

STAFF REPORT

DATE: October 18, 2011

TO: Utilities Commission

FROM: Cari Dale, Water Utilities Director

SUBJECT: **RECOMMEND APPROVAL OF A PROFESSIONAL SERVICES AGREEMENT IN AN AMOUNT NOT TO EXCEED \$51,280 WITH SANCON ENGINEERING OF HUNTINGTON BEACH TO APPLY COATING TO A SECONDARY CLARIFIER AT THE SAN LUIS REY WASTEWATER TREATMENT PLANT**

SYNOPSIS

Staff recommends and the Water/Sewer Committee recommend that the Utilities Commission recommend that the City Council approve a professional services agreement in an amount not to exceed \$51,280 with Sancon Engineering of Huntington Beach, to apply coating to a secondary clarifier at the San Luis Rey Wastewater Treatment Plant, and authorize the City Manager to execute the agreement.

BACKGROUND

The Water Utilities Department has a continuing program of maintenance that identifies equipment that needs to be replaced or rehabilitated. The secondary clarifier at the San Luis Rey Wastewater Treatment Plant that needs coating is 10 years old. During an inspection of the equipment, staff found extensive corrosion in the framework and determined that a protective coating needs to be applied to repair the damage.

ANALYSIS

Water Utilities staff obtained three bids for this work. In accordance with the City's procedure for the bidding process, staff evaluated the bids. After a thorough review of the bid amounts, staff unanimously recommended that Sancon Engineering be selected to apply the coating to the clarifier. The bids were as follows:

Supplier	Bid Amount
Sancon Engineering	\$51,280
Zebron	\$57,850
Jamison Engineering	\$63,275

Staff estimates that the coating of the secondary clarifier will take approximately two to three weeks.

FISCAL IMPACT

The FY 11-12 current available budget for infrastructure repair and maintenance in the San Luis Rey Plant Improvements project (909951000722.5703.10600) is \$226,711 so there are funds to perform this work.

COMMISSION OR COMMITTEE REPORT

The Water/Sewer Committee approved staff's recommendation at its regularly scheduled meeting on October 11, 2011.

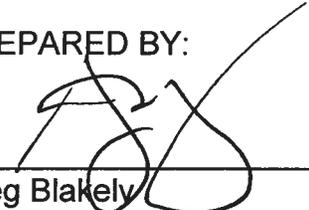
CITY ATTORNEY'S ANALYSIS

The referenced documents have been reviewed by the City Attorney and approved as to form.

RECOMMENDATIONS

Staff recommends and the Water/Sewer Committee recommend that the Utilities Commission recommend that the City Council approve a professional services agreement in an amount not to exceed \$51,280 with Sancon Engineering of Huntington Beach, to apply coating to a secondary clarifier at the San Luis Rey Wastewater Treatment Plant, and authorize the City Manager to execute the agreement.

PREPARED BY:



Greg Blakely
Administration Manager

STAFF REPORT

DATE: October 18, 2011

TO: Utilities Commission

FROM: Cari Dale, Water Utilities Director

SUBJECT: **RECOMMEND APPROVAL OF A PURCHASE ORDER IN THE AMOUNT OF \$180,481.25 FOR THE GRANULAR ACTIVATED CARBON SYSTEM FOR TRICHLOROPROPANE REMOVAL AT THE MISSION BASIN GROUNDWATER PURIFICATION FACILITY**

SYNOPSIS

Staff and the Water/Sewer Committee recommends and the Utilities Commission recommend that the City Council approve a purchase order in the amount of \$180,481.25 with Siemens Water Technologies Corporation of La Mirada for the end-of-lease buy-out of the Granular Activated Carbon System for Trichloropropane Removal at the Mission Basin Groundwater Purification Facility.

BACKGROUND

California Department of Health Services regulations required monitoring for Trichloropropane (TCP) in 2003 as part of the California Unregulated Contaminant Rule. TCP was first detected in early 2003 in wells 1, 2, 3, and 9 which are located at the Mission Basin Groundwater Purification Facility. It is also expected to be present in two additional wells, Wells 10 & 11 near the intersection of Mission Avenue and Foussat Road. Wells 4 and 5, which are located on the north side of the San Luis Rey River near College Boulevard, have had no TCP detected.

TCP was formulated with dichloropropanes in the manufacture of a soil fumigant, D-D. Historically, the Mission Basin was a major agricultural area for tomatoes, corn and strawberries, and it is thought the application of these soil fumigants was the source of the contaminant. TCP is also used as a solvent and extractive agent. As a solvent, it has commonly been used as a paint and varnish remover, a cleaning and degreasing agent and a cleaning and maintenance solvent.

The use of all wells with TCP was discontinued in 2003 while staff researched methods to remove TCP. During this period there was no threat to public safety.

In response, the City hired McGuire Malcolm Pirnie Environmental Consultants, Inc., (McGuire) who in 2001, conducted a pilot study at the Mission Basin Groundwater Purification Facility. That resulted in identifying Granular Activated Carbon (GAC) as the treatment technology to remove TCP from the source wells. The GAC treatment was determined to be the most cost-effective treatment option and that treatment, as

opposed to abandoning the wells and finding alternative water sources, is the only feasible solution to the TCP problem under the circumstances.

ANALYSIS

The Mission Basin Groundwater Purification Facility must produce 6.3 MGD to comply with the City's groundwater recovery agreement with the Metropolitan Water District. All of these wells are essential for keeping the plant in operation while other wells are undergoing maintenance and repair. It is also important to have the plant produce as much potable water as possible because the City saves money by having this local resource.

TCP still exists in the source wells and does not appear to be decreasing. The Granular Activated Carbon System provided by Siemens Water Technologies is performing as anticipated for the removal of TCP in compliance with the California Department of Public Health (CDPH (formerly CDHS)) requirements. Staff recommends that the City exercise its option to purchase the equipment for the pre-negotiated buy-out price of \$180,481.25.

FISCAL IMPACT

Since October of 2008, the city has been making payments on leasing the GAC treatment system from Siemens Water Technology Corporation. The final payment was made in late September of 2011. Per the lease agreement terms, the City has the option of purchasing the equipment at a price of \$180,481 or requesting that Siemens disassemble and remove the system at a price of \$92,277.

The Mission Basin Groundwater Purification Facility Expansion Project (908742500710.5703.10700) has an approximate balance of \$1,317,568. Therefore, sufficient funds are available for the Siemens Purchase Order.

COMMISSION OR COMMITTEE REPORT

The Water/Sewer Committee approved staff's recommendation at its regularly scheduled meeting on October 11, 2011.

CITY ATTORNEY'S ANALYSIS

Purchases must comply with bid requirements set forth in Chapter 28A of the City Code. Professional services agreements must be reviewed by the City Attorney and approved as to form.

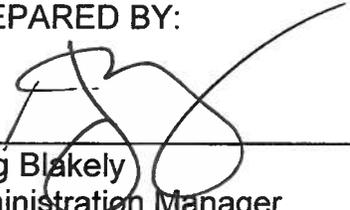
INSURANCE REQUIREMENTS

Does not apply.

RECOMMENDATIONS

Staff and the Water/Sewer Committee recommends and the Utilities Commission recommend that the City Council approve a purchase order in the amount of \$180,481.25 with Siemens Water Technologies Corporation of La Mirada for the end-of-lease buy-out of the Granular Activated Carbon System for Trichloropropane Removal at the Mission Basin Groundwater Purification Facility.

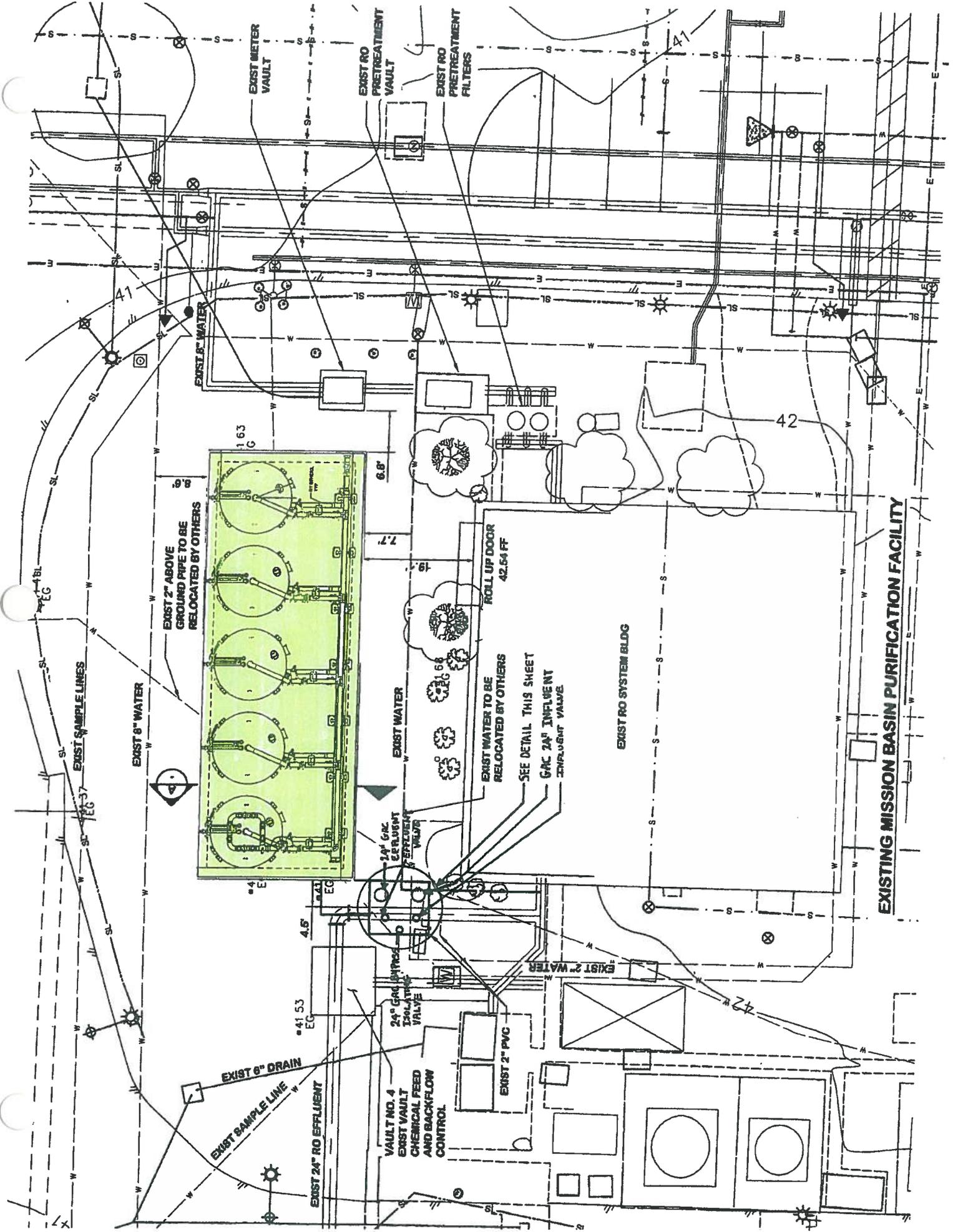
PREPARED BY:



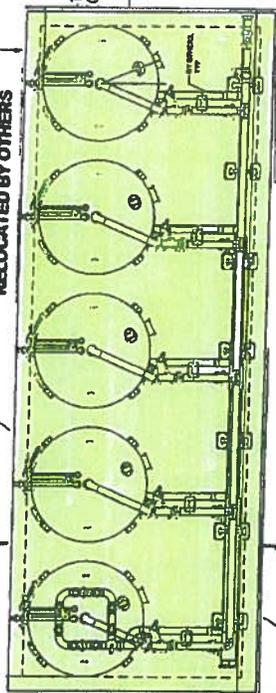
Greg Blakely
Administration Manager

REVIEWED BY:

Exhibit A - Site Map



EXISTING MISSION BASIN PURIFICATION FACILITY



EXIST WATER TO BE RELOCATED BY OTHERS
SEE DETAIL THIS SHEET
GAC 24\"/>

VAULT NO. 4
EXIST VAULT
CHEMICAL FEED
AND BACKFLOW
CONTROL

EXIST 2\"/>

EXIST 8\"/>

EXIST 24\"/>

24\"/>

24\"/>

EXIST WATER

ROLL UP DOOR
42.54 FT

EXIST 8\"/>

EXIST SAMPLE LINES

EXIST METER VAULT

EXIST RO PRETREATMENT VAULT

EXIST RO PRETREATMENT FILTERS

EXIST 8\"/>

EXIST RO SYSTEM BLDG

STAFF REPORT

DATE: October 18, 2011

TO: Water/Sewer Committee

FROM: Cari Dale, Water Utilities Director

SUBJECT: **RECOMMEND ACCEPTANCE OF IMPROVEMENTS CONSTRUCTED BY AMERICAN INDUSTRIAL SERVICES FOR THE CONSTRUCTION OF THE WELL HEAD FACILITIES FOR WELLS 10 & 11 PROJECT**

SYNOPSIS

Staff and the Water/Sewer Committee recommends that the Utilities Commission recommend that the City Council accept the improvements constructed by American Industrial Services for the Well Head Facilities for Wells 10 & 11 project, and authorize the City Clerk to file a Notice of Completion with the San Diego County Recorder.

BACKGROUND

The Mission Basin Groundwater Purification Facility, located at 215 Fireside Drive, was originally constructed and put into operation in 1994. The original facility produced 2.2 million gallons per day (mgd) of potable water from brackish groundwater by use of a reverse osmosis treatment process. A subsequent expansion project was to bring the capacity of the plant up to 6.37 mgd. This expansion, accepted by Council in February 2003 consisted of three additional production wells, nine monitoring wells, a high and low pump station an additional reverse osmosis train and other infrastructure-related work. All work was satisfactorily completed with the exception of the production wells, which when drilled did not produce sufficient quantities for production.

In October 1998, City Council authorized a joint participation agreement between the City of Oceanside, San Diego County Water Authority (SDCWA) and the Metropolitan Water District (MWD) for participation in the Groundwater Recovery Program (GRP). As part of the GRP study, SDCWA has drilled 11 exploratory wells to map the Basin for possible future use. As part of the drilling project, Oceanside had the SDCWA analyze up to five sites with an emphasis on three that can replace the poorly performing well sites 6, 7 and 8. Three of the sites are within a mile of the Mission Basin Groundwater Facility with one being on the plant site. Well site 9 at the plant site was drilled by the SDCWA and during the test pumping produced up to 2,220 gallons per minute. Construction of the wellhead facilities for Well 9 was completed in June of 2008 and began producing water shortly after construction was completed. The other two sites, well sites 10 and 11, adjacent to Fire Station 7 were later drilled by the SDCWA.

On December 10, 2008, the City Council approved the plans and specification for the construction of the Well Head Facilities for Wells 10 and 11 project and authorized the City Engineer to call for bids.

On September 15, 2009, eight bids were received and opened for the Well Head Facilities for Wells 10 and 11 project. The apparent low bidder was Pascal and Ludwig Constructors with a bid of \$1,347,293, shortly after the bids were received and within the requirements outlined in the Bid Documents, Pascal and Ludwig Constructors requested to withdrawal their bid. Staff reviewed the request and circumstances thereof and approved the withdrawal. The next lowest bidder is American Industrial Services of Escondido with a bid of \$1,529,471.

On November 18, 2009 City Council awarded the project to American Industrial Services and the Notice to Proceed was issued on January 20, 2010.

ANALYSIS

Construction began shortly after the notice to proceed was issued on January 20, 2010; per the contract documents, the project was to be completed by July 14, 2011

Shortly after work commenced on the Project, claims were made to the City via Public Work Stop Notices by 11 different subcontractors or suppliers. The City has held money pursuant to California Civil Code section 3186 upon receipt of the Stop Notices in the total amount of \$493,393.95, which represents 125% of the sum of the Stop Notices. Two of the subcontractors/suppliers have each commenced litigation in California Superior Court, San Diego County, North County Division, to enforce their respective stop notice claims. The City Attorney is working with the Contractor to facilitate the closing of the contract through unconditional lien releases and requests for dismissal of litigations.

Throughout the course of construction, American Industrial Services was issued 5 working days of time extension due to inclement weather therefore extending the contract completion date to July 21, 2011. Construction was complete on September 20, 2011; 61 days beyond the contract completion deadline. The contract allows for the deduction of liquidated damages in the amount of \$1500.00 per calendar day; this equates to a total deduction of \$91,500.00. Staff is recommending that liquidated damages be assessed and the amount has been included in the closing change order.

Closing Change Order #2 includes additional work requested by the City, a bid unit quantity adjustment, costs associated with a City Encroachment Permit, and the assessment of liquidated damages.

A final inspection has been performed and it was determined that the well head facilities for Wells 10 & 11 have been constructed per the plans and specifications.

FISCAL IMPACT

The Mission Basin Desalter Facility Expansion fund (908742600712.5703) has a balance of \$816,000. The final payment due including the change orders will be \$424,270.29; therefore sufficient funds are available.

CITY ATTORNEY'S ANALYSIS

The referenced documents have been reviewed by the City Attorney and approved as to form.

INSURANCE REQUIREMENTS

Does not apply

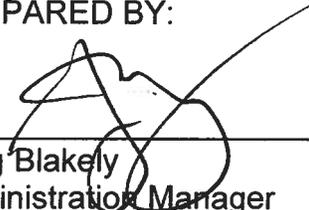
COMMISSION OR COMMITTEE REPORT

The Water/Sewer Committee approved staff's recommendation at its regularly scheduled meeting on October 11, 2011.

RECOMMENDATIONS

Staff and the Water/Sewer Committee recommends that the Utilities Commission recommend that the City Council accept the improvements constructed by American Industrial Services for the Well Head Facilities for Wells 10 & 11 project, and authorize the City Clerk to file a Notice of Completion with the San Diego County Recorder.

PREPARED BY:



Greg Blakely
Administration Manager

STAFF REPORT

DATE: October 18, 2011

TO: Utilities Commission

FROM: Cari Dale, Water Utilities Director

SUBJECT: **RECOMMEND APPROVAL OF A PROFESSIONAL SERVICES AGREEMENT WITH CAROLLO ENGINEERS, INC. FOR THE SAN LUIS REY WASTEWATER TREATMENT PLANT DIGESTER CLEANING AND REPAIR DESIGN SERVICES**

SYNOPSIS

Staff and the Water/Sewer Committee recommends that the Utilities Commission recommend that the City Council approve a professional services agreement with Carollo Engineers, Inc. of Oceanside in the amount of \$19,110 for San Luis Rey Wastewater Treatment Plant Digester Cleaning and Repair Design Services, and authorize the City Manager to execute the agreement (Exhibit A).

BACKGROUND

The San Luis Rey Wastewater Treatment Plant (SLRWWTP) was initially constructed in the early 1970s. There have been several expansions and upgrades to the plant over the past 35 years.

Wastewater treatment plant digesters require periodic cleaning to maintain proper treatment levels. Digester 1 at the San Luis Rey Wastewater Treatment Plant has not been cleaned for over 15 years. It is estimated that 10 feet of grit and other materials have settled in the bottom of the digester must be removed and the digester cleaned. There are also a small amount of ancillary piping modifications and repairs required to the digester in order to maintain its treatment effectiveness.

ANALYSIS

On September 9, 2011, a Request for Proposals (RFP) for the preparation of cleaning specifications and repair plans was sent to eight qualified firms that were listed on the Water & Wastewater Consultant List provided by the Public Works—Engineering Division.

On September 21, 2011, the Water Utilities Department received proposals from two of the eight consulting firms; staff performed a review of the proposals for accuracy and completeness and rated the consultants based on qualifications, performance of work, ability to provide services, quality of proposal, work performance for the City and cost. Staff has determined that the Carollo Engineers proposal includes the required items as

outlined in the RFP. This contract award is being brought forward for Council approval since the cumulative total for Carollo's projects is over \$50,000.

FISCAL IMPACT

The Fiscal Year 11-12 adopted budget for the San Luis Rey Digester Rehabilitation fund (909123100722) has a balance of \$275,000. The Professional Services Agreement is in the amount of \$19,110; therefore, adequate funds are available for the project.

INSURANCE REQUIREMENTS

The City's standard insurance requirements will be met.

COMMISSION OR COMMITTEE REPORT

The Utilities Commission will review staff's recommendation at its regularly scheduled meeting on October 18, 2011.

CITY ATTORNEY'S ANALYSIS

The referenced documents have been reviewed by the City Attorney's office and approved as to form.

RECOMMENDATIONS

Staff and the Water/Sewer Committee recommends that the Utilities Commission recommend that the City Council approve a professional services agreement with Carollo Engineers, Inc. of Oceanside in the amount of \$19,110 for San Luis Rey Wastewater Treatment Plant Digester Cleaning and Repair Design Services, and authorize the City Manager to execute the agreement (Exhibit A).

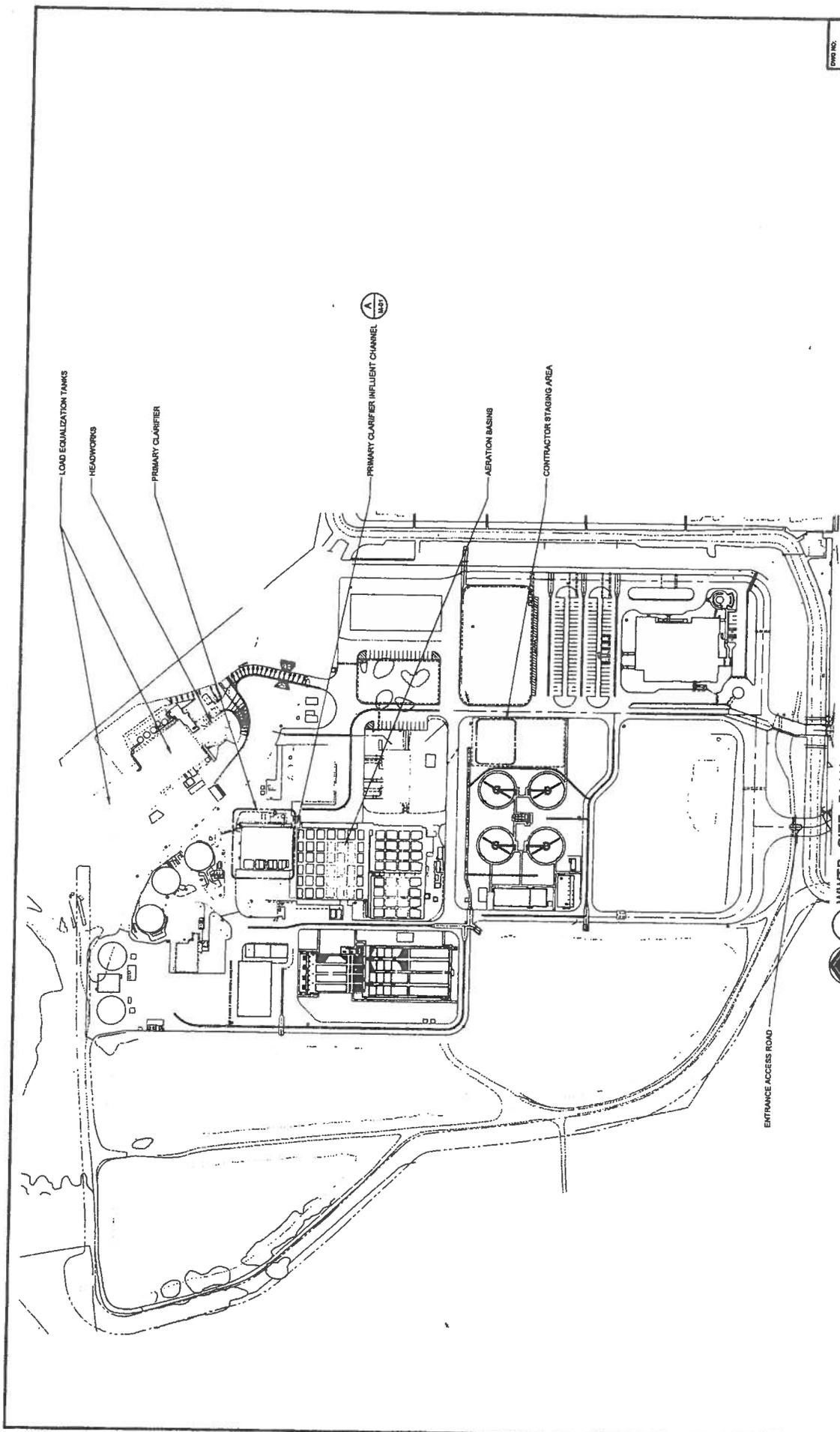
PREPARED BY:



Greg Blakely
Administration Manager

REVIEWED BY:

Exhibit A: Site Map



SHEET NO. 0-03
 CITY OF COVINGTON
 WASTEWATER TREATMENT PLANT
 INFLUENT CHANNEL REPAIR
 SITE PLAN
 DATE: 11/11/10
 DRAWN BY: [Signature]
 CHECKED BY: [Signature]
 SCALE: AS SHOWN
 PROJECT NO. 10-0000
 FILE: 10-0000-01

DESIGNED BY	DATE
CHECKED BY	DATE
SCALE	DATE
PROJECT NO.	DATE
FILE NO.	DATE

WWTP SITE PLAN
 SCALE: 1" = 100'
 FILE: 10-0000-01

carollo
 Engineers...Working Wonders With Water™

PROJECT NO. 10-0000
 DESIGNED BY: [Signature]
 CHECKED BY: [Signature]
 SCALE: AS SHOWN
 PROJECT NO. 10-0000
 FILE: 10-0000-01

APPROVED CHANGE: [Signature]
 DATE: [Date]

PROFESSIONAL ENGINEER
 STATE OF MISSISSIPPI
 No. 10000
 DATE: 11/11/10

DESIGNER: [Signature]
 DATE: 11/11/10

STAFF REPORT

DATE: October 18, 2011
TO: Utilities Commission
FROM: Cari Dale, Water Utilities Director
SUBJECT: **RECOMMEND INTRODUCTION OF AN ORDINANCE AMENDING CHAPTER 29 OF THE OCEANSIDE CITY CODE BY ESTABLISHING BRINE LINE DISPOSAL RATES**

SYNOPSIS

Staff and the Utilities Commission recommend that the City Council introduce an ordinance amending Chapter 29 of the Oceanside City Code by establishing brine line disposal rates (Exhibit A); and direct staff to implement the rates.

BACKGROUND

The City of Oceanside engaged Financial Consulting Solutions Group (FCS Group) to develop usage charges for the City's brine line. The pipeline currently conveys brine waste to the ocean outfall originating at the La Salina Treatment Plant. Currently, there is not a rate for the brine line. The proposed usage charges consist of two components:

1. **Capital Cost Component:** A charge to recover a proportionate share of the system's annual depreciation based on flow capacity.
2. **Operations Cost Component:** An O&M charge to recover a proportionate share of outfall pumping costs based on actual monthly flows.

ANALYSIS

Capital Cost Component

The capital cost component of the usage charge is designed to recover the cost of replacing the system and the end of its useful life. Annual replacement costs are based on straight-line depreciation. There are two customers that currently use the brine line; the city of Oceanside and a customer in the Ocean Ranch business park. Under the proposed rate structure, each customer would be responsible for funding depreciation on their individual segments, as well as a proportionate share of the depreciation for the shared segment.

The total system reproduction cost associated with brine disposal was estimated to be \$19.1 million, in 2011 dollars. Assuming an average useful life of 50 years, the annual depreciation was equal to \$382,268 and is allocated to customers as shown below:

	City of Oceanside	Ocean Ranch
Total Reproduction Cost:	\$16,435,421	\$2,678,00
Annual Depreciation	\$328,708	\$53,560
Monthly Fixed Rate:	\$27,392	\$4,463

Operations Cost Component

The Operations cost component of the usage rate recovers the cost of pumping the brine discharge through the La Salina ocean outfall. The proposed rate for Operations costs is variable and like the rate for water usage, will depend on the use by the customer. For this rate, the amount charged every month will be dependent on the amount of brine discharged. The proposed rate for the monthly Operations cost is \$1,229 per million gallons of brine. The monthly anticipated rates are summarized below:

	Estimate Based on 1.6 MG of flow	Estimate Based on 0.1 MG of flow
	City of Oceanside	Ocean Ranch
Monthly Operations Rate (\$1,229/MG)	\$1966	\$123
Monthly Fixed Rate:	\$27,392	\$4,463
Monthly Total:	\$29,358	\$4,586

It is anticipated that future brine line rate updates will be completed concurrently with updates to the water and sewer rates.

FISCAL IMPACT

The user rates and charges will generate \$407,328 revenue annually for the sewer fund. This amount is adequate to cover ongoing operations costs associated with brine disposal as well as future anticipated rehabilitation and replacement costs for the brine pipeline.

CITY ATTORNEY’S ANALYSIS

The ordinances have been reviewed by the City Attorney and approved as to form. Absent a majority protest pursuant to Proposition 218, brine line rates are authorized by Health and Safety Code Section 5471 upon adoption of an ordinance approved by two-thirds (four councilmembers) of the members of the City Council.

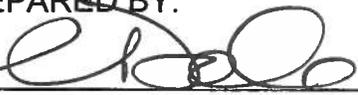
INSURANCE REQUIREMENTS

Does not apply.

RECOMMENDATIONS

Staff and the Utilities Commission recommend that the City Council introduce an ordinance amending Chapter 29 of the Oceanside City Code by establishing brine line disposal rates (Exhibit A); and direct staff to implement the user rates.

PREPARED BY:



Cari Dale
Water Utilities Director