the state to recommend dropping the "low" SLR scenario. This study thus focuses on the Medium and High SLR scenarios. The assumptions that form the basis for these scenarios are:

- **High Scenario** – The high scenario assumes population growth that peaks mid-century, high economic growth, and development of more efficient technologies. The associated energy demands would be met primarily with fossil-fuel intensive sources.
- **Medium Scenario** – The medium scenario assumes same population, economic, and technologic growth as the high scenario, but also assumes that energy would be derived from a balance of sources, thereby reducing greenhouse gas emissions.

4.2 Planning Horizons

The planning horizons analyzed for this project are 2050 and 2100, selected to inform the potential impacts to the WWTF project site for mid- and late-century conditions, and consistent with the CCC (2015) SLR Policy Guidance document. This set of planning horizons is recommended so that decisions about land use can be matched to the timeframe for project lifespans and to facilitate the identification of triggers for adaptation measures. Although the

typical design life for infrastructure such as a WWTF may be shorter than the 2100 planning horizon, it is unlikely that the WWTF would be removed at the end of this project life. Therefore, planning horizons for a SLR analysis are typically longer than the periods associated with near-term decision-making.

4.3 Relative Mean Sea Level Rise Amounts

Two SLR scenarios were evaluated to estimate the change in coastal water levels under medium and high degrees of climate change. This conforms to state planning guidance for coastal flood vulnerability, which recommends analyzing a range of climate scenarios due to uncertainty about future climate predictions (OPC 2013; CCC 2015). For assessing the impacts of SLR on the project site, we used mean SLR projections through 2100 based on a recent study by the National Research Council (NRC 2012) for the West Coast, which was adopted by the State of California (OPC 2013; CCC 2015). Table 3 presents the NRC values for relative mean SLR at 2050 and 2100 for the Los Angeles Region relative to 2000. The relative mean SLR includes regional projections of both mean SLR and vertical land subsidence of 1.5 millimeters per year for the San Andreas region south of Cape Mendocino (see OPC 2013).

TABLE 3
RELATIVE MEAN SEA LEVEL RISE PROJECTIONS FOR THE LOS ANGELES REGION,
FROM NRC (2012), TABLE 5.3

Year	Medium SLR	High SLR
2050	11 inches	24 inches
2100	37 inches	66 inches

4.4 Rainfall-Runoff and Climate Change

In addition to rising sea level conditions, future streamflow conditions may increase because of higher intensity rainfall events driven by climate change. To estimate the change in streamflow conditions, ESA used publically available downscaled climate model output developed for the fifth assessment report (AR5) by the International Panel on Climate Change (IPCC). The data was downloaded from the World Climate Research Programme's Coupled Model Intercomparison Phase 5 (CMIP5) website⁸ on 2/10/2015. These data include surface runoff and shallow groundwater flow (baseflow) on a 7.5 x 7.5 mile grid for the entire Western US. The datasets contain daily surface and baseflow values from 1950-2100. These datasets were developed through a multi-agency collaboration led by the United States Bureau of Reclamation (USBR, 2013). ESA used the hydrologic routing routine from the same model used in this study⁹ to combine surface runoff and baseflow within the AGC and MC watershed and generate a time series of daily streamflow at the outlet of the two systems. The daily time series was used to estimate change in streamflow statistics within these watersheds.

⁸ <http://gdo-dcp.ucllnl.org/>

⁹ Model used is the Variable Infiltration Capacity (VIC) model from the University of Washington

As for the SLR analysis, two emissions scenarios (medium and high) were selected to provide a range of potential future climate conditions. The emissions scenarios developed for AR5 are referred to as Representative Concentration Pathways (RCP) and are described by the net change in energy per unit area of ground surface by the end of the century (in Watts/square-meter) relative to pre-industrial levels. The medium scenario, RCP 4.5, represents a future climate trajectory where emissions are curbed by mid-century and stabilized by the end of the century. The high scenario, RCP 8.5, represents a future climate trajectory with little to no control on global greenhouse gas emissions. It should be noted that observed global emissions to date have matched more closely with RCP 8.5. A low emissions scenario was not selected as the existing conditions simulation brackets the low end of emissions, which would not significantly change rainfall or sea level conditions. Datasets from several climate models are available for each emissions scenario, and vary considerably. To avoid bias toward a particular subset of models, all of the available climate models were used for this analysis. The total number of models for which data was available was 31 models for medium emissions and 29 models for high emissions.

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5 FLOOD EXPOSURE ANALYSES

This section describes the analyses and results of three separate flooding mechanisms: coastal, fluvial and estuarine. Each of these mechanisms considers existing and future conditions with climate change, including changes to precipitation and flows, and its impacts due to SLR.

The coastal analysis considers exposure of the WWTF to impacts of wave runup and coastal erosion, including the historic erosion rate, the accelerated geomorphic changes associated with SLR, and the potential erosion caused by a storm event. The analysis evaluates how the exposure changes with SLR.

Future fluvial flooding on Arroyo Grande Creek was assessed using hydrologic techniques with the downscaled global circulation model (GCM) data available from the State. This approach is based on linking an existing flood threshold with the local intensity-duration-frequency (IDF) precipitation curve, and then calculating the future recurrence intervals of the precipitation intensity based on GCM future projections. This future precipitation recurrence frequency is an indicator of how the frequency of the historic flood event increases with the changing climate.

The exposure of the WWTF to the estuarine flood source (Meadow Creek Lagoon, also impacted by Arroyo Grande Lagoon and River water levels) was assessed using a combination of hydrologic and hydraulic models for the lagoon and creek system. The estuarine flood source is important because of the complicated drainage system that is controlled by the beach berm elevations.

These three flood mechanisms are described in the sections below.

5.1 Coastal Flood Source

This section summarizes the analysis for considering the potential impacts to the WWTF caused by a coastal flood source. Specifically, the existing and future exposure of the WWTF to the following:

- Direct impact of wave runup and overtopping
- Increased water levels in Meadow Creek from wave overtopping
- Erosion impacts

The following sections summarize the analysis conducted to review these potential coastal-related impacts to the WWTF.

5.1.1 Total Water Level

Coastal flooding was assessed by performing a total water level (TWL) analysis of the observed tide and wave data. The total water level is defined as the maximum elevation of wave runup above a reference water level, and is calculated by adding the wave runup height to the elevation

of the tidal still water level. Typically, one must include other components, including storm surge and wave setup, depending on the methods of analysis.

A time series of TWL was generated for the period of coincident wave and tide data. Wave runup was calculated using the Stockdon equation, based on the average beach slope along the shore and offshore significant wave height and peak spectral period (Stockdon et al. 2006). Beach slope is defined between mean high water and mean low water on the beach profile. Beach slope in the study reach is 0.018. Wave runup was added to the coincident ocean water to produce a time series of TWL. The Stockdon equation was developed using data from natural beaches without significant backshore barriers such as cliffs or seawalls. For these conditions, the TWL is typically higher than predicted by Stockdon. Therefore, to the extent that the existing dunes obstruct runup now or in the future, or coastal armoring is contracted, we can expect the wave runup to be higher.

The 100-year TWL for existing conditions was estimated to be 14.3 feet NAVD. Figure 7 presents several extreme value distributions fit to the annual maximum TWL data. For the Gumbel Least Squares fit, the most conservatively high of the distributions tested, the 100-year TWL at the Arroyo Grande Lagoon mouth was estimated to be 14.3 feet NAVD. This is similar to the base flood elevations (BFE) mapped in the Preliminary 2015 FEMA FIRM for the project area (FEMA 2015):

- 15 feet NAVD in the area to the north of the creek mouth in front of the residential housing (zone VE)
- 16 feet NAVD in the area to the south of the creek mouth in front of the beach lagoon and dunes (zone VE)
- 13 feet NAVD in the area at the creek mouth (zone AE)

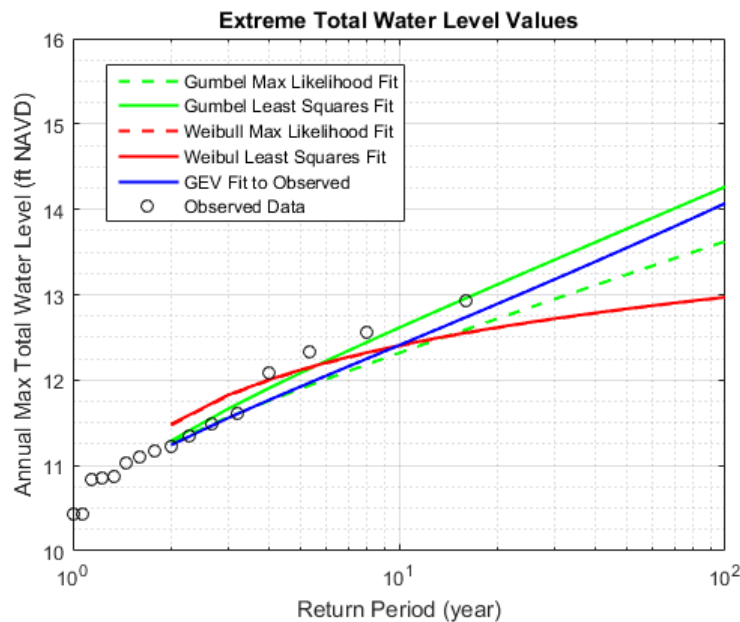


Figure 7
Extreme Value Analysis for Modeled Annual Max Total Water Levels for Existing Conditions

The reason that the area of beach directly in front of the creek mouth is mapped as zone AE is not clear, but is likely the BFE associated with the 100-year flow on Arroyo Grande Creek. However, The FEMA BFEs for the wave hazard zones are slightly higher than the ESA estimate of the 100-year TWL using the Stockdon equation. A more accurate elevation can be computed, and often a range of values and equations are considered owing to method uncertainty. Regardless, there are existing levees between Arroyo Grande and Meadow Creek, which has an approximate crest elevation ranging from 19 to 21 feet NAVD near the beach. Therefore overtopping of the levee into Meadow Creek Lagoon is considered unlikely or very rare.

Assuming that the levee is maintained and raised over the century, the 100-year TWL is not expected to overtop the levee into Meadow Creek Lagoon. Table 4 summarizes the values of existing and future 100-year TWL. The higher levels are high enough to indicate potential for overtopping by year 2100 for the high scenario. The future TWL was estimated by adding the sea level rise amounts for each planning period and emissions scenario to the existing 100-year TWL. For this calculation, we assumed that the future wave climate and tidal conditions are consistent with the historic records and SLR governs future changes to coastal hazards.

TABLE 4
ESTIMATED EXISTING AND FUTURE 100-YEAR TOTAL WATER LEVEL (FEET NAVD)

Emissions Scenario	Existing	2050	2100
Medium	14.3	15.2	17.4
High	14.3	16.3	19.8

However, the future wave runup heights and resulting TWL will likely be influenced by the future adaptation strategies pursued in the area. For example, protecting the development and levee with a hard structure may increase the wave runup height by a factor of 3 to 4 and raise the TWL by approximately 4 to 5 times the amount of SLR. Allowing the natural shore to erode would not cause the wave runup height to increase, and the TWL would increase directly with the amount of SLR (Vandever et al. 2016). However, the following section will address the proximity of the levee to the future coastal erosion hazard zones, which may also have an effect on the TWL and potential for wave overtopping into the Meadow Creek Lagoon.

5.1.2 Coastal Erosion

ESA estimated hazard zones associated with coastal erosion due to the historic shoreline retreat rate, anticipated geomorphic changes due to SLR, and the potential impacts of a large storm. The coastal erosion hazard zones were estimated for 2050 and 2100 for both the medium and high SLR scenarios. The coastal erosion hazard zones prepared for this study are presented for long-term erosion and impacts of a 100-year storm. This separation was provided to delineate long-term SLR induced changes from storm-induced changes.

Historic Shoreline Erosion

The historic erosion rate of the shoreline fronting Arroyo Grande Lagoon was determined by updating the USGS National Assessment of Shoreline Change for Sandy Shorelines (Hapke et al. 2006). This California wide USGS assessment calculated short- (1970s to 1998) and long-term

(1870s to 1998) shoreline change rates for sandy shorelines along the California Coast and was downloaded from the USGS website (<http://pubs.usgs.gov/of/2006/1251/>). Shoreline change rates were computed from the USGS 2006 National Assessment of Shoreline Change updated with a 2010 MHW shoreline extracted from the 2009-2011 LiDAR dataset. Shoreline erosion rates were estimated using linear regression techniques at 50-meter increments along the shore. Between 1976 and 1998, the shoreline in the vicinity of Arroyo Grande Lagoon has accreted at an average rate of four feet per year (fpy). Therefore, as a conservative approach, the shore analyses described in this report assumed a background erosion rate of zero fpy.

Geomorphic Response of Shore to SLR (Long-Term Erosion)

Since the shoreline has accreted in recent years (1976-2010), long-term retreat of the shoreline is comprised solely of recession due to SLR. The shoreline retreat from SLR is calculated based on the methods described by Bruun (1954; 1962), where retreat is calculated as the increase in sea level divided by the overall profile slope measured between the backshore toe and the depth of closure, and estimated to be approximately 0.015 for this site. This approach yields a future shoreline that transgresses landward and upward. Sufficient availability of sediment is a key assumption for this method, which is likely valid based on the presence of the adjacent sand dunes and the accreting beach. Figure 8 presents a schematic of the existing and future shore profiles because of SLR. Note that the beach lagoon is assumed to rise with SLR.

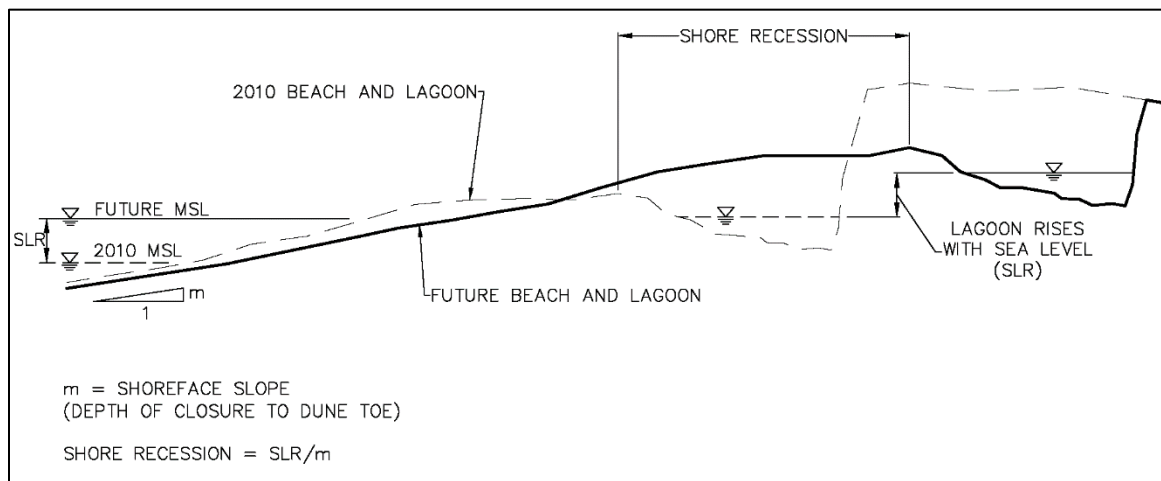


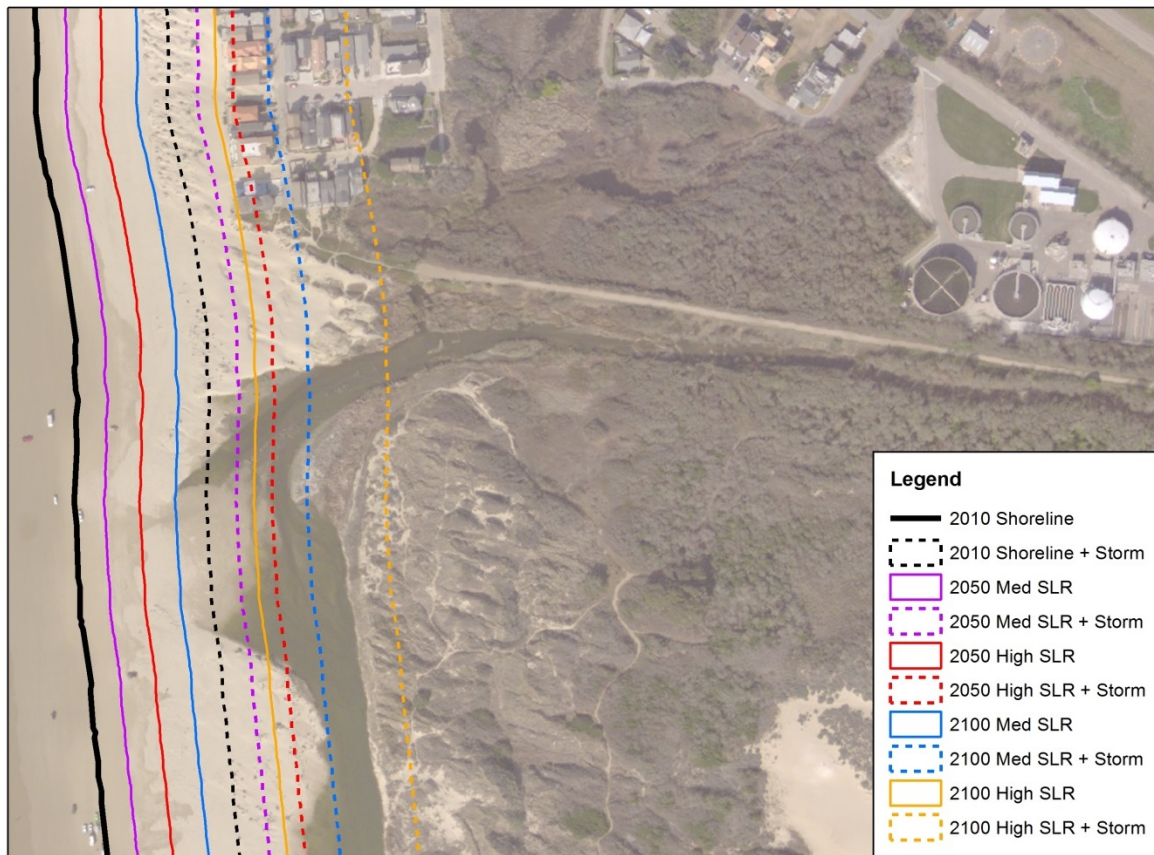
Figure 8
Schematic of Geomorphic Response of Shore to Sea Level Rise

Shore Response to 100-year Storm (Short-Term Erosion)

The potential inland shoreline retreat caused by the impact from a large storm event (100-year) was estimated using the geometric model of dune erosion originally proposed by Komar et al. (1999) and applied with different slopes to make the model more applicable to SLR (Revell et al. 2011). This method is consistent with the FEMA Pacific Coast Flood Guidelines (FEMA 2005), and uses the 100-year TWL. A 50% duration factor was applied to the geometric model for storm erosion to adjust for limited storm duration.

Coastal Erosion Hazards Map

Figure 9 shows the 2010 shoreline location and offsets for future shoreline locations considering long term changes in the shoreline as well as erosion from a large coastal storm. By inspection of the proximity of the future MHW contours to the existing levee, the risk of wave overtopping into the Meadow Creek area is likely to increase by mid- to late-century, but unlikely to impact the WWTF or to have a great effect on the water levels in Meadow Creek Lagoon. Therefore, the coastal hazard risk to the WWTF is not considered further in this study. However, SLR is expected to have a significant effect on the estuarine water levels in the Arroyo Grande Lagoon, and this is discussed in Section 5.3.



Source: ESA 2016, NOAA 2012.

Figure 9
Coastal Erosion Hazard Zones

5.2 Future Changes to Extreme Fluvial Flood Flows on Arroyo Grande Creek

The statistical analyses of the climate model data described in Section 4.4 indicated that flow rate magnitude is decreasing for the very small magnitude, more frequent events and increasing for events above a 2-year return period. Table 5 tabulates the percent change in flow magnitudes for a variety of event frequencies at 2050 and 2100 for medium and high emissions.

The values reported in Table 5 represent the median, or 50th percentile, of the climate models analyzed. Thus, half of the models show less of a change in flow magnitude while half of the models show a higher change in flow magnitude. The range of results underscores the uncertainty in the analysis. For this study, we used the 50th percentile of model output. A greater change in flow would be expected if the 90th percentile were used. This suggests that the relative change in extreme flows could be even higher than considered in this analysis, and may warrant further analysis to understand future flows in more detail, as well as evaluating the water surface elevations associated with these future flows.

TABLE 5
CHANGE IN FLOW MAGNITUDE FOR RANGE OF EVENTS (MEDIAN OF RANGE OF MODEL OUTPUT)

Return period (years)	% Change in flow			
	2050		2100	
	Medium emissions	High emissions	Medium emissions	High emissions
1	-47%	-32%	-11%	-59%
2	12%	17%	12%	10%
5	10%	25%	19%	22%
10	7%	21%	20%	27%
25	8%	16%	21%	28%
50	9%	16%	23%	36%
100	10%	14%	22%	43%
500	10%	21%	20%	39%

Another metric for evaluating the change in extreme streamflow events is the future frequency of an existing event. For example, how frequent will today's 100-year discharge event be at a future time horizon? The flood extents of the 100-year event have been mapped by FEMA thus this is a useful return period to focus on. The future return period for the 100-year event is summarized for the two emissions scenarios at 2050 and 2100 in Table 6. The existing FEMA 100-year floodplain is shown in Figure 10. Note that the BFE mapped at the WWTF is approximately 15 feet NAVD.

TABLE 6
CHANGE IN FREQUENCY FOR 100-YEAR FLOW (MEDIAN OF MODEL OUTPUTS)

Emissions scenario	Future return period for current 100-year flow (yrs)	
	2050	2100
Medium	76	50
High	65	39

The results indicate that the 100-year flow will become more frequent under all emissions scenarios, increasing in frequency to a 76-year event in 2050 and to a 39-year event in 2100. The return period is an estimate of the likelihood that an event will occur in any given year. For example, the 100-year recurrence is equivalent to the 1% annual exceedance probability each year. The return period can also be used to calculate the risk over time, such as for the design life of a facility or structure. For example, over a 30-year period, the probability that the 100-year

event will occur increases to 26%. A 76-year event has a 1.3% chance of occurrence in each year, and increases to 33% chance of occurring over a 30-year period. These results indicate that by 2100 the current 100-year event, and the associate flood extent shown in Figure 10, will be 2.6 times more likely to occur than it is today under the highest emissions scenario. The majority of the climate models agree with this trend.



Figure 10
Existing conditions FEMA 100-year floodplain (in blue)

The percent and number of models that show a more frequent 100-year discharge are summarized in Table 7. The values in Table 7 indicate that more than half of the models show a consistent increase in the frequency of the current 100-year flood event with 70% of the models showing higher frequency at the end of the century under both medium and high emissions.

TABLE 7
PERCENT AND NUMBER OF CLIMATE MODELS SHOWING MORE FREQUENT 100-YEAR DISCHARGE

Emissions Scenarios	% of Models		Number of Models	
	2050	2100	2050	2100
Medium (RCP 4.5)	60%	70%	19	22
High (RCP 8.5)	70%	70%	20	20

In this analysis, because the elevations of the future extreme fluvial flows are not known, the effect that SLR applied to the downstream tailwater has not been explicitly considered. However, it is unlikely that SLR will have a significant effect on the hydraulic grade line through the project site, and therefore have little effect on extreme fluvial flood elevations. However, future

analyses of the flood system in the vicinity of the WWTF should consider how the future extreme flows may relate to the flood elevations.

5.3 Estuarine Flood Source: Arroyo Grande and Meadow Creek Lagoon Water Levels

The WWTF is located in a low-lying area adjacent to the Meadow Creek Lagoon. Tailwater effects of the perched Arroyo Grande Lagoon have a backwater effect on the water levels in the Meadow Creek Lagoon, which tend to increase when the Arroyo Grande Lagoon mouth is closed and the water levels are high. Because the beach berm and mouth elevations control the Arroyo Grande Lagoon water level, and Arroyo Grande Lagoon affects the water levels in Meadow Creek Lagoon, the estuarine flood source is highly dependent on sea level. This section describes the technical approach used to estimate the impacts of SLR on the estuarine flood source in the Meadow Creek Lagoon.

ESA developed a hydrologic model of the Meadow Creek Lagoon to analyze the estuarine flood source at the WWTF site (Section 5.3.3). The hydrologic model of the Meadow Creek Lagoon comprises a water balance that computes the Meadow Creek Lagoon stage resulting from the inflow and outflow dynamics. ESA developed a quantified conceptual model (QCM) of the Arroyo Grande Lagoon to generate the downstream boundary conditions of the Meadow Creek Lagoon water balance (Section 5.3.1). A hydraulic model of the Meadow Creek Lagoon was used to estimate the inflow boundary conditions of the Meadow Creek Lagoon water balance (Section 5.3.2). This approach was used so that a synthetic time series of water levels in Meadow Creek Lagoon could be generated for existing and future cases with sea level rise and changes to fluvial inflows.

Although the hydraulics of the system are coupled, we made some simplifying assumptions to run the three interrelated models separately. The QCM of the Arroyo Grande Lagoon is used to simulate the existing and future lagoon water levels, as a function of creek inflows, waves, and sediment dynamics. The water levels in Arroyo Grande Lagoon are important because they control the timing and extent of drainage of Meadow Creek Lagoon through the tide gate structure, and act as the downstream tailwater of the Meadow Creek Lagoon. Flows through the Meadow Creek Lagoon are complicated due to the flat topography, dense marsh vegetation, limited detailed survey data through the lagoon, and limited information on lagoon inflows from Meadow Creek. Therefore, we used a hydraulic model to replicate specific events for which measured water levels exist, and calibrated the inflow parameters.

The following sections summarize the methods of the models, and present results of the estuarine flood analysis. The exposure of the WWTF to flooding is characterized using the synthetic time series of water levels in Meadow Creek Lagoon for existing and future cases with sea level rise. The exceedance of the flood threshold elevation and maximum water surface elevations are described.

5.3.1 Quantified Conceptual Model of Arroyo Grande Lagoon

The dynamics of the water levels in Arroyo Grande Lagoon play an important role in the behavior of the flood elevations in Meadow Creek Lagoon. The Arroyo Grande Lagoon water level acts as a tailwater to Meadow Creek Lagoon flows, which drains when Arroyo Grande Lagoon is low, or backs up when water levels in Arroyo Grande Lagoon are high. The balance between the outflows of the Arroyo Grande Creek and sediment dynamics associated with beach building and wave forcing primarily controls the Arroyo Grande Lagoon water levels. Intermittent breaching of the lagoon allows the lagoon to drain, affecting water levels through the lagoon system. This section summarizes the QCM used to establish synthetic time series of Arroyo Grande Lagoon water levels for existing and future cases with sea level rise and changes in precipitation, which were used as downstream boundary conditions in the Meadow Creek Lagoon water balance.

Methods and Input Data

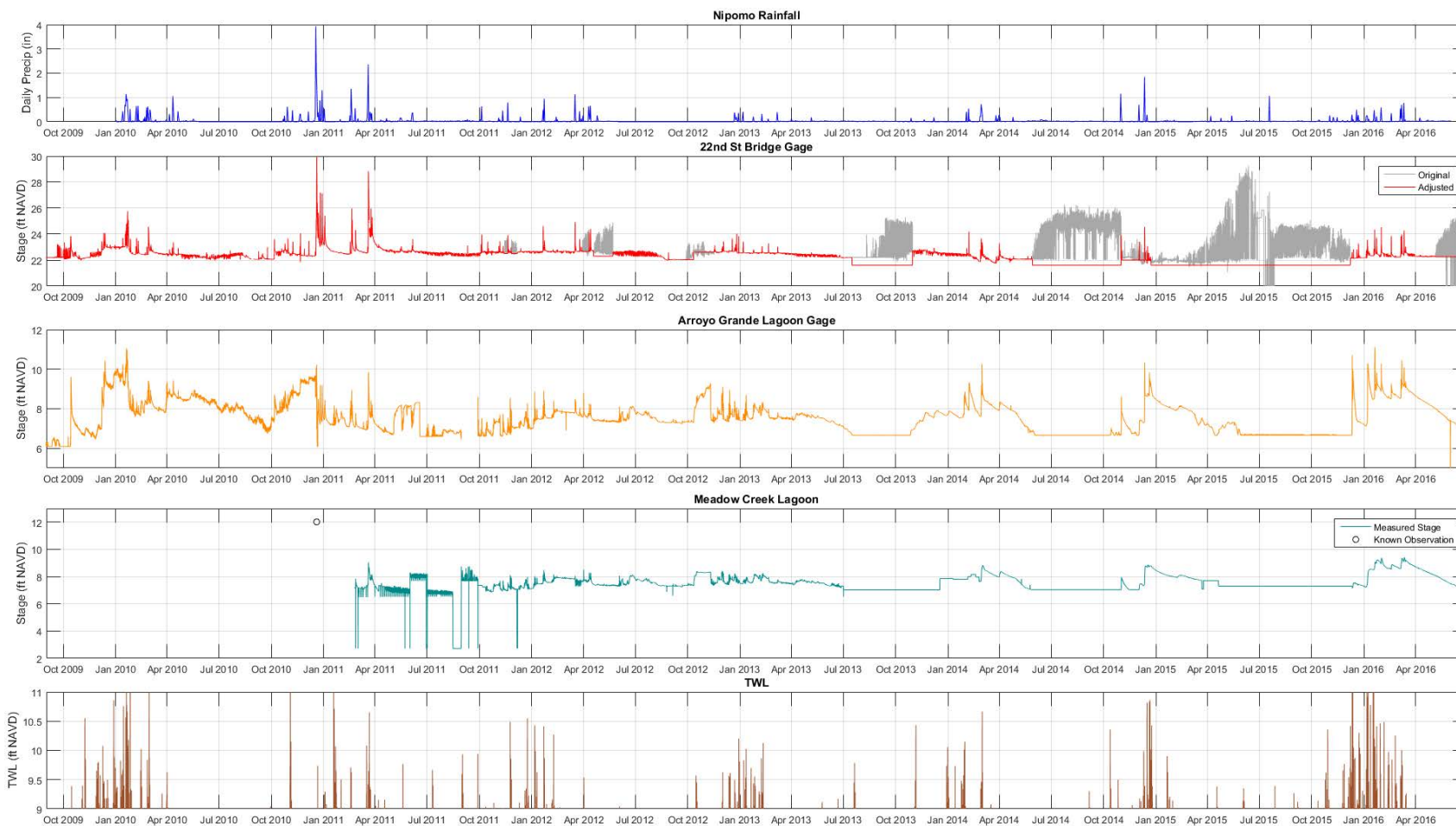
A QCM was built for Arroyo Grande Lagoon to model the water levels within the lagoon. Background on ESA's general QCM approach and methodology is included in Appendix A, and is applicable to the Arroyo Grande Lagoon QCM. The model uses time series of nearshore waves and tides, streamflow, and evapotranspiration data as boundary conditions (Figure 11). Nearshore input wave data was obtained from CDIP SL068 model output point and tide input data was taken from the Port San Luis gage, as described in Section 3. Streamflow input data was the adjusted streamflow record from Arroyo Grande at 22nd Street, as described in the Data Processing Section 3. Note that rainfall was not utilized as a direct input into the model. Instead, streamflow from Arroyo Grande Creek was assumed to be representative of local watershed runoff. Evaporation input data consisted of the CIMIS Nipomo data.

Stage-storage and stage-area curves were developed for Arroyo Grande Lagoon using the project surface described in Section 3. Note that drainage from Meadow Creek Lagoon into Arroyo Grande Lagoon was considered negligible for the QCM, and flow through the tide gate was relatively minor as compared to other input and output flow terms, such as stream inflow or beach seepage. The drainage from Meadow Creek could be coupled with the Arroyo Grande QCM, although that would require additional time.

The model was run and calibrated from September 2009 to May 2016. Calibration was performed by adjusting model parameters as described in Appendix A and in Behrens et al. (2015) to simulate water levels and closure events in the measured lagoon water level record.

ESA also analyzed the future conditions of the Arroyo Grande Lagoon to consider changes in flow magnitudes and sea level rise. First, the Arroyo Grande Creek inflow time series was modified by scaling the existing events greater than 50 cfs by corresponding percent changes tabulated in Table 5. This required assignment of recurrence intervals to observed flow magnitudes. Four future time series of the Arroyo Grande Lagoon water levels were generated for medium and high emissions scenarios at 2050 and 2100, and the corresponding amount of SLR was added last. Distributions of other parameters in the QCM, such as waves and tide range, were assumed not to change in the future.

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Source: ESA, UC IPM, NOAA, CDIP

Figure 11
Input and Calibration Parameters to Lagoon QCM: Precipitation, Creek Inflow Stage, Arroyo Grande Stage, Meadow Creek Stage, and Total Water Level

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Results & Discussion of QCM

Existing Conditions

Figure 12 is a 3-panel plot showing the measured and modeled lagoon stage (top), flow into the lagoon from wave overtopping and streamflow (middle), and wave power (bottom) for the duration of the existing conditions model run. In the top panel, the solid blue line is the measured Arroyo Grande Lagoon stage, the solid gold line is the modeled lagoon stage, and the dashed gold line is the thalweg elevation of the lagoon mouth, a channel that connects the lagoon to the ocean. The lagoon bed is lower in elevation than the thalweg of the mouth, and is located behind the mouth and the beach berm. Although the exact timing of the closure and beaching events are not always captured, the model reproduces a number of important aspects, including:

- The perched elevation of lagoon water levels above the tides
- Frequent perched overflow conditions, when the thalweg is
- The general seasonal pattern observed during the dry years of 2013-2015

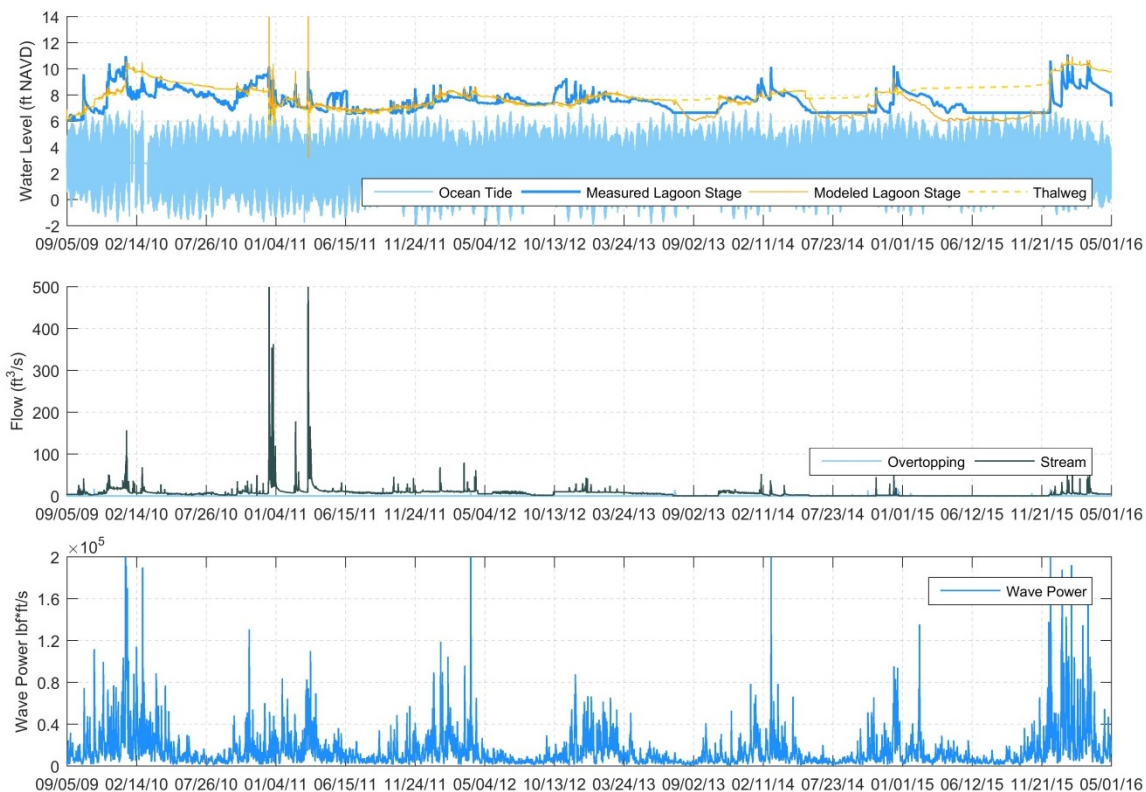


Figure 12

Existing Conditions: Modeled Lagoon Stage (yellow) Compared to Measured Stage (top), Flows into the Lagoon (middle), and Wave Power Time Series (bottom)

Both the measured and modeled lagoon stages are perched above ocean water levels and the lagoon is non-tidal during the modeled period. The model is able to represent this elevated lagoon condition well. Generally, the water surface elevations of the model are predicted to be within one foot of the measured elevations, with a few periods different by about two feet.

As shown in Figure 12, the thalweg elevation of the mouth throughout the majority of the modeled period fluctuates closely around the modeled lagoon stage. The tracking of the thalweg and lagoon stage indicates that the lagoon frequently experiences perched overflow conditions, where the lagoon is full and water is spilling out of the lagoon onto the beach at flows typically less than 10 cfs. The small overflow velocities are unable to erode a large channel, which would lead to a drop in lagoon water levels (lagoon breach). The model is consistent with observations indicating that perched overflow is commonly observed at the site.

During the drought years of 2013 through 2015, a clear seasonal pattern of dry/low lagoon conditions in summer and fall are observed, followed by a filling of the lagoon throughout the winter and drainage into the summer. The QCM is able to roughly model these periods, despite missing some of the peaks in the measured lagoon stage.

The QCM does have several limitations that affect the predictive capabilities of the model. As discussed in Section 3, there are uncertainties in the stage data from the 22nd St gage. Small fluctuations in stage can result in large changes in flow rates. The QCM is highly sensitive to streamflow rates, and thus the prediction accuracy of the modeled lagoon stage is limited by the uncertainties in the 22nd St gage data.

The Arroyo Grande-Meadow Creek Lagoon area is also a highly complicated system that has been simplified in the QCM model. By not including the interaction between Arroyo Grande and Meadow Creek lagoons, some dynamics may not be represented in the modeled lagoon levels. Furthermore, the geometry of the Arroyo Grande Lagoon itself is complex, consisting of an L-shaped lagoon extending alongshore between fore- and backshore dunes. During periods of high flow, sediment is scoured out of the system, changing elevations throughout the lagoon. However, the QCM operates on a fixed stage-storage curve, which may not be representative of the system at all times of the year.

Due to these limitations and other modeling uncertainties, some events in the measured lagoon record were not captured, such as an apparent breach in December 2009 and subsequent lowered water levels, a closure/lagoon filling event in November 2012, and water level peaks during the winter and spring of 2014, 2015, and 2016. Given the complexity of the Arroyo Grande Lagoon, the QCM is best used to reproduce the seasonality of the closures and the expected distribution of water levels in the Lagoon, and not the exact timing of closure or breach events. The model also gives insight into the factors that influence water level conditions in Arroyo Grande Lagoon, and subsequently, water levels in Meadow Creek Lagoon.

Typically, the model would be used to extend the length of the time series so that stable statistics can be derived from the predicted water levels. For this case, however, a limited amount of input data are available, specifically inflows on Arroyo Grande Creek. This could be accomplished by developing a hydrologic watershed model to generate synthetic streamflow using measured precipitation data in the area. However, this is beyond the scope of this study.

Future Conditions

The QCM was used to generate time series of water levels in Arroyo Grande Lagoon for future conditions using the modified Arroyo Grande Creek inflows that account for future changes in precipitation and streamflow per the medium and high emissions scenarios for 2050 and 2100. Based on the findings of the coastal analysis that the geomorphic response of the shore to SLR would effectively lift the lagoon and water levels at the same rate as SLR, the QCM was run for the modified inflows before adding SLR. Figure 13 presents the results of the QCM for the four future cases prior to adding SLR to the time series.

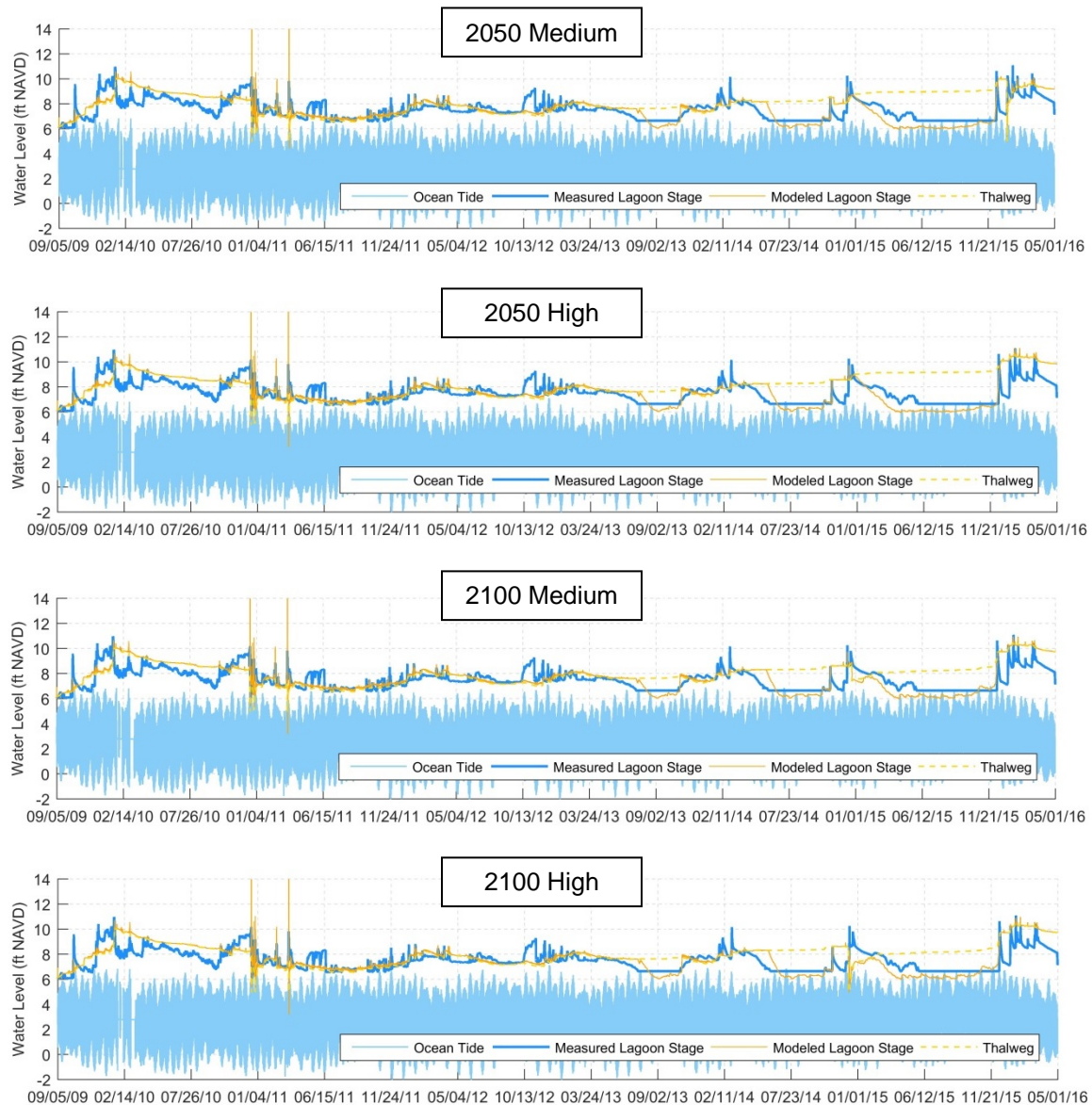


Figure 13
QCM Output for Future Conditions before adding Sea Level Rise:
2050 Medium, 2050 High, 2100 Medium, 2100 High (from top to bottom)

The lagoon water levels and breaching dynamics for the future cases are similar to those observed and modeled for existing conditions, except for during the larger fluvial inflows that cause a greater amount of scour during breaching and slightly increases the number of breach events that occur over the modeled record. SLR amounts were added to the modeled Arroyo Grande Lagoon water levels and the time series were used as the downstream boundary condition in the Meadow Creek Lagoon water balance (Section 5.3.3).

5.3.2 Meadow Creek Lagoon Hydraulic Model Analysis

The inflow boundary conditions to the Meadow Creek Lagoon water balance were generated using a hydraulic model of Meadow Creek lagoon driven by measured (existing) and projected streamflow and tailwater data under the influence of climate change (future). The measured Arroyo Grande Lagoon water levels were used as the tailwater conditions for the simulations. ESA developed a time series of the inflows to the Meadow Creek Lagoon by scaling flows on Arroyo Grande Creek, and calibrating the scale parameter by comparing the modeled Meadow Creek Lagoon water level to observations. The calibrated inflow time series was used in the Meadow Creek Lagoon water balance model that was used to assess the flood elevations. The analysis was conducted using the USACE's HEC-RAS hydraulic modeling software (v5.0.1) to evaluate water surface elevations in Meadow Creek Lagoon in the vicinity of the WWTF for a series of existing events and a range of future climate scenarios.

Each of these events was then analyzed for future periods under a range of climate emissions scenarios. Two time periods, 2050 and 2100, and two emissions scenarios, medium and high, were analyzed for each event to provide a range of potential future water surface conditions based on events known to have caused some degree of flooding in the vicinity of the WWTF.

To simulate future climate change scenarios, ESA developed estimates for future Arroyo Grande Lagoon water levels under the influence of SLR, as well as changes in streamflow in Arroyo Grande Creek and Meadow Creek under the influence of climate change and storm intensification. The following sections provide the methodology ESA developed in applying these datasets to the modeling and flood risk analysis, and key results of the flooding analysis.

Existing Conditions

The hydraulic model applied for this analysis was updated from a prior analysis conducted by ESA (ESA PWA 2013). The development of the original model is documented in the 2013 report. The model was updated by removing the Arroyo Grande Lagoon model geometry and setting the downstream tailwater elevation equal to the measured gage elevation in the Arroyo Grande Lagoon. A series of observed flood events were simulated to verify and calibrate the hydraulic model. The events analyzed and peak stage observed in the Meadow Creek Lagoon are summarized in Table 8.

TABLE 8
EVENTS ANALYZED WITH HYDRAULIC MODEL

Events analyzed	Peak Water Surface Elevation in Meadow Creek Lagoon (ft NAVD)	Source
December 18-25, 2010	12	Anecdotal observations
March 19-22, 2011	9.0	SLO Gage 770
January 20-22, 2012	8.1	SLO Gage 770
January 18-25, 2016	9.2	SLO Gage 770

The December 2010 event caused flooding at the WWTF (eyewitness accounts say approximately 1 foot of standing water at Emergency Electrical Building) and significant flooding in the surrounding residential areas. The water surface gages currently installed in Meadow Creek Lagoon were not active at the time of this event. Thus observed water surface elevations were based on anecdotal evidence of flood locations and depths compared to known elevations at these locations. To simulate flow in Meadow Creek for this event, measured streamflow at Arroyo Grande Lagoon was scaled based on proportional drainage area. This scaling was adjusted to match a peak stage in Meadow Creek Lagoon of 12.0 feet NAVD. This calibrated adjustment factor was then used to scale all flow to Meadow Creek Lagoon in the water balance model described in Section 5.3.3.

For events with measured stage elevations in Meadow Creek Lagoon, we were able to estimate streamflow based on change in stage per unit time and the stage-storage relationship of the lagoon. It was assumed that the change in storage was approximately equal to the inflow to Meadow Creek Lagoon. The event in January 2012 was used to evaluate model performance and adjust the calibration if needed. A comparison of the simulated and measured stage in Meadow Creek Lagoon just upstream of the culverts that drain the lagoon is shown in Figure 14.

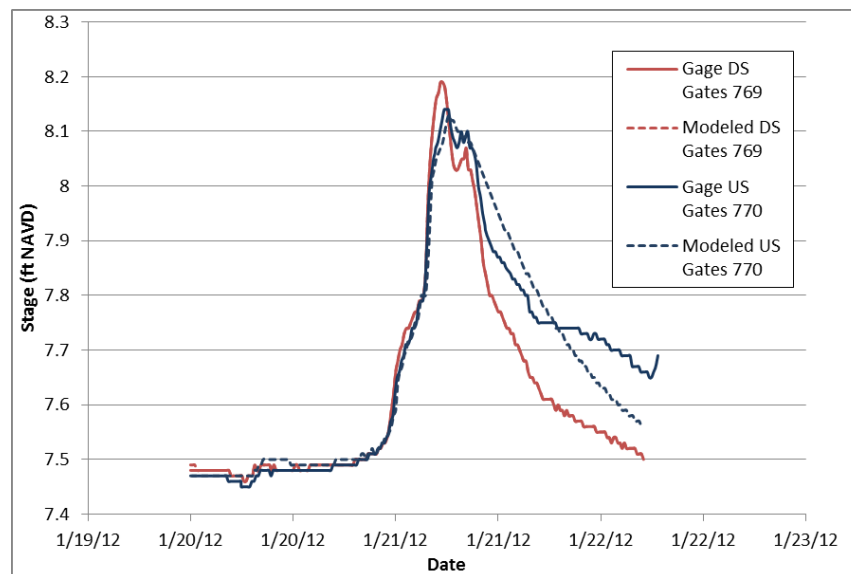


Figure 14

Simulated and measured stage in Meadow Creek Lagoon upstream of the tide gates

The results indicate that the model successfully reproduced the observed water levels in Meadow Creek Lagoon for this event. The existing conditions model was then used to simulate four future climate change scenarios—two emissions scenarios (medium and high) for each of two time horizons (2050 and 2100).

Future Conditions with Climate Change Impacts

The effects of climate change were incorporated into the boundary conditions of the hydraulic model to simulate how water surfaces would change in Meadow Creek Lagoon for a specific set of events. The Arroyo Grande Lagoon water surface governs the downstream water surface boundary condition and the inflow from Arroyo Grande Creek and Meadow Creek drive the upstream inflow boundary conditions on the hydraulic model. Each of the events modeled for existing conditions was adjusted for climate change and analyzed in the hydraulic model. The scenarios and governing boundary conditions are summarized in Table 9.

The computed inflows to Meadow Creek Lagoon were used as the upstream boundary conditions in the Meadow Creek Lagoon water balance described in Section 5.3.3.

TABLE 9
HYDRAULIC MODEL SCENARIOS AND BOUNDARY CONDITIONS

Scenario	Emissions scenario	Time Period	Sea level rise amount (ft)	Peak AGL water level (ft NAVD)	Estimate of Peak AGC flow recurrence interval	% change in peak flow	Peak flow in AGC (cfs)
March 19-22 2011	Existing	Existing	0.0	9.5	16-year	0%	917
	Medium	2050	0.9	10.4		7%	981
		2100	3.1	12.6		23%	1128
	High	2050	2.0	11.5		17%	1073
		2100	5.5	15.0		25%	1146
	January 20-22 2012	Existing	Existing	0.0		8.1	2-year
Medium		2050	0.9	9.0	11%	77	
		2100	3.1	11.2	11%	77	
High		2050	2.0	10.1	16%	80	
		2100	5.5	13.6	10%	76	
January 18-25 2016		Existing	Existing	0.0	9.3	1-year	
	Medium	2050	0.9	10.2	12%		68
		2100	3.1	12.4	10%		67
	High	2050	2.0	11.3	11%		68
		2100	5.5	14.8	1%		62

5.3.3 Meadow Creek Lagoon Water Balance

This section describes the hydrologic water balance model that was used to assess the flood elevations for existing and future conditions in Meadow Creek Lagoon. The water balance model relies on upstream boundary conditions developed using the hydraulic model described in Section 5.3.2 and the downstream boundary conditions developed using the Arroyo Grande Lagoon QCM described in Section 5.3.1.

Methods

A water balance model was developed to estimate the existing and future Meadow Creek Lagoon water levels under the climate change scenarios described in Section 4. The model estimates Meadow Creek Lagoon water levels on an hourly basis by summing precipitation and streamflow inflows to Meadow Creek Lagoon and losses via evaporation and discharge through the Sand Canyon Flap Gates. The model was calibrated to measured Meadow Creek Lagoon water levels from 2010 to 2016. Future Meadow Creek Lagoon water levels were estimated by running the model using scaled streamflow from Arroyo Grande Lagoon water levels adjusted for climate change (see Section 5.3.2). The downstream boundary was defined by the output from the Arroyo Grande Lagoon QCM (see Section 5.3.1).

Assumptions

Several assumptions were used in the development of this model:

- Losses (such as seepage out of the lagoon and discharge to the northwest) and gains (such as possible reverse flow through the tide gates), were considered minor relative to the other inflows and outflows and were neglected.
- Evaporation and precipitation over the lagoon were assumed to remain constant in the future.
- Erosion and deposition of sediment in Meadow Creek Lagoon was assumed to be minor and was neglected.
- Meadow Creek Lagoon was presumed to have a minimum water level driven by surrounding groundwater elevation. Groundwater elevations were assumed to rise the same amount as changes in sea level.
- Future peak flows above 50 cfs in Arroyo Grande Creek were assumed to change in magnitude as described in Section 5.2.1. Flows below 50 cfs were assumed to remain unchanged.

Inputs

Inputs to the model consisted of several existing hourly time series from 2010 to 2016. Two of the time series (Arroyo Grande Lagoon water levels and Meadow Creek streamflow) were adjusted to simulate future conditions over the same timeframe.

Evaporation and precipitation data from the Nipomo CIMIS station were converted into volumes by multiplying over an approximate lagoon surface area of 29.7 acres. These values were assumed to remain constant in the future. Arroyo Grande Lagoon water levels from Gage 769 were used for existing conditions. For future conditions, the Arroyo Grande Lagoon outputs from the QCM were used. Existing streamflows along Meadow Creek were estimated by scaling the

22nd Street Arroyo Grande Creek flows as described in Section 5.2.2. Future Meadow Creek inflows were calculated by scaling the future Arroyo Grande Creek flows, which were estimated by scaling peak flows (>50 cfs) by the change in flow magnitude associated with their return period for the four climate cases (see Table 5).

In addition to the existing and future time series, a head-discharge curve for the Sand Canyon Flapgates was also provided previously by the County, and was used to calculate flow out of Meadow Creek Lagoon into Arroyo Grande Lagoon. A stage-storage curve for Meadow Creek Lagoon was also used to calculate water level changes given inflow and outflow volumes to the lagoon.

Application

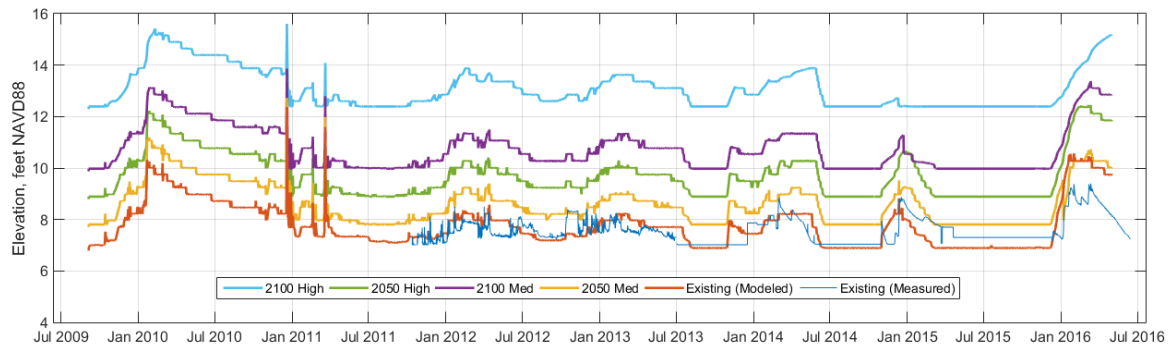
At every hour, the model calculates a change in Meadow Creek Lagoon volume based on gains from precipitation and streamflow, and losses from evaporation and flow out the flap gates. The volume change is then used to calculate a new water level in Meadow Creek Lagoon using the stage-storage relationship for Meadow Creek Lagoon.

The model was initially run and calibrated for existing conditions. High water level events in MCL, such as the December 2010 event, were given priority during calibration. The model was then re-run to simulate the future water level time series for Meadow Creek Lagoon using future streamflows and Arroyo Grande Lagoon water levels at the downstream boundary, as described above.

Results

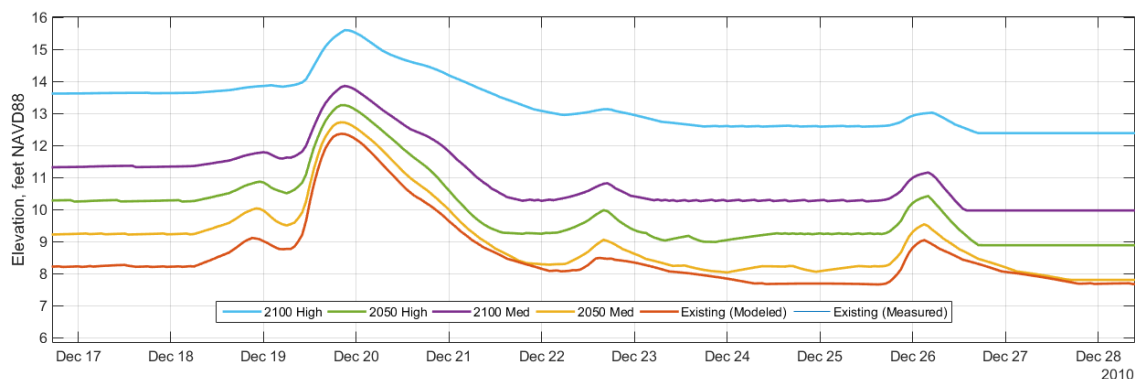
Time Series of Existing and Future Water Levels

Figure 15 presents the time series of simulated Meadow Creek Lagoon water levels for existing and future conditions output from the water balance model. The modeled existing condition is generally close to the measured existing water levels, and the peak water level of 12.3 feet NAVD during the December 2010 storm is close to observations of approximately 12 feet NAVD. In general, the increase in future water levels over time is approximately equal with the amount of SLR. However, extreme events increase less than the amount of SLR. This is likely due to the increase in flood extents associated with the hypsometry, where the area of flooding increases dramatically above 13 feet NAVD. This is shown by the spreading or smoothing of events in the time series results for the various cases.

**Figure 15**

Time Series of Modeled Water Levels in Meadow Creek Lagoon for Different SLR Scenarios

Figure 16 presents the same time series results with a focus on the December 2010 event. For all cases, this event yielded the maximum simulated water surface elevation. This event is noteworthy in that it illustrates that the increase in flood elevation for the large event is less than the amount of SLR, even with the concurrent increase in precipitation and flows. This also suggests that an increase in up to 1 foot is expected by 2050, followed by potential rapid SLR and increase in flood elevations by up to 3.3 feet is expected by 2100.

**Figure 16**

Modeled Hindcast of December 2010 Flood Event in Meadow Creek Lagoon

Frequencies of Existing and Future Flood Events

Figure 17 presents the percent exceedance plots of the time series data of the existing and future simulated water levels in Meadow Creek Lagoon. The plots present the simulated stage as a function of the percent of time that value is exceeded for the period of record (for this analysis, the record is seven years). For example, the median value corresponds to the 50% exceedance. The plot is used in the absence of a longer time series that can be used to tabulate annual maximum water levels and to conduct an extreme value analysis to estimate annual exceedance probabilities (e.g. 100-year water level). Because the amount of data is limited to seven years, an extreme value analysis cannot be performed to evaluate return periods of extreme events with sufficient confidence. Estimates of the 100-year event typically require at least 30 years of annual

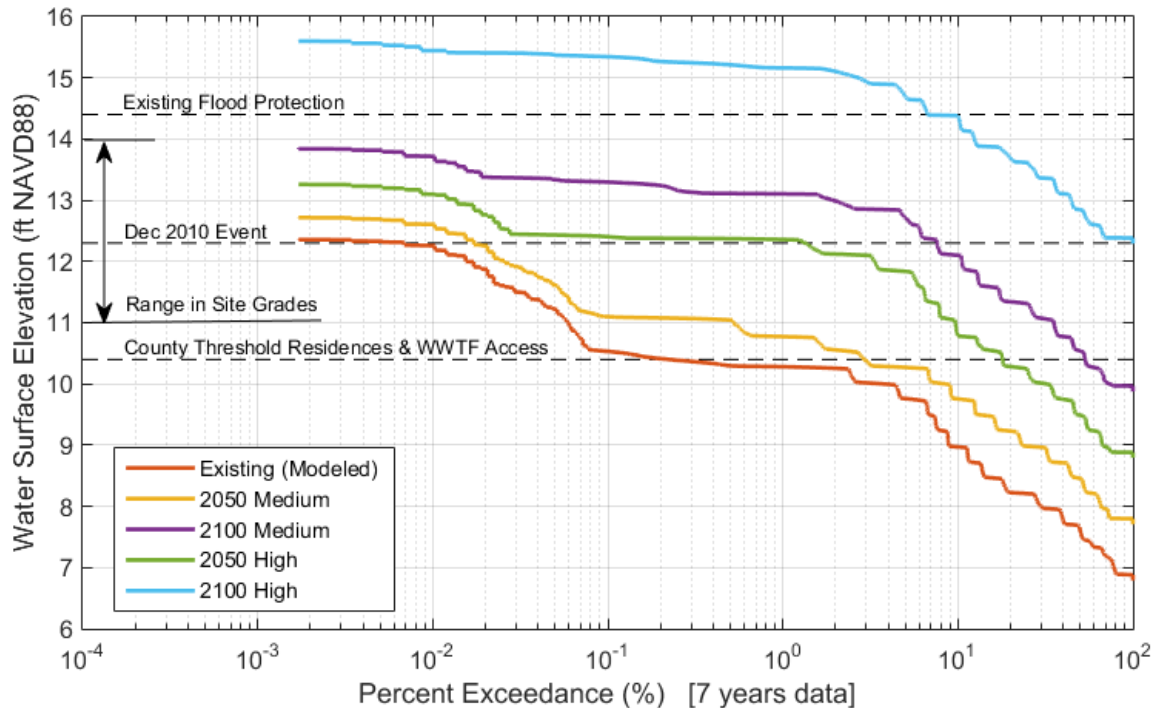
maximum data. Therefore, in the context of this study, we use the term frequency as a semi-quantitative approach that defines how often a given water level would occur over time in a general sense. To facilitate understanding of the percent exceedance, we define the following event frequencies:

- **Rare (extreme) water levels:** less than 1% exceedance, expected to have a 10-year return period or greater and occur during a relatively large storm
- **Nuisance water levels:** between 1% and 10% exceedance, expected to have approximately a 1-year return period
- **Typical water levels:** greater than 10% exceedance, expected to be representative of typical conditions and daily water levels

Note that these terms are defined relative to existing site grades at the WWTF and the associated potential flood consequences. The terms may be defined differently if other assets were under consideration, such as the residential areas that begin flooding at a lower elevation than the WWTF site. For this case, the flooding of the access to the WWTF is not of high consequence, and therefore has been identified as a nuisance water level. Of course, the percent of time that a given water level is exceeded can be used to indicate how frequently flood impacts can be anticipated.

Figure 17 shows the percent of time that the existing and future water levels in Meadow Creek Lagoon are exceeded for the seven-year record evaluated. The flood thresholds, existing elevation of flood protection, and the range in site grades is included in the figure. For a given elevation or threshold, the relative change in frequency over time can be estimated by comparing the future water level curves to the existing (red) curve. Three horizontal lines are depicted in the figure, and represent the following:

- **County Threshold for Residences and WWTF Access:** Flooding of the residential areas occurs when the water level reaches 10.4 feet NAVD, and access roads to the WWTF experience flooding
- **December 2010 event:** From prior experience at the site, the elevation of the Meadow Creek Lagoon during the December 2010 event is used as a benchmark for flooding at the WWTF, though it may not necessarily be representative of a damaging condition
- **Existing Flood Protection:** District staff indicate that improvements to the flood protection of WWTF were implemented since the December 2010 event, and that the facilities are flood proofed to elevation 14.4 feet NAVD

**Figure 17**

Water Level Exceedance Curves for Existing and Future Conditions with Sea Level Rise

The data in Figure 17 indicate the primary findings of the study:

- Increase in flood elevations for rare events is less than the amount of SLR, even with the concurrent increase in precipitation and inflows
- Depth of flooding for a given recurrence interval won't change much with climate change, but the extents of flooding will likely increase
- The frequency of flooding of the site will increase with climate change, and specifically, the flood threshold, or benchmark, will be crossed more frequently
- Typical water levels that occur regularly will increase approximately equal to the amount of SLR

Table 10 tabulates the percent exceedance values over time for the three thresholds shown in Figure 17. These values are useful to illustrate the relative frequency of flood impacts over time for different degrees of flooding. Because the WWTF is currently protected to elevation 14.4 feet NAVD, flood impacts related to SLR are not anticipated until approximately 2070 under the high SLR projection. However, the thresholds for lower elevations will be impacted by SLR sooner, with existing access to the WWTF likely to be impacted by 2050. The typical water levels in the Meadow Creek Lagoon will be greater than 10 feet NAVD by 2050, and greater than 12 feet NAVD by 2100. Changes in the typical water levels represent permanent inundation and imply that land use changes will need to be implemented.

TABLE 10
TABULATED EXCEEDANCE AND FREQUENCIES OF DIFFERENT FLOOD THRESHOLDS OVER TIME

Flood Threshold	Elevation (feet NAVD)	Percent Exceedance (Frequency)		
		Existing	2050	2100
Existing Flood Protection	14.4	0%	0%	<0.001% to 7% (Rare to Nuisance)
December 2010 Event Benchmark	12.3	<0.01% (Rare)	0.01% to 1% (Rare)	8% to 100% (Nuisance to Typical)
County Threshold for Residences and WWTF Access	10.4	0.2% (Rare)	3% to 18% (Nuisance to Typical)	50% to 100% (Typical)

Note: Ranges in percent exceedance represent the range associated with the medium and high emissions scenarios

Table 11 summarizes the median and maximum simulated water level in Meadow Creek Lagoon for existing and future scenarios. This suggests that flood thresholds for the plant of 12 feet NAVD will continue to be exceeded somewhat rarely by 2050, but by the end of the century will be exceeded on a regular basis. Flooding will exceed the access threshold of approximately 10.4 feet NAVD on a regular basis by mid-century.

TABLE 11
**MEDIAN AND MAXIMUM SIMULATED WATER LEVEL IN MEADOW CREEK LAGOON FOR EXISTING
AND FUTURE SCENARIOS (FEET NAVD)**

Simulated Water Level	Existing	2050		2100	
		Medium	High	Medium	High
Median (50th Percentile)	7.6	8.5	9.5	10.5	12.8
Maximum	12.3	12.7	13.2	13.9	15.6

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7 ACKNOWLEDGEMENTS

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John Clemons – SSLOCSD

Michael Nunley – MKN Associates

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APPENDIX A

Description of ESA's Quantified Conceptual Model (QCM) for Small Coastal Lagoons

APPENDIX A: Description of ESA's Quantified Conceptual Model (QCM) for Small Coastal Lagoons

ESA has developed a quantified conceptual model (QCM), which evaluates tidal inlet morphology and the resulting hydrology of the Lagoon. The QCM approach was originally developed for Crissy Field Lagoon, in San Francisco Bay (Battalio et al. 2006). The approach was then refined for river mouth systems by Rich and Keller (2013). Using lessons learned from both approaches, ESA further developed the QCM as a more complete tool to assess systems with both tidal and fluvial characteristics.

The QCM approach is centered on a water budget for the Lagoon, which is coupled with a sediment budget for the Lagoon mouth (inlet). The model is based on two core concepts:

- All water flows entering and leaving the system should balance.
- The net erosion/sedimentation of the inlet channel results from a balance of erosive (fluvial and tidal) and constructive (wave) processes.

The model uses time series of nearshore waves and tides, watershed runoff or streamflow, and evapotranspiration data as boundary conditions. Using these as forcing conditions, the model dynamically simulates time series of inlet, beach, and Lagoon state. With each time step, the net inflows or outflows to the system are estimated, along with the net sedimentation or erosion in the inlet bed. As shown in Figure X, the flow terms vary depending on whether the mouth of the Lagoon is open or closed. During closed conditions, net inflows are based on watershed runoff, wave overwash into the Lagoon, and losses from beach berm seepage and evapotranspiration. When the inlet is open, tidal flows into and out of the inlet are included. Sand deposition in the inlet channel is based on wave power when the inlet bed is lower than ocean tides, and based on both wave power and wave runup when it is perched above tide levels. To approximate scour, inlet flows are used to estimate both the bedload rate and the rate that bed sediments mix with the water volume to become suspended load (see Behrens et al. 2015). For more information on how the model resolves different processes, refer to Behrens et al. (2015).

As the model steps forward in time, it continuously transitions the mouth through tidal, perched, and closed conditions. When deposition in the inlet bed exceeds erosion, the bed rises vertically, eventually perching above most tidal elevations and closing. Closure occurs in the model when sediment fills the inlet bed higher than Lagoon water levels. Once closure occurs, the inlet thalweg effectively becomes the 'beach', and the beach crest is allowed to grow vertically when wave runup reaches the crest height. Breaching occurs in the model when water levels eventually overtop the beach berm crest, eroding a new inlet.

Model accuracy is tested by comparing modeled Lagoon water level time series against gaged observations, and by comparing the timing and length of inlet closure events to those of historical records. Although there are a large number of processes involved in this modeling approach, closure time series and Lagoon water level time series usually provide a good indication of which processes are dominating the system at a given time, such as freshwater runoff during floods, or powerful waves prior to closure. Thus, reproducing these time series is taken to mean that the dominant processes are meaningfully represented.

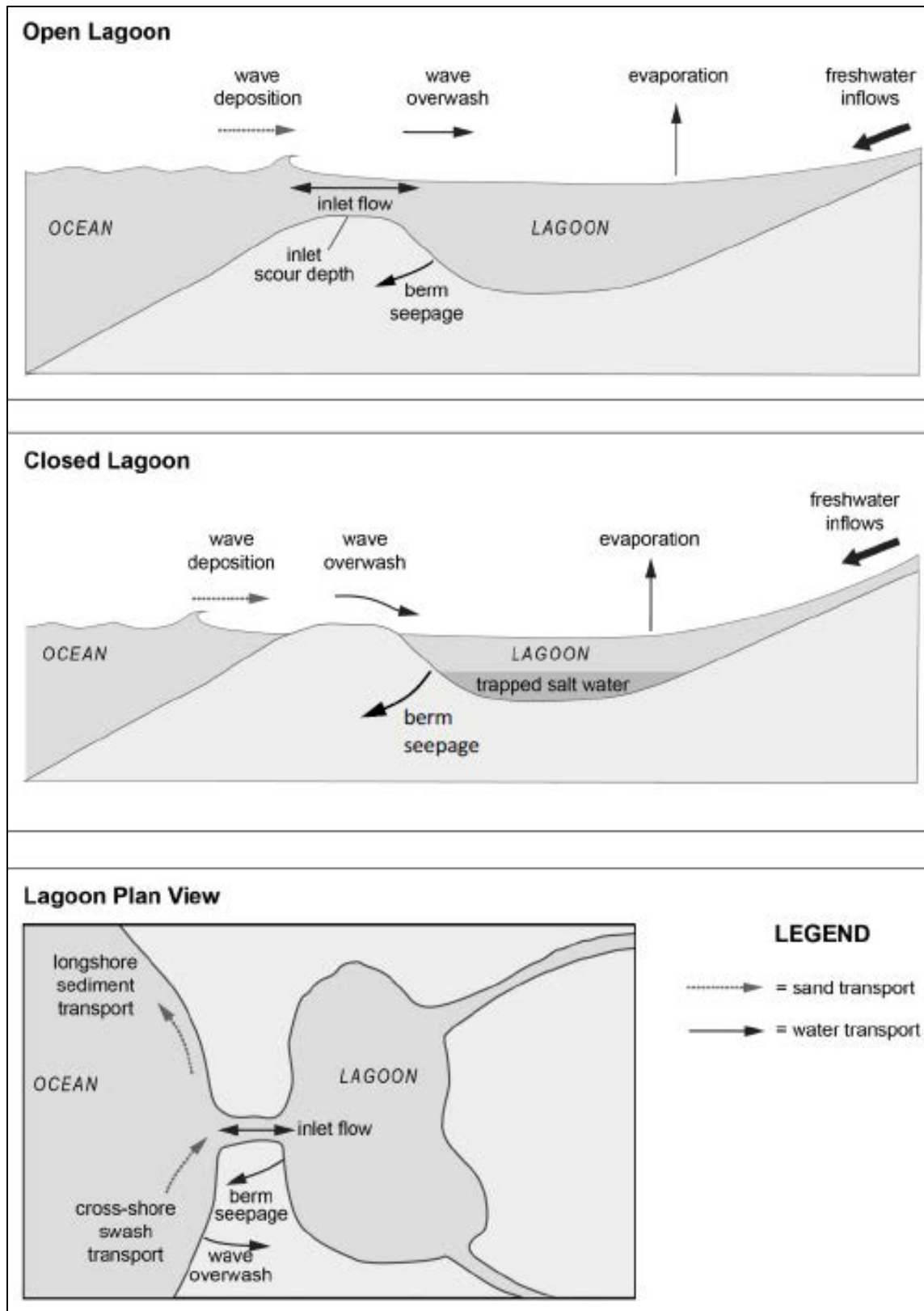


Figure A-1
Conceptual diagram of lagoon processes during open- and closed-mouth conditions

References

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- Behrens, D., Brennan, M., and Battalio, B., 2015, A quantified conceptual model of inlet morphology and associated lagoon hydrology, *Shore and Beach*, 83(3): 33-42.
- Rich, A., and Keller, E., 2013, A hydrologic and geomorphic model of estuary breaching and closure, *Geomorphology*, 19: 64-74.

Attachment E

*Technical Memorandum describing the proposed flood risk mitigation strategy
(Kennedy/Jenks; July 29, 2016)*

29 July 2016

Technical Memorandum

To: Gerhardt Hubner, South San Luis Obispo County Sanitation District (District)
From: John M. Wyckoff
Subject: Redundancy Project – Flood Risk Mitigation Strategy
K/J 1669009*00

Kennedy/Jenks Consultants scope of work for the subject project includes evaluation and recommendation of strategies to include in the project design to flood-proof certain new and existing facilities at the District's Wastewater Treatment Facility in Oceano, California. In general, the flood risk mitigation measures will likely include flood protection of critical existing and new structures and accommodation of access impacts at the site through 2050. Year 2050 coincides with the anticipated design life of other improvements implemented with the Redundancy Project. The design will address risks from a 100-year or lesser flood event on Arroyo Grande Creek, as well as address risks from nuisance flooding on Meadow Creek that may become more frequent due to sea level rise.

Flood protection will be considered for both new facilities that will be constructed as part of the Redundancy Project and existing facilities at the site. A majority of the existing facilities have flood proofing measures that were installed as part of the 1979 Improvements Project. Additional flood protection was implemented after a 2010 flood event by raising the flood protection wall height around the Headworks and Pumping Plant and installing heavy-duty floodgates. Exhibit A (South San Luis Obispo County Sanitation District Facility Flood Elevations – 6/3/16 – Draft), which is attached contains information on the elevations of the existing flood control measures at the plant. The protection provided by the existing flood protection measures range from elevation 13.81 feet at the Standby Power Building to elevation 17.75 feet at the Centrifuge Building.

It is District's intent that, as part of the Redundancy Project, all critical new and existing facilities will be installed or upgraded to be protected from the 100-year flood event on Arroyo Grande Creek as defined by Flood Insurance Rate Map (FIRM) maps. This would also protect these facilities from floods caused by sea level rise for the design life of the facilities. In the Environmental Science Associates (ESA) Sea Level Rise Analysis dated 20 July 2016, maximum flood elevations for existing and future conditions due to sea level rise are predicted to be as follows:

- Existing: 12.3 feet North American Vertical Datum of 1988 (NAVD)
- 2050: 12.7 to 13.2 feet NAVD (30+ years from present)
- 2100: 13.9 to 15.6 feet NAVD (80+ years from present).

Technical Memorandum

Gerhardt Hubner

29 July 2016

1668009*00

Page 2

The ranges for the 2050 and 2100 conditions are levels resulting from medium to high scenarios for climate change per State of California planning guidance.

Flood protection for new critical facilities will be provided to protect the facilities from flood levels of up to 15.25 feet. This flood protection will be provided by installing mechanical equipment and electrical devices above this elevation or within areas enclosed by permanent barriers to flood waters (i.e., block/concrete walls).

The flood proofing of existing critical facilities will be modified and raised, as necessary, to accommodate for protection for these facilities from the flood elevations, as indicated on Exhibit A. The exact modifications to be utilized will be determined during the detailed design of the Redundancy Project and may include techniques such as raising the height of existing flood brackets and floodgates, installing walls around openings in structures, or combinations of these methods. Critical facilities will be identified as a part of the detailed design effort.

By protecting the new and existing critical facilities to the 100-year FIRM flood elevation, these facilities will also be protected from the estimated maximum level floods through the year 2050 time horizon indicated in the ESA Sea Level Rise Analysis. In the year 2050, when there is an additional 30 years of data on sea level rise, the District will re-evaluate the projected maximum flood levels due to sea level rise. Flood protection at the site will be increased if it is deemed to be prudent and necessary based upon any new information and data available at that time. This additional flood protection may entail the installation of a flood protection wall around the treatment plant site, if warranted and/or feasible.

Access to the treatment plant site through the current main plant entrance at 1600 Aloha Place during flooding events may be a future issue with sea level rise. As stated in the ESA Sea Level Rise Study, the threshold elevation at which site access is impacted is 10.4 feet NAVD. This threshold access elevation is below current maximum flood elevations, and the ESA Sea Level Rise Analysis indicates flooding at this elevation may become more common by year 2050.

Currently, the plant has a second entrance (back entrance) near the existing Centrifuge Building. This back entrance is at elevation 13.0 feet and, therefore, would provide a means of access to the plant during maximum flooding events associated with sea level rise through the year 2050.

Attachment: Exhibit A

South San Luis Obispo County Sanitation District
Facility Flood Elevations
6/3/2016 - Draft

Notes:

- (1) Refer to Facility Flood Elevations exhibit for keynote locations
- (2) Existing Elevations based on topographic survey, prepared by Cannon, dated May 2016. Elevations based on NAVD 88 datum
- (3) Elevation estimated from FIRM map. Final Flood Elevation will be based on Flood Study.
- (4) Required flood proofing elevation = (flood elevation) + (freeboard). Freeboard is estimated at 2'. Final freeboard will be based on Flood Study.
- (5) Raise flood proofing height = (required Flood proofing elevation) - (existing elevation)
- (6) Notes will be prepared once final flood elevations and final freeboard is determined.

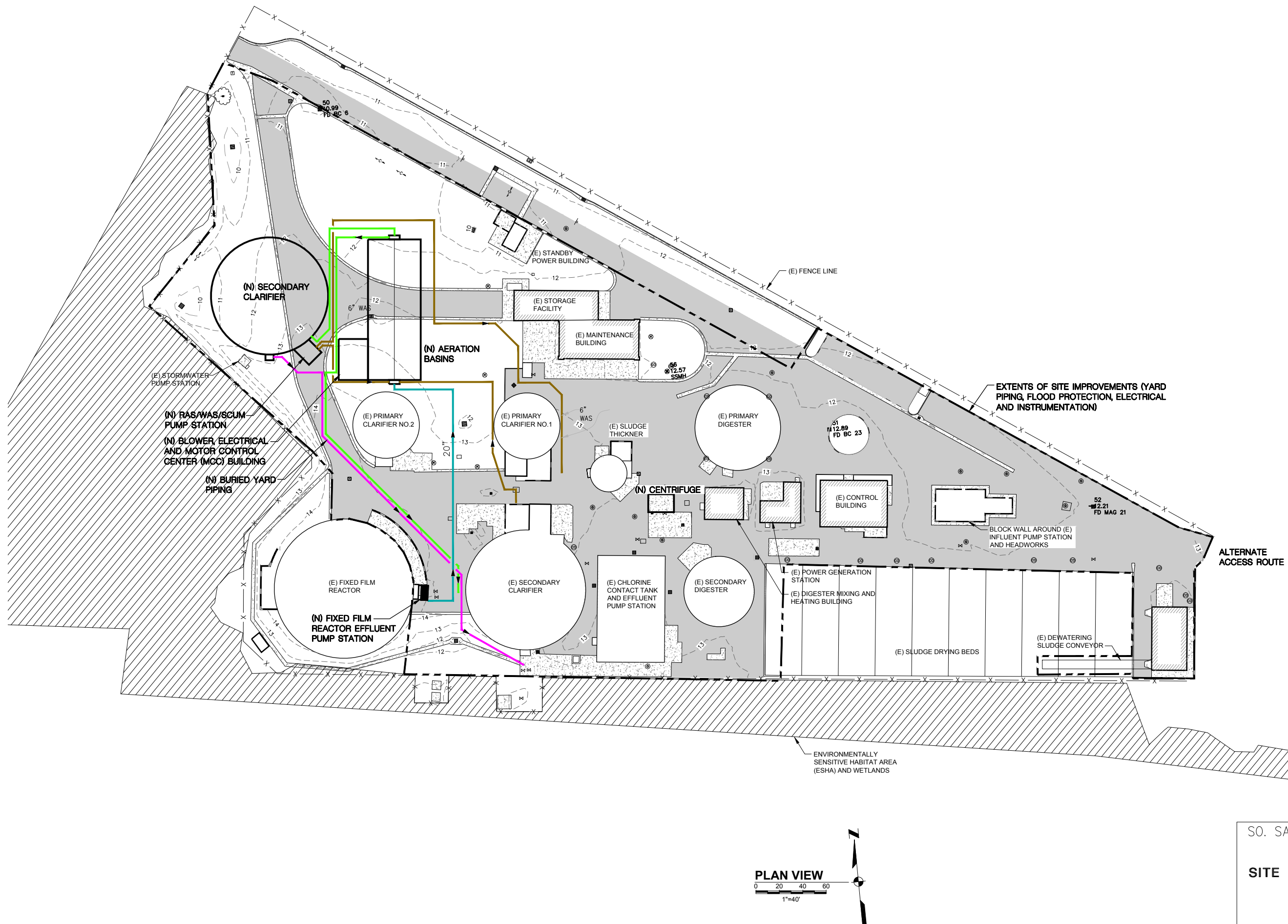
Existing Facilities							Notes ⁽⁶⁾
Keynote per Plan ⁽¹⁾	Location	Description	Existing Elevation ⁽²⁾	100-year Flood Elevation ⁽³⁾	Required Flood Proofing Elevation ⁽⁴⁾	Raise Flood Proofing Height ⁽⁵⁾	
1	Standby Power Building	Finish Floor	10.85	14.75	16.75	5.90	Critical - Can be floodproofed
2	Standby Power Building	Bottom of Window Sill	11.56	14.75	16.75	5.19	
3	Standby Power Building	Top of Metal Flood Bracket	13.81	14.75	16.75	2.94	
4	Storage Facility	Finish Floor	12.92	15.00	17.00	4.08	Not Critical
5	Storage Facility	Finish Floor	12.99	15.00	17.00	4.01	
6	Maintenance Building	Finish Floor	13.02	15.00	17.00	3.98	
7	Maintenance Building	Bottom of Window Sill	13.18	15.00	17.00	3.82	Critical - Can be floodproofed
8	Maintenance Building	Bottom of Window Sill	19.42	15.00	17.00	-2.42	
9	Transformer	Concrete Pad	12.28	15.25	17.25	4.97	
10	Fixed Film Reactor	Top of Metal Flood Bracket	15.60	14.75	16.75	1.15	Not Critical after Redundancy Project is completed
11	Fixed Film Reactor	Edge of Pavement	14.02	14.75	16.75	2.73	
12	Fixed Film Reactor	Top of Wall	15.51	14.75	16.75	1.24	
13	Fixed Film Reactor	Bottom of Fan	15.24	14.75	16.75	1.51	
14	Fixed Film Reactor	Edge of Pavement	14.23	14.75	16.75	2.52	
15	Fixed Film Reactor	Top of Metal Flood Bracket	15.65	14.75	16.75	1.10	
16	Fixed Film Reactor	Top of Metal Flood Bracket	15.57	14.75	16.75	1.18	
17	Fixed Film Reactor	Top of Wall	15.56	14.75	16.75	1.19	
18	Fixed Film Reactor	Finish Floor	8.65	14.75	16.75	8.10	
19	Fixed Film Reactor	Top of Metal Flood Bracket	15.58	14.75	16.75	1.17	
20	Fixed Film Reactor	Top of Metal Flood Bracket	15.59	14.75	16.75	1.16	Can be flooded
21	Fixed Film Reactor	Bottom of Fan	15.36	14.75	16.75	1.39	
22	Pressure Regulary Station	Concrete Pad	11.85	15.00	17.00	5.15	
23	Outfall Manhole	Concrete Pad	12.72	15.00	17.00	4.28	
24	Secondary Clarifier	Concrete	13.70	15.00	17.00	3.30	
25	Secondary Clarifier	Top of Metal Flood Bracket	14.40	15.00	17.00	2.60	
26	Secondary Clarifier	Top of Metal Flood Bracket	14.41	15.00	17.00	2.59	
27	Secondary Clarifier	Top of Wall	14.52	15.00	17.00	2.48	
28	Secondary Clarifier	Concrete	13.70	15.00	17.00	3.30	
29	Secondary Clarifier	Top of Metal Flood Bracket	14.42	15.00	17.00	2.58	
30	Secondary Clarifier	Top of Metal Flood Bracket	14.04	15.00	17.00	2.96	
31	Secondary Clarifier	Top of Wall	14.46	15.00	17.00	2.54	
32	Secondary Clarifier	Bottom of Window Sill	15.08	15.00	17.00	1.92	
33	Secondary Clarifier	Bottom of Window Sill	15.12	15.00	17.00	1.88	
34	Secondary Clarifier	Concrete Pad	13.56	15.00	17.00	3.44	
35	Secondary Clarifier	Concrete Pad	13.71	15.00	17.00	3.29	

EXHIBIT A

Existing Facilities							Notes ⁽⁶⁾
Keynote per Plan ⁽¹⁾	Location	Description	Existing Elevation ⁽²⁾	100-year Flood Elevation ⁽³⁾	Required Flood Proofing Elevation ⁽⁴⁾	Raise Flood Proofing Height ⁽⁵⁾	
36	Primary Clarifier No. 1	Edge of Pavement	13.56	15.00	17.00	3.44	PC top of wall critical - sludge pumps can be down for up to 2 wks
37	Primary Clarifier No. 1	Top of Metal Flood Bracket	14.40	15.00	17.00	2.60	
38	Primary Clarifier No. 1	Top of Metal Flood Bracket	14.41	15.00	17.00	2.59	
39	Primary Clarifier No. 1	Top of Wall	14.51	15.00	17.00	2.49	
40	Digester Heating & Mixing Bldg	Bottom of Window Sill	16.22	15.00	17.00	0.78	Not Critical - Can be down for up to 2 wks
41	Digester Heating & Mixing Bldg	Bottom of Window Sill	16.24	15.00	17.00	0.76	
42	Digester Heating & Mixing Bldg	Bottom of Window Sill	16.31	15.00	17.00	0.69	
43	Digester Heating & Mixing Bldg	Finish Floor	13.20	15.00	17.00	3.80	
44	Digester Heating & Mixing Bldg	Concrete Pad	13.01	15.00	17.00	3.99	
45	Digester Heating & Mixing Bldg	Bottom of Window Sill	16.25	15.00	17.00	0.75	
46	Digester Heating & Mixing Bldg	Bottom of Window Sill	16.25	15.00	17.00	0.75	
47	Digester Heating & Mixing Bldg	Bottom of Window Sill	16.39	15.00	17.00	0.61	
48	Digester Heating & Mixing Bldg	Concrete Pad	13.15	15.00	17.00	3.85	
49	Digester Heating & Mixing Bldg	Finish Floor	13.21	15.00	17.00	3.79	Backside of Station is MCC - Critical, Can be floodproofed
50	Power Generation Station	Finish Floor	14.26	15.00	17.00	2.74	
51	Power Generation Station	Top of Metal Flood Bracket	15.61	15.00	17.00	1.39	
52	Power Generation Station	Bottom of Window Sill	14.23	15.00	17.00	2.77	
53	Power Generation Station	Top of Metal Flood Bracket	15.56	15.00	17.00	1.44	
54	Power Generation Station	Top of Metal Flood Bracket	15.66	15.00	17.00	1.34	
55	Power Generation Station	Finish Floor	14.28	15.00	17.00	2.72	
56	Power Generation Station	Top of Metal Flood Bracket	15.73	15.00	17.00	1.27	
57	Power Generation Station	Bottom of Window Sill	16.47	15.00	17.00	0.53	
58	Power Generation Station	Bottom of Window Sill	16.33	15.00	17.00	0.67	
59	Power Generation Station	Finish Floor	14.26	15.00	17.00	2.74	
60	Power Generation Station	Top of Metal Flood Bracket	15.61	15.00	17.00	1.39	
61	Power Generation Station	Finish Floor	14.24	15.00	17.00	2.76	
62	Power Generation Station	Top of Metal Flood Bracket	15.57	15.00	17.00	1.43	
63	Power Generation Station	Bottom of Window Sill	16.39	15.00	17.00	0.61	
64	Control Building & Office	Top of Metal Flood Panel	15.49	15.25	17.25	1.76	
65	Control Building & Office	Top of Metal Flood Panel	15.49	15.25	17.25	1.76	
66	Control Building & Office	Top of Metal Flood Panel	15.47	15.25	17.25	1.78	
67	Control Building & Office	Finish Floor	12.95	15.25	17.25	4.30	
68	Control Building & Office	Top of Metal Flood Bracket	14.40	15.25	17.25	2.85	
69	Control Building & Office	Concrete Pad	12.81	15.25	17.25	4.44	
70	Control Building & Office	Top of Metal Flood Panel	15.43	15.25	17.25	1.82	
71	Control Building & Office	Top of Metal Flood Panel	15.42	15.25	17.25	1.83	
72	Control Building & Office	Top of Metal Flood Panel	15.42	15.25	17.25	1.83	
73	Control Building & Office	Finish Floor	12.97	15.25	17.25	4.28	
74	Control Building & Office	Top of Metal Flood Bracket	14.42	15.25	17.25	2.83	
75	Control Building & Office	Top of Wall	18.00	15.25	17.25	-0.75	
76	Control Building & Office	Finish Floor	12.95	15.25	17.25	4.30	
77	Control Building & Office	Bottom of Window Sill	13.13	15.25	17.25	4.12	
78	Control Building & Office	Top of Metal Flood Bracket	14.43	15.25	17.25	2.82	
79	Control Building & Office	Bottom of Window Sill	15.92	15.25	17.25	1.33	
80	Control Building & Office	Finish Floor	12.95	15.25	17.25	4.30	
81	Control Building & Office	Top of Metal Flood Bracket	14.43	15.25	17.25	2.82	
82	Control Building & Office	Bottom of Window Sill	17.29	15.25	17.25	-0.04	

EXHIBIT A

Existing Facilities							Notes ⁽⁶⁾
Keynote per Plan ⁽¹⁾	Location	Description	Existing Elevation ⁽²⁾	100-year Flood Elevation ⁽³⁾	Required Flood Proofing Elevation ⁽⁴⁾	Raise Flood Proofing Height ⁽⁵⁾	
83	Control Building & Office	Top of Metal Flood Panel	14.39	15.25	17.25	2.86	Critical - Can be floodproofed
84	Headworks/Influent Pumping	Top of Metal Flood Bracket	16.38	15.25	17.25	0.87	
85	Headworks/Influent Pumping	Top of Metal Flood Bracket	16.38	15.25	17.25	0.87	
86	Headworks/Influent Pumping	Top of Metal Flood Bracket	16.41	15.25	17.25	0.84	
87	Headworks/Influent Pumping	Top of Metal Flood Bracket	16.39	15.25	17.25	0.86	
88	Headworks/Influent Pumping	Top of Metal Flood Bracket	16.39	15.25	17.25	0.86	
89	Headworks/Influent Pumping	Top of Metal Flood Bracket	16.40	15.25	17.25	0.85	Not Critical - Can recover/repair after flood subsides
90	Headworks/Influent Pumping	Top of Wall	16.40	15.25	17.25	0.85	
91	Centrifuge Bldg	Finish Floor	13.51	15.25	17.25	3.74	
92	Centrifuge Bldg	Top of Metal Flood Bracket	17.69	15.25	17.25	-0.44	
93	Centrifuge Bldg	Top of Metal Flood Bracket	17.72	15.25	17.25	-0.47	
94	Centrifuge Bldg	Top of Metal Flood Bracket	17.77	15.25	17.25	-0.52	
95	Centrifuge Bldg	Finish Floor	13.51	15.25	17.25	3.74	
96	Centrifuge Bldg	Top of Metal Flood Bracket	17.75	15.25	17.25	-0.50	
97	Centrifuge Bldg	Finish Floor	13.54	15.25	17.25	3.71	
98	Centrifuge Bldg	Top of Metal Flood Bracket	17.75	15.25	17.25	-0.50	
99	Centrifuge Bldg	Top of Metal Flood Bracket	17.75	15.25	17.25	-0.50	

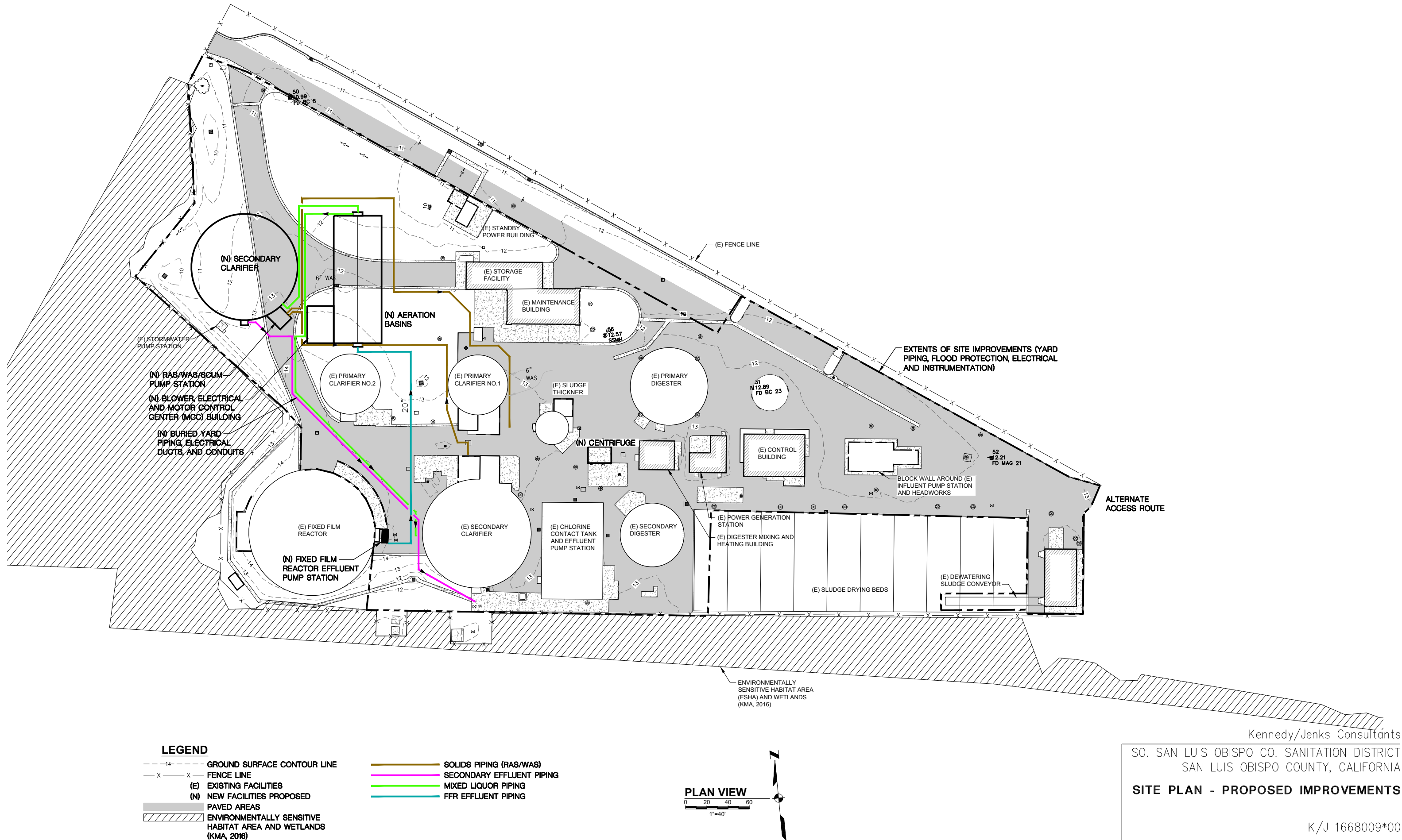


Kennedy/Jenks Consultants
SO. SAN LUIS OBISPO CO. SANITATION DISTRICT
SAN LUIS OBISPO COUNTY, CALIFORNIA
SITE PLAN - PROPOSED IMPROVEMENTS

K/J 1668009*00

Attachment F

Proposed Updated Site Plan (Kennedy/Jenks; 2016)



**SOUTH SAN LUIS OBISPO COUNTY SANITATION DISTRICT
RESOLUTION NO. 2016-357**

**A RESOLUTION OF THE BOARD OF DIRECTORS OF THE
SOUTH SAN LUIS OBISPO COUNTY SANITATION DISTRICT
CONCURRING THAT NO FURTHER ENVIRONMENTAL REVIEW
IS REQUIRED FOR THE LONG-RANGE PROJECT:
SECONDARY CLARIFIER AND AERATION TANKS**

WHEREAS, on July 7, 2010, following a public hearing, the Board of Directors of South San Luis Obispo County Sanitation District adopted Resolution No. 2010-275; and

WHEREAS, in Resolution No. 2010-275, the Board adopted a Mitigated Negative Declaration and Monitoring Program after finding that no substantial evidence in the record supported a fair argument that the secondary clarifier and aeration tanks project (Project) as conditioned, would have a significant impact on the environment; and

WHEREAS, the Board based its finding on an initial study and comments prepared to review the environmental impacts of a proposed long-range Project to construct backup systems including a secondary clarifier and aeration tanks that would improve the South San Luis Obispo County Wastewater Treatment Plant's ability to reliably meet discharge standards at all times; and

WHEREAS, the Board is currently processing a Coastal Development Permit with the California Coastal Commission to allow construction of the Project; and

WHEREAS, the Board has received a request to review whether the Mitigated Negative Declaration approved in Resolution No. 2010-275 continues to meet the requirements of the California Environmental Quality Act; and

WHEREAS, the Board has reviewed and considered the following:

- Addendum dated August, 2016, prepared by John F. Rickenbach, AICP, of JFR Consulting;
- Delineation of Waters of the U.S. and State of California (including wetland delineation) dated August, 2016, prepared by Kevin Merk Associates;
- Sea Level Rise Analysis dated August 3, 2016, prepared by ESA;
- Technical Memorandum regarding flood risk strategy, dated July 29, 2016, prepared by Kennedy/Jenks; and
- Proposed Updated Site Plan, dated 2016, prepared by Kennedy/Jenks.

which document that no substantial changes are proposed to the Project, and there have been no substantial changes in circumstances such that the Project would have new significant impacts or a substantial increase in impacts; further, no new information of substantial importance shows that the project will have one or more significant effects not discussed in the previous Mitigated Negative Declaration; and

**NOW, THEREFORE, THE BOARD OF DIRECTORS OF SOUTH SAN LUIS
OBISPO COUNTY SANITATION DISTRICT HEREBY RESOLVES:**

1. The above findings are true; and
2. The Board confirms its adoption of the Mitigated Negative Declaration and Mitigation Monitoring Program for the long-range Project: secondary clarifier and aeration tanks, and concurs that the Mitigated Negative Declaration continues to meet the requirements of the California Environmental Quality Act (CEQA) for the Project; and
3. Based on the Addendum and studies listed in the recitals above, the Board concurs that no further environmental review under CEQA is required for the long-range project: secondary clarifier and aeration tanks; and
4. The record of these proceedings is located at the office of South San Luis Obispo County Sanitation District, 1600 Aloha, Oceano, CA.

PASSED AND ADOPTED at a regular meeting of the South San Luis Obispo County Sanitation District held September 7, 2016.

Board Chair

ATTEST:

DISTRICT SECRETARY

APPROVED AS TO FORM:

BY:_____
DISTRICT COUNSEL

CONTENTS:

BY:_____
DISTRICT ADMINISTRATOR



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Staff Report

Date: September 7, 2016

To: Board of Directors

From: Gerhardt Hubner, District Administrator

**Subject: CHERRY AVENUE SEWER PIPE BRIDGE MAINTENANCE PROJECT -
CONSIDERATION OF A RESOLUTION NO. 2016-356, A RESOLUTION
MAKING FINDINGS, ADOPT A MITIGATION MONITORING PROGRAM,
APPROVE A MITIGATED NEGATIVE DECLARATION, AND DIRECT THE
FILING OF THE MITIGATED NEGATIVE DECLARATION**

RECOMMENDATION

1. Adopt Resolution No. 2016-356, a Resolution Making Findings, Adopt a Mitigation Monitoring Program, Approve a Mitigated Negative Declaration, and Direct the Filing of the Mitigated Negative Declaration for the Project

BACKGROUND

For several years, the District has pursued maintenance on its Cherry Ave Sewer Pipe Bridge, which spans Arroyo Grande Creek between Branch Street to the north and the Nelson Street cul-de-sac to the south in the City of Arroyo Grande.

In order to initiate maintenance on the Cherry Ave Sewer Pipe Bridge (Project), several permits from the State of California must be obtained first, including a Steambed Alteration Agreement from the California Department of Fish and Wildlife. Staff from the CA DFW have told District staff that prior to deeming an SAA application complete, and prior to processing the SAA for this Project, the California Environmental Quality Act (CEQA) must be complied with.

Therefore, to move the permitting forward, on April 20, 2016, your Board approved a contract with Kevin Merk Associates, LLC. to undertake and complete a Mitigated Negative Declaration (MND) for this Project.

DISCUSSION

On July 19, 2016, a draft MND (Attachment No. 1) for the Project was released for public review and comment. A public notice for the Project's MND was published in the San Luis Obispo Tribune (Attachment No. 2).

Project Description (from MND): The proposed Project will involve the removal of existing paint and debris from the bridge, followed by replacing anti-corrosion coatings on the bridge. Anti-corrosion coating systems will be applied including a 3-layer inorganic zinc/epoxy/urethane coating system, a wax tape and fiberglass outer wrap system and a 3-layer modified polyamidoamine epoxy/aliphatic acrylic polyurethane coating system. The District will utilize a containment system for the purpose of containing all material and debris from the existing pipe bridge and support structure for proper disposal at a licensed facility. The containment system will contain all water, resulting debris, and visible dust produced when the existing coating system is disturbed.

The Project will not place fill in, nor will any permanent disturbance to the Arroyo Grande Creek channel bottom occur. Native vegetation in the approximate 25-foot pipe bridge easement area will be selectively pruned to provide access to the structure, no vegetation removal is proposed. English ivy will be removed from existing trees located adjacent to the pipe bridge to ensure dying trees do not pose a threat to the pipe bridge from falling. Minor soil disturbance (up to 18 cubic yards, maximum) would occur where the existing pipe penetrates both banks to inspect the integrity of the pipe. This would be done with hand tools.

All equipment for the Project will be staged within the approximate 25-foot wide access easement area at the top of the northern bank of the creek. In addition, scaffolding would be hung from the bridge to allow the installation of a containment system and worker access to the bridge. Removal of invasive non-native plants would also occur within the easement area, and would be completed under the direction of a qualified biologist. All disturbed areas would be stabilized and revegetated with an assemblage of native plants and appropriate erosion controls at the direction of the project engineer.

Project Environmental Analysis: The Initial Study for the Project included on-site inspection of the project site and surroundings and a detailed review of the information in the file for the Project. In addition, available background information was reviewed. Relevant information regarding soil types and characteristics, geologic information, significant vegetation and/or wildlife resources, water availability, wastewater disposal services, existing land uses and surrounding land use categories and other information were evaluated.

Several issues were identified in the Initial Study (Agriculture Resources, Air Quality, Biological Resources, Cultural Resources, Geology and Soils, Hazards and Hazardous Materials, Noise, Population and Housing, Public Services and Utilities, Recreation, Transportation Circulation, Wastewater, Water, Land Use) as having potentially significant environmental effects, and analyzed in the MND. Impacts identified as "Impact can & will be mitigated" are considered to be significant but mitigable impacts. Those potentially significant items associated with the proposed uses can be minimized to less than significant levels.

The MND also includes a Mitigation and Monitoring Program, with specific conditions that will bring any identified impacts associated with the project to levels of less than significant.

Special Provision Document (Attachment No. 3): The special provisions document was prepared as a companion to the MND, and includes several specific Project provisions and conditions that will be implemented during the Project.

Public Review Process: On August 19, 2016, the public comment closed. Two comment letters were received, one from the San Luis Obispo County Air Pollution Control District (Attachment No. 4), and the other from the State Clearinghouse (Attachment No. 5). Comments from the

APCD were addressed through an email exchange (Attachment No. 6). The State Clearinghouse letter stated that no comments were received from any state agencies.

Resolution No. 2016-356

Today we are asking the Board to consider adoption of Resolution No. 2016-356. This Resolution includes the required findings to complete the CEQA process for this Project by approving the Mitigated Negative Declaration, and thus mitigate and/or avoid significant environmental effects by implementation of the Project. If adopted the Resolution also includes the required Mitigation Monitoring Program necessary to implement, monitor and enforce Project conditions, and mitigate any impact to less than significance during Project implementation.

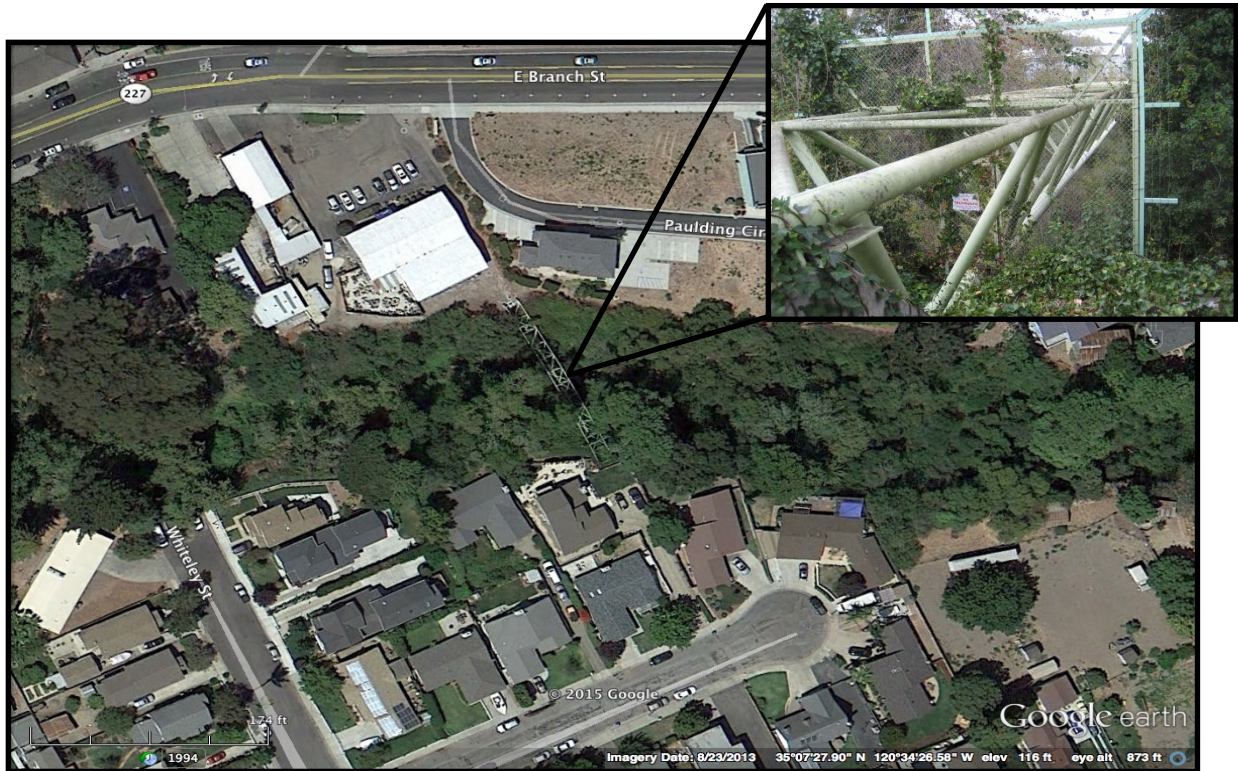
If the Board approves Resolution No. 2016-356 today, staff also requests the Board direct us to file a Notice of Determination for the MND for this Project.

ATTACHMENTS:

1. Final Mitigation Negative Declaration, including Mitigation Monitoring Program
2. MND Public Notice
3. Special Provisions
4. APCD Comment Letter
5. State Clearinghouse Comment Letter
6. Response to APCD Comments, email discussion
7. Resolution 2016-356

South San Luis Obispo County Sanitation District

Cherry Avenue Pipe Bridge Maintenance Project Initial Study and Mitigated Negative Declaration



Prepared for:

South San Luis Obispo County Sanitation District
1600 Aloha Place / P.O. Box 339
Oceano, CA 93475

Prepared by:

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July 2016



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Attachment A: Figure 1, Site Location. Figure 2, Project Site Plan/Aerial Overlay

Attachment B: Project Biological Assessment



**SOUTH SAN LUIS OBISPO COUNTY
SANITATION DISTRICT**

INITIAL STUDY SUMMARY - ENVIRONMENTAL CHECKLIST

Proposed Project: Cherry Avenue Pipe Bridge Maintenance Project

ENVIRONMENTAL FACTORS POTENTIALLY AFFECTED: The proposed project could have a "Potentially Significant Impact" for at least one of the environmental factors checked below. Please refer to the attached pages for discussion on mitigation measures or project revisions to either reduce these impacts to less than significant levels or require further study.

<input type="checkbox"/> Aesthetics	<input type="checkbox"/> Geology and Soils	<input type="checkbox"/> Recreation
<input type="checkbox"/> Agricultural Resources	<input type="checkbox"/> Hazards/Hazardous Materials	<input type="checkbox"/> Transportation/Circulation
<input checked="" type="checkbox"/> Air Quality	<input checked="" type="checkbox"/> Noise	<input type="checkbox"/> Wastewater
<input checked="" type="checkbox"/> Biological Resources	<input type="checkbox"/> Population/Housing	<input type="checkbox"/> Water
<input checked="" type="checkbox"/> Cultural Resources	<input type="checkbox"/> Public Services/Utilities	<input type="checkbox"/> Land Use

DETERMINATION: (To be completed by the Lead Agency)

On the basis of this initial evaluation, the South San Luis Obispo County Sanitation District finds that:

- ☐ The proposed project COULD NOT have a significant effect on the environment, and a NEGATIVE DECLARATION will be prepared.
- ☒ Although the proposed project could have a significant effect on the environment, there will not be a significant effect in this case because revisions in the project have been made by or agreed to by the project proponent. A MITIGATED NEGATIVE DECLARATION will be prepared.
- ☐ The proposed project MAY have a significant effect on the environment, and an ENVIRONMENTAL IMPACT REPORT is required.
- ☐ The proposed project MAY have a "potentially significant impact" or "potentially significant unless mitigated" impact on the environment, but at least one effect 1) has been adequately analyzed in an earlier document pursuant to applicable legal standards, and 2) has been addressed by mitigation measures based on the earlier analysis as described on attached sheets. An ENVIRONMENTAL IMPACT REPORT is required, but it must analyze only the effects that remain to be addressed.
- ☐ Although the proposed project could have a significant effect on the environment, because all potentially significant effects (a) have been analyzed adequately in an earlier EIR or NEGATIVE DECLARATION pursuant to applicable standards, and (b) have been avoided or mitigated pursuant to that earlier EIR or NEGATIVE DECLARATION, including revisions or mitigation measures that are imposed upon the proposed project, nothing further is required.

Prepared by (Print)

Signature

Date

District Rep. (Print)

Signature

Date

Project Environmental Analysis: The South San Luis Obispo County Sanitation District (SSLOCSD) environmental review process incorporates all of the requirements for completing the Initial Study as required by the California Environmental Quality Act (CEQA) and the CEQA Guidelines. The Initial Study includes on-site inspection of the project site and surroundings and a detailed review of the information in the file for the project. In addition, available background information is reviewed for each project. Relevant information regarding soil types and characteristics, geologic information, significant vegetation and/or wildlife resources, water availability, wastewater disposal services, existing land uses and surrounding land use categories and other information relevant to the environmental review process are evaluated for each project. The SSLOCSD uses the checklist to summarize the results of the research accomplished during the initial environmental review of the project.

Persons, agencies or organizations interested in obtaining more information regarding the environmental review process for a project should contact the SSLOCSD, 1600 Aloha Place, Oceano, CA 93445 (805-489-6666; FAX 805-489-2765).

1. PROJECT DESCRIPTION: The Cherry Avenue pipe bridge currently spans Arroyo Grande Creek between Branch Street to the north and the Nelson Street cul-de-sac to the south in the City of Arroyo Grande, San Luis Obispo County, California. The pipe bridge maintenance project will involve the removal of existing paint and debris from the bridge, followed by replacing anti-corrosion coatings on the bridge. The anti-corrosion coating systems to be applied include a 3-layer inorganic zinc/epoxy/urethane coating system, a wax tape and fiberglass outer wrap system and a 3-layer modified polyamidoamine epoxy/aliphatic acrylic polyurethane coating system. The South San Luis Obispo County Sanitation District (District) proposed to utilize a containment system for the purpose of containing all material and debris from the existing pipe bridge and support structure for proper disposal at a licensed facility. The containment system will contain all water, resulting debris, and visible dust produced when the existing coating system is disturbed.

No placement of fill in or permanent disturbance to the Arroyo Grande Creek channel bottom will occur. Native vegetation in the approximate 25-foot pipe bridge easement area would be selectively pruned to provide access to the structure, no vegetation removal is proposed. English ivy will be removed from existing trees located adjacent to the pipe bridge to ensure dying trees do not pose a threat to the pipe bridge from falling. Minor soil disturbance (up to 18 cubic yards, maximum) would occur where the existing pipe penetrates both banks to inspect the integrity of the pipe. This would be done with hand tools.

All equipment will be staged within the approximate 25-foot wide access easement area at the top of the northern bank of the creek. In addition, scaffolding would be hung from the bridge to allow the installation of a containment system and worker access to the bridge. Removal of invasive non-native plants would also occur within the easement area, and would be completed under the direction of a qualified biologist. All disturbed areas would be stabilized and revegetated with an assemblage of native plants and appropriate erosion controls at the direction of the project engineer.

Please refer to Figure 2, Site Plan/Aerial Overlay, for a detailed depiction of the proposed project.

2. PROJECT LOCATION: The Cherry Avenue pipe bridge currently spans Arroyo Grande Creek between Branch Street to the north and the Nelson Street cul-de-sac to the south in the City of Arroyo Grande, San Luis Obispo County, California. Please refer to Figure 1, Project Location/Site Vicinity. The project site is bounded on the north by mixed residential and commercial development along Branch Street (zoning designation = Village Mixed Use), and single family residential development to the south (zoning designation = Single Family). The project site has the following approximate latitude/longitude coordinates: North: 35.1244°, West: -120.5741°.

3. EXISTING SETTING: The subject site consists of a pipe bridge spanning the Arroyo Grande creek, within an easement owned by the SSLOCS. The northern pipe bridge abutment is located just south of the Paulding Circle/Branch Street intersection and is dominated by mixed use commercial and residential development. The southern pipe bridge abutment is located just north of the Nelson Street cul-de-sac, within an easement between single family residential development. Site elevation is approximately 124 feet above mean sea level, measured at the top of bank. The surrounding area adjacent to existing development to the north and south of the creek consists of residential and commercial land uses, with associated landscaping and ornamental plantings. Native habitat present in the Arroyo Grande Creek corridor at the site consists of a riparian overstory of arroyo willow and black cottonwood trees, with smaller arroyo willow shrubs and associated understory vegetation along the lower banks and the active channel. The creek banks are fairly incised and steep in the project vicinity.

4. ENVIRONMENTAL ANALYSIS: During the Initial Study process, several issues were identified as having potentially significant environmental effects (see following Initial Study). Impacts identified as "Impact can & will be mitigated" are considered to be significant but mitigable impacts. Those potentially significant items associated with the proposed uses can be minimized to less than significant levels.

INITIAL STUDY CHECKLIST

I.	AESTHETICS - <i>Will the project:</i>	Potentially Significant	Impact can & will be mitigated	Insignificant Impact	Not Applicable
a)	<i>Create an aesthetically incompatible site open to public view?</i>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
b)	<i>Introduce a use within a scenic view open to public view?</i>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
c)	<i>Change the visual character of an area?</i>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
d)	<i>Create glare or night lighting, which may affect surrounding areas?</i>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
e)	<i>Impact unique geological or physical features?</i>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
f)	<i>Other:</i> _____	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>

Setting. The project site consists of the existing Cherry Avenue pipe bridge which currently spans Arroyo Grande Creek between Branch Street to the north and the Nelson Street cul-de-sac to the

south in the City of Arroyo Grande, San Luis Obispo County, California. The City of Arroyo Grande is the southernmost portion of a continuous urban area within the County of San Luis Obispo made up of the nearby communities of Grover Beach, Oceano, Pismo Beach, and Shell Beach, known as the “Five Cities”.

The northern pipe bridge abutment is located just south of the Paulding Circle/Branch Street intersection and is dominated by mixed use commercial and residential development. The southern pipe bridge abutment is located just north of the Nelson Street cul-de-sac, within an easement between single family residential development.

Site elevation is approximately 124 feet above mean sea level (msl), measured at the top of bank. The surrounding area adjacent to existing development to the north and south of the creek consists of residential and commercial land uses, with associated landscaping and ornamental plantings. Native habitat present in the Arroyo Grande Creek corridor at the site consists of a riparian overstory of arroyo willow and black cottonwood trees, with smaller arroyo willow shrubs and associated understory vegetation along the lower banks and the active channel. The creek banks are fairly incised and steep in the project vicinity.

Being in general proximity to an arterial roadway and located on generally level topography, the project site can be seen from public vantage points near the Nelson Street cul-de-sac and Paulding Circle near the Branch Street intersection. However, views of the existing pipe bridge are for the most part blocked by intervening buildings and the relatively dense riparian vegetation surrounding the site. Views from public vantage points are considered sparse and intermittent.

Although the project will be intermittently visible from public roadways, it is important to note that the proposed project is limited to the maintenance of an existing pipe bridge and would not result in any changes to the current structure or abutments. The project would result in the cleaning, re-painting and re-coating of the existing pipe bridge structure. The proposed project would not obstruct or silhouette against any ridgelines as viewed from public vantage points.

Please refer to the attached “Biological Resource Assessment for the Cherry Avenue Pipe Bridge Maintenance Project, Arroyo Grande Creek, San Luis Obispo County, California” (Kevin Merk Associates, LLC. November 16, 2015) for a photo-plate including detailed photos of the project site and existing pipe bridge facility.

Impact. As the overarching policy document guiding development in the City, the Arroyo Grande General Plan contains policies to ensure that development is compatible with the existing visual context. The Agriculture, Conservation and Open Space Element includes policies to minimize visual impacts on surrounding natural landscapes and scenic views. In addition, the City’s Design Guidelines provides guidance on structural design requirements to ensure compatibility with surrounding land uses.

The proposed project consists of the maintenance of the existing Cherry Avenue pipe bridge and is limited to the stripping of the existing facility coating and re-application of coating and paint. No new facilities are proposed, and no structural changes would occur that would have the potential to alter

the existing pipe bridge. Construction scaffolding and equipment are temporary in nature and will be removed upon completion of the proposed maintenance. As such, the proposed project would not result in a change in the visual character of the project site or vicinity. Impacts to visual resources are considered less than significant.

Mitigation/Conclusion. No mitigation measures are necessary.

II. AGRICULTURAL RESOURCES - <i>Will the project:</i>		Potentially Significant	Impact can & will be mitigated	Insignificant Impact	Not Applicable
a)	<i>Convert prime agricultural land to non-agricultural use?</i>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
b)	<i>Impair agricultural use of other property or result in conversion to other uses?</i>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
c)	<i>Conflict with existing zoning or Williamson Act program?</i>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
d)	<i>Other:</i> _____	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>

Setting. The City of Arroyo Grande is located in the southern portion of San Luis Obispo County and the Central Coast Region, both of which are important key agricultural centers within the State of California. The region's agricultural industry is an important part of the local economy. It provides employment and income directly for those in agriculture, and it helps drive growth in the tourism industry, which in turn generates further economic activity and consumer spending.

The closest active agricultural production is located approximately ¼-mile to the south of the project site, along East Cherry Avenue, and consists of row crop production.

Impact. The proposed project consists of the maintenance of the existing Cherry Avenue pipe bridge and is limited to the stripping of the existing facility coating, spot repair of the existing pipe, and re-application of coating and paint. No new facilities are proposed, and no structural development is proposed. The project site is located entirely within the City limits and is not designated as Prime or Unique Farmland or Farmland of Statewide Importance on the maps prepared pursuant to the Farmland Mapping and Monitoring Program of the California Resources Agency. Therefore, the proposed project would not result in conversion of these agricultural resources to nonagricultural use.

The project site is not located on farmland, nor is it under a Williamson Act contract. The project site is surrounded by developed properties and public streets. Therefore, the proposed project would not conflict with existing zoning for agricultural use or a Williamson Act contract.

The proposed maintenance of the existing pipe bridge will not contribute to conversion of farmland. No impacts to existing agricultural resources are anticipated with implementation of the project.

Mitigation/Conclusion. No mitigation measures are necessary.

III.	AIR QUALITY - <i>Will the project:</i>	Potentially Significant	Impact can & will be mitigated	Insignificant Impact	Not Applicable
a)	<i>Violate any state or federal ambient air quality standard, or exceed air quality emission thresholds as established by the applicable air quality district?</i>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
b)	<i>Result in a cumulatively considerable net increase of any criteria pollutant for which the project region is nonattainment under an applicable federal or state ambient air quality standard (including releasing emissions that exceed quantitative thresholds for ozone precursors)?</i>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
c)	<i>Create or subject individuals to air pollution emissions or objectionable odors?</i>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
d)	<i>Be inconsistent with an applicable Air Quality Management Plan?</i>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
e)	<i>Other:</i> _____	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>

Setting. Air quality in the Arroyo Grande region of San Luis Obispo County is characteristically different than other regions of the County (i.e., the Upper Salinas River Valley and the East County Plain), although the physical features that divide them provide only limited barriers to transport pollutants between regions. The County is designated nonattainment for the one-hour California Ambient Air Quality Standards (CAAQS) for ozone and the CAAQS for respirable particulate matter (PM₁₀). The County is designated attainment for national ambient air quality standards (NAAQS).

Both the US Environmental Protection Agency (EPA) and the California Air Resources Board (CARB) have established ambient air quality standards for common pollutants. These ambient air quality standards are levels of contaminants representing safe levels that avoid specific adverse health effects associated with each pollutant. The ambient air quality standards cover what are called “criteria” pollutants because the health and other effects of each pollutant are described in criteria documents. Areas that meet ambient air quality standards are classified as attainment areas, while areas that do not meet these standards are classified as nonattainment areas. As mentioned above, Arroyo Grande is currently designated as nonattainment for the state and federal ambient air quality standards for ground-level ozone and PM_{2.5} as well as the state standards for PM₁₀.

Greenhouse Gas Emissions: The San Luis Obispo County Air Pollution Control District (APCD) is the agency primarily responsible for ensuring that NAAQS and California ambient air quality standards

(CAAQS) are not exceeded and that air quality conditions are maintained in the region. The County of San Luis Obispo APCD adopted the Clean Air Plan in January 1992; the Plan was updated in 1998, and again in 2001. The Clean Air Plan is a comprehensive planning document designed to reduce emissions from traditional industrial and commercial sources, as well as from motor vehicle use. The purpose of the County's Clean Air Plan is to address the attainment and maintenance of state and federal ambient air quality standards by following a comprehensive set of emission control measures within the Plan.

The City of Arroyo Grande Climate Action Plan (CAP) includes goals and policies for implementing reductions in GHG emissions. The CAP includes the City's emissions inventory (2005), and identifies GHG reductions, including implementation measures and monitoring procedures. The CAP is consistent with CEQA Guidelines Section 15183.5(b) for mitigating emissions and climate change impacts and serves as a Qualified GHG Reduction Strategy through the APCD. As such, project-specific analysis of GHG emissions is only required if GHG emissions from a project would be cumulatively significant regardless of CAP implementation.

Impact. Temporary impacts from the project, including but not limited to excavation and construction activities, vehicle emissions from heavy duty equipment, have the potential to create dust and emissions that exceed air quality standards during construction for temporary and intermediate periods.

Construction activities can generate fugitive dust, which could be a nuisance to local residents and businesses in close proximity to the proposed construction site. The proposed project is expected to generate construction emissions in excess of the thresholds approved by the APCD [Ozone Precursors (ROG + NO_x) = 137 lbs/day or 2.5 tons for projects lasting up to one quarter; Diesel Particulate Matter (DPM) = 7 lbs/day or 0.13 tons for projects lasting up to one quarter; Fugitive Particulate Matter (PM₁₀) = 2.5 tons for projects lasting up to one quarter]. Because the project is within 1,000 feet of sensitive receptors, impacts related to fugitive dust emissions during proposed construction activities are considered significant but mitigable.

Construction equipment itself can be the source of air quality emission impacts, and may be subject to California Air Resources Board or APCD permitting requirements. This includes portable equipment, 50 horsepower (hp) or greater or other equipment listed in the APCD's 2012 CEQA Handbook, Technical Appendices. Truck trips associated with the materials that will be cut from the site may also be a source of emissions subject to APCD permitting requirements, subject to specific truck routing selected. Impacts related to vehicle and heavy equipment emissions are considered significant but mitigable.

Operational Impacts: The proposed project consists of the maintenance of the existing Cherry Avenue pipe bridge structure and would not result in operational impacts. Air quality impacts are expected to be limited to construction related emissions.

Application of Coating: The pipe bridge maintenance project will involve the removal of existing paint and debris from the bridge followed by replacing anti-corrosion coatings on the bridge and pipe. The anti-corrosion coating consists of a 3-layer inorganic zinc/epoxy/urethane coating system, a wax tape

and fiberglass outer wrap system, and a 3-layer modified polyamidoamine epoxy/aliphatic acrylic polyurethane coating system to be applied after the pipes are stripped. According to the District, any work that disturbs the existing coating system may expose project workers to health hazards. All debris produced when the existing coating system is disturbed must be contained. As such, the District proposes to use a containment system designed to contain all debris resulting from the stripping of the existing pipe bridge. The containment system will contain all water, resulting debris, and visible dust produced when the existing coating system is disturbed. No temporary structures are proposed for construction in the stream channel bottom. Impacts related from coating application are considered less than significant with implementation of the proposed containment system.

Greenhouse Gas Emissions: As discussed above, the City of Arroyo Grande CAP is designed as a Qualified GHG Reduction Plan, consistent with CEQA Guidelines Section 15183.5(b). According to the CAP, the City's GHG emissions are estimated at 93,513 MT CO₂e by 2020. The City will need to reduce its GHG emissions by 3,914 MT CO₂e by 2020 to meet the 15% reduction target. Implementation of the GHG reduction measures in the Climate Action Plan are estimated to reduce the City's GHG emissions by 5,371 MT CO₂e by 2020. It is important to note that the proposed maintenance project does not include an operational phase and would not result in a cumulative increase in operational emissions and would not result in an increase in traffic or vehicle miles traveled. Air quality impacts are limited to the construction phase of the maintenance project. As such, the proposed project is consistent with the CAP and impacts from greenhouse gas emissions are considered to be less than significant.

Mitigation/Conclusion. In addition to the proposed dust control measures discussed in Section 7 of the District's Special Provisions document, the following mitigation shall be required in order to reduce impacts to less than significant levels:

AQ-1. To mitigate fugitive dust emissions related to project construction, the following shall be implemented as feasible:

- a) Reduce the amount of the disturbed area where possible;
- b) Use of water trucks or sprinkler systems in sufficient quantities to prevent airborne dust from leaving the site. Increased watering frequency would be required whenever wind speeds exceed 15 mph. Reclaimed (non-potable) water should be used whenever possible;
- c) All dirt stock pile areas should be sprayed daily as needed;
- d) Permanent dust control measures identified in the approved project revegetation and landscape plans should be implemented as soon as possible following completion of any soil disturbing activities;
- e) Exposed ground areas that are planned to be reworked at dates greater than one month after initial grading should be sown with a fast germinating, non-invasive grass seed and watered until vegetation is established;
- f) All disturbed soil areas not subject to revegetation should be stabilized using approved chemical soil binders, jute netting, or other methods approved in advance by the APCD;

- g) All roadways, driveways, sidewalks, etc. to be paved should be completed as soon as possible. In addition, building pads should be laid as soon as possible after grading unless seeding or soil binders are used;
- h) Vehicle speed for all construction vehicles shall not exceed 15 mph on any unpaved surface at the construction site;
- i) All trucks hauling dirt, sand, soil, or other loose materials are to be covered or should maintain at least two feet of freeboard (minimum vertical distance between top of load and top of trailer) in accordance with CVC Section 23114;
- j) Install wheel washers where vehicles enter and exit unpaved roads onto streets, or wash off trucks and equipment leaving the site;
- k) Sweep streets at the end of each day if visible soil material is carried onto adjacent paved roads. Water sweepers with reclaimed water should be used where feasible;
- l) All of these fugitive dust mitigation measures shall be shown on grading and building plans; and
- m) The contractor or builder shall designate a person or persons to monitor the fugitive dust emissions and enhance the implementation of the measures as necessary to minimize dust complaints, reduce visible emissions below 20% opacity, and to prevent transport of dust offsite. Their duties shall include holidays and weekend periods when work may not be in progress. The name and telephone number of such persons shall be provided to the APCD Compliance Division prior to the start of any grading, earthwork or demolition.

AQ-2. The required mitigation measures for reducing nitrogen oxides (NO_x), reactive organic gases (ROG), and diesel particulate matter (DPM) emissions from construction equipment are listed below:

- Maintain all construction equipment in proper tune according to manufacturer's specifications;
- Fuel all off-road and portable diesel powered equipment with ARB certified motor vehicle diesel fuel (non-taxed version suitable for use off-road);
- Use diesel construction equipment meeting ARB's Tier 2 certified engines or cleaner off-road heavy-duty diesel engines, and comply with the State off-Road Regulation;
- Use on-road heavy-duty trucks that meet the ARB's 2007 or cleaner certification standard for on-road heavy-duty diesel engines, and comply with the State On-Road Regulation;
- Construction or trucking companies with fleets that do not have engines in their fleet that meet the engine standards identified in the above two measures (e.g. captive or NO_x exempt area fleets) may be eligible by proving alternative compliance;
- All on and off-road diesel equipment shall not idle for more than 5 minutes. Signs shall be posted in the designated queuing areas and or job sites to remind drivers and operators of the 5 minute idling limit;
- Diesel idling within 1,000 feet of sensitive receptors is not permitted;
- Staging and queuing areas shall not be located within 1,000 feet of sensitive receptors;
- Electrify equipment when feasible;

- Substitute gasoline-powered in place of diesel-powered equipment, where feasible; and,
- Use alternatively fueled construction equipment on-site where feasible, such as compressed natural gas (CNG), liquefied natural gas (LNG), propane or biodiesel.

IV.	BIOLOGICAL RESOURCES - <i>Will the project:</i>	Potentially Significant	Impact can & will be mitigated	Insignificant Impact	Not Applicable
a)	<i>Result in a loss of unique or special status species or their habitats?</i>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
b)	<i>Reduce the extent, diversity or quality of native or other important vegetation?</i>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
c)	<i>Impact wetland or riparian habitat?</i>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
d)	<i>Introduce barriers to movement of resident or migratory fish or wildlife species, or factors, which could hinder the normal activities of wildlife?</i>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
e)	<i>Other:</i> _____	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>

Setting: To accurately characterize the biological resources present at the project site and to support the project permitting through the California Department of Fish and Wildlife (CDFW) Section 1600 process, a biological assessment of the project site and anticipated project impacts has been prepared by a qualified biologist (Kevin Merk Associates, November 16, 2016). Please refer to the attached biological assessment for additional details.

Results of the Biological Assessment: Upon field visits and site inspection by the KMA team, the study area was determined to consist of the bridge location, the adjacent channel area approximately 25 feet upstream and downstream of the bridge, and the access areas from Branch and Mason Streets. Site elevation is approximately 124 feet above msl, measured at the top of bank. The surrounding area consists of residential and commercial land uses, with associated landscaping and ornamental plantings.

Please refer to the attached biological assessment for a detailed habitat map and a photo plate with a series of photographs taken during the field visit for the purpose of showing the existing site conditions.

Habitat Types: The following project site habitat conditions were observed as part of the project biological investigation:

Central Coast Arroyo Willow Riparian Forest

The drainage channel contained a sparse to dense willow canopy, consistent with the Central Coast Arroyo Willow Riparian Forest and Scrub plant communities described by Holland (1986) and the red and arroyo willow thickets described by Sawyer et al. (2009). The riparian habitat onsite consisted primarily of arroyo willow, with several large cottonwood trees scattered along the lower banks. Gaps in the canopy were dominated by poison oak with scattered occurrences of coyote brush (*Baccharis pilularis*), ripgut brome (*Bromus diandrus*), perennial mustard (*Hirschfeldia incana*), stinging nettle (*Urtica dioica* ssp. *holosericea*), virgin's bower (*Clematis ligusticifolia*), garden nasturtium (*Tropaeolum majus*), Kikuyu grass (*Pennisetum clandestinum*), and pampas grass (*Cortaderia jubata*). Two large cottonwood trees on or near the south bank were almost completely covered with English ivy, and exhibited low vigor and reduced canopy and leaf cover as a result of the ivy infestation.

Riparian forest communities are important for many wildlife species because the abundance of moisture and associated vegetation provides structure, materials, and food sources for nesting and roosting activities. Many species forage within the understory and use riparian habitat as cover and as a corridor for movement along the edges of open areas. Common inhabitants of riparian woodland habitats include amphibians and reptiles such as the Pacific chorus frog (*Pseudacris regilla*) and western fence lizard (*Sceloporus occidentalis*). Mammals such as raccoon (*Procyon lotor*), opossum (*Didelphis virginiana*), striped skunk (*Mephitis mephitis*), and shrews (*Sorex* spp.) are also expected to occur in the riparian corridor within the project site. Riparian woodland habitat typically supports a diverse number of resident and migratory bird species and can provide roosting and foraging habitat for several raptors as well as bats.

Riverine

Riverine habitat conditions within Arroyo Grande Creek in the project area consisted of a wetted active channel bounded by incised earthen banks. The creek in this urban area is severely incised due to a restricted flow regime and is dominated by non-native plants. Several species of fish are expected to occur within riverine habitat of Arroyo Grande Creek, including the federally threatened southern steelhead (*Oncorhynchus mykiss irideus*), speckled dace (*Rhinichthys osculus*), three-spined stickleback (*Gasterosteus aculeatus*), and Pacific lamprey (*Lampetra tridentata*). Great blue heron (*Ardea herodias*) and snowy egret (*Egretta thula*) are common predators within local riverine habitats, and numerous bird species are expected to use the creek and associated riparian forest for foraging and nesting.

Riverine habitat is seasonally variable, and often includes open water components (active, flowing channel), unvegetated sandbars (riverwash, active floodplain), pools, and seasonally emergent wetlands (Holland 1986). Even though the creek is steeply incised from down-cutting, the small floodplain was well developed with vegetation.

Developed/Ruderal

Developed/ruderal conditions are common in abandoned fields, along roadsides, in un-maintained areas adjacent to development, and areas that have been altered by construction, agriculture, landscaping, or other types of regular human activity that constrains plant growth. If vegetated, these areas are typically dominated by non-native annual grasses and herbaceous plants adapted to

the regular cycle of disturbance from traffic and weed reduction practices such as mowing and herbicide application. Typical plants consist primarily of introduced species.

Plant species observed within and adjacent to developed areas of the site included English ivy, ripgut brome, slender wild oats (*Avena barbata*), bur-clover (*Medicago polymorpha*), sweet fennel (*Foeniculum vulgare*), and a variety of ornamental plantings associated with landscaping of neighboring development. The developed/ruderal portions of the study area would typically attract common wildlife species adapted to human disturbance, and are not expected to provide significant habitat values for native species.

Special Status Biological Resources: The Arroyo Grande region and Arroyo Grande Creek corridor in particular support numerous special status, or rare, plant communities and species of plants and animals. This assessment did not include focused surveys to determine presence or absence of special status wildlife, but did include direct observation of onsite and offsite conditions, knowledge of the particular species biology, and review of biological reports completed in the general area to determine if a particular species could be expected to occur within the study area, and ultimately affected by the proposed project.

Special Status Natural Communities

The site-specific field work identified the special status plant community Central Coast Arroyo Willow Riparian Forest as present along the Arroyo Grande Creek corridor in the study area. In addition, elements of Coastal and Valley Freshwater Marsh, which is also a special status natural community, were present within the bed of the channel.

Special Status Plants

The CNDDDB identified the following four special status plant species as present within one mile of the project area.

- Hoover's bent grass (*Agrostis hooverii*);
- Pismo clarkia (*Clarkia speciosa* ssp. *immaculata*);
- Santa Margarita manzanita (*Arctostaphylos pilosula* formerly *A. wellsii*); and
- Southern curly-leaved monardella (*Monardella sinuata* ssp. *sinuata*).

These four special status plant species have specialized habitat requirements, and are not typically found in association with ruderal, riverine, or willow riparian forest habitats. In addition, Santa Margarita manzanita is a perennial shrub that would have been in identifiable condition if it was observed during the site visit. As such, these species are not expected to occur within the project area or be affected by the proposed maintenance project.

Additional plant species not listed in the CNDDDB search, but that are known to occur in riparian habitats in coastal San Luis Obispo County area include:

- Marsh sandwort (*Arenaria paludicola*);

- Gambel's water cress (*Rorippa gambelii*); and
- Black-flowered figwort (*Scrophularia atrata*).

Habitat quality for these species within the surveyed section of Arroyo Grande Creek would be considered low due to the steeply cut banks, and the presence of flowing water in a confined channel without more extensive pools and floodplain areas of emergent wetland plants. Furthermore, black-flowered figwort typically occurs on shaly, calcareous and rocky soils that are not present in the study area. These species are unlikely to occur onsite based on the lack of suitable habitat.

Special Status Animals

The CNDDDB identified four special status animal species present within a one-mile radius of the project area. In addition, Arroyo Grande Creek is listed as critical habitat for the federally protected southern steelhead and this species is expected to be present year round with the project area.

- California red-legged frog (*Rana draytonii*; CRLF);
- Obscure bumble bee (*Bombus caliginosus*);
- Southern steelhead; and
- Western pond turtle (*Emys marmorata*).

Additional species not listed in the CNDDDB search, but that are known to occur in riparian habitat in the upper Arroyo Grande Creek area include:

- Coast Range newt (*Taricha torosa torosa*);
- Two-striped garter snake (*Thamnophis hammondi*); and
- Bats.

The species listed above could be present in the creek channel within and adjacent to the project area. As stated above, the evaluation of potential for special status animals did not include definitive surveys for the presence or absence of these species in Arroyo Grande Creek, but did include direct observation of onsite conditions, and review of biological reports and the CNDDDB records. No bumblebees were observed, but it is possible that the species could be present in the vicinity at some point in time during the year. None-the-less, it is unlikely that bees or other insects would be significantly impacted by the proposed project which includes minimal disturbance and is limited to the pipe bridge maintenance

A number of avian species are known from the general area and could potentially utilize the riparian corridor as foraging habitat. Riparian habitat dependent species such as yellow warbler (*Dendroica petechia brewsteri*) or western yellow-billed cuckoo (*Coccyzus americanus occidentalis*) could utilize the corridor for foraging, but would be less likely to nest onsite due to the existing development and human presence in the area. No records of these species nesting in or near the study area were found during this investigation. Small songbirds could utilize the trees and shrubs onsite for nesting, but would likely only include those opportunistic species that are adapted to developed areas and increased human presence. The project area and surrounding areas do not appear to provide adequate nesting or foraging habitat for raptor species, and raptors would be expected primarily as

transients across the site on their way to higher quality foraging and nesting grounds. Moreover, no large stick nests typical of raptor nesting were observed in the immediate area during the survey.

Bat species including western red bat (*Lasiurus blossevilli*), hoary bat (*Lasiurus cinereus*) and various species of *Myotis* are known to occur in the region and have the potential to forage over the site. While there were no bats identified in the CNDDDB search around the study area, the site contains suitable foraging habitat along the creek corridor, and potential night roost opportunities are present under road bridges in the general area. The pipe bridge does not provide suitable habitat conditions to support night roosts for bats.

Impact. Completion of the proposed project would temporarily disturb developed and ruderal areas adjacent to the top of the Arroyo Grande Creek bank on site. Developed and ruderal areas dominated by non-native species are not considered sensitive plant communities by the CDFW, and are common throughout the region. Therefore, any loss of the developed and ruderal habitat would be considered a less than significant impact, and no mitigation would be required. Measures required below associated with erosion and sediment control would further reduce impacts to developed or ruderal areas resulting from the project.

The project will require pruning of seven willow trees to allow access and provide clearance from the bridge structure. Branches to be removed are primarily less than three inches in diameter, but there may be several branches between four and six inches in diameter that require removal. Existing trunks and roots would not be disturbed. The willows that are pruned are expected to grow back quickly.

Two large cottonwood trees near the southern end of the bridge will also require pruning for project access, and to reduce the potential for damage to the structure if the trees were to fall down. Both trees are heavily infested with English ivy, and are in poor health. As proposed, both trees would be pruned to allow access to the bridge structure, and the ivy removed from the base of the tree trunks. Because the pruning would be a temporary impact, and no trees would be removed, no tree replanting is proposed and impacts are expected to be less than significant.

Proposed project activities would involve removing anti-corrosion coatings through mechanical methods, and recoating the structure. While a containment system is proposed around the pipe, removed coatings, chemicals, abrasives, new coating materials, and other project-related substances could enter the creek channel and flowing water. Please refer to Section VII, Hazards and Hazardous Materials, below for a discussion of the proposed project spill prevention and response details. Excavation around the pipe on both banks would disturb soils on steep banks above the active channel. In addition, disturbed soils could enter the channel during the rainy season and cause sedimentation of downstream areas. Sedimentation and erosion impacts are considered significant but mitigable.

Based on observed site conditions and the presence of flowing water in the active channel, the creek channel provides suitable habitat for steelhead trout, California red-legged frog, and other wildlife such as two-striped garter snake and pond turtle. As such, any project activity occurring within the lower banks and over/near the active stream channel could impact these species. Specific activities that will occur in the lower bed of Arroyo Grande Creek include willow and cottonwood pruning and removal of non-native vegetation. While the containment system is supposed to catch all debris and old paint removed from the pipe bridge, construction materials could fall into the bed of the creek. Impacts to special status aquatic species are considered significant but mitigable.

Potential impacts to nesting birds could occur as a result of project activities causing noise generation and equipment operation, and increased human presence in the creek corridor. Although impacts to nesting birds are considered temporary, they are considered significant unless mitigated.

Mitigation/Conclusion. In addition to the proposed environmental compliance measures stipulated in the District's Special Provisions document, including Section 20 "Revegetation", the following mitigation measures shall be required in order to reduce impacts to less than significant levels:

BIO-1: The following measures are required to reduce impacts to biological resources in Arroyo Grande Creek resulting from tree pruning to less than significant levels:

1. All pruned materials shall be removed from the creek channel to reduce potential for blocking downstream bridge or culvert openings during high flow conditions;
2. Chainsaws used within the channel shall have internal chain oiling systems to reduce oil spray during cutting operations. Sawdust generated from large cuts on the cottonwood trees shall be contained and removed from the channel and spread on the banks as part of the erosion control plan;
3. All English ivy that is removed from within the pipe easement area shall be removed from the creek channel and disposed in a landfill; and
4. Due to the steep slopes and the need to stabilize and revegetate the site following construction, English ivy removal shall be conducted by pulling up runners as feasible, and then selective hand digging root balls in areas of low erosion potential throughout the project area. Holes created by digging shall be immediately filled and compacted by foot pressure. No loose dirt shall be left on the slopes, and all bare soils shall be seeded with the native seed mix identified below under Mitigation Measure BIO-2.

BIO-2: The following measures are required reduce potential water quality impacts as a result of project implementation to less than significant levels:

1. Prior to start of construction, the project site boundaries, access routes, and equipment/materials staging areas shall be clearly flagged or fenced so that the contractor is aware of the limits of allowable site access and disturbance;
2. Prior to start of construction, the applicant shall prepare an Erosion Control Plan. The plan shall address both temporary and permanent measures to stabilize disturbed areas and control erosion and reduce sedimentation. Erosion and soil protection, including seeding with native species, shall be provided on all disturbed soil areas prior to the onset of the rainy season (typically October 15; however, official date to be determined at the time of the first significant rain event of the season). All project plans shall show that sedimentation and erosion control measures must be installed per the engineer's requirements. The plan shall include specific measures to minimize impacts to jurisdictional habitats. For example, washing of equipment shall occur only in designated areas where polluted water and materials can be contained for subsequent removal from the site. Washing of equipment, tools, etc. shall not be allowed in any location where the tainted water could enter storm drains or flow into

the channel. The following native seed mix is recommended for application (either via hydroseed or broadcast seeding techniques) on disturbed bank areas;

Species	Application Rate (lbs./acre)
<i>Ambrosia psilostachya</i> (western ragweed)	2
<i>Artemisia douglasiana</i> (mugwort)	3
<i>Bromus carinatus</i> (California brome)	5
<i>Hordeum brachyantherum</i> (meadow barley)	3
<i>Trifolium wildenovii</i> (tomcat clover)	5
<i>Vulpia microstachys</i> (six weeks fescue)	5
Total	23

3. To avoid disturbance of wet soils, and limit the potential for erosion and sedimentation, work shall occur outside of the rainy season, which is typically defined from October 15 through April 15 (however, rainy season will be officially defined upon the first significant rain event of the season) , or as authorized by CDFW following approval of the project Erosion Control Plan;
4. The contractor shall implement the detailed containment measures developed by the project engineer designed to capture and remove all materials from the creek channel. Safe operation and maintenance of the containment system shall be a project priority, and the system shall be monitored for proper function during use;
5. Excavation of the top of bank to expose the pipe shall utilize the smallest equipment feasible, and may require some handwork to minimize the disturbance area. Due to the steep slopes, all loose soil must be contained during construction and incidental fall back of soils during excavation contained by installation of silt fence, straw bales, plywood or similar material below the excavation area. Erosion control measures must be cleaned and maintained daily during the project. Incidental fall back of soils shall be removed by hand and avoid impacts to native vegetation;
6. All project-related spills of hazardous materials within or adjacent to the project site shall be cleaned up immediately. Spill prevention and cleanup materials shall be on-site at all times. Cleaning and refueling of equipment and vehicles shall occur only within designated staging areas. The staging areas shall conform to standard Best Management Practices applicable to attaining zero discharge of storm water runoff into the creek. No maintenance, cleaning or fueling of equipment shall occur within riparian areas, or within 25 feet of such areas given the tight working conditions. At a minimum, all equipment and vehicles shall be checked and maintained on a daily basis to ensure proper operation and to avoid potential leaks or spills; and
7. During project activities, all trash that may attract predators shall be properly contained, removed from the work site, and disposed of regularly. Following construction, all trash and construction debris shall be removed from the work area.

BIO-3: The following measures are required to reduce potential impacts to aquatic species to less than significant levels.

1. Before project activities begin, a qualified biologist shall conduct preconstruction surveys for wildlife 48 hours prior to the start of any construction activity within the

creek, and then again immediately prior to activity within the proposed project disturbance area. Any steelhead, CRLF, garter snake, or pond turtle occurrences within the project area shall be documented and avoided. Avoidance can be accomplished by delaying work until the animal(s) move out of the work area, or through establishment of exclusion zones, which will be the case for the active channel and areas of flowing water. All work that requires access to the creek channel such as vegetation removal shall be done under the direction of a qualified biologist to ensure these species are avoided.

2. Immediately prior to start of construction activities, a qualified biologist shall conduct an environmental education training session for all project personnel. At a minimum, the training shall include a description of the species potentially present, the specific measures required to protect those species, and the boundaries within which the project may be accomplished. The training shall include a review of all relevant permit conditions, and a question and answer session to discuss specific issues.
3. A qualified biologist shall be onsite to oversee all vegetation clearing and erosion control measures within the creek corridor. Once all initial site disturbance is done, the biologist shall visit the project site on a weekly basis to monitor compliance with all avoidance and protection measures. Monitoring shall also occur immediately prior to and following rain events to document preparedness and identify potential remedial actions needed prior to the rain event. The biologist shall have authority to temporarily stop work in consultation with the District if impacts to aquatic species or habitats potentially occur. The biologist shall also survey the site following the rain event to ensure species such as CRLF have not moved into the work area.
4. Any construction material or debris that inadvertently falls into the creek channel or on the creek banks shall be removed by hand immediately.

BIO-4: Impacts to nesting birds will be reduced to less than significant levels with the incorporation of the following mitigation measures.

1. To avoid impacts to nesting bird species, including special-status species and species protected by the Migratory Bird Treaty Act (MBTA), work within and adjacent to willow riparian forest areas shall be limited to the time period between September 1st and January 31st if feasible. Since this would place some work in the winter rain season, and project completion may not be feasible during this period, work can proceed during the bird nesting season as long as a qualified biologist conducts a pre-construction survey for active bird nests within the project area at least 48-hours prior to any disturbance activities proposed within the nesting season (February 1 through August 31). If no nesting activity is observed, project activities can proceed;
2. If active nest sites of bird species protected under the Migratory Bird Treaty Act and/or California Fish and Game Code Section 3503 are observed within the immediate project vicinity, then the project shall be modified as necessary to avoid impacts to the identified nests, adults, eggs, and/or young. Potential project modifications may include establishing appropriate “no activity” buffers around the nest site as determined by the project biologist. The buffer shall be developed in consultation with CDFW. Construction activities shall not occur in the buffer until the project

- biologist has determined that the nesting activity has ceased and the young are no longer reliant on the nest site;
3. If active nest sites of raptors and/or bird species of special concern are observed within the vicinity of project related disturbances, an appropriate buffer around the nest site (250 to 500 feet for raptors depending on location) shall be implemented. A reduced buffer may be feasible but will depend on vegetation, slope aspect, etc. and visual/sound separation from the nest site and construction zone. Construction activities in the buffer zone shall be prohibited until the young have fledged and are no longer reliant on the nest site; and
 4. Active nests located in the project area shall be mapped and monitored by the project biologist, and a report shall be submitted to the CDFW and other appropriate agencies, documenting project compliance with the MBTA, California Fish and Game Code, and applicable project mitigation measures.

With the implementation of the mitigation measures listed above, impacts to biological resources will be reduced to less than significant levels.

V. CULTURAL RESOURCES - <i>Will the project:</i>	Potentially Significant	Impact can & will be mitigated	Insignificant Impact	Not Applicable
a) Cause a substantial adverse change in the significance of a historical resource as defined in 15064.5?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
b) Cause a substantial adverse change in the significance of an archaeological resource pursuant to 15064.5?	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
c) Directly or indirectly destroy a unique paleontological resource or site or unique geological feature?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
d) Disturb any human remains, including those interred outside of formal cemeteries?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
e) Other: _____	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>

Setting. Historical, archaeological, and paleontological resources in the project site vicinity, were evaluated as part of the Final Environmental Impact Report for the City of Arroyo Grande East Cherry Avenue Specific Plan (available for review at the following City of Arroyo Grande Planning Division web site: <http://www.arroyogrande.org/569/East-Cherry-Avenue-Specific-Plan>). Although the project site is not part of the Specific Plan evaluated in the FEIR, the project site is approximately 1,000 feet north of the Specific Plan site and the location was covered in the records search prepared as part of the cultural resources evaluation (Central Coast Archaeological Research Consultants, June 2015). A copy of this evaluation can be found on the web site listed above.

As discussed in the above referenced evaluation, at the time of Spanish contact in the region speakers of the Obispeño language of the Chumash language family occupied the lands in the Arroyo

Grande vicinity. The project area is located south of the boundary of the Obispeño or Northern Chumash (to the south) and speakers of the putative Playano language and Salinan groups that resided to the north near Big Sur.

The old town portion of Arroyo Grande along Branch Street east of Highway 101, was once a part of the Pismo Rancho. The Pismo Rancho was granted to Jose Ortega on November 18, 1840 and transferred to Isaac Sparks in 1846. Today's boundaries for Arroyo Grande also takes in parts of three other historic Mexican Land Grant ranchos.

The archival records research prepared as part of the above-referenced cultural resources evaluation focused on developing a general historic context and site-specific information for the immediate Specific Plan area. The records search included information on all archaeological sites within a 0.5-mile radius of the East Cherry Avenue Specific Plan area and previous cultural resource surveys conducted within a 0.25-mile radius. This study area covers the proposed Cherry Avenue Pipe Bridge project site, which is less than 0.25 miles north of the Specific Plan site. Based on the archival records search, no previously identified cultural resource sites are found within the areas proposed for disturbance as part of the proposed pipe bridge maintenance project.

In addition, it should be noted that the areas proposed for minor excavation as part of the maintenance project are limited to ground disturbance immediately adjacent to the existing pipe bridge footings on the north and south banks of the Arroyo Grande Creek. These areas are comprised of fill material placed during the original construction of the pipe bridge and are void of any native or undisturbed soils.

Impact. The project site is not located within a known cultural resource site and is not located in direct proximity to known archaeological, historic or paleontological resources. Furthermore, project ground disturbance is limited to the disturbed, non-native fill material immediately adjacent to the existing pipe bridge footings. Although remote, there is a possibility of the unanticipated and accidental discovery of archaeological and/or paleontological resources and/or human remains during project implementation. As such, impacts are considered less than significant with mitigation incorporated

Mitigation/Conclusion. The following mitigation measure is required to reduce impacts to cultural resources to less than significant levels.

CR-1: In the event unforeseen archaeological resources are unearthed during any construction activities, all grading and/or excavation shall cease in the immediate area and the find left untouched. The City shall be notified so that the extent and location of discovered materials may be recorded by a qualified archaeologist, Native American, or paleontologist, whichever is appropriate. The qualified professional shall evaluate the find and make reservations related to the preservation or disposition archaeological resources are found to include human remains, or in any other case when human remains are discovered during construction, the District shall notify the County Coroner. If human remains are found to be of ancient age and of archaeological spiritual significance, the District shall notify the Native American of likely descent.

With the implementation of the mitigation measure listed above, impacts to cultural resources will be reduced to less than significant levels.

VI.	GEOLOGY AND SOILS - Will the project:	Potentially Significant	Impact can & will be mitigated	Insignificant Impact	Not Applicable
a)	<i>Result in exposure to or production of unstable earth conditions, such as landslides, earthquakes, liquefaction, ground failure, land subsidence or other similar hazards?</i>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
b)	<i>Be within a California Geological Survey "Alquist-Priolo Earthquake Fault Zone"?</i>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
c)	<i>Result in soil erosion, topographic changes, loss of topsoil or unstable soil conditions from project-related improvements, such as vegetation removal, grading, excavation, or fill?</i>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
d)	<i>Change rates of soil absorption, or amount or direction of surface runoff?</i>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
e)	<i>Include structures located on expansive soils?</i>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
f)	<i>Change the drainage patterns where substantial on- or off-site sedimentation/ erosion or flooding may occur?</i>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
g)	<i>Involve activities within the 100-year flood zone?</i>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
h)	<i>Be inconsistent with the goals and policies of the City General Plan relating to geologic and seismic hazards?</i>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
i)	<i>Preclude the future extraction of valuable mineral resources?</i>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
j)	<i>Other: _____</i>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>

Setting: San Luis Obispo County, including the City of Arroyo Grande, is located within the Coast Range Geomorphic Province, which extends along the coastline from central California to Oregon. This region is characterized by extensive folding, faulting, and fracturing of variable intensity. In general, the folds and faults of this province comprise the pronounced northwest trending ridge-valley system of the central and northern coast of California.

According to the Geologic Map of California, San Luis Obispo Sheet (California Department of Mines and Geology, 1978), the site vicinity is underlain by Middle Miocene Marine aged marine deposits.

Under the Alquist-Priolo Special Studies Zone Act, the State Geologist is required to delineate appropriately wide special study zones that encompass all potentially and recently active fault traces deemed sufficiently active and well-defined as to constitute a potential hazard to structures from surface faulting or fault creep. In San Luis Obispo County, the Special Studies Zones (i.e., Earthquake Fault Zones) includes the San Andreas and Los Osos faults, neither of which are located in proximity to the project site.

Adjacent to the City of Arroyo Grande, the Wilmar Avenue fault is the closest potentially active fault to the project site. This fault can be seen exposed in a coastal bluff in the City of Pismo Beach, and extends inland underground in a northwest-southeast parallel to Highway 101 under portions of the City of Arroyo Grande. This fault is listed in the City's General Plan Safety Element as posing a moderate potential for fault rupture hazards. Inactive faults, like the Pismo fault, within the City are considered to pose a very low potential for fault rupture hazards.

Landslide hazards are considered potentially significant along the incised banks of Arroyo Grande Creek in the project site area.

Impact. Seismically induced ground rupture is defined as the physical displacement of surface deposits in response to an earthquake's seismic waves. Ground rupture is most likely to occur along active faults. However, the potential for ground rupture also exists along potentially active faults. The project site is not located within an Earthquake Fault Zone as established in accordance with the Alquist-Priolo Earthquake Fault Zoning Act of 1972. The nearest fault line, the Wilmar Avenue fault discussed above, does not cross the project site. Furthermore, it should be noted that the proposed project is limited to the maintenance of the existing pipe bridge and no structural development is proposed that may pose a safety risk. The potential for surface rupture to occur on the site is determined to be very low, and impacts are considered less than significant.

Small to moderate earthquakes (with magnitudes less than 5.0 on the Richter Scale) are common in San Luis Obispo County. The project site is located in general proximity to active or potentially active faults and is approximately 35 miles west of the San Andreas Fault. As such, strong shaking should be expected during the lifetime of the proposed project. However, it should be noted that the proposed project is limited to the maintenance of the existing pipe bridge and no structural development is proposed that may pose a safety risk related to earthquake activity. Impacts are considered less than significant (please refer to Section VII, Hazards and Hazardous Materials, for a discussion of pipeline spill response).

Liquefaction is the loss of strength in saturated granular soils produced by seismic shaking. For this to occur, the soils must be saturated at a relatively shallow depth, of a granular (non-cohesive) nature, and be relatively loose. Based on the project site location spanning the banks of the Arroyo Grande Creek and depth to groundwater, and the analysis in the City's General Plan Safety Element, the project site has a high estimated liquefaction potential. However, it should be noted that the proposed project is limited to the maintenance of the existing pipe bridge and no structural

development is proposed that may pose a safety risk related to liquefaction activity. Impacts are considered less than significant.

The project site is relatively flat and is from any nearby slopes; therefore, it is unlikely to be impacted by landslides. Impacts are considered to be less than significant.

The project site is underlain by the Mocho silty clay loam (0-2% slope) and Riverwah soil units. According to the United States Department of Agriculture-Natural Resources Conservation Service's Web Soil Survey, this soil has a minimal to slight erosion hazard. A rating of slight indicates that erosion is unlikely under ordinary conditions. Implementation of the requirements for dust abatement and air quality that require watering of loose soils and various erosion and dust control measures would ensure that any earthmoving activities would be properly mitigated for soil erosion. Therefore, project impacts related to soil erosion or the loss of topsoil are considered to be less than significant.

The project site is not located on an unstable geologic unit or expansive soil, nor would the site become unstable as a result of the project. Riverwash soils are the primary soil types in the project site and are characterized as being nearly level to gently sloping and having a high runoff rate, low shrink-swell potential, moderately rapid permeability level, and a minimal to slight erosion hazard. However, the proposed project is limited to the maintenance of the existing pipe bridge and no structural development is proposed. As such, impacts related to expansive soils are considered less than significant.

Implementation of the required mitigation measures BIO-1 and BIO-2, listed above, will reduce impacts related to erosion to less than significant levels.

Storm runoff volumes and rates will not be altered as a result of the proposed maintenance project. To adequately manage storm water runoff, and address water quality including impacts related to sedimentation and erosion, the District is proposing the drafting and implementation of a Water Pollution Control Program (WPCP) in accordance with the WPCP Preparation Manual as published by CalTrans (for more information, please refer to the "Special Provisions" publication by the South San Luis Obispo County Sanitation District, available for review and the District office listed at the beginning of this Initial Study/MND). This includes preparation of the WPCP, obtaining WPCP acceptance, amending the WPCP, and reporting on water pollution control practices at the job site.

In addition, the District-proposed construction site management includes controlling potential sources of water pollution before they come in contact with storm water systems or watercourses. Site management also includes the controlling material pollution and managing waste and non-storm water at the job site by implementing effective handling, storage, use, and disposal practices. For information on documents under the District's Special Provisions, please refer to the Caltrans' Preparation Manual, Dewatering Guide, and BMP Manual (available at the following web site: <http://www.caltrans.ca.gov/trafficops/ep/water.html>). The District proposes to implement these requirements as part of the proposed project. With implementation of the WPCP and the requirements established under the Caltrans' Preparation Manual, Dewatering Guide, and BMP Manual, impacts related to stormwater runoff are considered less than significant.

Mitigation/Conclusion. Implementation of the District’s proposed Special Provisions for the proposed project, including the requirements under mitigation measures BIO-1 and BIO-2 will reduce impacts to less than significant levels. No additional measures are required.

VII.	HAZARDS & HAZARDOUS MATERIALS - <i>Will the project:</i>	Potentially Significant	Impact can & will be mitigated	Insignificant Impact	Not Applicable
a)	<i>Result in a risk of explosion or release of hazardous substances (e.g. oil, pesticides, chemicals, radiation) or exposure of people to hazardous substances?</i>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
b)	<i>Interfere with an emergency response or evacuation plan?</i>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
c)	<i>Expose people to safety risk associated with airport flight pattern?</i>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
d)	<i>Increase fire hazard risk or expose people or structures to high fire hazard conditions?</i>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
e)	<i>Create any other health hazard or potential hazard?</i>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
f)	<i>Other:</i> _____	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>

Setting. Hazards may include exposure to both natural and man-made hazards. A range of other types of hazards are addressed in other sections of this Initial Study/MND, including air pollution hazards and water pollution hazards, such as groundwater contamination and surface runoff. Hazardous materials are defined as substances with physical and chemical properties of ignitability, corrosivity, reactivity, or toxicity which may pose a threat to human health or the environment. The term “hazardous materials” is used in this section to describe chemical materials, such as petroleum products, solvents, pesticides, herbicides, paints, metals, asbestos, and other regulated chemical materials. The potential for future releases of hazardous materials to occur during implementation of the proposed project are discussed below. It is important to note that hazardous material impacts are limited to the project construction phase, since the project is limited to the proposed pipe bridge maintenance and no operational phase is proposed.

Impact. The pipe bridge maintenance project will involve the removal of existing paint and debris from the bridge, followed by replacing anti-corrosion coatings on the bridge. The anti-corrosion coating systems to be applied include a 3-layer inorganic zinc/epoxy/urethane coating system, a wax tape and fiberglass outer wrap system and a 3-layer modified polyamidoamine epoxy/aliphatic acrylic polyurethane coating system. According to the District, any work that disturbs the existing coating system may expose project workers to health hazards. All debris produced when the existing coating system is disturbed must be contained. As such, the District proposes to use a containment system

designed to contain all debris resulting from the stripping of the existing pipe bridge. The containment system will contain all water, resulting debris, and visible dust produced when the existing coating system is disturbed. No temporary structures are proposed for construction in the stream channel bottom. Impacts related from coating application are considered less than significant with implementation of the proposed containment system.

Spill Prevention and Control Plan: In order to address accidental release of the stripped materials and/or pipe coating, the District has proposed a Spill Prevention and Control program. This includes submittal of a Spill Prevention Plan for review by the project Engineer, including a Material Data Sheet, monthly inventory records for materials used or stored, manifest forms for hazardous waste disposal and written approvals for any discharge to sanitary sewer systems. The provisions of the Spill Prevention and Control Plan include requirements for the maintenance of all vehicles and equipment used on site and checked daily for fuel, oil, and hydraulic fluid leaks or other problems.

The Spill Prevention Plan includes the requirement to keep appropriate spill control and clean up materials (e.g., oil absorbent pads) onsite in the event spills occur. As soon as it is safe, the plan will include methods to contain and clean up spills of petroleum products, including sanitary and septic waste substances listed under CFR Title 40, Parts 110, 117, and 302. All trash and debris shall be required to be confined in appropriate enclosed bins, and dispose of at an approved site regularly. In addition, the District will be required to designate a staging area for equipment and vehicle fueling and storage at least 100 feet away from waterways, in a location where fluids cannot flow into waterways.

The Plan also requires that in the event that a spill occurs, all project activities shall immediately cease until cleanup of the spilled materials is completed. The Engineer and CDFW shall be notified immediately of any spills and shall be consulted regarding cleanup procedures. The Plan will include procedures to contain, clean up and report minor spills, semi-significant spills, and significant or hazardous spills. Please refer to the District's Special Provisions for additional details with respect to spill protection and response for hazardous materials.

Asbestos and Lead Compliance Plan: In order to address hazards related to the potential release of asbestos containing materials and/or lead based paint, the District is required through Cal/OSHA (including 8 CCR § 1529 and 1532 and APCD regulations) to prepare an Asbestos and Lead Compliance Plan for the purpose of preventing or minimizing exposure to asbestos and lead while handling earth materials, coating system debris and residue containing asbestos and lead. The Plan will also contain provision for preventing or minimizing contamination of the project area.

The plan is required to contain the items listed in 8 CA Code of Regulations § 1529(g) and § 1532.1(e)(2)(B). In addition, the plan will contain sampling and testing requirements for work area monitoring and sampling and testing requirements for debris handling. Before submittal, a California Certified Asbestos Consultant and a person certified by the California Department of Public Health shall review and sign and seal the plan.

As part of the Plan, before starting any activity that presents the potential for asbestos or lead disturbance, the project contractor will be required to notify the San Luis Obispo County Air Pollution

Control District, Enforcement Section. Before starting any activity that presents the potential for asbestos or lead exposure to employees, including District employees, the District (or their contractor) will be required to provide a safety training program that complies with 8 CA Code of Regulations § 1529 and § 1532.1 and the Asbestos and Lead Compliance Plan. This also includes the requirement to submit monitoring and inspection reports. Please refer to the District's Special Provisions for additional details with respect to asbestos and lead safety requirements.

The project is not located in an area of known hazardous material contamination. Fire protection is provided by the Five Cities Fire Authority, a Joint Powers Authority between the Cities of Arroyo Grande, Grover Beach and the Oceano Community Services District. A Five Cities Fire Authority Fire station is in close proximity to the project site (140 Traffic Way, Arroyo Grande), providing timely emergency support if needed. The project is not within a high severity risk area for fire. No airports are nearby, and as a result the project is not within an Airport Review area.

Mitigation/Conclusion. With implementation of the required project containment system and the required Spill Prevention and Control Plan and Asbestos and Lead Compliance Plan, including the details of the District's Special Provisions and required mitigation measures BIO-1 and BIO-2, hazard and hazardous material impacts are considered less than significant.

VIII. NOISE - <i>Will the project:</i>		Potentially Significant	Impact can & will be mitigated	Insignificant Impact	Not Applicable
a)	<i>Expose people to noise levels that exceed the City Noise Element thresholds?</i>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
b)	<i>Generate increases in the ambient noise levels for adjoining areas?</i>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
c)	<i>Expose people to severe noise or vibration?</i>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
d)	<i>Other:</i> _____	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>

Setting. The City of Arroyo Grande General Plan Noise Element requires that interior noise exposure from exterior noise sources (traffic) within residential dwellings not exceed 45 dB LDN (or CNEL), regardless of exterior noise exposure. The City of Arroyo Grande has established an exterior noise level criterion of less than 60 dB LDN (or CNEL) within transient lodging, office commercial and residential land uses, including the yards and patios used by the residences. These are considered to be the "Normally Acceptable" levels, and may be adjusted upward to 70 dB LDN for playgrounds and neighborhood parks. Mitigation measures may be required to insure that interior spaces shall not exceed 45 dBA with the exception of playgrounds and parks.

The City of Arroyo Grande Municipal Code, Title 9, Chapter 9.16 – Noise, allows for noise sources associated with construction, provided such activities do not take place before 7:00 AM or after 10:00 PM on any day except Saturday or Sunday, or before 8:00 AM or after 5:00 PM on Saturday or Sunday.

Impact. The proposed project is located in proximity to residential land uses along the northern and southern banks of the Arroyo Grande Creek, adjacent to the existing pipe bridge. The proposed project is limited to the maintenance of the existing pipe bridge. The project would not have the potential to result in an increase in exterior or interior noise levels in the site vicinity after maintenance is completed. However, project activities will create a temporary increase in noise and potential groundbourne vibration. Construction activities would result in substantial, short-term increases in existing ambient noise levels over 65 dBA CNEL within the project vicinity during the following activities:

- construction vehicles entering and leaving the site, including workers, building materials, or construction equipment;
- activities in the construction staging areas;
- operation of temporary on-site generators and compressors;
- grading and/or earth-moving activities; and
- pipe bridge maintenance activities.

Impacts related to project noise generation are considered temporary in nature, but given the level of proposed maintenance activities, they have the potential to result in significant impacts unless mitigated.

The proposed project site is not located within an airport land use plan or within two miles of a public airport or public use airport and is not located within the vicinity of a private airstrip.

Mitigation/Conclusion. To mitigate impacts related to construction noise to less than significant levels, the following noise mitigation shall be required:

- N-1: Construction activity for site preparation shall be limited to the hours of 7 AM to 7 PM, Monday through Friday and 8AM to 5PM on Saturdays. No construction shall occur on Sundays or State Holidays. Construction equipment maintenance shall be limited to the same hours. Non-noise generating construction activities without mechanical equipment (e.g., excavation using hand tools, hand painting, etc.) are not subject to these restrictions.

Stationary construction equipment that generates noise that exceeds 65 dBA at the project boundaries shall be shielded with the most modern and effective noise control devices (i.e., mufflers, lagging, and/or motor enclosures). Impact tools (e.g., jack hammers, pavement breakers, and rock drills) used for project construction shall be hydraulically or electrically powered wherever possible to avoid noise associated with compressed-air exhaust from pneumatically powered tools. Where use of pneumatic tools is unavoidable, an exhaust muffler on the compressed-air exhaust shall be used. All equipment shall be properly maintained to ensure that no additional noise, due to worn or improperly maintained parts, is generated. Stockpiling and vehicle staging areas shall be located as far as practical from sensitive noise receptors. Every effort shall be made to create the greatest distance between noise sources and sensitive receptors during construction activities.

IX.	POPULATION/HOUSING - <i>Will the project:</i>	Potentially Significant	Impact can & will be mitigated	Insignificant Impact	Not Applicable
a)	<i>Induce substantial growth in an area either directly or indirectly (e.g., through projects in an undeveloped area or extension of major infrastructure)?</i>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
b)	<i>Displace existing housing or people, requiring construction of replacement housing elsewhere?</i>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
c)	<i>Create the need for substantial new housing in the area?</i>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
d)	<i>Use substantial amount of fuel or energy?</i>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
e)	<i>Other:</i> _____	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>

Setting/Impact. The proposed project is limited to the maintenance of the existing Cherry Avenue pipe bridge and would not induce substantial population growth in the City of Arroyo Grande either directly or indirectly. The project would not displace existing housing or necessitate the construction of replacement housing elsewhere and would not displace people or require the construction of housing elsewhere.

Mitigation/Conclusion. No significant population and housing impacts are anticipated, and no mitigation measures are necessary.

X.	PUBLIC SERVICES/UTILITIES - <i>Will the project have an effect upon, or result in the need for new or altered public services in any of the following areas:</i>	Potentially Significant	Impact can & will be mitigated	Insignificant Impact	Not Applicable
a)	<i>Fire protection?</i>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
b)	<i>Police protection (e.g., City Police, CHP)?</i>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
c)	<i>Schools?</i>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
d)	<i>Roads?</i>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
e)	<i>Solid Wastes?</i>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
f)	<i>Other public facilities?</i>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
g)	<i>Other:</i> _____	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>

Setting. Police: Police services in the Project vicinity are provided by the Arroyo Grande Police Department (AGPD). The AGPD is staffed by 30 full-time employees who provide law enforcement and emergency response throughout the City and surrounding area. The Police Department is located at 200 North

Halcyon Road, approximately 1.5 mile from the project site. The department is organized into two major divisions: Patrol Services and Support Services, each led by a Commander. In addition to the 30 full-time employees, the department has six part-time employees, two Reserve Offices, two Neighborhood Services Technicians, one Fleet and Equipment Technician, one Training Manager, and 52 community volunteers. Provision of police protection services are regulated under the *General Plan Safety Element*, which requires adequate provision of these services.

Fire: Fire protection is provided by the Five Cities Fire Authority, a Joint Powers Authority between the Cities of Arroyo Grande, Grover Beach and the Oceano Community Services District. A Five Cities Fire Authority Fire station is in close proximity to the project site (140 Traffic Way, Arroyo Grande), providing timely emergency support if needed.

Schools: The Project site is located within the Lucia Mar Unified School District (School District) (K-12), which encompasses the communities of Arroyo Grande, Grover Beach, Nipomo, Oceano, Pismo Beach, and Shell Beach (Lucia Mar Unified School District 2016a). The School District is the largest school district in San Luis Obispo County, and serves over 10,700 students. The School District consists of 19 schools: eleven elementary schools, three middle schools, four high schools, and one continuation high school.

Solid Waste: South County Sanitary is the service provider for the City of Arroyo Grande, including the project vicinity, and offers curbside solid waste and recyclable collection services. South County Sanitary is a municipal waste hauling company supported by the Cold Canyon Landfill, and is owned by Waste Connections, Inc. (South County Sanitary 2015). The Cold Canyon Landfill is the primary Landfill for the Five Cities area, as well as for the City of San Luis Obispo, and is projected to reach its capacity around 2018. The landfill has been approved for the expansion of the facilities capacity from 1,620 to 2,500 tpd, extending the landfill's projections to reach capacity in approximately 30 years in order adequately service current and anticipated district needs (County of San Luis Obispo 2012).

Impact. The proposed project is limited to the maintenance of the existing Cherry Avenue Pipe Bridge and would not result in an increased demand for police, fire protection or any other public services or utilities and would not result in the need for the upgrade of existing services or require the construction of new services. Impacts to public services are considered less than significant.

Senate Bill 50 (SB 50) implemented school impact fee reforms in 1998 by amending the laws governing developer fees and school mitigation. Pursuant to SB 50, future development projects would be required to pay school impact fees established to offset potential impacts on school facilities. The proposed project does not trigger school impact fees and impacts to schools are not expected. Similarly, the project is not expected to have a significant impact on parks or other public facilities. No impacts would result.

Mitigation/Conclusion. Impacts are considered less than significant, no mitigation is required.

XI.	RECREATION - <i>Will the project:</i>	Potentially Significant	Impact can & will be mitigated	Insignificant Impact	Not Applicable
a)	<i>Increase the use or demand for parks or other recreation opportunities?</i>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
b)	<i>Affect the access to trails, parks or other recreation opportunities?</i>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
c)	<i>Other</i> _____	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>

Setting. There are 15 public or quasi-public recreational resources and open spaces within the vicinity of the project site located within the City. This includes over 147.9-acres of active parks, sports complexes, and passive open spaces managed and maintained by the City of Arroyo Grande. The City Recreational Services Department also maintains approximately 20.4 acres of non-useable landscape areas for a total of 168.34-acres of public lands in parks, landscaped areas, and open spaces.

Impact. The proposed project does not have the potential to increase the amount of residents in the vicinity, or increase demands on local parks facilities and would not increase visitation of open spaces or other City recreational facilities. Impacts related to project development in native habitat have been discussed in detail under Section IV, Biological Resources.

Mitigation/Conclusion. Impacts are considered less than significant and no additional measures are required.

XII.	TRANSPORTATION/ CIRCULATION - <i>Will the project:</i>	Potentially Significant	Impact can & will be mitigated	Insignificant Impact	Not Applicable
a)	<i>Increase vehicle trips to local or areawide circulation system?</i>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
b)	<i>Reduce existing "Levels of Service" on public roadway(s)?</i>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
c)	<i>Create unsafe conditions on public roadways (e.g., limited access, design features, sight distance, slow vehicles)?</i>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
d)	<i>Provide for adequate emergency access?</i>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
e)	<i>Result in inadequate parking capacity?</i>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
f)	<i>Result in inadequate internal traffic circulation?</i>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
g)	<i>Conflict with adopted policies, plans, or programs supporting alternative transportation (e.g., pedestrian access, bus turnouts, bicycle racks, etc.)?</i>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>

XII. TRANSPORTATION/ CIRCULATION - <i>Will the project:</i>	Potentially Significant	Impact can & will be mitigated	Insignificant Impact	Not Applicable
h) <i>Result in a change in air traffic patterns that may result in substantial safety risks?</i>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
i) <i>Other:</i> _____	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>

Setting. Regional access to the City of Arroyo Grande is provided via the U.S. Highway 101, and access in the project vicinity is available via northbound and southbound ramps at Traffic Way, as well as a full interchange at East Grand Avenue. These two interchanges provide access to a limited arterial system which funnels traffic generated in this automobile-dependent area to a few key intersections. Local access to the site is provided via East Branch Street (and Paulding Circle) for the north-bank pipe bridge landing, and via Nelson Street for the south-bank pipe bridge landing.

Impact. The proposed project is limited to the maintenance of the existing Cherry Avenue Pipe Bridge. The project is limited to the construction activities discussed above in detail under the Project Description. No development is proposed that would have the potential to increase traffic on local roadways or regional transportation corridors (e.g., Highway 101). Project traffic impacts are limited to construction activities associated with the pipe bridge maintenance and operational traffic increases are not expected. Construction is anticipated to last up to 60 days maximum and as such, construction traffic generation is considered temporary. Therefore, transportation and traffic impacts are considered less than significant.

The project will not affect air traffic patterns. The project would not substantially increase hazards due to a design feature or incompatible use. Impacts are considered less than significant

The proposed project would not conflict with adopted policies, plans, or programs supporting alternative transportation. Project construction staging will require an encroachment permit from the City and construction staging shall not be allowed to obstruct traffic access to nearby residences. Impacts are considered less than significant.

Mitigation/Conclusion. With compliance with the anticipated City Encroachment Permit, impacts are considered less than significant. Further mitigation is not required.

XIII. WASTEWATER - <i>Will the project:</i>	Potentially Significant	Impact can & will be mitigated	Insignificant Impact	Not Applicable
a) <i>Violate waste discharge requirements or local criteria for wastewater systems?</i>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
b) <i>Change the quality of surface or ground water (e.g., nitrogen-loading, daylighting)?</i>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>

XIII. WASTEWATER - Will the project:		Potentially Significant	Impact can & will be mitigated	Insignificant Impact	Not Applicable
c)	Adversely affect City wastewater service provider?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
d)	Other: _____	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>

Setting. The wastewater collection system for within the City limits conveys raw wastewater to trunk mains owned and operated by the District for wastewater treatment. The District serves the Cities of Arroyo Grande, Grover Beach, and the community of Oceano. The sanitary sewer system consists of nearly 73 miles of gravity sewer systems and five wastewater lift stations throughout the City. The sewer pipe collection system conveys approximately 1.20 million gallons per day (mgd) of wastewater with peak daily flows of approximately 3.16 mgd. The proposed project is part of the maintenance of the District's wastewater conveyance system.

Impact. The proposed project consists of the maintenance to the Cherry Avenue Pipe Bridge and will help ensure the continued safe conveyance of wastewater for treatment as part of the local municipal infrastructure.

Please refer to Section VII, Hazards and Hazardous Materials, for a discussion of impacts related to the removal of existing facility paint and coating and the application of new coating on the pipe bridge. The District is proposing the use of a containment system that will contain all debris (including any water used for paint removal) for proper disposal.

Mitigation/Conclusion. Mitigation measures are not required. Impacts are considered less than significant.

XIV. WATER - Will the project:		Potentially Significant	Impact can & will be mitigated	Insignificant Impact	Not Applicable
a)	Violate any water quality standards?	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
b)	Discharge into surface waters or otherwise alter surface water quality (e.g., turbidity, temperature, dissolved oxygen, etc.)?	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
c)	Change the quality of groundwater (e.g.,	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
d)	Change the quantity or movement of available surface or ground water?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
e)	Adversely affect community water service provider?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
f)	Other: _____	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>

Setting. Water use at the project site is managed under the City's Urban Water Management Plan which assesses the City water demand and water supply in regards to the proposed build-out population, and anticipates adequate supply of water upon reaching build-out of the City.

The City receives its water primarily from Lopez Reservoir via the Lopez pipeline, as well as groundwater from the Santa Maria Groundwater Basin and Pismo Formation. Lopez Reservoir water is treated at the Lopez Water Treatment Plant operation of the dam and treatment facilities is provided by the San Luis Obispo Flood Control and Water Conservation District. This constitutes the majority supply of fresh water for the Five Cities area. Total water demand for the City in 2010 equated to 3,793 afy and the City water supply availability will be approximately 3,813 afy in 2020.

Impact. The proposed project is limited to the maintenance of the existing Cherry Avenue Pipe Bridge and would not impact the water resources for the community. The project would not have the potential to change the movement of surface or ground water. The proposed project has the potential to result in water quality impacts related to sedimentation/erosion resulting from proposed earth moving activities along the steep incised creek banks. In addition, the project has the potential to result in impacts related to accidental release of hazardous materials (debris from the stripping of the pipe bridge and coating applications) into the Arroyo Grande Creek.

Please refer to the discussion under Sections IV (Biological Resources), VI (Geology and Soils) and VII (Hazards and Hazardous Materials) for a detailed analysis of impacts related to stormwater runoff, erosion/sedimentation, and the release of hazardous materials. Impacts are considered significant but mitigable.

Mitigation/Conclusion. With implementation of the proposed project containment system and the District's Spill Prevention and Control Plan and Asbestos and Lead Compliance Plan, including the details of the District's Water Pollution Control Program (WPCP) to be prepared in accordance with the WPCP Preparation Manual as published by CalTrans, and required mitigation measures BIO-1 and BIO-2, water and water quality impacts are considered less than significant.

XV. LAND USE - <i>Will the project:</i>	Inconsistent	Potentially Inconsistent	Consistent	Not Applicable
a) <i>Be potentially inconsistent with land use, policy/regulation (e.g., general plan [City General Plan and ordinance], specific plan, Clean Air Plan, etc.) adopted to avoid or mitigate for environmental effects?</i>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
b) <i>Be potentially inconsistent with any habitat or community conservation plan?</i>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
c) <i>Be potentially inconsistent with adopted agency environmental plans or policies with jurisdiction over the project?</i>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>

XV. LAND USE - <i>Will the project:</i>	Inconsistent	Potentially Inconsistent	Consistent	Not Applicable
d) <i>Be potentially incompatible with surrounding land uses?</i>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
e) <i>Other:</i> _____	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>

Setting/Impact. The project site is bounded on the north by mixed residential and commercial development along Branch Street (zoning designation = Village Mixed Use), and single family residential development to the south (zoning designation = Single Family).

The proposed project has been reviewed for consistency with policy and/or regulatory documents relating to the environment and appropriate land use (e.g., City Land Use Ordinance, General Plan, etc.) and has been determined to be in substantial conformance.

The project is not within or adjacent to a habitat or community conservation plan. The project is consistent or compatible with the surrounding uses as discussed in this Initial Study.

Mitigation/Conclusion. No inconsistencies were identified and therefore no additional measures above what will already be required are determined necessary.

XVI. MANDATORY FINDINGS OF SIGNIFICANCE - <i>Will the project:</i>	Potentially Significant	Impact can & will be mitigated	Insignificant Impact	Not Applicable
a) <i>Have the potential to degrade the quality of the environment, substantially reduce the habitat of a fish or wildlife species, cause a fish or wildlife population to drop below self-sustaining levels, threaten to eliminate a plant or animal community, reduce the number or restrict the range of a rare or endangered plant or animal or eliminate important examples of the major periods of history or prehistory?</i>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
b) <i>Have impacts that are individually limited, but cumulatively considerable? ("Cumulatively considerable" means that the incremental effects of a project are considerable when viewed in connection with the effects of past projects, the effects of other current projects, and the effects of probable future projects)?</i>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
c) <i>Have environmental effects which will cause substantial adverse effects on human beings, either directly or indirectly?</i>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>

For further information on CEQA or the District’s environmental review process, please contact the South San Luis Obispo County Sanitation District, or the California Environmental Resources Evaluation System at “http://ceres.ca.gov/topic/env_law/ceqa/guidelines/” for information about the California Environmental Quality Act.

5. REFERENCES AND RESOURCES

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12. California Air Resources Board. *Ambient Air Quality Standards*. As revised March 20, 2008.
13. California Department of Conservation, California Geological Survey. *Alquist-Priolo Earthquake Fault Zoning Act. California Public Resources Code, Section 2621 et seq.* 1972.
14. California Department of Conservation, California Geological Survey. *Seismic Hazards Mapping Act. California Public Resources Code. Section 2690 et seq.* 1990.

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16. California Regional Water Quality Control Board, Central Coast Region. *Water Quality Control Plan*. As updated August 5, 2006.
17. California Resources Agency. *California Environmental Quality Act, California Public Resources Code, Division 13 Environmental Protection, Sections 21000–21777*. 2005.
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6. MITIGATION MONITORING PLAN

AQ-1. To mitigate fugitive dust emissions related to project construction, the following shall be implemented:

- a) Reduce the amount of the disturbed area where possible;
- b) Use of water trucks or sprinkler systems in sufficient quantities to prevent airborne dust from leaving the site. Increased watering frequency would be required whenever wind speeds exceed 15 mph. Reclaimed (non-potable) water should be used whenever possible;
- c) All dirt stock pile areas should be sprayed daily as needed;
- d) Permanent dust control measures identified in the approved project revegetation and landscape plans should be implemented as soon as possible following completion of any soil disturbing activities;
- e) Exposed ground areas that are planned to be reworked at dates greater than one month after initial grading should be sown with a fast germinating, non-invasive grass seed and watered until vegetation is established;
- f) All disturbed soil areas not subject to revegetation should be stabilized using approved chemical soil binders, jute netting, or other methods approved in advance by the APCD;
- g) All roadways, driveways, sidewalks, etc. to be paved should be completed as soon as possible. In addition, building pads should be laid as soon as possible after grading unless seeding or soil binders are used;
- h) Vehicle speed for all construction vehicles shall not exceed 15 mph on any unpaved surface at the construction site;
- i) All trucks hauling dirt, sand, soil, or other loose materials are to be covered or should maintain at least two feet of freeboard (minimum vertical distance between top of load and top of trailer) in accordance with CVC Section 23114;
- j) Install wheel washers where vehicles enter and exit unpaved roads onto streets, or wash off trucks and equipment leaving the site;
- k) Sweep streets at the end of each day if visible soil material is carried onto adjacent paved roads. Water sweepers with reclaimed water should be used where feasible;
- l) All of these fugitive dust mitigation measures shall be shown on grading and building plans; and
- m) The contractor or builder shall designate a person or persons to monitor the fugitive dust emissions and enhance the implementation of the measures as necessary to minimize dust complaints, reduce visible emissions below 20% opacity, and to prevent transport of dust offsite. Their duties shall include holidays and weekend periods when work may not be in progress. The name and telephone number of such persons shall be provided to the APCD Compliance Division prior to the start of any grading, earthwork or demolition.

Mitigation Implementation/Monitoring

- 1. Performance standard:** Dust mitigation measures shall be reviewed by the District and jurisdictional permitting agencies.
- 2. Contingency Measure:** None
- 3. Implementation Responsibility:** South San Luis Obispo County Sanitation District (District)
- 4. Implementation Schedule:** Prior to construction, the above measures shall be clearly printed on all plans. Measures to be implemented throughout construction.
Monitoring Method: District shall work with appropriate APCD staff to ensure implementation and monitoring per Mitigation Measure AQ-1(m).

AQ-2. The required mitigation measures for reducing nitrogen oxides (NO_x), reactive organic gases (ROG), and diesel particulate matter (DPM) emissions from construction equipment are listed below:

- Maintain all construction equipment in proper tune according to manufacturer's specifications;
- Fuel all off-road and portable diesel powered equipment with ARB certified motor vehicle diesel fuel (non-taxed version suitable for use off-road);
- Use diesel construction equipment meeting ARB's Tier 2 certified engines or cleaner off-road heavy-duty diesel engines, and comply with the State off-Road Regulation;
- Use on-road heavy-duty trucks that meet the ARB's 2007 or cleaner certification standard for on-road heavy-duty diesel engines, and comply with the State On-Road Regulation;
- Construction or trucking companies with fleets that do not have engines in their fleet that meet the engine standards identified in the above two measures (e.g. captive or NOx exempt area fleets) may be eligible by proving alternative compliance;
- All on and off-road diesel equipment shall not idle for more than 5 minutes. Signs shall be posted in the designated queuing areas and or job sites to remind drivers and operators of the 5 minute idling limit;
- Diesel idling within 1,000 feet of sensitive receptors is not permitted;
- Staging and queuing areas shall not be located within 1,000 feet of sensitive receptors;
- Electrify equipment when feasible;
- Substitute gasoline-powered in place of diesel-powered equipment, where feasible; and,
- Use alternatively fueled construction equipment on-site where feasible, such as compressed natural gas (CNG), liquefied natural gas (LNG), propane or biodiesel.

Mitigation Implementation/Monitoring

- 1. Performance standard:** The District shall ensure compliance with the DPM avoidance measures during site construction.
- 2. Contingency Measure:** As determined by environmental monitor or District official
- 3. Implementation Responsibility:** District
- 4. Implementation Schedule:** throughout construction
- 5. Monitoring Method:** Applicant shall consult with and apply for any appropriate permits with the San Luis Obispo Air Pollution Control District

BIO-1: The following measures are required to reduce impacts to biological resources in Arroyo Grande Creek resulting from tree pruning to less than significant levels:

1. All pruned materials shall be removed from the creek channel to reduce potential for blocking downstream bridge or culvert openings during high flow conditions;
2. Chainsaws used within the channel shall have internal chain oiling systems to reduce oil spray during cutting operations. Sawdust generated from large cuts on the trees shall be contained and removed from the channel and spread on the banks as part of the erosion control plan;
3. All English ivy and pampas grass removed from within the pipe easement area shall be removed from the creek channel and disposed in a landfill; and
4. Due to the steep slopes and the need to stabilize and revegetate the site following construction, English ivy removal shall be conducted by pulling up runners as feasible, and then selective hand digging root balls in areas of low erosion potential throughout the project area. Holes created by digging shall be immediately filled and compacted by foot pressure. No loose

dirt shall be left on the slopes, and all bare soils shall be seeded with the native seed mix identified below under Mitigation Measure BIO-2.

Mitigation Implementation/Monitoring

1. **Performance standard:** Biological mitigation measures shall be printed on project contract documents and conformance shall be monitored by a qualified biologist.
2. **Contingency Measure:** As determined by environmental monitor or District official
3. **Implementation Responsibility:** District
4. **Implementation Schedule:** Prior to commencement of construction
5. **Monitoring Method:** Environmental monitor shall report to District and CDFW as appropriate. Monitoring by the District under CDFW permits.

BIO-2: The following measures are required to reduce potential water quality impacts as a result of project implementation to less than significant levels:

1. Prior to start of construction, the project site boundaries, access routes, and equipment/materials staging areas shall be clearly flagged or fenced so that the contractor is aware of the limits of allowable site access and disturbance;
2. Prior to start of construction, the applicant shall prepare an Erosion Control Plan. The plan shall address both temporary and permanent measures to stabilize disturbed areas and control erosion and reduce sedimentation. Erosion and soil protection, including seeding with native species, shall be provided on all disturbed soil areas prior to the onset of the rainy season (October 15). All project plans shall show that sedimentation and erosion control measures must be installed per the engineer's requirements. The plan shall include specific measures to minimize impacts to jurisdictional habitats. For example, washing of equipment shall occur only in designated areas where polluted water and materials can be contained for subsequent removal from the site. Washing of equipment, tools, etc. shall not be allowed in any location where the tainted water could enter storm drains or flow into the channel. The following native seed mix is recommended for application (either via hydroseed or broadcast seeding techniques) on disturbed bank areas;

Species	Application Rate (lbs./acre)
<i>Ambrosia psilostachya</i> (western ragweed)	2
<i>Artemisia douglasiana</i> (mugwort)	3
<i>Bromus carinatus</i> (California brome)	5
<i>Hordeum brachyantherum</i> (meadow barley)	3
<i>Trifolium wildenovii</i> (tomcat clover)	5
<i>Vulpia microstachys</i> (six weeks fescue)	5
Total	23

3. To avoid disturbance of wet soils, and limit the potential for erosion and sedimentation, work shall occur outside of the rainy season, which is typically defined from October 15 through April 15 (rainy season to be officially defined upon the first significant rain event of the season), or as authorized by CDFW following approval of the project Erosion Control Plan;
4. The contractor shall implement the detailed containment measures developed by the project engineer designed to capture and remove all materials from the creek channel. Safe operation

and maintenance of the containment system shall be a project priority, and the system shall be monitored for proper function during use;

5. Excavation of the top of bank to expose the pipe shall utilize the smallest equipment feasible, and may require some handwork to minimize the disturbance area. Due to the steep slopes, all loose soil must be contained during construction and incidental fall back of soils during excavation contained by installation of silt fence, straw bales, plywood or similar material below the excavation area. Erosion control measures must be cleaned and maintained daily during the project. Incidental fall back of soils shall be removed by hand and avoid impacts to native vegetation;
6. All project-related spills of hazardous materials within or adjacent to the project site shall be cleaned up immediately. Spill prevention and cleanup materials shall be on-site at all times. Cleaning and refueling of equipment and vehicles shall occur only within designated staging areas. The staging areas shall conform to standard Best Management Practices applicable to attaining zero discharge of storm water runoff into the creek. No maintenance, cleaning or fueling of equipment shall occur within riparian areas, or within 25 feet of such areas given the tight working conditions. At a minimum, all equipment and vehicles shall be checked and maintained on a daily basis to ensure proper operation and to avoid potential leaks or spills; and
7. During project activities, all trash that may attract predators shall be properly contained, removed from the work site, and disposed of regularly. Following construction, all trash and construction debris shall be removed from the work area.

Mitigation Implementation/Monitoring

- 1. Performance standard:** Project contract documents shall note required elements.
- 2. Contingency Measure:** To be shown on plans prior to issuance of required permits.
- 3. Implementation Responsibility:** District
- 4. Implementation Schedule:** During construction.
- 5. Monitoring Method:** Construction contractor report to District Official.

BIO-3: The following measures are required to reduce potential impacts to aquatic species to less than significant levels.

1. Before project activities begin, a qualified biologist shall conduct preconstruction surveys for wildlife 48 hours prior to the start of any construction activity within the creek, and then again immediately prior to activity within the proposed project disturbance area. Any steelhead, CRLF, garter snake, or pond turtle occurrences within the project area shall be documented and avoided. Avoidance can be accomplished by delaying work until the animal(s) move out of the work area, or through establishment of exclusion zones, which will be the case for the active channel and areas of flowing water. All work that requires access to the creek channel such as vegetation removal shall be done under the direction of a qualified biologist to ensure these species are avoided.
2. Immediately prior to start of construction activities, a qualified biologist shall conduct an environmental education training session for all project personnel. At a minimum, the training shall include a description of the species potentially present, the specific measures required to protect those species, and the boundaries within which the project may be accomplished. The

training shall include a review of all relevant permit conditions, and a question and answer session to discuss specific issues.

3. A qualified biologist shall be onsite to direct all vegetation clearing and erosion control measures within the creek corridor. Once all initial site disturbance is done, the biologist shall visit the project site on a weekly basis to monitor compliance with all avoidance and protection measures. Monitoring shall also occur immediately prior to and following rain events to document preparedness and identify potential remedial actions needed prior to the rain event. The biologist shall have authority to temporarily stop work in consultation with the District if impacts to aquatic species or habitats could potentially occur. The biologist shall also survey the site following the rain event to ensure species such as CRLF have not moved into the work area.
4. Any construction material or debris that inadvertently falls into the creek channel or on the creek banks shall be removed by hand immediately.

Mitigation Implementation/Monitoring

- 1. Performance standard:** Project contract documents shall note required elements.
- 2. Contingency Measure:** To be shown on plans prior to issuance of all required permits.
- 3. Implementation Responsibility:** District
- 4. Implementation Schedule:** During construction.
- 5. Monitoring Method:** Biological monitor to report to District Official and CDFW.

BIO-4: Impacts to nesting birds will be reduced to less than significant levels with the incorporation of the following mitigation measures.

1. To avoid impacts to nesting bird species, including special-status species and species protected by the Migratory Bird Treaty Act (MBTA), work within and adjacent to willow riparian forest areas shall be limited to the time period between September 1st and January 31st if feasible. Since this would place some work in the winter rain season, and project completion may not be feasible during this period, work can proceed during the bird nesting season as long as a qualified biologist conducts a pre-construction survey for active bird nests within the project area at least 48-hours prior to any disturbance activities proposed within the nesting season (February 1 through August 31). If no nesting activity is observed, project activities can proceed;
2. If active nest sites of bird species protected under the Migratory Bird Treaty Act and/or California Fish and Game Code Section 3503 are observed within the immediate project vicinity, then the project shall be modified as necessary to avoid impacts to the identified nests, adults, eggs, and/or young. Potential project modifications may include establishing appropriate "no activity" buffers around the nest site as determined by the project biologist. The buffer shall be developed in consultation with CDFW. Construction activities shall not occur in the buffer until the project biologist has determined that the nesting activity has ceased and the young are no longer reliant on the nest site;
3. If active nest sites of raptors and/or bird species of special concern are observed within the vicinity of project related disturbances, an appropriate buffer around the nest site (250 to 500 feet for raptors depending on location) shall be implemented. A reduced buffer may be feasible but will depend on vegetation, slope aspect, etc. and visual/sound separation from the nest site and construction zone. Construction activities in the buffer zone shall be prohibited

until the young have fledged and are no longer reliant on the nest site; and

4. Active nests located in the project area shall be mapped and monitored by the project biologist, and a report shall be submitted to the CDFW and other appropriate agencies, documenting project compliance with the MBTA, California Fish and Game Code, and applicable project mitigation measures.

Mitigation Implementation/Monitoring

1. **Performance standard:** Project contract documents shall note required elements. Work within and adjacent to willow riparian forest areas shall be limited to the time period between September 1st and January 31st if feasible. Work can proceed during the bird nesting season as long as a qualified biologist conducts a pre-construction survey for active bird nests within the project area at least one week prior to any disturbance activities proposed within the nesting season.
2. **Contingency Measure:** To be shown on contract documents prior to issuance of required permits.
3. **Implementation Responsibility:** District
4. **Implementation Schedule:** Prior to construction.
5. **Monitoring Method:** Biological monitor to report to District and CDFW.

CR-1: In the event unforeseen archaeological resources are unearthed during any construction activities, all grading and/or excavation shall cease in the immediate area and the find left untouched. The City shall be notified so that the extent and location of discovered materials may be recorded by a qualified archaeologist, Native American, or paleontologist, whichever is appropriate. The qualified professional shall evaluate the find and make reservations related to the preservation or disposition archaeological resources are found to include human remains, or in any other case when human remains are discovered during construction, the District shall notify the County Coroner. If human remains are found to be of ancient age and of archaeological spiritual significance, the District shall notify the Native American of likely descent.

Mitigation Implementation/Monitoring

1. **Performance standard:** In the event of unforeseen discovery, work shall stop and the required notification shall occur prior to restarting work.
2. **Contingency Measure:** To be shown on project construction documents.
3. **Implementation Responsibility:** District, County Coroner.
4. **Implementation Schedule:** During construction
5. **Monitoring Method:** District.

N-1: Construction activity for site preparation shall be limited to the hours of 7 AM to 7 PM, Monday through Friday and 8AM to 5PM on Saturdays. No construction shall occur on Sundays or State Holidays. Construction equipment maintenance shall be limited to the same hours. Non-noise generating construction activities without mechanical equipment (e.g., excavation using hand tools, hand painting, etc.) are not subject to these restrictions.

Stationary construction equipment that generates noise that exceeds 65 dBA at the project boundaries shall be shielded with the most modern and effective noise control devices (i.e., mufflers, lagging, and/or motor enclosures). Impact tools (e.g., jack hammers, pavement breakers, and rock drills) used for project construction shall be hydraulically or electrically

powered wherever possible to avoid noise associated with compressed-air exhaust from pneumatically powered tools. Where use of pneumatic tools is unavoidable, an exhaust muffler on the compressed-air exhaust shall be used. All equipment shall be properly maintained to ensure that no additional noise, due to worn or improperly maintained parts, is generated. Stockpiling and vehicle staging areas shall be located as far as practical from sensitive noise receptors. Every effort shall be made to create the greatest distance between noise sources and sensitive receptors during construction activities.

Mitigation Implementation/Monitoring

1. **Performance standard:** Construction activities shall be limited to the hours prescribed above. Construction equipment and noise buffers shall conform to the requirements listed above as feasible.
2. **Contingency Measure:** To be shown on project contract documents.
3. **Implementation Responsibility:** District
4. **Implementation Schedule:** During staging and construction
5. **Monitoring Method:** District.

Attachment A:
Figure 1, Site Location. Figure 2, Project Aerial Overview

Attachment B:
Project Biological Assessment

THE Newspaper of the Central Coast TRIBUNE

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In The Superior Court of The State of California
In and for the County of San Luis Obispo
AFFIDAVIT OF PUBLICATION

AD # 2568024
SOUTH SAN LUIS OBISPO COUNTY
SANITATION DISTRICT

STATE OF CALIFORNIA

ss.

County of San Luis Obispo

I am a citizen of the United States and a resident of the County aforesaid; I am over the age of eighteen and not interested in the above entitled matter; I am now, and at all times embraced in the publication herein mentioned was, the principal clerk of the printers and publishers of THE TRIBUNE, a newspaper of general Circulation, printed and published daily at the City of San Luis Obispo in the above named county and state; that notice at which the annexed clippings is a true copy, was published in the above-named newspaper and not in any supplement thereof – on the following dates to wit; JULY 19, 2016, that said newspaper was duly and regularly ascertained and established a newspaper of general circulation by Decree entered in the Superior Court of San Luis Obispo County, State of California, on June 9, 1952, Case #19139 under the Government Code of the State of California.

I certify (or declare) under the penalty of perjury that the foregoing is true and correct.


(Signature of Principal Clerk)

DATED: JULY 19, 2016
AD COST: \$111.32

Public Notice

July 14, 2016

NOTICE IS HEREBY GIVEN that the South San Luis Obispo County Sanitation District Board of Directors will conduct a public hearing in August 2016 at 1655 Front Street in Oceano, California 93445 at 6:00 p.m. to consider the following:

Adoption of a Mitigated Negative Declaration of Environmental Impact associated with the District's proposal to implement the Cherry Avenue Pipe Bridge Maintenance Project over Arroyo Grande Creek between Branch Street to the north and Nelson Street to the south in Arroyo Grande, San Luis Obispo County, California. The pipe bridge maintenance project will involve the removal of existing paint and debris from the bridge, followed by replacing anti-corrosion coatings on the bridge.

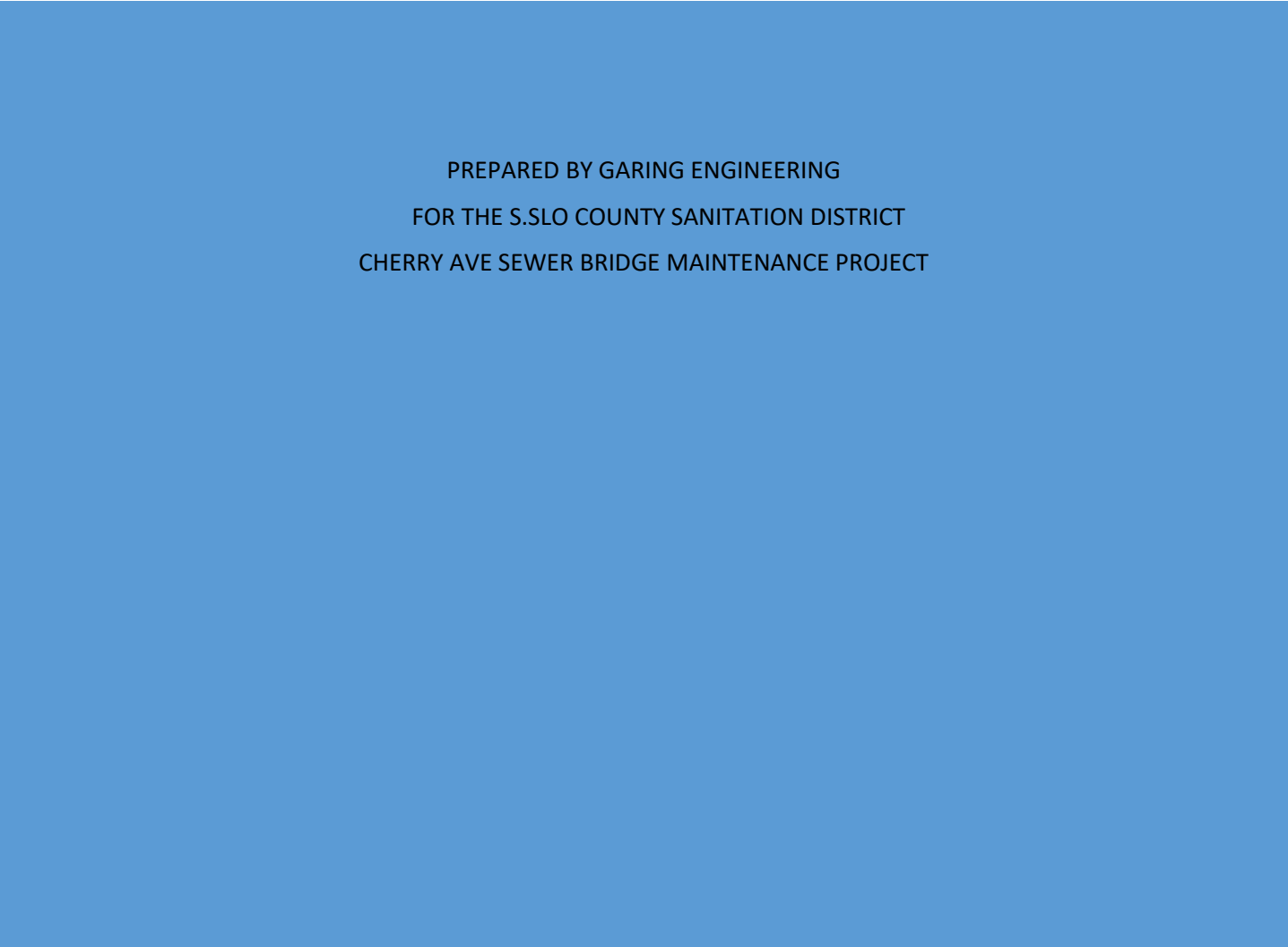
Copies of the draft Mitigated Negative Declaration and supporting data are available for public review at the District office location and on the website at <http://sslcsd.org>. The comment and review period is open between July 20, 2016 and August 19, 2016. All interested persons are invited to comment on the environmental document and attend the South San Luis Obispo County Sanitation District Board of Directors hearing in August 2016.

July 19, 2016

2568024



SPECIAL PROVISIONS



PREPARED BY GARING ENGINEERING
FOR THE S.SLO COUNTY SANITATION DISTRICT
CHERRY AVE SEWER BRIDGE MAINTENANCE PROJECT

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SPECIAL PROVISIONS

SECTION 1. DESCRIPTION OF WORK

The contract work consists of cleaning and recoating portions of the exposed and buried structural steel surfaces of the Cherry Avenue Sewer Pipe Bridge while adhering to all required environmental permit conditions in accordance with these Plans, the Standard Specifications, Standard Plans, and these Special Provisions.

SECTION 2 CONSTRUCTION DETAILS

2-1.01 ORDER OF WORK

Attention is directed to Section 4-1.03, "Contract Submittals," of these Special Provision for a list of submittals required to be submitted to the Engineer within 10 days of receipt of the fully executed contract.

After having received written Notice to Proceed Contractor shall install the required construction areas signs as the first item of work in accordance with these Special Provisions. No other work will be allowed until the placement of the construction area signs has been completed.

The Contractor shall coordinate their work schedule to consider permit restrictions associated with early season rainfall and storm water run off as well as locations that are known to have active bird nesting activities.

Pre-construction surveys performed by District biologists to determine nesting activities will be provided to the Contractor to assist them in determining location scheduling. This information will be available at the time of the pre-construction meeting.

Construction shall occur between April 15 and October 15th.

All work activities during the construction phase will be confined to daylight hours. Daylight hours are defined as that daytime period between sunrise and sunset.

All work should be conducted in compliance with the CAL-OSHA and EPA regulations.

Payment for complying with the requirements of "Order of Work" shall be considered as included in the contract items of work involved and no separate payment will be made therefor.

2-1.02 MOBILIZATION

Mobilization shall conform to the provisions in Section 9-1.16D, "Mobilization" of the Standard Specifications and these Special Provisions. The contract lump sum price paid for "MOBILIZATION" shall be in accordance with the manner specified in Section 9-1.16D, "Mobilization," of the Standard Specifications.

2-1.03 FIRE PREVENTION

The Contractor shall cooperate with local fire prevention authorities in eliminating hazardous fire conditions. Construction personnel shall be educated on preventing the risk of fire in the area and to properly dispose of cigarettes at the project site. Construction personnel shall have shovels and a fire extinguisher on-site during all construction activities.

Payment for complying with the requirements of "Fire Prevention" shall be considered as included in the contract items of work involved and no separate payment will be made therefor.

2-1.04 ENVIRONMENTAL COMPLIANCE

The Contractor shall comply with all the conditions listed in Section 12, "Environmental Permit Summary Forms," of these Special Provisions. The Contractor shall also assign and submit to the Engineer an Environmental Compliance Manager assigned to assure environmental permit compliance.

The District shall provide a Biological Monitor. In accordance with the environmental permit summary form, the Biological Monitor must conduct a survey immediately prior to the onset of work activities. The Biological Monitor shall provide any needed training to all individuals working on the project. The Biological Monitor shall establish limits in both time and space for performance of certain activities. The Contractor shall cooperate with the Biological Monitor to insure that the project is in compliance with all environmental permit conditions.

All environmental permits and CEQA document shall be readily available at the Project sites at all times and shall be presented to any agency personnel upon request.

Payment for complying with the requirements of "Environmental Compliance" shall be considered as included in the contract items of work involved and no separate payment will be made therefor.

2-1.05 AREA FOR CONTRACTORS USE

Nothing in these specifications shall be construed as allowing the Contractor to make any arrangements with any person to permit occupancy or use of any land, structure, or building within the limits of the contract for any purpose whatsoever, either with or without compensation, in conflict with any agreement between the District and any owner, former owner, or tenant of the land, structure, or building.

The District Sewer Easement (DSE) shall be used only for purposes that are necessary to perform the required work. The Contractor shall not occupy the DSE, or allow others to occupy the DSE, for purposes which are not necessary to perform the required work.

No District--owned parcels adjacent to the DSE are available for the exclusive use of the Contractor within the contract limits. The Contractor shall secure, at the Contractor's own

expense, areas required for plant sites, storage of equipment or materials, or for other purposes.

No area is available within the contract limits for the exclusive use of the Contractor. However, temporary storage of equipment and materials on District property may be arranged with the Engineer, subject to the prior demands of District maintenance forces and to other contract requirements. Use of the Contractor's work areas and other District-owned property shall be at the Contractor's own risk, and the District shall not be held liable for damage to or loss of materials or equipment located within such areas.

Residence trailers will not be allowed within the DSE.

The Contractor shall remove equipment, materials, and rubbish from the work areas and other District--owned property which the Contractor occupies. The Contractor shall leave the areas in a presentable condition in conformance with the provisions in Section 4-1.13, "Cleanup," of the Standard Specifications and these Special Provisions. The Contractor shall secure, at the Contractor's own expense, areas required for plant sites, storage of equipment or materials or for other purposes, if sufficient DSE area is not available to the Contractor within the contract limits.

Payment for complying with the requirements of "AREA FOR CONTRACTORS USE" shall be considered as included in the contract items of work involved and no separate payment will be made therefor.

2-1.06 CONSTRUCTION SITE MANAGEMENT

GENERAL

This work includes controlling potential sources of water pollution before they come in contact with storm water systems or watercourses.

Control material pollution and manage waste and non-storm water at the job site by implementing effective handling, storage, use, and disposal practices.

For information on documents under these Special Provisions, refer to the Caltrans' Preparation Manual, Dewatering Guide, and BMP Manual.

Preparation Manual, Dewatering Guide, and BMP Manual are available from the Caltrans' Construction Storm Water and Water Pollution Control web site.

Definitions and Abbreviations

- BMP Manual: The Department's Construction Site Best Management Practices (BMP) Manual.
- Dewatering Guide: The Department's Field Guide to Construction Site Dewatering

(Not Applicable).

- Minor spills: Small quantities of oil, gasoline, paint, or other material that are small enough to be controlled by a first responder upon discovery of the spill.
- Semi-significant spills: Spills that can be controlled by a first responder with help from other personnel.
- Significant or hazardous spills: Spills that cannot be controlled by construction personnel.

Submittals

Within 10 days, not including Saturdays, Sundays, and legal holidays, of receipt of the fully executed contract:

1. Submit 1 electronic and 2 printed copies (double-sided) of the Spill Prevention Plan for review. Allow 10 days, not including Saturdays, Sundays, and legal holidays, for the Engineer's review. The Engineer provides comments and specifies the date when the review stopped if revisions are required.
2. Submit a revised Spill Prevention Plan within 5 days, not including Saturdays, Sundays, and legal holidays, of receiving the Engineer's comments. The Engineer's review resumes when the complete plan has been resubmitted.
3. When the Engineer accepts the Spill Prevention Plan, submit 1 electronic and 2 printed copies (double-sided) of the accepted plan.

Submit the following:

1. Material Safety Data Sheet (MSDS) at least 5 working days before material is used or stored
2. Monthly inventory records for material used or stored
3. Manifest forms for hazardous waste disposal within 5 days of transport and disposal
4. Copy of written approval to discharge into a sanitary sewer system at least 5 days before beginning discharge activities

CONSTRUCTION

Spill Prevention and Control

All construction vehicles and equipment used on site must be well maintained and checked daily for fuel, oil, and hydraulic fluid leaks or other problems that could result in

spills of toxic materials.

A Spill Prevention Plan and appropriate spill control and clean up materials (e.g., oil absorbent pads) onsite are required in case spills occur. All trash and debris shall be confined in appropriate enclosed bins, and dispose of the trash and debris at an approved site at least weekly. Designate a staging area for equipment and vehicle fueling and storage at least 25 feet away from waterways, in a location where fluids cannot flow into waterways.

Implement spill and leak prevention procedures for chemicals and hazardous substances stored on the job site. As soon as it is safe, contain and clean up spills of petroleum products, sanitary and septic waste substances listed under CFR Title 40, Parts 110, 117, and 302.

In the event that a spill occurs, all Project activities shall immediately cease until cleanup of the spilled materials is completed. The Engineer and CDFW shall be notified immediately of any spills and shall be consulted regarding cleanup procedures.

Minor Spills:

Clean up minor spills using these procedures:

1. Contain spread of the spill
2. Recover spilled material using absorption
3. Clean contaminated area
4. Dispose of contaminated material promptly and properly

Semi-significant Spills:

Clean up semi-significant spills immediately using these procedures:

1. Contain spread of the spill
2. Recover spilled material using absorption where the spill occurs on paved or an impermeable surface.
3. Contain the spill with an earthen dike and dig up contaminated soil for disposal where the spill occurs on soil
4. When the spill occurs during precipitation, cover the spill with plastic or other material to prevent contaminated runoff
5. Dispose of contaminated material promptly and properly

Significant or Hazardous Spills:

Immediately notify qualified personnel of significant or hazardous spills. Construction personnel must not attempt to cleanup the spill until qualified staff has arrived.

Do the following:

1. Notify the Engineer and follow up with a written report
2. Obtain the services of a spills contractor or hazardous material team immediately
3. Notify the local emergency response team by dialing 911 and District officials at the emergency phone numbers kept on the job site
4. Notify the Governor's Office of Emergency Services Warning Center at (805) 852-7550
5. Notify the National Response Center at (800) 424-8802 regarding spills of Federal reportable quantities under CFR Title 40, Parts 110, 119, and 302
6. Notify other agencies as appropriate, including:
 - a. Fire Department
 - b. Public Works Department
 - c. Coast Guard
 - d. Highway Patrol
 - e. County Sheriff Department
 - f. Department of Toxic Substances
 - g. California Division of Oil and Gas
 - h. Cal OSHA
 - i. Regional Water Resources Control Board

Report minor, semi-significant, and significant spills to the WPC (Water Pollution Control) manager. WPC manager must notify the Engineer immediately. WPC manger must oversee and enforce proper spill prevention and control measures.

Prevent spills from entering storm water runoff before and during cleanup. Spills must not be buried or washed with water.

Keep materials or waste storage areas clean, well organized, and equipped with enough cleanup supplies for the material stored.

Vehicle and Material Management

Any equipment or vehicles driven and/or operated adjacent to the stream shall be checked and maintained daily to prevent leaks of materials that, if introduced to water, could be deleterious to aquatic and terrestrial life.

Vehicles shall not operate in the channel at any time, except that an excavator or similar

equipment operated along the top of bank may extend toward the channel to facilitate movement of equipment or other material.

Construction vehicle access to the stream's banks and bed shall be limited to predetermined ingress and egress corridors on existing roads. All other areas adjacent to the work site shall be considered an ESA and shall remain off-limits to construction equipment. Vehicle corridors and the ESA shall be identified by the Permittee's resident engineer in consultation with the Department representative.

Any staging or equipment/vehicle parking areas shall be free of combustible vegetation and work crews shall have shovels and a fire extinguisher on site during all construction activities.

Material Management General

Material must be delivered, used, and stored for this job in a way that minimizes or eliminates discharge of material into the air, storm drain systems, or watercourses.

Implement the practices described in this section while taking delivery of, using, or storing these materials:

1. Hazardous chemicals including acids, lime, glues, adhesives, paints, solvents, and curing compounds.
2. Soil stabilizers and binders
3. Fertilizers
4. Detergents
5. Plaster
6. Petroleum products including fuel, oil, and grease.
7. Asphalt components and concrete components
8. Pesticides and herbicides

Employees trained in emergency spill cleanup procedures must be present during unloading of hazardous materials or chemicals. If practical, use less hazardous products.

Material Storage

Use these storage procedures:

1. Store liquids, petroleum products, and substances listed in CFR Title 40, Parts 110, 117, and 302 in containers or drums approved by the United States Environmental Protection Agency, and place them in secondary containment facilities.

2. Secondary containment facilities must be impervious to the materials stored there for a minimum contact time of 72 hours.
3. Throughout the rainy season, cover secondary containment facilities during nonworking days and when precipitation is predicted. Secondary containment facilities must be adequately ventilated.
4. Keep secondary containment facility free of accumulated rainwater or spills. After precipitation, or in the event of spills or leaks, collect accumulated liquid and place into drums within 24 hours. Handle these liquids as hazardous waste under "Hazardous Waste" unless testing determines them to be nonhazardous.
5. Do not store incompatible materials, such as chlorine and ammonia, in the same secondary containment facility.
6. Store materials in the original containers with the original product labels maintained in legible condition. Replace damaged or illegible labels immediately.
7. Secondary containment facility must have the capacity to contain precipitation from a 24-hour-long, 25-year storm; and 10 percent of the aggregate volume of all containers, or entire volume of the largest container within the facility, whichever is greater.
8. Store bagged or boxed material on pallets. Throughout the rainy season, protect bagged or boxed material from wind and rain during non-working days and while precipitation is predicted.
9. Provide sufficient separation between stored containers to allow for spill cleanup or emergency response access. Storage areas must be kept clean, well organized, and equipped with cleanup supplies appropriate for the materials being stored.
10. Repair or replace perimeter controls, containment structures, covers, and liners as necessary. Inspect storage areas before and after precipitation, and at least weekly during other times.

Stockpile Management

Use these stockpile management procedures:

1. 1 Reduce or eliminate potential air and water pollution from stockpiled material including soil, paving material, or pressure treated wood.
2. Locate stockpiles:
 - a. If within the floodplain, at least 100 feet from concentrated flows of storm water, drainage courses, or inlets unless approved

- b. If outside the floodplain, at least 50 feet from concentrated flows of storm water, drainage courses, or inlets unless approved

Active and inactive soil stockpiles must be:

1. Covered with soil stabilization measures, plastic sheeting, or geosynthetic fabric
2. Surrounded with a linear sediment barrier

Portland cement concrete rubble, AC, HMA, AC and HMA rubble, aggregate base or aggregate sub-base stockpiles must be:

1. Covered with plastic sheeting, or geosynthetic fabric
2. Surrounded with a linear sediment barrier

Control wind erosion during year round under Section 10, "Dust Control" of the Standard Specifications.

Repair or replace linear sediment barriers and covers as needed to keep them functioning properly. If sediment accumulates to 1/3 of the linear sediment barrier height, remove sediment.

Waste Management Solid Waste

Do not allow litter or debris to accumulate anywhere on the job site. Pick up and remove trash and debris from the job site daily.

WPC manager must monitor solid waste storage and disposal procedures on the job site.

If practicable, recycle nonhazardous job site waste and excess material. If recycling is not practicable, disposal must comply with Section 14-11, "Solid Waste Disposal and Recycling" of the Standard Specifications.

Furnish enough closed-lid dumpsters of sufficient size to contain the solid waste generated by work activities. Once refuse reaches the fill line, empty dumpsters. Dumpsters must be watertight. Do not wash out dumpsters at the job site. Furnish additional containers and more frequent pickup during the demolition phase of construction.

Solid waste includes:

1. Brick
2. Mortar
3. Timber
4. Metal scraps

5. Sawdust
6. Pipe
7. Electrical cuttings
8. Non-hazardous equipment parts
9. Styrofoam and other packaging materials
10. Vegetative material and plant containers from highway planting
11. Litter and smoking material, including litter generated randomly by the public
12. Other trash and debris

Furnish and use trash receptacles in the job site yard, field trailers, and locations where workers gather for lunch and breaks.

Hazardous Waste

Use hazardous waste management practices if waste is generated on the job site from these substances:

1. Petroleum products
2. Asphalt products
3. Concrete curing compound
4. Pesticides
5. Acids
6. Paints
7. Stains
8. Solvents
9. Wood preservatives
10. Roofing tar
11. Road flares
12. Lime

13. Glues and adhesives

14. Materials classified as hazardous by California Code of Regulations, Title 22, Division 4.5; or listed in CFR Title 40, Parts 110, 117, 261, or 302

WPC manager must oversee and enforce hazardous waste management practices. Minimize the production of hazardous materials and hazardous waste at the job site. If damaged, repair or replace perimeter controls, containment structures, and covers.

If hazardous material levels are unknown, use a laboratory certified by the Environmental Laboratory Accreditation Program (ELAP) under the California Department of Public Health (CDPH) to sample and test waste to determine safe methods for storage and disposal.

Separate potentially hazardous waste from non-hazardous waste at the job site. Hazardous waste must be handled, stored, and disposed of under California Code of Regulations, Title 22, Division 4.5; and in CFR Title 49, Parts 261, 262, and 263.

Store hazardous waste in sealed containers constructed and labeled with the contents and date accumulated under California Code of Regulations, Title 22, Division 4.5; and in CFR Title 49, Parts 172, 173, 178, and 179. Keep hazardous waste containers in temporary containment facilities under "Material Storage" of these Special Provisions.

Furnish containers with adequate storage volume at convenient locations for hazardous waste collection. Do not overfill hazardous waste containers. Do not mix hazardous wastes. Do not allow potentially hazardous waste to accumulate on the ground. Store any dry-waste containers that are not water-tight on top of pallets. Store hazardous waste away from storm drains, watercourses, moving vehicles, and equipment.

Clean water based or oil based paint from brushes or equipment within a contained area and in a way that does not contaminate soil, watercourses, or storm drain systems. Handle and dispose of these as hazardous waste: paints, thinners, solvents, residues, and sludges that cannot be recycled or reused. When thoroughly dry, dispose of these as solid waste: dry, latex paint and paint cans, used brushes, rags, absorbent materials, and drop cloths.

Dispose of hazardous waste within 90 days of being generated. Use a licensed hazardous waste transporter to take hazardous waste to a Class I Disposal Site. Submit a copy of uniform hazardous waste manifest forms within 24 hours of transporting hazardous waste to the Engineer.

WPC manager must inspect these daily:

1. Storage areas for hazardous materials and wastes
2. Hazardous waste disposal and transporting activities
3. Hazardous material delivery and storage activities

Contaminated Soil

Identify contaminated soil from spills or leaks by noticing discoloration, odors, or differences in soil properties. Soil with evidence of contamination must be sampled and tested by a laboratory certified by ELAP. If levels of contamination are found to be hazardous, handle and dispose of the soil as hazardous waste.

Prevent the flow of water, including ground water, from mixing with contaminated soil by using one or a combination of these measures:

1. Berms
2. Cofferdams
3. Grout curtains
4. Freeze walls
5. Concrete seal course

If water mixes with contaminated soil and becomes contaminated, sample and test the water using a laboratory certified by ELAP. If levels of contamination are found to be hazardous, handle and dispose of the water as hazardous waste.

Concrete Waste

Use practices that will prevent the discharge of portland cement concrete, AC, or HMA waste into storm drain systems or watercourses.

Collect and dispose of portland cement concrete, AC, or HMA waste at locations where:

1. Concrete material, including grout, is used
2. Concrete dust and debris result from demolition
3. Saw cutting, coring, grinding, grooving, or hydro-concrete demolition of portland cement concrete, AC, or HMA creates a residue or slurry
4. Concrete truck or other concrete-coated equipment is cleaned at the job site

Sanitary and Septic Waste

Do not bury or discharge wastewater from sanitary or septic systems within District Sewer Easement. WPC manager must inspect sanitary or septic waste storage and monitor disposal procedures at least weekly. Sanitary facilities that discharge to the sanitary sewer system must be properly connected and free from leaks. Place sanitary facilities at least 50 feet away from storm drains, watercourse, and flow lines.

Obtain written approval from local health agency, city, county, and sewer district before discharging from a sanitary or septic system directly into a sanitary sewer system, and submit a copy to the Engineer. Comply with local health agency provisions while using an on-site disposal system.

Liquid Waste

Use practices to prevent job site liquid waste from entering storm drain systems or watercourses. Liquid wastes include the following:

1. Drilling slurries or fluids
2. Grease-free or oil-free wastewater or rinse water
3. Dredgings, including liquid waste from drainage system cleaning
4. Liquid waste running off a surface including wash or rinse water
5. Other non-storm water liquids not covered by separate permits

Hold liquid waste in structurally sound, leak proof containers such as:

1. Roll-off bins
2. Portable tanks

Liquid waste containers must be of sufficient quantity and volume to prevent overflow, spills and leaks.

Store containers:

1. At least 50 feet from moving vehicles and equipment
2. If within the floodplain, at least 100 feet from concentrated flows of storm water, drainage courses, watercourses, or storm drain inlets unless approved
3. If outside the floodplain, at least 50 feet from concentrated flows of storm water, drainage courses, watercourses, or storm drain inlets unless approved

Remove and dispose of deposited solids from sediment traps under "Solid Waste" unless the Engineer authorizes another method.

Liquid waste may require testing to determine hazardous material content before disposal.

Drilling fluids and residue must be disposed of outside the highway right of way.

If an approved location is available within the job site, fluids and residue exempt under Section 2511(g) of the California Code of Regulations, Title 23 and may be dried by evaporation in a leak proof container. Dispose of remaining solid waste under "Solid

Waste" of these Special Provisions.

Non-Storm Water Management

Water Control and Conservation

Manage water used for work activities to prevent erosion or discharge of pollutants into storm drain systems or watercourses. Obtain approval before washing anything on the job site with water that could discharge into a storm drain system or watercourse. Report discharges immediately.

If water is used at the job site, implement water conservation practices. Inspect irrigation areas. Adjust watering schedules to prevent erosion, excess watering, or runoff. Shut off water source to broken lines, sprinklers, or valves, and repair breaks within 24 hours. If possible, reuse water from waterline flushing for landscape irrigation. Sweep and vacuum paved areas: do not wash with water.

Direct job site water runoff, including water from water line repair, to areas where it can infiltrate into the ground and not enter storm drain systems or watercourses. Do not allow spilled water to escape water truck filling areas. If possible, direct water from off-site sources around the job site. Minimize the contact of off-site water with job site water.

Illegal Connection and Discharge Detection and Reporting

Inspect the job site and the site perimeter before starting work for evidence of illegal connections, discharges, or dumping. After starting work, inspect the job site and perimeter on a daily schedule. When illegal connections, discharges, or dumping are discovered, notify the Engineer immediately. Take no further action unless ordered by the Engineer. Assume unlabeled or unidentifiable material is hazardous.

Look for the following evidence of illegal connections, discharges, or dumping:

1. Debris or trash piles
2. Staining or discoloration on pavement or soils
3. Pungent odors coming from drainage systems
4. Discoloration or oily sheen on water
5. Stains or residue in ditches channels or drain boxes
6. Abnormal water flow during dry weather
7. Excessive sediment deposits
8. Nonstandard drainage junction structures
9. Broken concrete or other disturbances near junction structures

Vehicles and Equipment Cleaning

Limit vehicle and equipment cleaning or washing at the job site except what is necessary to control vehicle tracking or hazardous waste. Notify the Engineer before cleaning vehicles and equipment at the job site with soap, solvents, or steam. Contain and recycle or dispose of resulting waste under "Liquid Waste" or "Hazardous Waste" of these Special Provisions, whichever is applicable. Do not use diesel to clean vehicles or equipment, and minimize the use of solvents.

Clean or wash vehicles and equipment in a structure equipped with disposal facilities. If using a structure is not possible, vehicles and equipment must be cleaned or washed in an outside area:

1. Paved with AC, HMA, or portland cement concrete
2. Surrounded by a containment berm
3. Equipped with a sump to collect and dispose of wash water
4. If within the floodplain, located at least 100 feet from concentrated flows of storm water, drainage courses, watercourses, or storm drain inlets unless approved
5. If outside the floodplain, located at least 60 feet from concentrated flows of storm water, drainage courses, watercourses, or storm drain inlets unless approved

When washing vehicles or equipment with water, use as little water as possible. Hoses must be equipped with a positive shutoff valve

Discharge liquid from wash racks to a recycle system or to another approved system. Remove liquids and sediment as necessary.

WPC manger must inspect vehicle and equipment cleaning facilities:

1. Daily when vehicle and equipment cleaning occurs daily
2. Weekly when vehicle and equipment cleaning does not occur daily

Vehicle and Equipment Fueling and Maintenance

All fueling and maintenance activity shall occur in designated staging areas.

If fueling or maintenance must be done at the job site, designate a site, or sites, and obtain approval before using. Minimize mobile fueling or maintenance.

All fueling and maintenance of vehicles, other equipment, and staging/storage areas shall be located as far as practical and a minimum of 25 feet from any riparian habitat or water body. All refueling, maintenance, and staging of equipment and vehicles will occur, given site constraints, at least as far as practical from riparian habitat or water bodies and employing best management practices to prevent a spill from draining directly toward

aquatic habitat. A monitor will ensure contamination of habitat does not occur during such operations and a secondary containment, such as a drain pan or drain cloth, shall be used when fueling to catch spills or leaks. Prior to the onset of work, the District will ensure that a plan is in place for prompt and effective response to any accidental spills. All workers will be informed of the importance of preventing spills and of the appropriate measures to take should a spill occur.

Servicing and fueling of vehicles will be accomplished with the use of the following best management practices:

- 1 Servicing and fueling shall take place as far as practical from the seasonal streams.
- 2 When fueling, tanks shall not be "topped off."
- 3 A secondary containment, such as a drain pan or drain cloth, shall be used when fueling to catch spills or leaks.
- 4 All fluid spills shall be reported immediately.
- 5 Storage of hazardous materials shall be as far as practical from the seasonal streams.
- 6 A contingency plan for possible leaks and spills of hazardous materials into the seasonal streams shall be developed and implemented as appropriate.

During construction/ground disturbing activities, the following measures to reduce ozone precursor emissions shall be implemented:

- 1 Maintain all construction equipment in proper tune according to manufacturer's specifications.
- 2 Fuel all off-road and portable diesel powered equipment, including but not limited to bulldozers, graders, cranes, loaders, scrapers, backhoes, generator sets, compressors, auxiliary power units, with ARB certified motor vehicle diesel fuel (non-taxed version suitable for use off-road).
- 3 Maximize to the extent feasible, the use of diesel construction equipment meeting the ARB's 1996 or newer certification standard for off-road heavy duty diesel engines.

If vehicle and equipment fueling and maintenance must be done on the job site, areas for these activities shall be approved by the Engineer and must be:

- 1 On level ground
- 2 Protected from storm water run-on
- 3 If within the floodplain, located at least 100 feet from concentrated flows of storm water, drainage courses, watercourses, or storm drain inlets unless approved
- 4 If outside the floodplain, located at least 60 feet from concentrated flows of storm water,

drainage courses, watercourses, or storm drain inlets unless approved

Use containment berms or dikes around the fueling and maintenance area. Keep adequate quantities of absorbent spill cleanup material and spill kits in the fueling and maintenance area and on fueling trucks. Dispose of spill cleanup material and kits immediately after use. Use drip pans or absorbent pads during fueling or maintenance.

Fueling or maintenance activities must not be left unattended. Fueling nozzles must be equipped with an automatic shutoff control. Vapor recovery fueling nozzles must be used where required by the Air Quality Management District. When not in use, nozzles must be secured upright. Do not top-off fuel tanks.

Recycle or properly dispose of used batteries and tires.

WPC manager must inspect vehicle and equipment maintenance and fueling areas:

1 Daily when vehicle and equipment maintenance and fueling occurs daily

2 Weekly when vehicle and equipment maintenance and fueling does not occur daily

WPC manager must inspect vehicles and equipment at the job site for leaks and spills on a daily schedule. Operators must inspect vehicles and equipment each day of use.

If leaks cannot be repaired immediately, remove the vehicle or equipment from the job site.

Material and Equipment Used Over Water

Place drip pans and absorbent pads under vehicles or equipment used over water. Keep an adequate supply of spill cleanup material with the vehicle or equipment. If the vehicle or equipment will be idle for more than one hour, place drip pans or plastic sheeting under vehicles or equipment on docks, barges, or other surfaces over water.

Furnish watertight curbs or toe boards on barges, platforms, docks, or other surfaces over water to contain material, debris, and tools. Secure material to prevent spills or discharge into water due to wind.

Structure Removal Over or Adjacent to Water

Do not allow demolished material to enter storm water systems or watercourses. Use approved covers and platforms to collect debris. Use attachments on equipment to catch debris on small demolition activities. Empty debris catching devices daily and handle debris under "Waste Management" of these Special Provisions.

WPC manager must inspect demolition sites within 50 feet of storm water systems or watercourses daily.

Payment

The contract lump sum price paid for "CONSTRUCTION SITE MANAGEMENT" includes

full compensation for furnishing all labor, materials, tools, equipment, and incidentals and for doing all the work involved in spill prevention and control, material management, waste management, non-stormwater management, and dewatering and identifying, sampling, testing, handling, and disposing of hazardous waste resulting from your activities, as specified in the Standard Specifications and these Special Provisions, and as directed by the Engineer.

2-1.07 ENVIRONMENTAL IMPACT MINIMIZATION

This work includes adhering to conditions prescribed by the Biological Monitor which are intended to reduce and mitigate expected project impacts.

The presence of certain animal or plant species within the project area may delay project activities. The Contractor is directed to Section 22 "ENVIRONMENTAL PERMIT SUMMARY FORMS".

The District shall provide a qualified biologist to act as Biological Monitor for the project. The Biological Monitor shall be responsible for approving all construction activities which may create environmental impacts or which could affect the District's ability to meet the conditions of the environmental permits which govern the project's implementation. The Biological Monitor shall have the authority to stop work in order to minimize environmental impacts.

The Contractor shall coordinate work with the Biological Monitor and shall give the Biological Monitor sufficient advance notice so that he/she has sufficient time to perform the required field surveys in advance of project activities. These surveys may include nesting bird surveys, aquatic life surveys, vegetation surveys and other investigations.

Full compensation for conforming to the requirements of this section shall be considered as included in the contract items of work involved and no separate payment will be made therefor.

2-1.08 DOCUMENTATION OF EXISTING CONDITIONS

The Contractor is directed to Section 3.11 D of the General Conditions regarding protection of public and private property, and Contractor's liability for damage to same.

Before starting work, the Contractor shall examine and document the existing condition of all pipes, sewer conduits, electrical conduits, lawns, gardens, shrubbery, trees, fences, and other structures or property, public and private, that are likely to be encountered in the performance of the work. The Contractor shall submit the documentation to the Engineer for approval prior to starting work.

Starting work shall indicate the Contractor's acceptance of all existing conditions and

therefore change orders requested due to "unexpected conditions" will not be allowed.

Full compensation for conforming to the requirements of this section shall be considered as included in the contract items of work involved and no separate payment will be made therefor.

2-1.09 CITY OF ARROYO GRANDE ENCROACHMENT PERMIT

The Contractor shall obtain an encroachment permit from the City of Arroyo Grande before beginning any site work or traffic control.

Full compensation for conforming to the requirements of this section shall be considered as included in the contract items of work involved and no separate payment will be made therefor.

SECTION 3 WATER POLLUTION CONTROL

GENERAL

Summary

Water pollution control work applies to projects where work activities result in less than 1 acre of soil disturbance.

Manage work activities to reduce the discharge of pollutants to surface waters, groundwater, or municipal separate storm sewer systems including contract work item for Prepare Water Pollution Control Program. Water Pollution Control Program (WPCP) preparation includes obtaining WPCP acceptance, amending the WPCP, and installation, maintenance, monitoring, and inspecting water pollution control practices at the job site.

Do not begin work until the WPCP is accepted.

Definitions and Abbreviations:

Active and inactive areas: (1) Active areas have soil disturbing work activities occurring at least once within 14 days, and (2) Inactive areas are areas that have not been disturbed for at least 15 days.

BMPs: Best Management Practices are water pollution control practices.

Construction phase: Construction phases are (1) Construction including work activities for building roads and structures, (2) Plant Establishment including maintenance on vegetation installed for final stabilization, and (3) Suspension where work activities are suspended and areas are inactive.

Preparation Manual: The Department's "Storm Water Pollution Prevention Plan and Water Pollution Control Program Preparation Manual."

NPDES: National Pollutant Discharge Elimination System

RWQCB: Regional Water Quality Control Board

SWPPP: Storm Water Pollution Prevention Plan

SWRCB: State Water Resources Control Board Water Pollution

Control Manager: The Water Pollution Control Manager implements water pollution control work described in the WPCP and oversees revisions and amendments to the WPCP.

WPCP: Water Pollution Control Program

Submittals

Within 10 days, not including Saturdays, Sundays, and legal holidays, of receipt of the fully executed contract:

1. Submit 1 electronic and 2 printed copies (double-sided) of WPCP for review. Allow 10 days, not including Saturdays, Sundays, and legal holidays, for the Engineer's review. The Engineer provides comments and specifies the date when the review stopped if revisions are required.
2. Submit a revised WPCP within 5 days, not including Saturdays, Sundays, and legal holidays, of receiving the Engineer's comments. The Engineer's review resumes when the complete WPCP has been resubmitted.
3. When the Engineer accepts the WPCP, submit 1 electronic and 2 printed copies (double-sided) of the accepted WPCP.

Submit:

1. Stormwater training records including training dates and subject for employees and subcontractors. Include dates and subject for ongoing training, including tailgate meetings.
2. Employee training records:
 - a. Within 5 days of WPCP acceptance for existing employees
 - b. Within 5 days of training for new employees
 - c. At least 5 days before subcontractors start work for subcontractor's employees

Submit as required:

1 BMP Status Report

2 Inspection Reports

At least 5 days before operating any construction support facility

1 Submit a plan showing the location and quantity of water pollution control practices associated with the construction support facility

Quality Control and Assurance: Training

Provide storm water training for:

- 1 Project managers
- 2 Supervisory personnel
- 3 Employees involved with water pollution control work

Train all employees, including subcontractor's employees, in the following subjects:

1. Water pollution control rules and regulations
2. Implementation and maintenance for:
 - a. Temporary Soil Stabilization
 - b. Temporary Sediment Control
 - c. Tracking Control
 - d. Wind Erosion Control
 - e. Material pollution prevention and control
 - f. Waste management
 - g. Non-storm water management
 - h. Identifying and handling hazardous substances
 - i. Potential dangers to humans and the environment from spills and leaks or exposure to toxic or hazardous substances

Employees must receive initial water pollution control training before working on the job.

Conduct weekly training meetings covering:

- 1 Water pollution control BMPs deficiencies and corrective actions
- 2 BMPs that are required for work activities during the week
- 3 Spill prevention and control
- 4 Material delivery, storage, use, and disposal
- 5 Waste management
6. Non-storm water management procedures

You may obtain copies of the Preparation Manual from the Publication Distribution Unit. The mailing address for the Publication Distribution Unit is:

State of California Department of Transportation Publication Distribution Unit
1900 Royal Oaks Drive
Sacramento, California 95815
Telephone: (916) 445-3520

For the Preparation Manual and other water pollution control references, go to the State's "Construction Storm Water and Water Pollution Control" web site at:

<http://www.dot.ca.gov/hq/construc/stormwater/stormwater1.htm>

If you operate construction support facilities, protect storm water systems or receiving waters from the discharge of potential pollutants by using water pollution control practices.

Construction support facilities include:

- 1 Staging areas
- 2 Storage yards for equipment and materials
- 3 Mobile operations
- 4 Batch plants for PCC and HMA
- 5 Crushing plants for rock and aggregate
- 6 Other facilities installed for your convenience such as haul roads

Water Pollution Control Manager

The Contractor shall designate in writing a Water Pollution Control Manager (WPCM). The Contractor shall submit a statement of qualifications describing the training, work history, and expertise of the proposed WPCM. The WPCM must have at least one of the following qualifications:

- 1 Certified Erosion, Sediment and Storm Water Inspector (CESSWI)[™] registered through Enviro Cert International, Inc.
- 2 Certified Inspector of Sediment and Erosion Control (CISEC) registered through CISEC, Inc.
- 3 Qualifications described in the Permit (Order No. 2009-009-DWQ, NPDES No. CAS000002) for a QSD.
- 4 Department approved storm water management training described in the Department's "Construction Storm Water and Water Pollution Control" web site

At the job site, the Water Pollution Control Manager must:

- 1 Be responsible for water pollution control work
- 2 Be the primary contact for water pollution control work
- 3 Oversee the maintenance of water pollution control practices
- 4 Oversee and enforce hazardous waste management practices
- 5 Have the authority to mobilize crews to make immediate repairs to water pollution control practices
- 6 Ensure that all employees have current water pollution control training
- 7 Implement the accepted WPCP and amend the WPCP when required

Water Pollution Control Manager must oversee:

- 1 Inspections of water pollution control practices identified in the WPCP
- 2 Inspections for visual monitoring

You may designate one manager to prepare the WPCP and a different manager to implement the plan. The WPCP preparer shall meet the training requirements for the WPCM.

Water Pollution Control Program:

The work includes preparing a WPCP, obtaining WPCP acceptance, amending the WPCP, and reporting on water pollution control practices at the job site. The WPCP must comply with the Preparation Manual. The WPCP is required by the provisions in Section 7-1.01G, "Water Pollution," of the Standard Specifications, and these Special Provisions.

You may request, or the Engineer may order, changes to the water pollution control work. Changes may include addition of new water pollution control practices. Additional water pollution control work is change order work.

The WPCP must include water pollution control practices:

1. For storm water and non-stormwater from areas outside of the job site related to project work activities such as:
 - a. Staging areas
 - b. Storage yards
 - c. Access roads
- 2 For activities or mobile operations related to contractor obtained NPDES permits
- 3 Construction support facilities

WPCP Amendments

You must amend the WPCP when:

- 1 Changes in work activities could affect the discharge of pollutants
- 2 Water pollution control practices are added by change order work
- 3 Water pollution control practices are added by your discretion If you amend the WPCP, follow the same process specified for WPCP acceptance.

Retain a printed copy of the accepted WPCP at the job site.

WPCP Schedule

The WPCP schedule must:

1. Describe when work activities will be performed that could cause the discharge of pollutants in storm water
- 2 Describe water pollution control practices associated with each construction phase
- 3 Identify soil stabilization and sediment control practices for disturbed soil areas

Implementation Requirements

Monitor the National Weather Service Forecast Office on a daily basis. For forecasts, go to:

<http://www.srh.noaa.gov/forecast>

Whenever you or the Engineer identifies a deficiency in the implementation of the accepted WPCP:

- 1 Correct the deficiency immediately, unless the Engineer authorizes an agreed date for correction
- 2 Correct the deficiency before precipitation occurs

If you fail to correct the deficiency by the agreed date or before the onset of precipitation, the District may correct the deficiency and deduct the cost of correcting the deficiency from payment.

If you fail to comply with "Water Pollution Control" of these Special Provisions, the Engineer will order a suspension of work until the project complies with the requirements of "Water Pollution Control" of these Special Provisions.

The Contractor's responsibility for WPCP implementation shall continue throughout any temporary suspension of work ordered in conformance with the provisions in Section 8-1.06, "Suspensions," of the Standard Specifications.

Install water pollution control practices within 15 days or before predicted precipitation, whichever occurs first.

If actions for the Contractor's convenience disturb one or more acres, the Contractor must pay all costs and be responsible for all delays associated with complying with Order No. 2009-0009-DWQ, NPDES General Permit No. CAS000002, issued by the SWRCB for "Storm Water Discharges Associated with Construction and Land Disturbance Activities." The General Permit is available at:

<http://www.waterboards.ca.gov>

Inspection

The Water Pollution Control Manager must oversee inspections for water pollution control practices identified in the WPCP:

- 1 Before a forecasted storm
- 2 After precipitation that causes site runoff
- 3 At 24-hour intervals during extended precipitation
- 4 On a predetermined schedule, a minimum of once a week

The Water Pollution Control Manager must oversee daily inspections of:

- 1 Storage areas for hazardous materials and wastes
- 2 Hazardous waste disposal and transporting activities
- 3 Hazardous material delivery and storage activities
- 4 Water pollution control practices specified under "Construction Site Management" of these Special Provisions

The Water Pollution Control Manager must use the Storm Water Site Inspection Report provided in the Preparation Manual.

The Water Pollution Control Manager must prepare BMP status reports that include the following:

- 1 Location and quantity of installed water pollution control practices
- 2 Location and quantity of disturbed soil for the active or inactive areas

Within 24 hours of finishing the weekly inspection, the Water Pollution Control Manager must submit:

- 1 Copy of the completed site inspection report
- 2 Copy of the BMP status report

Reporting Requirements

If the following occur, notify the Engineer within 6 hours:

- 1 You identify discharges into receiving waters or drainage systems causing or potentially causing pollution
- 2 The job receives a written notice or order from a regulatory agency

No later than 48 hours after the conclusion of a storm event resulting in a discharge, a non-stormwater discharge, or receiving the notice or order, submit:

- 1 Date, time, location, and nature of the activity, type of discharge and quantity, and the cause of the notice or order
- 2 Water pollution control practices used before the discharge, or before receiving the notice or order
- 3 Description of water pollution control practices and corrective actions taken to manage the discharge or cause of the notice

Payment:

Failure to comply with "Water Pollution Control" of these Special Provisions or failure to implement water pollution control practices during each estimate period, the District withholds 25 percent from progress payment.

Withholds for failure to perform water pollution control work are in addition to all other withholds provided for in the contract. The District returns performance-failure withholds in the progress payment following the correction for noncompliance.

The contract lump sum price paid for "WATER POLLUTION CONTROL PROGRAM" includes full compensation for furnishing all labor, materials, tools, equipment, and incidentals and for doing all the work involved in developing and implementing a WPCP, designating a manager, conducting water pollution control training, monitoring inspection, and correcting water pollution control practices, as shown on the plans, as specified in the Standard Specifications, these Special Provisions, and as directed by the Engineer.

The District pays the Contractor for "WATER POLLUTION CONTROL PROGRAM" as follows:

- 1 A total of 75 percent of the item total upon approval of the WPCP.

2 A total of 100 percent of the item upon contract acceptance.

SECTION 4 NEIGHBORHOOD NOTIFICATION AND COORDINATION PLAN

Attention is directed to Section 3.11C, "Inconvenience to the Public," of the General Conditions.

The Contractor shall prepare a NEIGHBORHOOD NOTIFICATION AND COORDINATION PLAN to prevent or minimize inconvenience to members of the public who reside or work in properties that could be impacted by project activities.

The NEIGHBORHOOD NOTIFICATION AND COORDINATION PLAN shall contain at the minimum:

1. A list or map of all the homes and businesses that will be notified.
2. A list of all public agencies that will be notified, including the City of Arroyo Grande, Public Works and Community Development Departments.
3. A written notification of the work to be accomplished and the dates that the work is scheduled to be delivered to each adjacent property at least 14 days prior to the start of work. If the occupant is not home/open, the notice will be left on the door, NOT IN MAIL BOXES!
4. The notification shall also advertise a meeting to be held at the job site at least 7 days prior to the start of work. This meeting shall offer an opportunity for the neighbors to ask questions about the project and describe specific concerns so that these concerns can be addressed and the associated inconveniences can be mitigated, reduced, or eliminated.
5. A plan that describes the likely inconveniences to neighbors in terms of access, noise, fumes, dust, temporary occupancy of the work site, and reduced parking, and also described the measures that will be taken to mitigate, reduce, and eliminate these inconveniences.

Within 10 days, not including Saturdays, Sundays, and legal holidays, of receipt of the fully executed contract:

1. Submit 1 electronic and 2 printed copies (double-sided) of the NEIGHBORHOOD NOTIFICATION AND COORDINATION PLAN for review. Allow 10 days, not including Saturdays, Sundays, and legal holidays, for the Engineer's review. The Engineer provides comments and specifies the date when the review stopped if revisions are required.
2. Submit a revised NEIGHBORHOOD NOTIFICATION AND COORDINATION PLAN within 5 days, not including Saturdays, Sundays, and legal holidays, of receiving the Engineer's comments. The Engineer's review resumes when the complete plan has been

resubmitted.

3. When the Engineer accepts the NEIGHBORHOOD NOTIFICATION AND COORDINATION PLAN, submit 1 electronic and 2 printed copies (double-sided) of the accepted plan.

The contract lump sum price paid for "NEIGHBORHOOD NOTIFICATION AND COORDINATION PLAN" shall include full compensation for furnishing all labor, materials, tools, equipment, and incidentals and for doing all the work involved in preparing and implementing the plan as specified in these Special Provisions and no additional compensation will be allowed therefor.

SECTION 5 ASBESTOS AND LEAD COMPLIANCE PLAN

Attention is directed to the Attachment A, "Asbestos and Lead Sampling and Inspection Report," of these Special Provisions.

The Contractor shall prepare an Asbestos and Lead Compliance Plan to prevent or minimize worker exposure to asbestos and lead while managing and handling earth materials, coating system debris, and residue containing asbestos and lead. The Asbestos and Lead Compliance Plan shall also contain provisions for preventing or minimizing asbestos and lead contamination of the surrounding area.

Regulations containing specific Cal/OSHA requirements when working with asbestos include 8 CA Code of Regulations § 1529 and Local Air Pollution Control District (APCD) regulations. Regulations containing specific Cal/OSHA requirements when working with lead include 8 CA Code of Regulations § 1532.1 and Local Air Pollution Control District (APCD).

The plan must contain the items listed in 8 CA Code of Regulations § 1529(g). The plan must contain the items listed in 8 CA Code of Regulations § 1532.1(e)(2)(B). In addition, the plan must contain suitable sampling and testing requirements for WORK AREA MONITORING in these Special Provisions and suitable sampling and testing requirements for DEBRIS HANDLING in these Special Provisions. Before submittal, a California Certified Asbestos Consultant and a person certified by the California Department of Public Health to write lead compliance plans must sign and seal the plan.

Within 10 days, not including Saturdays, Sundays, and legal holidays, of receipt of the fully executed contract:

1. Submit 1 electronic and 2 printed copies (double-sided) of the Asbestos and Lead Compliance Plan for review. Allow 10 days, not including Saturdays, Sundays, and legal holidays, for the Engineer's review. The Engineer provides comments and specifies the date when the review stopped if revisions are required.

2. Submit a revised Asbestos and Lead Compliance Plan within 5 days, not including

Saturdays, Sundays, and legal holidays, of receiving the Engineer's comments. The Engineer's review resumes when the complete plan has been resubmitted.

3. When the Engineer accepts the Asbestos and Lead Compliance Plan, submit 1 electronic and 2 printed copies (double-sided) of the accepted plan.

Before starting any activity that presents the potential for asbestos or lead disturbance, the Contractor shall notify the San Luis Obispo County Air Pollution Control District, Enforcement Section, regarding these planned activities at (805) 781-5918.

Before starting any activity that presents the potential for asbestos or lead exposure to employees who have no prior training, including District employees, provide a safety training program to these employees that complies with 8 CA Code of Regulations § 1529 and § 1532.1 and the Asbestos and Lead Compliance Plan.

Submit copies of air monitoring or job site inspection reports made under 8 CA Code of Regulations § 1529 or § 1532.1 within 10 days after the date of monitoring or inspection.

Supply personal protective equipment, training, and washing facilities required by the Asbestos and Lead Compliance Plan for 3 District employees.

The contract lump sum price paid for "ASBESTOS AND LEAD COMPLIANCE PLAN" shall include full compensation for furnishing all labor, materials, tools, equipment, and incidentals and for doing all the work involved in preparing and implementing the plan as specified in these Special Provisions and no additional compensation will be allowed therefor.

SECTION 6 MAINTAINING TRAFFIC

Maintaining traffic shall conform to the provisions of Section 7-1.03, "Public Convenience," Section 7-1.04, "Public Safety," and Section 12, "Temporary Traffic Control Devices," of the Standard Specifications and these Special Provisions.

The Contractor shall conduct operations in such a manner that access of abutting residences and businesses. Care shall be taken by the Contractor so that materials or equipment placed or parked within the District Sewer Easement will not block driveways or other access means used by the adjacent property owners.

At the close of each day's work when operations are not in progress, obstructions shall be removed and the roadway left clear and unobstructed for the free passage of public traffic.

Full compensation for conforming to the requirements of this section shall be considered as included in the contract items of work involved and no separate payment will be made therefor.

SECTION 7 DUST CONTROL

Dust control shall conform to the provisions in Section 14-9.03, "Dust Control," of the Standard Specifications and these Special Provisions.

During construction/ground disturbing activities, the contractor shall implement the following particulate (dust) control measures. These measures will be included in the contract Special Provisions. In addition, the contractor shall designate a person or persons to monitor the dust control program and to order increased watering, as necessary, to prevent transport of dust off site. Their duties shall include holiday and weekend periods when work may not be in progress. The name and telephone number of such persons shall be provided to the APCD prior to commencement of construction.

- 1 Reduce the amount of disturbed area where possible.
- 2 Prevent airborne dust from leaving the site.
- 3 Control dust from all dirt stock pile areas.
- 4 Implement re-vegetation (i.e., hydro seeding) as soon as possible following completion of any soil disturbing activities.
- 5 Proposed ground areas that are planned to be reworked at dates greater than one month after initial grading shall be subject to dust control measures (watering, etc.) or shall be sown with a fast germinating native grass seed and watered until a temporary vegetative cover is established.
- 6 All trucks hauling dirt, sand, soil, or other loose materials are to be covered or should maintain at least two feet of freeboard (minimum vertical distance between top of load and top of trailer) in accordance with California Vehicle Code Section 23114.
- 7 Ensure that trucks and equipment leaving the site do not carry soil material onto adjacent paved roads; clean adjacent paved roads at the end of each day if visible soil material is carried from the site onto those roads.

During any road construction or maintenance activity activities must be conducted so that no track-out from any road construction project is visible on any paved roadway open to the public.

During any road construction or maintenance activity the speed of any vehicles and equipment traveling across unpaved areas must be no more than fifteen (15) miles per hour unless the road surface and surrounding area is sufficiently stabilized to prevent vehicles and equipment traveling more than 15 miles per hour from emitting dust that is visible crossing the project boundaries.

Equipment and operations must not cause the emission of any dust that is visible crossing the project boundaries.

Payment for furnishing labor, materials, tools, equipment, and incidentals, and for doing the work involved in controlling dust as specified herein shall be considered as included in the contract price paid for the various items of work involved and no separate payment will be made therefor.

SECTION 8 OBSTRUCTIONS

Attention is directed to Section 5-1.36, "Property and Facility Preservation," and Section 15, "Existing Facilities," of the Standard Specifications and these Special Provisions.

Please contact Underground Service Alert ("USA") at (800) 227-2600 a minimum of 48 hours prior to the start of construction. The Contractor shall be responsible to pothole and identify the locations of all existing utilities in the project limits prior to construction and shall notify the Engineer immediately if any conflicts are noted. The Contractor shall be responsible to protect and preserve the existing utilities in place.

Payment for furnishing labor, materials, tools, equipment, and incidentals, and for doing the work involved in locating, protecting, or repairing property as specified herein shall be considered as included in the contract price paid for the various items of work involved and no separate payment will be made therefor.

SECTION 9 EXISTING DISTRICT FACILITIES

The work performed in connection with various existing District facilities shall conform to the provisions in Section 15, "Existing Facilities," of the Standard Specifications and these Special Provisions.

Existing District facilities, highway improvements and facilities, utility and non-highway facilities, trees and plants that are not to be removed, shall be fully protected from damage at the Contractor's expense.

Persons who are under District or Contractor control shall not have firearms or pets; nor shall they engage in hunting or fishing.

The Contractor shall be responsible for keeping all temporary and permanent fences secured and shall prevent the private property's livestock from leaving the property.

Payment for furnishing labor, materials, tools, equipment, and incidentals, and for doing the work involved in locating, protecting, or repairing property as specified herein shall be considered as included in the contract price paid for the various items of work involved and no separate payment will be made therefor.

SECTION 10 (Reserved)

SECTION 11 DEBRIS CONTAINMENT AND COLLECTION PROGRAM

Within 10 days, not including Saturdays, Sundays, and legal holidays, of receipt of the fully executed contract:

1. Submit 1 electronic and 2 printed copies (double-sided) of a Debris Containment and Collection Program for review. Allow 10 days, not including Saturdays, Sundays, and legal holidays, for the Engineer's review. The Engineer provides comments and specifies the date when the review stopped if revisions are required.
2. Submit a revised a Debris Containment and Collection Program within 5 days, not including Saturdays, Sundays, and legal holidays, of receiving the Engineer's comments. The Engineer's review resumes when the complete plan has be resubmitted.
3. When the Engineer accepts the Debris Containment and Collection Program, submit 1 electronic and 2 printed copies (double-sided) of the accepted program.

The program must identify materials, equipment, and methods to be used when the existing coating system is disturbed and must include working drawings of containment systems, loads applied to the bridge by containment structures, provisions for ventilation and air movement for visibility and worker safety, name and address of analytical lab that will perform the analyses, CA Department of Toxic Substances Control registration certificate and documentation of compliance with the CA Highway Patrol Biennial Inspection of Terminals Program of the hazardous waste hauler that will transport the hazardous waste, and the name and address of the disposal site that will accept the hazardous waste residue

If the measures being taken by the Contractor are inadequate to provide for the containment and collection of debris produced when the existing coating system is disturbed, the Engineer will direct the Contractor to revise the operations and the debris containment and collection program. The directions will be in writing and will specify the items of work for which the Contractor's debris containment and collection program is inadequate. No further work must be performed on the items until the debris containment and collection program is adequate and, if required, a revised program has been approved for the containment and collection of debris produced when the existing coating system is disturbed.

Full compensation for the debris containment and collection program shall be considered as included in the contract price paid for the item of work causing the existing coating system to be disturbed, and no additional compensation will be allowed therefor.

SECTION 12 SAFETY AND HEALTH PROVISIONS

Attention is directed to Section 7-1.02K(6), "Occupational Health and Safety Provisions," of the Standard Specifications. Work practices and worker health and safety must conform to the California Code of Regulations, Title 8, Construction Safety Orders, including Section 1532.1, "Lead", and 1529 "Asbestos".

The Contractor must furnish the Engineer a written Code of Safe Practices and must implement an Injury and Illness Prevention Program and a Hazard Communication Program in conformance with the requirements of Construction Safety Orders, Sections 1509 and 1510.

Prior to starting work that disturbs the existing coating system, and when revisions to the compliance program are required, submit an asbestos and lead compliance plan under "ASBESTOS AND LEAD COMPLIANCE PLAN" of these Special Provisions. Copies of all air monitoring or jobsite inspection reports must be furnished to the Engineer within 10 days after the date of monitoring or inspection.

Full compensation for furnishing the Engineer with the submittals, acquiring and adhering to all required permits, and for implementing the programs required by this safety and health section shall be considered as included in the contract price paid for the item of work causing the existing coating system to be disturbed, and no additional compensation will be allowed therefor.

SECTION 13 DEBRIS HANDLING

Debris produced when the existing coating system is disturbed must not be temporarily stored on the ground. Debris accumulated inside the containment system must be removed before the end of each work shift. Debris must be stored in metal containers approved by the U.S Department of Transportation for the transportation and temporary storage of hazardous waste. The containers must be handled such that no spillage occurs. The containers must be stored in a secured enclosure. Acceptable secure enclosures include a locked chain link fenced area or a lockable shipping container located within the project limits until disposal as approved.

Handling, storing, transporting, and disposing of debris produced when the existing coating system is disturbed must be performed in conformance with all applicable Federal, State, and local hazardous waste laws. Laws that govern this work include:

1 Health and Safety Code, Division 20, Chapter 6.5 (California Hazardous Waste Control Act).

2 Title 22; California Code of Regulations, Division 4.5, (Environmental Health Standards for the Management of Hazardous Waste).

3 Title 8, California Code of Regulations.

The Contractor must make necessary arrangements to test the debris as required by the disposal facility and as specified in the ASBESTOS AND LEAD COMPLIANCE PLAN as described in these Special Provisions.

From the first 220 gal of hazardous waste or portion thereof if less than 220 gal of hazardous waste are produced, a minimum of 4 randomly selected samples must be taken and analyzed individually. Samples must not be composited. From each additional 880 gal of hazardous waste or portion thereof if less than 880 gal are produced, a minimum of 1 additional random sample must be taken and analyzed. Use chain of custody procedures consistent with Chapter 9 of the US EPA Test Methods for Evaluating Solid Waste, Physical/Chemical Methods (SW-846) while transporting samples from the project to the laboratory. Each sample must be homogenized before analysis by the laboratory performing the analyses. A sample aliquot sufficient to cover the amount necessary for the total and the soluble analyses must then be taken. This aliquot must be homogenized a second time and the total and soluble analyses run on this aliquot. The homogenization process must not include grinding of the samples. Submit the name and location of the disposal facility that will be accepting the hazardous waste and the analytical laboratory along with the testing requirements not less than 5 business days before the start of the work that disturbs the existing coating system. The analytical laboratory must be certified by the CDPH ELAP for all analyses to be performed.

Submit analytical test results of the debris, including chain of custody documentation, for review and acceptance before:

- 1 Requesting the Engineer's signature on the waste profile requested by the disposal facility
- 2 Requesting the Engineer obtain a US EPA Generator Identification Number for disposal
- 3 Removing the residue from the site

Submit a request for the US EPA Generator Identification Number when the Engineer accepts the waste characterization analytical test results documenting that the debris is a hazardous waste.

Except as otherwise provided herein, debris produced when the existing coating system is disturbed must be disposed of by the Contractor at an approved California Department of Toxic Substances Control permitted Class 1 disposal facility within California in conformance with the requirements of the disposal facility operator. The Engineer will obtain the US EPA Generator Identification Number and will sign all manifests as the generator within 2 business days of receiving and accepting the waste characterization analytical test results and receiving your request for the US EPA Generator Identification Number. Disposal must occur after the Engineer accepts the waste characterization analytical test results and within 30 days after accumulating 220 pounds of residue and dust.

If less than 220 pounds of hazardous waste debris is generated in total, dispose of it within 30 days after the start of accumulation of the debris.

The debris must be hauled by a transporter currently registered with the California Department of Toxic Substances Control and in compliance with the CA Highway Patrol Biennial Inspection of Terminals Program using correct manifesting procedures. The Contractor must make all arrangements with the operator of the disposal facility and perform any testing of the debris required by the operator.

If analytical test results demonstrate that the residue is a non-hazardous waste and the Engineer agrees, dispose of the residue at an appropriately permitted Class II or Class III facility or recycle it.

Submit receiving landfill facility documentation of proper disposal within 5 business days of debris transport from the project.

Full compensation for debris handling and disposal shall be considered as included in the contract price paid for the item of work causing the existing coating system to be disturbed, and no additional compensation will be allowed therefor.

SECTION 14 WORK AREA MONITORING

The Contractor must perform work area monitoring of the ambient air and soil in and around the work area at the bridge site to verify the effectiveness of the containment system. The work area monitoring must consist of collecting, analyzing, and reporting air and soil test results and recommending the required corrective action when specified exposure levels are exceeded. The work area monitoring must be carried out according to the ASBESTOS AND LEAD COMPLIANCE PLAN described in these Special Provisions.

If containment measures being taken are inadequate to provide for the containment and collection of debris produced when the existing coating system is disturbed, the Engineer will direct the Contractor to revise the operations and the debris containment and collection program. The directions will be in writing and will specify the items of work for which the debris containment and collection program is inadequate. No further work must be performed on the items until:

- 1 Debris containment and collection program is adequate.
- 2 If required, a revised program has been authorized for the containment and collection of debris produced when the existing coating system is disturbed.
- 3 Released material has been cleaned up and contained

Full compensation for work area monitoring shall be considered as included in the contract price paid for the item of work causing the existing coating system to be disturbed, and no additional compensation will be allowed therefor.

SECTION 15 VEGETATION PRUNING AND REMOVAL

Vegetation within the Sewer Easement which may obstruct the work shall be selectively pruned and removed from the job site.

The Contractor shall exercise every reasonable precaution to protect streams, lakes, reservoirs, bays, and coastal waters from pollution with fuels, oils, bitumens, calcium chloride and other harmful materials and shall conduct and schedule operations so as to avoid or minimize muddying and silting of streams, lakes, reservoirs, bays and coastal waters. Care shall be exercised to preserve vegetation beyond the limits of construction.

All English Ivy that encroaches onto the bridge structure shall be removed.

The limits of pruning shall be provided by the Biological Monitor. No pruning shall take place without a pre-pruning inspection by the Biological Monitor. All pruning shall take place under the direction of the Biological Monitor.

Existing willow trees shall be pruned to allow access and provide clearance from the bridge and containment structure. Branches to be removed are primarily less than three inches in diameter, but there may be several branches between four and six inches in diameter that require removal. Existing trunks and roots shall not be disturbed.

1. All pruned materials shall be removed from the creek channel.
2. Chainsaws used within the channel shall have internal chain oiling systems. Sawdust generated from large cuts on the cottonwood trees shall be contained and removed from the channel and spread on the banks as part of the erosion control plan.
3. All English ivy and pampas grass that is removed from the creek channel shall be disposed in a landfill.
4. Due to the steep slopes and the need to stabilize and revegetate the site following construction, English ivy removal shall be conducted by pulling up the runners as feasible, and then selective hand digging root balls in areas of low erosion potential throughout the project area. Holes created by digging shall be immediately filled and compacted by foot pressure. No loose soil shall be left on the slope, and all bare soils shall be seeded with the native seed mix identified below.

The contract lump sum price paid for "VEGETATION PRUNING AND REMOVAL" shall include full compensation for furnishing all labor, materials, tools, equipment, and incidentals and for doing all the work involved in pruning and removing vegetation within the sewer easement as specified in these Special Provisions and no additional compensation will be allowed therefor.

SECTION 16 CONTAINMENT SYSTEM

Any work that disturbs the existing coating system may expose workers to health hazards. All debris produced when the existing coating system is disturbed must be contained.

The containment system must contain all water, resulting debris, and visible dust produced when the existing coating system is disturbed.

The containment structure must conform to the provisions for falsework in Section 48-1, "Temporary Structures" of the Standard Specifications.

No temporary structures are to be constructed in the stream channel bottom. Construction of the containment system shall comply with all terms of the environmental permits for this project. See Section 12 Environmental Permit Summary Forms.

If the containment system is to rely on the existing pipe bridge for support, a full structural analysis by a Registered Civil Engineer shall be provided to show the suitability of the existing bridge to provide such support.

The minimum total design load of the ventilated containment structure must consist of the sum of the dead and live vertical loads. Dead load must consist of the actual load of the containment structure. Live loads must consist of a uniform load of not less than 45 psf, which includes 20 psf of sand load, applied over the area supported, and in addition, a moving 1,000-pound concentrated load must be applied to produce maximum stress in the main supporting elements. Assumed horizontal loads need not be included in the design of the containment structure.

Flexible materials must be supported and fastened to prevent escape of materials due to whipping from traffic or wind and to maintain clearances.

The containment structure must be properly maintained while work is in progress and must not be changed from the approved working drawings without prior approval of the Engineer.

The contract lump sum price paid for "CONTAINMENT SYSTEM" shall include full compensation for furnishing all labor, materials, tools, equipment, and incidentals and for doing all the work involved in constructing, maintaining, and removing the containment system as specified in these Special Provisions and no additional compensation will be allowed therefor.

SECTION 17 PROTECTIVE WORK CLOTHING AND HYGIENE FACILITIES

Wherever there is exposure or possible exposure to heavy metals, asbestos, or or other toxic materials at the bridge site, the Contractor must, for District personnel: (1) furnish, clean, and replace protective work clothing and (2) provide access to hygiene facilities. The furnishing, cleaning, and replacement of protective work clothing and providing

access to hygiene facilities must conform to the provisions of subsections (g), "Protective work clothing and equipment," and (i), "Hygiene facilities and practices," of Section 1532.1, "Lead," of the Construction Safety Orders, and to the provisions of subsections (i) "Protective clothing," and (j) "Hygiene facilities and practices for employees," of section 1529 "Asbestos," of the Construction Safety Orders, and will be required for no more than 5 people.

The protective work clothing and access to hygiene facilities must be provided during exposure or possible exposure to heavy metals or other toxic materials at the bridge site and during the application of the undercoats of paint.

Protective work clothing and washing facilities must be inspected and approved by the Engineer before the start of any activity that presents the potential for lead or asbestos exposure.

The protective work clothing shall remain the property of the Contractor at the completion of the contract.

Full compensation for protective work clothing and access to washing facilities for District personnel shall be considered as included in the contract price paid for the item of work causing the existing coating system to be disturbed, and no additional compensation will be allowed therefor.

SECTION 18 REPAIR END BARRIERS

Barriers were installed on both ends of the bridge during its original construction. Sometime after 2007 an additional framework was installed around its perimeter and strung with barbed wire. The existing barrier system is shown in Attachment F "Existing Barrier Sketch".

The Contractor shall replace the hinges and hasps on the gates with new stainless steel hardware that is equivalent or superior to the existing hardware, subject to the approval of the Engineer. The Contractor shall submit a shop drawing for all replacement hardware prior to installation. The Contractor shall re-attach the gate and adjust the gate and hardware so that the gate opens and closes and can be securely locked.

The contract lump sum price paid for "REPAIR END BARRIERS" shall include full compensation for furnishing all labor, materials, tools, equipment, and incidentals and for doing all the work involved in repairing and repainting the bridge end barriers as specified in these Special Provisions and no additional compensation will be allowed therefor.

SECTION 19 SPOT RECOATING OF EXISTING STRUCTURAL STEEL

Selected portions of the exposed and buried metal surfaces of the existing structure shall

be prepared and recoated as detailed below.

SURFACES TO BE SPOT RECOATED

The following surfaces shall be prepared and painted as noted:

1. All areas listed in the attached CATALOG OF SPOT REPAIRS (Attachment F) as requiring an overwrap repair shall be recoated using the PIPE OVERWRAP SYSTEM shown below.
2. All areas listed in the attached CATALOG OF SPOT REPAIRS (Attachment F) as requiring a spot paint repair shall be recoated using the SPOT RECOATING SYSTEM shown below.
3. The buried metal surfaces of the 18" carrier pipe and the 20" steel sleeve which penetrate the earth near the manholes/abutments shall be recoated to a distance at least 12 inches into the soil using the PIPE OVERWRAP SYSTEM shown below.

SURFACE PREPARATION AND RECOATING SYSTEMS

The following surface preparation and recoating systems shall be used:

1. The PIPE OVERWRAP SYSTEM shall be applied to existing steel pipe according to manufacturer's specifications and as follows:
 - a. Remove all of the loosely adhering, damaged, and disbonded coating from the pipe in the area to be recoated using SSPC-SP2 Hand Tool Clean and SP3 Power Tool Clean. This work shall also conform to the ASBESTOS AND LEAD COMPLIANCE PLAN referenced in these Special Provisions.
 - b. Prepare the surface using a wire brush or clean the entire area to be recoated as thoroughly as possible with clean, solvent soaked rags. The use of a wire brush is preferred. Extend the cleaning of the pipe for a minimum of 1 linear foot past the recoat area on each end. This work shall also conform to the ASBESTOS AND LEAD COMPLIANCE PLAN referenced in these Special Provisions.
 - c. Feather all edges of the existing coating. Ensure existing coatings are in sound, tight condition. This work shall also conform to the ASBESTOS AND LEAD COMPLIANCE PLAN referenced in these Special Provisions.
 - d. Apply a thin coat of Trenton Temcoat 3000 Primer or approved equal to the entire area to be recoated, except for the 1 linear foot on each end of the recoat portion.
 - e. At locations where a smooth taper cannot be achieved on the existing coating, apply Trenton Fill-Pro PM-GP or approved equal to completely fill in voids and smooth out the profile.

- f. Spirally wrap Trenton #2 Wax Tape around the area of the pipe to be recoated, except for the 1 foot area at each end. The wax tape shall be applied wherever the primer has been applied. Pull the wax tape firmly and overlap 50% of the previous wrap layer. If irregularities prevent a 50% overlap, a minimum overlap of 1" shall be provided. Press down the seams where the tape overlaps itself so that the tape appears to be almost seamless.
 - g. At locations where the area to be recoated does not extend all the way around the pipe, or where connections make spiral winding impractical, apply pieces of Trenton #2 Wax Tape or approved equal to the area of the pipe to be recoated, overlapping the existing coating by 4 inches to 6 inches. The wax tape shall be applied wherever the primer has been applied. If more than one piece is needed, overlap 50% of the previous tape layer. If irregularities prevent a 50% overlap, a minimum overlap of 1" shall be provided. Press down the seams where the tape overlaps itself so that the tape appears to be almost seamless.
 - h. Spirally wrap Trenton MC Outerwrap or approved equal starting a minimum of 1 linear foot past the end of the wax tape coating. The outerwrap must be applied with a minimum of 67% overlap so that there are at least 3 layers. Extend it a minimum of 1 linear foot past the opposite end of the wax tape. At the end of the last roll, brush on Trenton MCO outerwrap end adhesive or approved equal to prevent possible unraveling before the wrap has cured.
 - i. Apply Tnemec 1029 Enduratone, or approved equal, @ 2.0 to 4.0 mils DFT to the exposed Trenton MC Outerwrap. The Contractor shall select a color for the top layer that closely matches the existing coating color, and shall submit a color sample to the Engineer for approval prior to application
2. The SPOT RECOATING SYSTEM shall be applied according to manufacturer's specifications as follows:
- a. Surface preparation: Remove all coatings that are not strongly adhering using SSPC-SP2 Hand Tool Clean and SP3 Power Tool Clean. Limit removal to areas where existing coatings are not strongly adhering. This work shall also conform to the ASBESTOS AND LEAD COMPLIANCE PLAN referenced in these Special Provisions.
 - b. Feather all edges. Ensure existing coatings are in sound, tight condition. This work shall also conform to the ASBESTOS AND LEAD COMPLIANCE PLAN referenced in these Special Provisions.
 - c. Spot Prime Coat: Tnemec 135 Chembuild or approved equal @ 3.0 to 5.0 mils DFT.
 - d. Spot Intermediate Coat: Tnemec 135 Chembuild or approved equal @ 3.0 to 5.0 mils DFT. The intermediate coat shall be tinted one shade

different from the finish color.

- e. Spot Finish Coat: Tnemec 1095 Endura Shield or approved equal @ 2.0 to 4.0 mils DFT. The Contractor shall select a color for the top layer that closely matches the existing coating color, and shall submit a color sample to the Engineer for approval prior to application.

GENERAL

Attention is directed to "SSPC QP Certification" of the Instructions to Bidders. The Contractor and/or subcontractors listed in the "SSPC QP Certification" form shall remain so certified for the duration of the contract. If the Contractor's or subcontractor's certification expires, the Contractor or subcontractor will not be allowed to perform any work requiring said certification until the certification is reissued. No claim will be allowed for damages or extensions of time because of delays in work resulting from an inactive certification. The Contractor shall immediately notify the Engineer of any change in certification status.

The existing coating systems consist of materials listed in "Existing District Facilities" of these Special Provisions.

Within 10 days, not including Saturdays, Sundays, and legal holidays, of receipt of the fully executed contract:

1. Submit 1 electronic and 2 printed copies (double-sided) of a Painting Quality Work Plan (PQWP) for review. Allow 10 days, not including Saturdays, Sundays, and legal holidays, for the Engineer's review. The Engineer provides comments and specifies the date when the review stopped if revisions are required.
2. Submit a revised PQWP within 5 days, not including Saturdays, Sundays, and legal holidays, of receiving the Engineer's comments. The Engineer's review resumes when the complete plan has been resubmitted.
3. When the Engineer accepts the PQWP, submit 1 electronic and 2 printed copies (double-sided) of the accepted plan.

As a minimum, each PQWP shall include the following:

- 1 The name of each Contractor or subcontractor to be used.
- 2 One copy each of all current AWWA and SSPC specifications or qualification procedures applicable to the painting or paint removal to be performed. These documents shall become the permanent property of the District.
- 3 A copy of the coating manufacturer's guidelines and recommendations for surface preparation, painting, drying, and curing of painted structural steel, including testing methods and maximum allowable levels for soluble salts.

- 4 Proposed methods and equipment to be used.
- 5 Proof of each of any required certifications.
- 6 Proposed methods to control environmental conditions in accordance with the manufacturer's recommendations and these Special Provisions.
- 7 Proposed methods to protect the coating during the curing period.
- 8 Proposed rinse water collection plan.
- 9 A detailed paint repair plan for the repair of damaged areas.
- 10 Procedures for containing debris and water during application of coatings and coating repair of erected steel.
- 11 Examples of proposed daily reports for all testing to be performed, including type of testing, location, lot size, time, weather conditions, test personnel, and results.
- 12 A copy of California statewide portable equipment registration (issued by the California Air Resources Board) or an APCD permit for portable generators, compressors, and other equipment with engines that are 50 hp or greater.

No painting or paint removal shall be performed until the PQWP is accepted by the Engineer. Should the Engineer fail to complete the review within this time allowance and if, in the opinion of the Engineer, the Contractor's controlling operation is delayed or interfered with by reason of the delay in reviewing the PQWP, the delay will be considered a suspension in conformance with the provisions in Section 8-1.06B, "Suspensions Unrelated to Contractor Performance," of the Standard Specifications.

It is understood that the Engineer's acceptance of the Contractor's PQWP shall not relieve the Contractor of any responsibility under the contract for the successful completion of the work in conformity with the requirements of the plans and specifications.

A pre-painting meeting between the Engineer, the Contractor, and a representative from each entity performing painting for this project shall be held to discuss the requirements for the PQWP prior to commencing paint or paint removal work.

The Contractor shall provide enclosures to permit cleaning and painting during inclement weather. Provisions shall be made to control atmospheric conditions inside the enclosures within specified limits during cleaning and painting operations, drying to solvent insolubility, and throughout the curing period in accordance with the manufacturer's recommendations and these Special Provisions. Full compensation for providing and maintaining such enclosures shall be considered as included in the prices paid for the various contract items of work requiring paint and no additional compensation will be allowed therefor.

Fresh, potable water with a maximum chloride content of 75 ppm and a maximum sulfate content of 200 ppm shall be used for water rinsing, pressure washing, or steam cleaning

operations. No continuous recycling of rinse water will be permitted. If rinse water is collected into a tank and subsequent testing determines the collected water conforms to the specified requirements, reuse may be permitted by the Engineer if no collected water is added to the tank after sample collection for determination of conformance to specified requirements.

PAINTING EXPOSED METAL SURFACES

Paint shall be applied to existing exposed metal surfaces in conformance with the following requirements:

1. Precede each specified undercoat by a stripe coat on all edges, corners, seams, crevices, interior angles, junctions of joining members, weld lines, and similar surface irregularities. This stripe coat shall be of sufficient thickness to completely hide the surface being covered and shall be followed as soon as practical by the application of the full undercoat to its specified thickness.
2. Prepared areas shall be coated with one of the coating systems noted above.
 - a. The total dry film thickness of the prime coat, intermediate coats, and finish coat shall be not less than the minimum DFTs noted above or more than the manufacturer's recommendation.
 - b. A minimum of 12 hours drying time shall be allowed before applying the succeeding undercoat or finish coat.
 - c. The first prime coat shall be applied immediately after surface preparation and before any surface rusting occurs.
 - d. The intermediate coat(s) and finish coat shall be applied within the time limits recommended by the manufacturer.

The total dry film thickness on areas that have been cleaned shall be not less than the sum of the minimum DFTs noted above for each coat or more than the manufacturer's recommendation.

WRAPPING METAL SURFACES

The PIPE OVERWRAP SYSTEM noted above shall be applied according to manufacturer's specifications as follows:

- a. If surface irregularities are present, Trenton Fill-Pro PM-GP or approved equal shall be applied according to manufacturer's specifications to fill in voids and smooth out the profile.

b. A thin layer of Trenton Temcoat 3000 Primer or approved equal shall be applied according to manufacturer's specifications to all areas to be wrapped.

c. Trenton #2 Wax Tape or approved equal shall be spirally wrapped around the pipe according to manufacturer's specifications with a minimum 50% overlap. Where the tape overlaps itself, the seam shall be pressed down according to manufacturer's specifications so that the wax tape almost appears to be seamless.

d. Trenton MC Outerwrap or approved equal shall be spirally wrapped around the pipe according to manufacturer's specifications with a 67% overlap so that there are at least 3 layers. At the end of the last roll, brush on Trenton End Adhesive for MC Outerwrap or approved equal according to manufacturer's specifications to prevent possible unraveling before the wrap has cured.

INSPECTION AND TESTING

The District shall provide a Coating Inspector. The Contractor shall comply with AWWA 218-08 Section 5.1 and provide the Coating Inspector access, facilities for overall inspection of the cleaning and coating procedures.

The Coating Inspector shall compare prepared surfaces to appropriate standards. The Coating Inspector shall identify areas that do not meet these comparison standards.

PAYMENT

The contract lump sum price paid for SPOT RECOATING ON EXISTING STRUCTURAL STEEL shall include full compensation for furnishing all labor, materials, tools, equipment, and incidentals, and for doing all the work involved in preparing and recoating surfaces of existing metal, debris containment, protection, work area monitoring, including testing for soluble salts, visual comparisons, and warranty complete in place, as shown on the plans, as specified in the Standard Specifications and these Special Provisions, and as directed by the Engineer.

SECTION 20 REVEGETATION

REVEGETATION. -- Revegetation consists of planting the seeds listed below in Table 1 at the rates shown therein.

Table 1
Revegetation Prescription for the Cherry Ave. Pipe Bridge Maintenance Project

Species	Application Rate (lbs./acre)
<i>Ambrosia psilostachya</i> (western ragweed)	2
<i>Artemisia douglasiana</i> (mugwort)	3
<i>Bromus carinatus</i> (California brome)	5
<i>Hordeum brachyantherum</i> (meadow barley)	3
<i>Trifolium wildenovii</i> (tomcat clover)	5
<i>Vulpia microstachys</i> (six weeks fescue)	5
Total	23

Revegetation shall consist of seeding the species listed in Table 1 on all soil surfaces that have been disturbed by pulling up weedy species roots. Seeds shall be provided by the Contractor. Seed shall be premixed according to the prescribed specifications, and bagged in lots. To aid in the even distribution of seed lots, the revegetation areas shall be divided into sections and marked in the field.

The seed material shall be applied (either via hydroseed or broadcast seeding techniques), and shall be raked or chained into soil which was exposed during vegetation pruning and removal activities, during excavation around the carrier pipe and sleeve, and during any other ground-disturbing operations.

Seeded and raked areas shall be compacted by foot pressure. No loose soil shall be left in the revegetated areas.

Revegetation of areas disturbed during vegetation pruning and removal activities shall occur within 5 days of the conclusion of those activities.

Revegetation of areas disturbed during excavation to expose the carrier pipe and sleeve at the abutments/manholes shall occur within 5 days of the completion of these activities.

Revegetation of areas disturbed by all other project activities shall occur within 5 days of the removal of the containment structure.

Payment for Revegetation shall be at the contract lump sum price and shall include full compensation for furnishing all labor, materials, tools, equipment, and incidentals, and for doing all the work involved in site revegetation and no additional compensation will be allowed therefor.

SECTION 21 FINISHING PROJECT.

The work shall be finished in accordance with the provisions in Section 22, "Finishing Roadway," of the Standard Specifications and these Special Provisions.

The Contractor shall restore or replace, when and as directed, any public or private property damaged by his work, equipment, or employees, to a condition at least equal to that existing immediately prior to the beginning of operations. To this end the Contractor shall perform as required all necessary highway or driveway, walk, and landscaping work. Suitable materials, equipment, and methods shall be used for such restoration. The restoration of existing property or structures shall be done as promptly as practicable as work progresses and shall not be left until the end of the contract period.

Payment for Finishing Project shall be at the contract lump sum price and no additional compensation will be allowed therefore.

SECTION 22, "ENVIRONMENTAL PERMIT SUMMARY FORMS,"

[These summaries will be provided pending issuance of pertinent environmental permits.]

Attachment A Existing Coating and Lining Systems

The existing coating system is described in Attachment E "Inspection/Evaluation Report, April 2007". According to that report, the existing coating can be summarized as follows:

1. The 18" steel carrier pipe external coating was shop applied coal tar plus asbestos impregnated wrap.
2. Prior to coating, all bare steel was sandblasted and primed with Valdura Val- Chem 690 Epoxy Ester Metal Primer. The primed steel as well as the asbestos wrapped 18" pipe were top coated with Valdura Val-Chem Chlorinated Rubber Enamel. The primer used on the bare steel surfaces is known to contain lead.
3. The bridge was externally recoated in May, 1994. All areas with rust showing were sandblasted to bare steel. High pressure water blasting was used in non rusted areas. Small portions of the asbestos wrap were removed where needed to prep the steel in rusted areas or if not properly adhered to the pipe. Containment was set up for the lead and asbestos removal, including the water used in blasting. The spot blasted areas were primed with Tnemec 50-330 Polyuraprime Primer. The entire structure, including the wrapped 18" carrier pipe was then primed with Tnemec 50-330 Polyuraprime Primer and top coated with Tnemec 82 Silicone Alkyd Enamel.

The existing lining system is described in Attachment E "Inspection/Evaluation Report, April 2007". According to that report, the existing lining can be summarized as follows:

4. The 18" steel carrier pipe was originally internally lined with cement mortar, then coated with coal tar.
5. An internal video inspection in May, 1993, revealed that the internal mortar lining was cracked throughout the length of the bridge and in many sections, portions of the lining were hanging loose from the pipe or missing altogether. The bare steel could be seen in the video where the lining was missing, but it was not possible to determine if there was wall loss in these areas. No corrosion pitting or otherwise obvious signs of corrosion were evident.
6. The pipe was relined in June 1995. A barbed pig was pulled through the line multiple times to remove loose sections of the original mortar lining. A folded PVC liner was then inserted into the pipe and inflated with heat to conform to the interior of the steel pipe. The PVC liner thickness is in excess of 0.5".
7. An internal video inspection in February 2004 revealed that the interior of the pipeline was clear and free of debris. The PVC liner appeared to be intact and sealed to the manholes. There were some wrinkles evident in the liner, but they did not appear to have been caused by failure of the lining or appear to be capable of obstructing debris. The wrinkles look like they may have been caused during installation when the PVC liner was conformed to an irregular surface (caused by the irregular portions of mortar lining that remained attached to the pipe wall just

prior to the liner's installation.)

Attention is directed to Section 9 EXISTING DISTRICT FACILITIES of these Special Provisions. The Contractor shall preserve and protect the existing PVC liner. Such protection includes preventing any heat being applied to the 18" carrier pipe that would raise the temperature above 110dF, or could cause the PVC liner to distort in shape or otherwise be damaged.

The asbestos and lead content of the existing coating systems on the Cherry Avenue Pipe Bridge was sampled in April, 2016. The results are summarized below:

1. The black mastic pipe wrap was found to be non-friable, and undamaged. Two samples were collected. One sample contained 10% Chrysotile asbestos. The other contained 15% Chrysotile asbestos.
2. None of the 12 sampled locations contained concentrations of lead greater than 1.0 milligrams per centimeter.
3. Two paint chip samples were collected. The lead concentrations in these samples were found to be 150 ppm and 550 ppm. Both of the sampled building materials contained lead concentrations lower than the Cal-OSHA limit of 600 ppm.

For additional information or details – See Attachment A “Asbestos and Lead Sample and Analysis Report” of these Special Provisions.

Attachment B, "Asbestos and Lead Sampling and Inspection Report,"

Attachment C, Environmental Permits

[These documents will be provided pending issuance of pertinent environmental permits.]

Attachment D, "1965 Bridge Plan Sheets"

Attachment E, "Inspection/Evaluation Report, April 2007"

Attachment F, "Catalog of Spot Repairs"

[This catalog will be provided pending results of detailed coating inspection.]



Air Pollution Control District San Luis Obispo County

July 26, 2016

Gerhardt J Hubner
South San Luis Obispo County Sanitation District
P O Box 339
Oceano, CA 93475

SUBJECT: APCD Comments Regarding the Cherry Avenue Pipe Bridge Maintenance Project - Initial Study and Mitigated Negative Declaration

Dear Mr. Hubner:

Thank you for including the San Luis Obispo County Air Pollution Control District (APCD) in the environmental review process. We have completed our review of the Cherry Avenue Pipe Bridge Maintenance Project Initial Study and Mitigated Negative Declaration. The project is located in Arroyo Grande between Paulding Circle and Nelson Street.

The following are APCD comments that are pertinent to this project.

As a commenting agency in the California Environmental Quality Act (CEQA) review process for a project, the APCD assesses air pollution impacts from both the construction and operational phases of a project, with separate significant thresholds for each. **Please address the action items contained in this letter, with special attention to items that are highlighted by bold and underlined text.**

CONSTRUCTION PHASE IMPACTS - Insufficient Information

The report states the proposed project is expected to generate construction emissions in excess of the thresholds established by the APCD:

The proposed project is expected to generate construction emissions in excess of the thresholds approved by the APCD [Ozone Precursors (ROG + NOx) = 137 lbs/day or 2.5 tons for projects lasting up to one quarter; Diesel Particulate Matter (DPM) = 7 lbs/day or 0.13 tons for projects lasting up to one quarter; Fugitive Particulate Matter (PM10) = 2.5 tons for projects lasting up to one quarter]. Because the project is within 1,000 feet of sensitive receptors, impacts related to fugitive dust emissions during proposed construction activities are considered significant but mitigable.

The air quality assessment needs to document the following information/assumptions:

- Project emissions are provided in the report, as discussed above; however, the calculations and data used to arrive at the emissions was not included in the report; please include this information.
- An estimation of the number and type of construction equipment operating throughout the construction phase of the project;
- Identify sensitive receptors within 1000 feet of construction boundary (see Section 2.1.1 in the CEQA Air Quality Handbook);
- Identify whether the project includes hauling (on-site or off-site). Time frame for the operation of construction equipment during the project, which includes:
 - a. Estimated construction schedule for all phases including anticipated phase overlaps;
 - b. An estimation of the number of daily operating hours for the equipment;
- An estimation of equipment that would operate simultaneously on a given day.

Construction Permit Requirements

Based on the information provided, we are unsure of the types of equipment that may be present during the project's construction phase. Portable equipment, 50 horsepower (hp) or greater, used during construction activities may require California statewide portable equipment registration (issued by the California Air Resources Board) or an APCD permit.

The following list is provided as a guide to equipment and operations that may have permitting requirements, but should not be viewed as exclusive. For a more detailed listing, refer to the Technical Appendices, page 4-4, in the APCD's 2012 CEQA Handbook.

- Power screens, conveyors, diesel engines, and/or crushers;
- Portable generators and equipment with engines that are 50 hp or greater;
- Electrical generation plants or the use of standby generator;
- Internal combustion engines;
- Rock and pavement crushing;
- Unconfined abrasive blasting operations;
- Tub grinders;
- Trommel screens; and,
- Portable plants (e.g. aggregate plant, asphalt batch plant, concrete batch plant, etc).

To minimize potential delays, prior to the start of the project, please contact the APCD Engineering Division at (805) 781-5912 for specific information regarding permitting requirements.

Truck Routing

Proposed truck routes should be evaluated and selected to ensure routing patterns have the least impact to residential dwellings and other sensitive receptors, such as schools, parks, day care centers, nursing homes, and hospitals. If the project has significant truck trips where hauling/truck trips are routine activity and operate in close proximity to sensitive receptors, toxic risk needs to be evaluated.

Developmental Burning

Effective February 25, 2000, **the APCD prohibited developmental burning of vegetative material**

within San Luis Obispo County. If you have any questions regarding these requirements, contact the APCD Enforcement Division at (805) 781-5912. **Demolition debris does not qualify for ag burning.**

Demolition/Asbestos

Demolition activities can have potential negative air quality impacts, including issues surrounding proper handling, abatement, and disposal of asbestos containing material (ACM). Asbestos containing materials could be encountered during the demolition or remodeling of existing structures or the disturbance, demolition, or relocation of above or below ground utility pipes/pipelines (e.g., transite pipes or insulation on pipes). **If this project will include any of these activities, then it may be subject to various regulatory jurisdictions, including the requirements stipulated in the National Emission Standard for Hazardous Air Pollutants (40CFR61, Subpart M - asbestos NESHAP).** These requirements include, but are not limited to: 1) written notification, within at least 10 business days of activities commencing, to the APCD, 2) asbestos survey conducted by a Certified Asbestos Consultant, and, 3) applicable removal and disposal requirements of identified ACM. Please contact the APCD Enforcement Division at (805) 781-5912 and also go to slocleanair.org/business/asbestos.php for further information. To obtain a Notification of Demolition and Renovation form go to the "Other Forms" section of: slocleanair.org/business/onlineforms.php.

Hydrocarbon Contaminated Soil

Should hydrocarbon contaminated soil be encountered during demolition or construction activities, the APCD must be notified as soon as possible and no later than 48 hours after affected material is discovered to determine if an APCD Permit will be required. In addition, the following measures shall be implemented immediately after contaminated soil is discovered:

- Covers on storage piles shall be maintained in place at all times in areas not actively involved in soil addition or removal;
- Contaminated soil shall be covered with at least six inches of packed uncontaminated soil or other TPH -non-permeable barrier such as plastic tarp. No headspace shall be allowed where vapors could accumulate;
- Covered piles shall be designed in such a way to eliminate erosion due to wind or water. No openings in the covers are permitted;
- The air quality impacts from the excavation and haul trips associated with removing the contaminated soil must be evaluated and mitigated if total emissions exceed the APCD's construction phase thresholds;
- During soil excavation, odors shall not be evident to such a degree as to cause a public nuisance; and,
- Clean soil must be segregated from contaminated soil.

The notification and permitting determination requirements shall be directed to the APCD Engineering Division at (805) 781-5912.

Lead During Demolition

Demolition of structures coated with lead based paint is an air quality concern. Improper demolition can result in the release of lead containing particles from the site. Sandblasting or removal of paint by heating with a heat gun can result in significant emissions of lead. Therefore,

proper abatement of lead before demolition of these structures must be performed in order to prevent the release of lead from the site. **Depending on removal method, an APCD permit may be required. If a lead work plan is required by the APCD, it must be submitted ten days prior to the start of the demolition. For more information, contact the APCD Enforcement Division at (805) 781-5912 or for specific information regarding lead removal, please contact Cal-OSHA at (818) 901-5403. Additional information can also be found on line at www.epa.gov/lead.**

Naturally Occurring Asbestos

The APCD Naturally Occurring Asbestos (NOA) Map has recently been updated and is available on the APCD website. The current version of the map indicates that the project site is not in the NOA zone.

Construction Phase Idling Limitations

Based on the images provided in the report, this project appears to be in close proximity to sensitive receptors. **To help reduce sensitive receptor emissions impact of diesel vehicles and equipment used to construct the project, the applicant shall implement the following idling control techniques:**

1. California Diesel Idling Regulations

- a. ***On-road diesel vehicles*** shall comply with Section 2485 of Title 13 of the California Code of Regulations. This regulation limits idling from diesel-fueled commercial motor vehicles with gross vehicular weight ratings of more than 10,000 pounds and licensed for operation on highways. It applies to California and non-California based vehicles. In general, the regulation specifies that drivers of said vehicles:
 1. Shall not idle the vehicle's primary diesel engine for greater than 5-minutes at any location, except as noted in Subsection (d) of the regulation; and,
 2. Shall not operate a diesel-fueled auxiliary power system (APS) to power a heater, air conditioner, or any ancillary equipment on that vehicle during sleeping or resting in a sleeper berth for greater than 5.0 minutes at any location when within 1,000 feet of a restricted area, except as noted in Subsection (d) of the regulation.
- b. ***Off-road diesel equipment*** shall comply with the 5-minute idling restriction identified in Section 2449(d)(2) of the California Air Resources Board's In-Use Off-Road Diesel regulation.
- c. Signs must be posted in the designated queuing areas and job sites to remind drivers and operators of the state's 5-minute idling limit.
- d. The specific requirements and exceptions in the regulations can be reviewed at the following web sites: arb.ca.gov/msprog/truck-idling/2485.pdf and arb.ca.gov/regact/2007/ordiesl07/frooal.pdf.

2. Diesel Idling Restrictions Near Sensitive Receptors

In addition to the state required diesel idling requirements, the project applicant shall comply with these more restrictive requirements to minimize impacts to nearby sensitive receptors:

July 25, 2016

Page 5 of 5

- a. Staging and queuing areas shall not be located within 1,000 feet of sensitive receptors;
- b. Diesel idling within 1,000 feet of sensitive receptors shall not be permitted;
- c. Use of alternative fueled equipment is recommended; and
- d. Signs that specify the no idling areas must be posted and enforced at the site.

Again, thank you for the opportunity to comment on this proposal. If you have any questions or comments, feel free to contact me at (805) 781-5912.

Sincerely,



Gary Arcemont
Air Quality Specialist

GJA/ihs

cc: Tim Fuhs, Enforcement Division, APCD
Kevin Merk Associates, LLC, PO Box 318, San Luis Obispo, CA 93406;

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EDMUND G. BROWN JR.
GOVERNOR

STATE OF CALIFORNIA
GOVERNOR'S OFFICE *of* PLANNING AND RESEARCH
STATE CLEARINGHOUSE AND PLANNING UNIT



KEN ALEX
DIRECTOR

August 17, 2016

Gerhardt Hubner
South San Luis Obispo County Sanitation District
p.o. Box 339
Oceano, CA 93475

Subject: Cherry Avenue Pipe Bridge Maintenance Project
SCH#: 2016071045

Dear Gerhardt Hubner:

The State Clearinghouse submitted the above named Mitigated Negative Declaration to selected state agencies for review. The review period closed on August 16, 2016, and no state agencies submitted comments by that date. This letter acknowledges that you have complied with the State Clearinghouse review requirements for draft environmental documents, pursuant to the California Environmental Quality Act.

Please call the State Clearinghouse at (916) 445-0613 if you have any questions regarding the environmental review process. If you have a question about the above-named project, please refer to the ten-digit State Clearinghouse number when contacting this office.

Sincerely,

Scott Morgan
Director, State Clearinghouse

**Document Details Report
State Clearinghouse Data Base**

SCH# 2016071045
Project Title Cherry Avenue Pipe Bridge Maintenance Project
Lead Agency South San Luis Obispo County Sanitation District

Type MND Mitigated Negative Declaration

Description Project is the removal of existing paint and debris from the pipe bridge, and replacement of anti-corrosion coatings on the bridge. The district proposes to utilize a containment system for the purpose of containing all material and debris from the existing pipe bridge and support structure for proper disposal. The containment system will contain all water, resulting debris, and dust produced. No placement of fill or permanent disturbance of the Creek channel will occur. Vegetation within 25 ft of the pipe bridge will be pruned, non-native vegetation (e.g. English Ivy) will be removed. Soil disturbance will be limited to 18 cy max to inspect abutments. All disturbed areas will be stabilized with erosion control and revegetated with native plants.

Lead Agency Contact

Name	Gerhardt Hubner		
Agency	South San Luis Obispo County Sanitation District		
Phone	805-489-6666	Fax	
email			
Address	p.o. Box 339		
City	Oceano	State CA	Zip 93475

Project Location

County	San Luis Obispo
City	Arroyo Grande
Region	
Lat / Long	35° 12' 44" N / 120° 57' 41" W
Cross Streets	Branch St and Paulding Circle/Nelson St cul-de-sac
Parcel No.	
Township	
	Range
	Section
	Base

Proximity to:

Highways	
Airports	
Railways	
Waterways	Arroyo Grande Creek
Schools	
Land Use	site zoned as village mixed use at northern pipe bridge abutment and single family res at the southern end

Project Issues Aesthetic/Visual; Agricultural Land; Air Quality; Archaeologic-Historic; Biological Resources; Flood Plain/Flooding; Geologic/Seismic; Noise; Population/Housing Balance; Public Services; Recreation/Parks; Soil Erosion/Compaction/Grading; Toxic/Hazardous; Traffic/Circulation; Vegetation; Water Quality; Wetland/Riparian; Landuse

Reviewing Agencies Resources Agency; Department of Fish and Wildlife, Region 4; Department of Parks and Recreation; Department of Water Resources; California Highway Patrol; Caltrans, District 5; Regional Water Quality Control Board, Region 3; Native American Heritage Commission

Date Received	07/18/2016	Start of Review	07/18/2016	End of Review	08/16/2016
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For the file ... FW: Cherry Avenue Pipe Bridge Maintenance

Malcolm McEwen [mmcewen@garingtaylor.com]

Sent: Monday, August 22, 2016 12:15 PM**To:** Gerhardt Hubner

Hello Gerhardt,

I spoke with Kevin Merk today. He tells me that we are OK with SLO County Environmental Health regarding lead removal.

As noted below the paint samples showed lead, and the recommendation is to follow CalOSHA guidelines for worker protection. Disposal of this material may require it to be handled as hazardous waste. Our Special Provisions contain requirements that cover both those topics.

Please retain this email chain to show the District's correspondence with County Environmental Health during the MND comment period.

Malcolm McEwen, P.E.
Garing Taylor & Associates, Inc.

From: Malcolm McEwen
Sent: Monday, August 15, 2016 8:52 AM
To: tatkins@co.slo.ca.us
Subject: RE: Cherry Avenue Pipe Bridge Maintenance

Hello Tricia,

Thanks so much for your help in the planning stages of this project.

A CEQA document (mitigated negative declaration) for the project noted above is out for public review at the present time.

I am attaching the MND as well as the project's draft "Front End" and "Special Provisions". These documents will form the basis of the contract when the District puts this project out to bid, and place numerous environmental protection requirements on the contractor.

I am hoping you can review these documents and let me know if we need to add any additional requirements to be compliant with all pertinent lead regulations.

Malcolm McEwen, P.E.
Garing Taylor & Associates, Inc.

From: tatkins@co.slo.ca.us [<mailto:tatkins@co.slo.ca.us>]
Sent: Monday, May 02, 2016 9:38 AM
To: Malcolm McEwen <mmcewen@garingtaylor.com>
Subject: Re: Cherry Avenue Pipe Bridge Maintenance

Malcolm,

I reviewed the "Limited Preliminary Asbestos & Lead Survey analytical report submitted by Insight Environmental Testing and Consulting. I recommend following Cal OSHA guidelines for worker protection when renovating the Cherry Avenue Pipe Bridge.

The report confirms there is a concentration of lead in the paint. However, it may be below Cal OSHA levels, but, it could be a hazardous waste. Therefore, all paint removed and containerized is required to be tested to determine if it exceeds lead hazardous waste levels, and then disposed of accordingly. Lead is a hazardous waste when the Total Threshold Limit Concentration (TTLC) is 1,000 ppm or greater, and/or the Soluble Threshold Limit Concentration (STLC) is 5.0 ppm or greater. The STLC analysis is run when the TTLC concentration is, at least, 10x the lead STLC concentration, which would be 50 ppm.

Proper disposal of a hazardous waste requires a Cal EPA ID#. You can apply for a temporary EPA ID# from the Department Toxic Substance Control (DTSC) website: <http://www.dtsc.ca.gov/IDManifest/index.cfm>

Please submit to me a copy of the lead hazardous waste analysis when that is complete, and before disposal. Any questions please email me.

Best regards,

Tricia Atkins, REHS
Environmental Health Specialist III
San Luis Obispo County Environmental Health Services
(805)-781-1105 office
(805)781-4211 fax

From: Malcolm McEwen <mmcewen@garingtaylor.com>
To: "Tricia Atkins (tatkins@co.slo.ca.us)" <tatkins@co.slo.ca.us>,
Date: 05/02/2016 08:43 AM
Subject: Cherry Avenue Pipe Bridge Maintenance

Hello Tricia,

Thanks for calling back this morning.

Please take a look at these results and provide guidance regarding required actions to eliminate lead exposure.

Malcolm McEwen, P.E.
Garing Taylor & Associates, Inc.
141 South Elm Street
Arroyo Grande, CA 93420
(805)489-1321

[attachment "Complete PRE-DEMO Asbestos and Lead Survey.pdf" deleted by Tricia Atkins/PH/COSLO]

For the file - FW: Cherry Avenue Pipe Bridge Maintenance Project

Malcolm McEwen [mmcewen@garingtaylor.com]

Sent: Monday, August 22, 2016 12:09 PM**To:** Gerhard Hubner

Hello Gerhard,

I spoke with Kevin Merk today. He tells me that we are OK with the APCD comments because the documents they reviewed did not include the special provisions. These special provisions contain provisions to protect air-quality and were sent to the APCD on 8/10/2016. Since that time we have heard no further concerns from them.

Also note that the length of the pipeline is such that the asbestos abatement work does not need an APCD permit.

Please retain this email chain to show the District's correspondence with the local Air Pollution Control District during the MND comment period.

Malcolm McEwen, P.E.
Garing Taylor & Associates, Inc.

From: Tim Fuhs [mailto:tfuhs@co.slo.ca.us]**Sent:** Wednesday, August 10, 2016 5:00 PM**To:** Malcolm McEwen <mmcewen@garingtaylor.com>**Cc:** Gerhard_sslocsd.us <Gerhardt@sslocsd.us>; Kevin Merk <kmerk@kevinmerkassociates.com>; Gary Arcemont <garcemont@co.slo.ca.us>**Subject:** Re: Cherry Avenue Pipe Bridge Maintenance Project

Thanks Malcom I will make sure these docs get to Gary A also. I like that you have requirements to contact the apcd prior to start. Although the asbestos abatement aspect will most likely be below our minimum threshold, it is beneficial to know that the project is beginning in case we receive calls from the public. I also didn't know if you had touched base with Tricia at SLO County Environmental Health regarding the Pb aspect? As we discussed a while back they have that authority not the apcd. We do regulate possible lead removal methods such as abrasive blasting however and do appreciate the notification that you have in the docs.

Thank you for the follow through--

Tim

From: Malcolm McEwen <mmcewen@garingtaylor.com>**Sent:** Wednesday, August 10, 2016 1:36:59 PM**To:** Tim Fuhs**Cc:** Gerhard_sslocsd.us; Kevin Merk**Subject:** Cherry Avenue Pipe Bridge Maintenance Project

Hello Tim,

As promised, here are the draft "Front End" and "Special Provisions" for the above-noted project. These documents will form the basis of the contract when the District puts this project out to bid.

(Also attached for reference is a comment letter from Gary Arcemont of your office.)

As I mentioned, it contains numerous environmental protections, including those for air quality.

If the District needs to add any other provisions to comply with air-quality regulations, please let me know.

Malcolm McEwen, P.E.
Garing Taylor & Associates, Inc.
141 South Elm Street
Arroyo Grande, CA 93420
(805)489-1321

**SOUTH SAN LUIS OBISPO COUNTY SANITATION DISTRICT
RESOLUTION NO. 2016-356**

**A RESOLUTION OF THE BOARD OF DIRECTORS OF THE
SOUTH SAN LUIS OBISPO COUNTY SANITATION DISTRICT
MAKING FINDINGS, ADOPTING A MITIGATION MONITORING PROGRAM, APPROVING A
MITIGATED NEGATIVE DECLARATION, AND DIRECTING FILING OF THE MITIGATED
NEGATIVE DECLARATION
FOR THE CHERRY AVENUE PIPE BRIDGE MAINTENANCE PROJECT**

WHEREAS, the District operates a sewer pipe bridge spanning Arroyo Grande Creek between Branch Street and Nelson Street cul-de-sac in Arroyo Grande; and

WHEREAS, the bridge needs maintenance consisting of removing existing paint and debris, followed by replacing anti-corrosion coatings on this sewer pipe bridge; and

WHEREAS, the District has consulted with pertinent governmental agencies and has caused a biological resource assessment and environmental review consisting of a Mitigated Negative Declaration to be prepared for the sewer bridge maintenance project; and

WHEREAS, according to the biological resource assessment (dated November 16, 2015) and Draft Mitigated Negative Declaration (prepared in July 2016), the proposed sewer pipe bridge maintenance project has the potential to result in significant environmental impacts in the areas of air quality, biological resources, cultural resources, noise and water unless it is implemented according to specified mitigation measures; and

WHEREAS, the District has caused a draft July 2016 Mitigated Negative Declaration of environmental impact and mitigation monitoring program to be prepared for the sewer pipe bridge maintenance project; and

WHEREAS, the required notices were published and the July 2016 Mitigated Negative Declaration was circulated for 30-day public review, sent to every responsible agency with jurisdiction over the project and placed in a public location; and

WHEREAS, the District held a duly noticed public hearing on September 7, 2016, for the purpose of receiving evidence and considering the Final July 2016 Mitigated Negative Declaration; and

WHEREAS, the District has responded to all comments received from the public review, and these comments and any revisions have been incorporated into the Final Cherry Avenue Pipe Bridge Maintenance Project Mitigated Negative Declaration, dated August 2016 (Final Mitigated Negative Declaration); and

WHEREAS, the District has considered all evidence and Final Mitigated Negative Declaration; and

WHEREAS, the mitigation measures set forth in the Final Mitigated Negative Declaration will mitigate or avoid the significant environmental effects of the project to the point where clearly no significant environmental impacts will occur; and

WHEREAS, the mitigation measures set forth in the Final Mitigated Negative Declaration shall be fully enforceable and monitored by District staff via incorporation into project plans, permit conditions, construction agreements, or by other means as specified in the mitigation monitoring program; and

WHEREAS, there is no substantial evidence in the record supporting a fair argument that the project, as conditioned, and described in the Final Mitigated Negative Declaration will have a significant effect on the environment; and

WHEREAS, the Final Mitigated Negative Declaration reflect the District's independent judgment.

NOW, THEREFORE, THE BOARD OF DIRECTORS OF SOUTH SAN LUIS OBISPO COUNTY SANITATION DISTRICT HEREBY RESOLVES:

1. The above findings are true; and
2. The Board hereby adopts the Cherry Avenue Pipe Bridge Maintenance Project Final Mitigated Negative Declaration prepared by Kevin Merk Associates, LLC, dated August 2016 (Attachment No. 1); and
3. The Board approves a mitigation monitoring program for the project, which is found at Pages 38-44 of the Final Mitigated Negative Declaration; and
4. The mitigation measures shall be fully enforceable and monitored by District staff via incorporation into project plans, permit conditions, construction agreements, or by other means as specified in the mitigation monitoring program; and
5. The record of these proceedings is located at the office of South San Luis Obispo County Sanitation District, 1600 Aloha, Oceano, CA.

PASSED AND ADOPTED at a regular meeting of the South San Luis Obispo County Sanitation District held September 7, 2016.

Board Chair

ATTEST:

DISTRICT SECRETARY

APPROVED AS TO FORM:

BY: _____
DISTRICT COUNSEL

CONTENTS:

BY: _____
DISTRICT ADMINISTRATOR



SOUTH SAN LUIS OBISPO COUNTY SANITATION DISTRICT

Post Office Box 339 Oceano, California 93475-0339

1600 Aloha Oceano, California 93445-9735

Telephone (805) 489-6666 FAX (805) 489-2765

www.sslocsd.org

Staff Report

Date: September 7, 2016

To: Board of Directors

From: Gerhard Hubner, District Administrator

Subject: **AWARD OF CONTRACT FOR A MECHANICAL BAR SCREEN/HEADWORKS IMPROVEMENT PROJECT AT THE DISTRICT'S WASTEWATER TREATMENT PLANT**

RECOMMENDATIONS:

1. Award a contract for installation and construction of the Mechanical Bar Screen/Headwork Improvement Project to Fluid Resource Management;
2. Direct the District Administrator to enter into an Agreement (Attachment No. 1) with Fluid Resource Management in the amount of \$511,370.51;
3. Approve a specific contingency fund for this project up to 15% (\$76,706) of the total contract amount for unforeseen future project events; and
4. Authorize the District Administrator to approve further change orders for this project within the newly created contingency fund.

BACKGROUND

The District currently operates an auger system at the plant headworks that does not effectively or efficiently remove rags or other large inorganic materials. This issue has become more problematic of late with the advent of more "flushable" products.

Over the past year the District pursued an improvement to the efficiency of the headworks by means of a mechanical bar screen system to increase safety by keeping rags and other larger inorganic materials out of the treatment stream. The removal of rags and other large inorganic materials at the headworks by a mechanical bar screen system will also increase pump reliability, reduce electrical costs, reduce maintenance, and increase productivity of the digester.

DISCUSSION

In late June of this year, design of the Headworks Improvement Project was completed. On July 18, 2016 the District advertised a Notice Inviting Bids for this project. A request for proposals was posted at the District website, in a local newspaper, on the Central Coast Builders'

Exchange, on the San Luis Obispo County Builders' Exchange, on the Santa Maria Valley Contractors Association website, and on the ASAP Reprographics website. A pre-bid conference was held at the District's facility on July 25, 2016. The Bid opening for the project was held on August 10, 2016 at 2:00pm, with four bids received, ranging in price from \$511,370 to \$613,000 (Attachment No. 2). The engineer's estimate for this project was \$573,850, including a 15% contingency (Attachment No. 3).

Fluid Resource Management posted the lowest qualified bid of \$511,370.51. The bid was evaluated by Michael K. Nunley and Associates (MKN), design engineer for project for the District. After completing its review, MKN recommended the District award the Headworks Improvement Project to Fluid Resource Management (Attachment No. 4). District staff concurs with this recommendation, and that the bid process complies with the District's "Adopted Policies and Procedures for the Expenditure of District Funds for Supplies, Equipment, Construction and Services".

With award and execution of a contract, the Headworks Improvement Project can proceed. Installation and construction are anticipated to take six months to complete (Spring 2017) from the issuance of a notice to proceed.

FISCAL CONSIDERATIONS

In the Adopted Budget for Fiscal Year 2016-2017, \$577,000 was identified in Fund 26, Schedule B-1 for the Mechanical Bar Screen/Headworks Project (Project No. 2016-B1-11). The bid by Fluid Resource Management (\$511,370.51) is within this amount. If the total project amount exceeds \$577,000 budgeted for this line item; staff will return to the Board at a future date with a budget adjustment.

Attachments:

1. Agreement, SSLOCSD WWTP Headworks Improvement Project
2. Bid Tabulation
3. Opinion of Probable Construction Cost by MKN, dated May 25, 2016
4. Recommendation to Award by MKN, dated May 25, 2016

AGREEMENT

SSLOCSO WWTP HEADWORKS
IMPROVEMENT PROJECT

DOCUMENT 00500

AGREEMENT

THIS AGREEMENT, made and entered into this _____ day of _____, 2016,
by and between

hereinafter referred to as "Contractor," and the South San Luis Obispo County Sanitation District in the County of San Luis Obispo, California, hereinafter referred to as "District" "Owner" or "SSLOCSD."

WITNESSETH:

That for and in consideration of the promises and agreements hereinafter made and exchanged, Owner and Contractor agrees as follows:

1. That Contractor shall complete the work generally described as follows: SSLOCSD WWTP HEADWORKS IMPROVEMENT PROJECT in accordance with the Contract Documents therefore, as prepared by District.
2. That Owner will pay Contractor progress payments and the final payment, in accordance with the provisions of the contract documents, with warrants drawn on the appropriate fund or funds as required, at the prices bid on the proposal form accepted by Owner, and set forth in this agreement.

Total Bid of _____ Dollars
and _____ Cents

Contract Price in Figures \$ _____

3. Contractor agrees to complete said work within the contract time of one hundred forty (140) WORKING DAYS, from the day following the issuance of the Notice to Proceed, and approved extensions thereof, to the satisfaction of Owner before final payment is made.
4. Time is of the essence on this contract.
5. It is mutually understood and agreed that time is of the essence of this agreement and that it is difficult to ascertain the amount of damages required to properly compensate Owner for failure by Contractor to comply with all the contract requirements within the time fixed in the agreement.

In accordance with California Government Code, Section 53069.85, the amount of liquidated damages to be paid to Owner for each day completion is delayed beyond the time for completion, shall be FIVE HUNDRED (\$500) dollars. Contractor hereby acknowledges

that it has reviewed said provisions relating to liquidated damages and the amount thereof, and accepts the same as being reasonable under the circumstances and as a material part of the consideration for this contract. Contractor also acknowledges that progress payments made after the scheduled completion date do not constitute a waiver of liquidated damages.

Provisions in this contract relating to damages shall be read consistently with Public Contract Code §7102, pertaining to damages in construction contracts of public agencies.

Pursuant to Public Contract Code §7105, unless this contract is financed by revenue bonds, nothing in this contract shall be read to require Contractor to assume responsibility in excess of five percent of the contract amount for repairing or restoring damages caused by an act of God. If required by the invitation for bids, Contractor shall procure insurance to cover such losses. This contract may be terminated in the event of such damages as provided by Part 6 of Document 00700.

6. That, in accordance with Section 1774 of the California Labor Code, Contractor will pay, and will require subcontractors to pay, employees on the project a salary or wage at least equal to the prevailing salary or wage established for such work as set forth in the wage determinations and wage standards applicable to this work, contained in or referenced in the contract documents. The general rate of per diem wages (prevailing wage) for each craft, classification or type of worker needed to execute the contract is on file at the office of the SSLOCSD General Manager.
7. That, in accordance with Section 1775 of the California Labor Code, Contractor shall forfeit to Owner, as a penalty, not more than two hundred dollars (\$200) for each day, or portion thereof, for each worker paid, either by Contractor or any subcontractor, less than the prevailing rates as determined by the Director of the California Department of Industrial Relations for the work.
8. That, in accordance with Section 1777.5 of the Labor Code, this agreement fixes the responsibility of compliance with said Section 1777.5 for all apprenticeable occupations with the prime Contractor.
9. That, except as provided in Section 1815 of the California Labor Code, in the performance of the work not more than eight (8) hours shall constitute a day's work, and not more than forty (40) hours shall constitute a week's work; that Contractor shall not require more than eight (8) hours of labor in a day nor more than forty (40) hours of labor in a week from any person employed by Contractor or any subcontractor; that Contractor shall conform to Division 2, Part 7, Chapter 1, Article 3 (Section 1810, et seq.) of the California Labor Code; and that Contractor shall forfeit to Owner, as a penalty, the sum of twenty-five dollars (\$25) for each worker employed in the execution of the work by Contractor or any subcontractor for each day during which any worker is required or permitted to labor more than eight (8) hours in violation of said Article 3.
10. That Contractor shall carry workers' compensation insurance and require subcontractors to carry workers' compensation insurance as required by the California Labor Code. Further, the Contractor shall secure the payment of workers' compensation to its employees as provided in California Labor Code §§1860 and 3700.

11. That Contractor shall have furnished, prior to execution of the contract, three bonds approved by Owner: (1) the faithful performance bond in the amount of one-hundred percent (100%) of the contract price, to guarantee the faithful performance of the work; (2) the labor and material bond in the amount of one-hundred percent (100%) of the contract price, to guarantee payment of all claims for labor and materials furnished; and (3) the guarantee and defective material bond in the amount of ten percent (10%) of the contract price, to guarantee the one year maintenance of public improvements. This contract shall not become effective until such bonds are supplied to and approved by Owner.
12. That Contractor, prior to execution of the contract shall comply with the following Department of Industrial Relations requirements.
 - Pursuant to Public Contract Code §6109, no contractor shall perform work on a public works project with a subcontractor who is ineligible to work on a public works project under §§ 1777.1 or 1777.7 of the California Labor Code.
 - No contractor or subcontractor may be listed on a bid proposal for a public works project (submitted on or after March 1, 2015) unless registered with the Department of Industrial Relations pursuant to Labor Code section 1725.5 [with limited exceptions from this requirement for bid purposes only under Labor Code section 1771.1(a)].
 - No contractor or subcontractor may be awarded a contract for public work on a public works project (awarded on or after April 1, 2015) unless registered with the Department of Industrial Relations pursuant to Labor Code section 1725.5.
 - This project is subject to compliance monitoring and enforcement by the Department of Industrial Relations.
 - In the manner required by Labor Code §1776 and accompanying rules, Contractor shall keep accurate payroll records of wages paid, keep specified records available for inspection, use forms or provide information as required by the Division of Labor Standards Enforcement, file records, redact records, inform the District of the location of the records, and comply with records requests.
13. That this agreement, by reference, includes the contract documents defined in Document 00700, General Conditions. Terms of this agreement relating to modification, amendment or termination appear in Parts 5 and 6 of Document 00700.
14. That Contractor agrees to devote the hours necessary to perform the services set forth in this agreement in an efficient and effective manner. Contractor may represent, perform services for and be employed by additional individuals or entities, in Contractor's sole discretion, as long as the performance of these extra-contractual services does not interfere with or present a conflict with District's business.
15. The agreement shall be binding on and shall inure to the benefit of the heirs, executors, administrators, successors and assigns of the parties hereto, but nothing in this section shall be construed as consent by District to any assignment of this agreement or any interest in this agreement.

(REMAINDER OF PAGE LEFT INTENTIONALLY BLANK.)

IN WITNESS WHEREOF, said Contractor and the SSLOCSD, have caused the names of said parties to be affixed hereto, each in triplicate, the day and year first above written.

South San Luis Obispo County Sanitation
District
SAN LUIS OBISPO COUNTY, CALIFORNIA

BY: _____
DISTRICT ADMINISTRATOR

CONTRACTOR

BY: _____
NAME
PRESIDENT
COMPANY

BY: _____
NAME
SECRETARY & TREASURER
COMPANY

DISTRICT

ATTEST:

APPROVED AS TO FORM:

BY: _____
DISTRICT CLERK

BY: _____
DISTRICT COUNSEL

DATE: _____

DATE: _____

FAITHFUL PERFORMANCE BOND

SSLOCSD WWTP HEADWORKS
IMPROVEMENT PROJECT

DOCUMENT 00610

FAITHFUL PERFORMANCE BOND

WHEREAS, the South San Luis Obispo County Sanitation District, State of California, and _____ (hereinafter designated as the "principal") have entered into an agreement whereby principal agrees to install and complete certain designated public improvements, which said agreement, dated _____, 2016, and identified as SSLOCSD WWTP HEADWORKS IMPROVEMENT PROJECT, is hereby referred to and made a part hereof; and

WHEREAS, said principal is required under the terms of said agreement to furnish a bond for the faithful performance of said agreement.

NOW, therefore, we, the principal and _____, as surety, are held and firmly bound unto the South San Luis Obispo County Sanitation District hereinafter called "District," in the penal sum of _____ Dollars (\$_____) lawful money of the United States, for the payment of which sum well and truly to be made, we bind ourselves, our heirs, successors, executors, administrators, jointly and severally, firmly by these presents.

The condition of this obligation is such that if the above bounded principal, his or its heirs, executors, administrators, successors, or assigns, shall in all things stand to and abide by, and well and truly keep and perform the covenants, conditions, and provisions in the said agreement and any alteration thereof made as therein provided, on his or their part, to be kept and performed at the time and in the manner therein specified, and in all respects according to their true intent and meaning, and shall indemnify and save harmless District, its officers, agents, and employees as therein stipulated, then this obligation shall become null and void; otherwise it shall be and remain in full force and effect.

As a part of the obligation secured hereby and in addition to the face amount specified therefore, there shall be included costs and reasonable expenses and fees, including reasonable attorney's fees, incurred by District in successfully enforcing such obligation, all to be taxed as costs and included in any judgment rendered.

The surety hereby stipulates and agrees that no change, extension of time, alteration or addition to the terms of the agreement or to the work to be performed there under or the specifications accompanying the same shall in any manner affect its obligations on this bond, and it does hereby waive notice of any such change, extension of time, alteration or addition to the terms of the agreement or to the work or to the specifications.

IN WITNESS WHEREOF, this instrument has been duly executed by principal and surety above named, on _____, 2016.

ADDRESS OF CONTRACTOR FOR SERVICE OF DOCUMENTS UNDER BOND AND UNDERTAKING LAW:

Principal (SEAL)

(SEAL)

Signature of Principal Title

ADDRESS OF SURETY FOR SERVICE OF DOCUMENTS UNDER BOND AND UNDERTAKING LAW

Surety (SEAL)

(SEAL)

Signature for Surety Title

APPROVED AS TO FORM:

By: _____
District Counsel

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ATTY REV 1999

*** * * END OF DOCUMENT 00610 * * ***

LABOR AND MATERIAL BOND

SSLOCSO WWTP HEADWORKS
IMPROVEMENT PROJECT

DOCUMENT 00620

LABOR AND MATERIAL BOND

WHEREAS, the South San Luis Obispo County Sanitation District, State of California and _____ (hereinafter designated as "principal") have entered into an agreement whereby principal agrees to install and complete certain designated public improvements, which said agreement, dated _____, 2016, and identified as project as SSLOCSD WWTP HEADWORKS IMPROVEMENT PROJECT, is hereby referred to and made a part hereof; and

WHEREAS, under the terms of said agreement, principal is required before entering upon the performance of the work, to file a good and sufficient payment bond with the South San Luis Obispo County Sanitation District to secure the claims to which reference is made in Title 1 (commencing with Section 8000) of Part 6 of Division 4 of the Civil Code of the State of California.

NOW, THEREFORE, said principal and the undersigned as corporate surety, are held firmly bound unto the South San Luis Obispo County Sanitation District and all contractors, subcontractors, laborers, materialmen and other persons employed in the performance of the aforesaid agreement and referred to in the aforesaid Code of Civil Procedure in the sum of _____ Dollars (\$_____), for materials furnished or labor thereon of any kind, or for amounts due under the Unemployment Insurance Act with respect to such work or labor, that said surety will pay the same in amount not exceeding the amount hereinabove set forth, and also in case suit is brought upon this bond, will pay, in addition to the face amount thereof, costs and reasonable expenses and fees, including reasonable attorney's fees, incurred by District in successfully enforcing such obligation, to be awarded and fixed by the court, and to be taxed as costs and to be included in the judgment therein rendered.

It is hereby expressly stipulated and agreed that this bond shall inure to the benefit of any and all persons, companies and corporations entitled to file claims under Title 1 (commencing with Section 8000) of Part 6 of Division 4 of the Civil Code, so as to give a right of action to them or their assigns in any suit brought upon this bond.

Should the condition of this bond be fully performed, then this obligation shall become null and void, otherwise it shall be and remain in full force and effect.

The surety hereby stipulates and agrees that no change, extension of time, alteration or addition to the terms of said agreement or the specifications accompanying the same shall in any manner affect its obligations on this bond, and it does hereby waive notice of any such change, extension, alteration or addition.

IN WITNESS WHEREOF, this instrument has been duly executed by principal and surety above named, on _____, 2016.

ADDRESS OF CONTRACTOR FOR SERVICE OF DOCUMENTS UNDER BOND AND UNDERTAKING LAW:

Principal (SEAL)

(SEAL)

Signature of Principal Title

ADDRESS OF SURETY FOR SERVICE OF DOCUMENTS UNDER BOND AND UNDERTAKING LAW

Surety (SEAL)

(SEAL)

Signature for Surety Title

APPROVED AS TO FORM:

By: _____
District Counsel

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*** * * END OF DOCUMENT 00620 * * ***

**GUARANTEE AND DEFECTIVE
MATERIAL BOND**

**SSLOCSD WWTP HEADWORKS
IMPROVEMENT PROJECT**

DOCUMENT 00680

GUARANTEE AND DEFECTIVE MATERIAL BOND

WHEREAS, the South San Luis Obispo County Sanitation District, State of California and _____ (hereinafter designated as "principal") have entered into an agreement whereby principal agrees to install and complete certain designated public improvements, which said agreement, dated _____, 2016, and identified as project as SSLOCSD WWTP HEADWORKS IMPROVEMENT PROJECT, is hereby referred to and made a part hereof; and

WHEREAS, said principal is required under the terms of said agreement to furnish a bond for the one year maintenance of public improvements of said agreement.

NOW, therefore, we, the principal and _____, as surety, are held and firmly bound unto the South San Luis Obispo County Sanitation District hereinafter called "District," in the penal sum of _____ dollars (\$_____) lawful money of the United States, for the payment of which sum well and truly to be made, we bind ourselves, our heirs, successors, executors and administrators, jointly and severally, firmly by these presents.

The condition of this obligation is such that if the above bounded principal, his or its heirs, executors, administrators, successors, or assigns, shall in all things stand to and abide by, and well and truly keep and perform the covenants, conditions, and provisions in the said agreement and any alteration thereof made as therein provided, on his or their part, to be kept and performed at the time and in the manner therein specified, and in all respects according to their true intent and meaning, and shall indemnify and save harmless District, its officers, agents, and employees as therein stipulated, then this obligation shall become null and void; otherwise it shall be and remain in full force and effect.

As a part of the obligation secured hereby and in addition to the face amount specified therefore, there shall be included costs and reasonable expenses and fees, including reasonable attorney's fees, incurred by District in successfully enforcing such obligation, all to be taxed as costs and included in any judgment rendered.

The surety hereby stipulates and agrees that no change, extension of time, alteration or addition to the terms of the agreement or to the work to be performed there under or the specifications accompanying the same shall in any manner affect its obligations on this bond, and it does hereby waive notice of any such change, extension of time, alteration or addition to the terms of the agreement or to the work or to the specifications.

IN WITNESS WHEREOF, this instrument has been duly executed by principal and surety above named, on _____, 2016.

ADDRESS OF CONTRACTOR FOR SERVICE OF DOCUMENTS UNDER BOND AND UNDERTAKING LAW:

Principal (SEAL)

(SEAL)

Signature of Principal Title

ADDRESS OF SURETY FOR SERVICE OF DOCUMENTS UNDER BOND AND UNDERTAKING LAW

Surety (SEAL)

(SEAL)

Signature for Surety Title

APPROVED AS TO FORM:

By: _____
District Counsel

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*** * * END OF DOCUMENT 00680 * * ***

Bid Tabulation
SSLOCS D Headworks Improvement Project
Bid Opening 8/10/2016

Bidder	Fluid Resource Management	Brough Construction, Inc.	Spiess Construction Company	Whitaker Construction Group
TOTAL	\$511,370.51	\$557,858.00	\$594,700.00	\$618,000.00

South San Luis Obispo County Sanitation District WWTP Headworks Improvements
Opinion of Probable Construction Cost - 5/25/2016

Bid Item	Description	Unit	Quantity	Total Price
1	Mobilization/Demobilization	LS	1	\$ 6,282
2	Screens and Press	LS	1	\$ 366,300
3	Installation Screens and Press	LS	1	\$ 75,000
4	Electrical and Instrumentation	LS	1	\$ 36,630
5	Headworks Modifications	LS	1	\$ 14,000
Construction Subtotal				\$ 499,000
Construction Contingency				15% \$ 74,850
Construction Total				\$ 573,850
Engineering (Completed)				\$ 54,515
Const. Support (Previously Approved)				\$ 21,595
Total Project Cost Opinion				\$ 650,000

This Opinion of Probable Cost is only an estimate of possible construction costs for budgeting purposes. This estimate is limited to the conditions existing at issuance and is not a guaranty of actual price or cost. Uncertain market conditions such as, but not limited to; local labor or contractor availability, wages, other work, material market fluctuations, price escalations, force majeure events and developing bidding conditions, etc. may affect the accuracy of this estimate. MKN is not responsible for any variance from this Opinion of Construction Cost or actual prices and conditions obtained.



August 15, 2016

Gerhardt Hubner
District Administrator
South San Luis Obispo County Sanitation District
1600 Aloha Place
Oceano, CA 93445

Dear Mr. Hubner,

Re: Headworks Improvement Project Recommendation for Award

Michael K. Nunley & Associates, Inc. (MKN) has reviewed the bids received for the South San Luis Obispo County Sanitation District Headworks Improvement Project. The District received four bids ranging from \$511,370.51 to \$618,000. The Engineer's estimate was \$480,000-\$520,000.

Fluid Resource Management (FRM) was the Apparent Low Bidder at \$511,370.51. We have reviewed their submitted bid forms and find that the bid meets District requirements for a successful bid. MKN recommends that the District award the project to FRM.

I have attached via email a Notice of Award form for you use, and a copy of the Agreement to be provided to FRM for execution.

If you have any questions, please contact me at jhanlon@mknassociates.us or by phone at (805) 904-6530 x103.

Sincerely,



Jon Hanlon, PE

Attachments:
Bid tabulation (attached electronically)
Agreement (attached electronically)
Notice of Award form (attached electronically)



SOUTH SAN LUIS OBISPO COUNTY SANITATION DISTRICT

1600 Aloha Oceano, California 93445-9735
Telephone (805) 489-6666 FAX (805) 489-2765

Date: September 7, 2016
To: Board of Directors
From: Gerhardt Hubner, District Administrator & John Clemons, District Superintendent
Subject: **DISTRICT ADMINISTRATOR AND PLANT SUPERINTENDENT'S REPORT**

Today's report presents ongoing information on latest District staff activities of possible interest to the Board and members of the public, project updates, regional efforts, our regular Superintendent report, and operation and maintenance activities. *Updates since the last report are provided in italics below:*

RWQCB and District Settlement of 2010 Spill

As announced at the August 3rd Board Meeting, the RWQCB and the District has agreed to settle their litigation over the Administrative Civil Liability (ACL) penalty issued to the District regarding the 2010 Spill at the District's facility. Both parties agreed to resolve this matter without further litigation and without an admission of liability for the \$1,109,812.80 ACL penalty amount, with approximately 50% of the total penalty amount going towards regional and local projects, including two supplemental environmental, and one enhanced compliance.

As District and RWQCB staff were working together to finalize the settlement and Draft Order, RWQCB staff recently informed us that a 30-day comment period for the settlement would be required under federal National Pollutant Discharge Elimination System permit regulations. Therefore, a draft Order, signed by both parties will be posted and noticed on the RWQCB's website for the next 30 days to meet this requirement.

In addition, to ensure the Stipulated Stay does not expire in the intervening time, District Special Counsel and the State Department of Justice attorneys have jointly filed the necessary action with the Superior Court to extend the Stipulated Stay to November 30th.

Project Updates:

- **Cherry Ave. Arroyo Grande Sewer Bridge Project** – The purpose of this project is to perform regular maintenance on the existing structure, remove paint and debris and replace its anti-corrosion coating. *See Item 6B on today's agenda for consideration of approval of a Mitigated Negative Declaration for this project.*

- **Grit Removal System** – On April 28, 2016, the Board approved a contract with Spiess Construction Company for \$492,100. *Construction continues on this project, most recently to prepare the foundation. As previously mentioned, the first piece of equipment (grit classifier section) has been delivered. At the August 17th Board meeting, the Board approved a change order in the amount of \$15,526, a specific contingency of 15% (\$35,000) of the total project amount, and authority to process future change orders.*
- **Mechanical Bar Screen** – *See Item 6C on today's agenda for consideration of an award of contract for this project.*
- **Secondary Process Redundancy Project** – On March 16, 2016, the Board approved a design contract with Kennedy Jenks for Phase I of this project. On August 5, 2016, a cover letter outlining our response(s) to the Coastal Commission staff's April 15th letter to our Coastal Development Permit application was sent to Coastal Commission staff, including five attachments (which included site plans, biological surveys, sea level rise analysis, flood risk mitigation strategy, and site photos). *Subsequently on August 16th, upon receipt by us, a one-page form from the County of San Luis Obispo on its permitting determination was transmitted to Coastal Commission staff.*

On August 16th, a teleconference was held with the Coastal Commission staff, and the District and its consultant team to discuss and go over the District's August 5th submittal. Part of the discussion also included the Redundancy Project's CEQA status. This topic will be considered by the Board separately as part of today's agenda under Item No. 6A.

State Revolving Funding (SRF) Loan Program - On August 30th, District staff participated in two meetings in Sacramento with SWRCB Division of Financial Assistance staff. The first involved meeting with the SWRCB staff directly responsible for processing the District's pending application for a SRF planning loan. This meeting was very productive, and provided District staff with early insight as to the status of the SWRCB's SRF loan program, the amount of SRF loan funds already committed, and the amount of funding available statewide for future projects. In short, the SRF loan program is overcommitted, and the availability of funds for wastewater projects may be limited. The second meeting held that day was with the Deputy Director of the Division. He confirmed the early meeting discussion that the SRF loan program may not have sufficient funds for future projects. However, he also was very helpful in providing potential other funding sources the District may avail itself of, in the event a SRF loan (or funding) are not available. Staff is considering various options for funding the Redundancy Project, and will likely be coming to the Board in the near future with options.

- **Satellite Water Resource Recovery Facilities Grant** – The Board approved a re-scoping of this grant funded project at its March 30, 2016. Regular monthly meetings are held with the consultant and City of Arroyo Grande staff, where project schedule, milestone and progress on report components are discussed. *Staff and Arroyo Grande staff met with WSC staff at their office in SLO on September 3rd, to further discuss and further refine various on-site and off-site recycling locations. In addition, on August 30th, District staff met face to face in Sacramento with the SWRCB's grant project manager to discuss the re-scoping of this study, its deliverable schedule, and overall purpose of the study in conjunction with ongoing regional recycling efforts in south San Luis Obispo County.*
- **Energy Cost Reduction/Conservation Project, Co-Generation Unit** – Staff continue to work with representatives of PG&E, MKN and Enviser on the feasibility of a co-generation

system at the District's facility. Significant benefits of a co-generation system may include future saving on facility electricity costs, and a reduced carbon footprint (eliminated flare)/greenhouse gases. *On August 30th, the District's Plant Superintendent attended and was provided a tour of a similar PG&E co-generation project recently constructed and operating at the City of San Luis Obispo WWTP.*

- ***District Control Building and Office*** – Significant issues and problems are evident in the District's Operational and Administrative Building. Identified issues include: Strong and persistent odors, noise and disruption from brine disposal trucks, multiple leaks in the ceiling/roof, mold, old desks and chairs (some decades old), old and stained carpets and flooring, infestation of pests, bubbling and peeling paint, break room/kitchen deterioration, identified leaks in the indoor plumbing, insufficient and overlapping utilization of space for administration vs. operations, IT integration, file storage, and others.

At the July 6th Board meeting, the Board approved work to repair the Building's HVAC Ductwork and Bathroom. *Work on the bathroom reconstruction was not completed the past two weeks as expected, and continues to be very disruptive to the administrative work area. Work on the HVAC has yet to begin.*

On August 11th, a temporary construction trailer for administrative staff was delivered to the plant site, adjacent to the C-Train (containing a majority of the District's files). Power to the trailer is expected to be installed by end of the week with phone service expected next week. Furniture has been ordered and expected to arrive September 1st. Among many uses anticipated for the space within the construction trailer, it is also expected to facilitate our future records management initiative.

Regional Efforts

- Arroyo Grande Watershed MOU Group – In 2006, various parties, including the District entered into a Memorandum of Understanding. The purpose of this watershed group is to develop programs and policies for the maintenance, protection, and enhancement of Arroyo Grande Watershed and creeks within the Watershed. The next meeting is scheduled tentatively for late September.
- Zone 1-1A Flood Control Advisory Committee – The Committee is focused on the goal to provide input and coordination on proposed improvement and maintenance of the Zone 1/1A flood facilities, working with the Coastal San Luis Resource Conservation District. At the June 15th Board meeting, the Board approved District staff participation. *On August 16th, the District's Plant Superintendent attended this Committee meeting, with topics including an update to the Arroyo Grande Creek annual channel maintenance, Waterway Management Program projects, and annual budget.*
- Integrated Water Resource Management (IRWM) – Integrated Regional Water Management (IRWM) is a collaborative effort with the County of San Luis Obispo to manage all aspects of water resources on a region wide scale that:
 - Crosses jurisdictional, watershed, and political boundaries
 - Involves multiple agencies, stakeholders, individuals, and groups
 - Addresses regional issues and differing perspectives of all the entities involved through mutually beneficial solutions.

- Develops multi-benefit solutions

At the July 6th Board meeting the Board approved the District's participation in the IRWM program through adoption of a Resolution and becoming signatory under the existing Memorandum of Understanding. The next meeting is scheduled for September 7th.

- Water Reuse, Central Coast Chapter - The Association is a not-for-profit association (501c6) of utilities, government agencies and industry that advocates for laws, policies and funding to promote water reuse. The Water Reuse Association provides a comprehensive and complementary approach to increasing water reuse in California. *As a reminder an invitation was received for staff and elective officials to visit and tour the Monterey Regional Water Pollution Control Agency's "Pure Water Demonstration Facility" on September 14th.*
- North Cities Management Area Technical Group - The NCMA TG, which includes representatives from the Cities of Arroyo Grande, Grover Beach, Pismo Beach, and the Oceano Community Services District, was formed as a result of the Santa Maria Groundwater Basin (SMGB) Adjudication. This group is exploring various ways to protect and enhance future water supplies in the basin through groundwater monitoring, and the collection and analyzing of data pertinent to water supply and demand. At the meetings, group members share hydrologic and water resources data and information, and water conservation efforts.
- Regional South SLO County Recycling and Countywide Water Action Team/Water Management Efforts: Staff participates in meeting with the City of Pismo Beach, and discusses their efforts with a potential regional recycling project and how might the District participate. In addition, a Countywide Water Action Team has formed, with water managers throughout San Luis Obispo County convening to discuss and collaborate on water supply management solutions, especially in light of the severe drought. *The latest meeting was held August 26th.*
- *Outreach Efforts* – The District Administrator provided a formal presentation on the District and its initiatives to the Arroyo Grande City Council on July 26th, the Oceano CSD on July 27th, and the Regional Water Quality Control Board on July 28th. *Work continues on overhauling the District's website and drafting our first newsletter since 2013. We anticipate rolling out the website by the end of September.*

Superintendent's Report

During this reporting period (August 1st through August 12th) the District's facility continues to regularly meet its Permit Limitations as required under the State of California's National Pollution Elimination Discharge (NPDES) Permit issued to the District. *All process values (lab test results) were within permit limits.* However, on August 2nd we did receive test results for total suspended solids and BOD that were above our monthly permit limits. In the days prior to these unusually high results staff noticed a red colored substance in the influent which continued for over an hour. Staff collected a sample and tested that sample for conductivity and pH. The results were within normal range. Also, on July 1st, as a result of a power outage, the FFR pumps were not pumping for up to an hour, creating a process bypass situation (The Regional Water Board has been notified). All subsequent test results have been typical ranges for this Plant.

Plant Data (Data as Available August 31), 2016

August 2016	INF Flow MGD	Peak Flow MGD	INF BOD mg/L	EFF BOD mg/L	INF TSS mg/L	EFF TSS mg/L	Fecal Coli	Cl2 lbs/day	BOD REM Eff. %
Average	2.30	3.56	462	31	450	32	21	273	93
High	2.48	4.5	506	42	468	53	240	375	
Limit	5.0			40/60/90		40/60/90	2000		80
CY 2015 Monthly									
Average	2.17	3.42	415	29	438	36	67	194	93
High	2.42	4.8	495	43	494	47	255	402	

**Limit – 40/60/90 represent NPDES Permit limits for the monthly average, weekly average, and instantaneous value for plant effluent BOD and TSS.

Operation and Maintenance Projects

- *Cleaned surface of FFR. Collected oil sample for lab testing.*
- *Performed monthly safety inspection.*
- *Installed automated valve for grit removal system.*
- *Had front loader serviced and repaired by Diamond A Inc.*
- *Replaced MCC building exhaust fan motor.*
- *Made electrical connections to office trailer.*
- *Furniture delivered for office trailer.*
- *Replaced Amiad filter screen.*
- *Continued to work on FFR temporary back-up system.*
- *Marked underground service alerts.*
- *Performed various work orders.*
- *Staff met with staff at the city of SLO WWTP to tour and discuss that facility's co-generation unit. Also present were representatives from PG&E, MKN, and G2 Engineers.*

Training

- Staff participated in a plant familiarization training session focused on the Plant's solids handling system.
- Staff participated on a safety training class on fire extinguisher usage.
- Lab Tech/Operator III Fanny M. and OIT Mario D. attended a one-day CWEA training conference at the City of San Luis Obispo WWTP.
- Superintendent John C. and Interim Supervisor Mike A. attended a free two-day training seminar in Bakersfield hosted by Rockwell Automation.
- Operator III Mychal J., Operator III Rick. J, and Operator II Billy R. participated in a training session on operation of the G.I.S. system.

Call Outs

- **No Call outs this period**