

Engineering Services Key Activities for the Month of January 2007

Summary

- Recent Events
- Skinner Area Project:
 Skinner Water Treatment Plant Expansion No. 4
- Integrated Area Studies
- Supply and Delivery Reliability:

Central Pool Augmentation Tunnel Geotechnical Feasibility Inland Feeder Program Mills Water Treatment Plant Capacity Upgrade

• Infrastructure Reliability:

Jensen Water Treatment Plant Improvements Program Skinner Water Treatment Plant Improvements Program

• Water Quality:

Oxidation Retrofit Program

Regulatory:

Chlorine Containment and Handling Facilities CRA Discharge Containment Program

Attachments

Monthly Progress Report of Construction and Procurement Contracts for December 2006.

Detailed Report

This report details key engineering activities for the month January 2007.

RECENT EVENTS:

- The Jensen Water Treatment Plant and Foothill Feeder pipeline shutdowns began on January 14, 2007 and concluded on Monday, January 29, 2007. Three prestressed concrete cylinder pipe (PCCP) segments with a diameter of 201-inches were repaired by two different contractors. Two pipe segments were repaired using carbon fiber technology and the remaining pipe segment was replaced with a welded steel pipe. The shutdown required a seven-hour extension to install an internal seal band in the Foothill Feeder to repair a leak that was discovered during the repairs.
- Lake View Siphon and Freda Siphons Numerous wet spots were observed on the ground surface near the Lakeview and Freda Siphons on January 20, 2007. The likely cause of the leaks is the unusually cold weather, which caused the concrete pipe to shrink and hairline cracks to develop. After the Lakeview Siphon was dewatered, an internal inspection revealed 19 leaky cracks. Repair of the Lakeview Siphon is scheduled for February 2007. The Freda Siphon will be inspected and repaired in March, during a scheduled shutdown of the Colorado River Aqueduct (CRA).

Recent Events (cont.):

- Perris Valley Pipeline A tentative agreement has been reached with Northwest Pipe Company and
 Metropolitan on terms regarding pipe procurement for the Perris Valley Pipeline. A tentative agreement has
 also been reached with Black & Veatch on terms for the close-out of the canceled design-build effort.
 Western Municipal Water District, under the terms of the reimbursement agreement, adopted resolutions of
 necessity for two parcels required for construction of the North Reach.
- Lake Perris Dam Seismic Assessment On January 26, 2007, the Department of Water Resources (DWR) announced it will begin additional geologic exploration along the base of Perris Dam. The information gathered from this work will provide DWR with a better understanding of subsurface soil and water conditions needed to design the repair for the dam. The exploration studies and topographic surveys will make take about three months to complete.

Skinner Area Project:

Skinner Water Treatment Plant Expansion No. 4: This program includes construction of a new 110-mgd water treatment module (Module No. 7) and supporting facilities. In order to expedite construction of the expansion, the work is being completed under multiple construction contracts.

- The Washwater Reclamation Plant No. 3 construction, which is part of the ORP construction contract, is complete.
- Module No. 7 construction is approximately 97 percent complete and is scheduled to be completed in April 2007 (Figure 1).
- The Chemical Systems Modifications work is approximately 76 percent complete and is scheduled to be completed in June 2007.

The overall program is on schedule and is within budget.



Figure 1: Module No. 7

Integrated Area Studies:

Work continues on the Integrated Area Studies (IAS) for the Riverside/San Diego and the Central Pool areas. These studies are investigating alternative strategies for meeting future demands in both areas. During January, a joint Central Pool and Riverside/San Diego IAS meeting was held to continue policy discussions on facility implementation, service connections on key conveyance systems, and reliability (Figure 2). In addition, a workshop was held to begin developing potential project portfolios for the Riverside/San Diego area.



Figure 2: Joint Central Pool and Riverside/San Diego IAS meeting

Supply and Delivery Reliability:

Central Pool Augmentation Tunnel Geotechnical Feasibility: In June 2006, the Board appropriated \$4.95 million and authorized geotechnical and geological investigations along the Cleveland Tunnel alignment, to assess the economic feasibility of the approved tunnel alignment through the Cleveland National Forest. Staff completed negotiations with two geotechnical firms in December and received permits from the United States Forest Service (USFS) to conduct the work. The geotechnical firms began to mobilize their equipment in January at bore sites B-1 (Figure 3) and B-2. Site B-1 is closest to the eastern portal and the boring is planned to be approximately 2,200 feet deep. In response to some misleading news reports that indicated Metropolitan was conducting these borings for the Riverside and Orange county transportation agencies, some environmental groups came out in opposition to this work. Metropolitan met with the groups in late January to clarify the purpose and scope of the investigations and to minimize any delays in the work already approved by USFS. The USFS is opposed to delaying this work as it may push completion into the fire season and create schedule problems for their staff that will monitor this work. Drilling operations are scheduled to begin at both sites in February. Preliminary results of the geotechnical investigations are scheduled for early 2007.

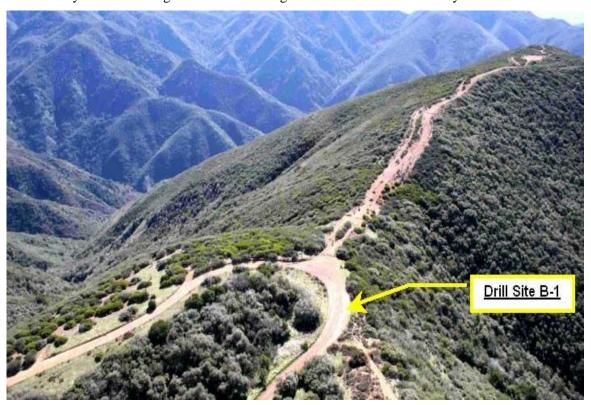


Figure 3: Location of Drill Site B-1

Supply and Delivery Reliability (cont.):

Inland Feeder Program: The program consists of 44 miles of pipeline and tunnels that will enable Metropolitan to convey up to 1,000 cubic feet per second of State Water Project supplies from Devil Canyon Afterbay. Eight of nine construction contracts have been completed. Recent activities include the following:

- Arrowhead East Tunnel The contractor hand excavated around the Tunnel Boring Machine (TBM) in an effort to free the stuck machine (Figure 4). On January 15th, the contractor was successful in freeing the machine and it was able to advance 45 feet. Through January 15th, the TBM has advanced a total of 16,375 feet (73 percent of the total length).
- Arrowhead West Tunnel Through January 15th, the TBM advanced a total of 245 feet. The total length of tunnel mined to date is 8,795 feet (44 percent of the tunnel's length).

The program is expected to be completed within the Board-approved budget of \$1.186 billion.



Figure 4: Crew hand excavation above Arrowhead East TBM shield

Supply and Delivery Reliability (cont.):

Mills Water Treatment Plant Capacity Upgrade: This program will upgrade specific components of the Mills plant to match the plant's hydraulic capacity of 326 mgd. The program consists of four projects. Recent activities include the following:

- Ozone Contactors Nos. 3 and 4 Under the completed Mills ORP, Ozone Contactors Nos. 1 and 2 were installed with a combined capacity of 160 mgd. To increase the ozonation capacity to 326 mgd, two new ozone contactors are required. Advertisement for bids is scheduled for February 2007. The projected completion date for the new contactors is mid-2009.
- Modules Nos. 1 and 2 Rehabilitation To fully upgrade the Mills plant, Modules Nos. 1 and 2 will be rehabilitated and returned to service. In conjunction with the rehabilitation of these modules, the post-filter disinfection system will be upgraded. Final design is underway and is scheduled to be completed by December 2007. Construction is scheduled to be completed for Modules Nos. 1 and 2 by 2009. Figure 5 shows existing mixing equipment that will be rehabilitated as part of this project.
- <u>Solids Handling Upgrade</u> A study is underway to assess whether operational changes, upgrades of the lagoons, and/or new facilities (mechanical dewatering equipment and storage) are required to reliably treat the plant's full 326 mgd capacity. The study is scheduled to be completed by March 2007.
- <u>Chemical System Capacity Upgrades</u> Portions of the existing chemical facilities will be upgraded to support the full 326 mgd plant capacity. Final design is scheduled to be completed by December 2007. Construction is scheduled to be completed for the upgraded chemical facilities in 2009.

The program is on schedule to restore hydraulic capacity in 2009 and is within budget.



Figure 5: Modules Nos. 1&2 mixing equipment to be rehabilitated

Infrastructure Reliability:

Jensen Water Treatment Plant Improvements Program: This program was initiated to maintain reliability and to improve operating efficiency of the Jensen plant through specific improvement projects. The program currently contains 18 projects. Recent activities include the following:

- <u>Washwater Pump Modifications Phases 1 and 2</u> Final design for Phase 1 is scheduled to be completed by June 2007. Final design for Phase 2 will commence after the start-up and operation of Phase 1.
- <u>Reactivate Mixing and Settling Basins</u> Construction is on hold pending the settlement of environmental issues associated with disposal of the old sealant material.
- Solids Handling Facility Preliminary design is scheduled to be completed in February 2007.
- <u>Solids Thickener Capacity Increase</u> Two new solids thickeners are under design to increase solids processing capacity. Final design is 90 percent complete and is scheduled to be completed by June 2007.
- Module No. 1 Filter Valve Refurbishment Four valves will be replaced in early 2007. The four removed valves will be inspected and evaluated to determine if the remainder of the valves may be refurbished or must be replaced. Subsequent to these findings, a mid-2007 Board action is planned to authorize refurbishment or procurement of replacement valves for the remaining Module 1 filter valves. Figure 6 shows one of the valves to be replaced.
- <u>Alum-to-Polymer Tank Conversion</u> Preliminary design is scheduled to begin in June 2007 for the conversion of the plant's existing unused alum tank to polymer service.

The program is on schedule and is within budget.



Figure 6: One of the Module No. 1 filter valves to be replaced

Infrastructure Reliability (cont):

Skinner Water Treatment Plant Improvements Program: This program was initiated to maintain reliability and improve the operating efficiency of the Skinner plant through specific improvement projects. The program currently contains 20 projects. Several projects within this program are being executed under construction contracts within the Skinner Expansion No. 4 Program. Recent activities include the following:

- <u>Dry Polymer System Control Panel Replacement</u> The project will replace three existing control panels in the Dry Polymer Building. Construction is scheduled to be completed by February 2007 to coincide with the Chemical Systems Modifications contractor's schedule.
- <u>Electrical Buildings Upgrade</u> The project will include replacement of electrical equipment and installation of air conditioning systems and insulation in twelve electrical buildings (Figure 7).
 Preliminary design has been completed, and a February 2007 Board action is planned for authorization for final design.
- <u>Ground Fault Protection Upgrade</u> The project will include the upgrade of the ground fault protection system to reduce the potential for plant shutdowns caused by electrical ground faults. Preliminary design has been completed, and a February 2007 Board action is planned for authorization for final design.
- <u>Plant-Wide Replacement of Turbidimeters and Particle Counters</u> The project will replace the existing turbidimeters and particle counters in Modules 1 to 6. The project is 60 percent complete and is scheduled to be completed by June 2007.

The overall program is on schedule and is within budget.



Figure 7: Interior of electrical building

Water Quality:

Oxidation Retrofit Program: This program was established to reduce the level of disinfection by-products in the finished water at all five of Metropolitan's treatment plants in order to meet state and federal drinking water regulations and to remove blend or plant capacity restrictions at the three blend plants. Recent activities include the following:

- <u>Mills Plant</u> The plant's ozone system became fully operational in March 2003. Final design of two additional ozone contactors to upgrade the plant's ozonation system capacity to 326 mgd is approximately 98 percent complete. Advertisement for bids is scheduled for February 2007.
- <u>Jensen Plant</u> The plant's ozone system became fully operational on July 1, 2005.
- <u>Skinner Plant</u> Ozone facilities construction is approximately 42 percent complete.
- Weymouth Plant Final design is near completion. The construction package will be advertised for bids in late February 2007.
- <u>Diemer Plant</u> In preparing the site for the upcoming ozone system, support facilities are being relocated and the south slope stabilization project is underway. Construction of the new Plant Maintenance Facilities is approximately 95 percent complete. Construction of the Vehicle Maintenance Center is approximately 82 percent complete. Construction of Phase I of the Chemical Tank Farm Improvements for the ORP is approximately 82 percent complete. The south slope stabilization construction is approximately 35 percent complete, with preparations underway for an upcoming plant shutdown and piping tie-in (Figure 8). The slope stabilization project is scheduled to be completed by March 2008. Final design of the ozone facilities is approximately 88 percent complete.



Figure 8: Diemer south slope stabilization

Regulatory:

Chlorine Containment and Handling Facilities Program: This program includes design and construction of facilities to handle and contain chlorine to minimize the possibility of a chlorine leak. Recent activities include the following:

- <u>Diemer and Weymouth Plants</u> The Diemer and Weymouth projects were completed in 2002 and 2005, respectively, and are fully operational.
- <u>Jensen Plant</u> Construction of the chlorine containment facilities is 10 percent complete.
- <u>Mills Plant</u> Construction of the chlorine containment facilities is 25 percent complete. Figure 9 shows the installation of one of two chlorine scrubbers.
- <u>Skinner Plant</u> Construction of the chlorine containment facilities is 65 percent.

The program is on schedule to be completed in 2009 and is within budget.



Figure 9: Mills Plant – Installation of chlorine scrubber

Regulatory (cont.):

CRA Discharge Containment Program: The Colorado River Aqueduct (CRA) Discharge Containment Program was established to address waste discharges at the five CRA pumping plants. Recent activities include the following:

- Transformer Oil and Sodium Hypochlorite Containment This project addresses transformer oil issues at all five CRA pumping plants and secondary containment of diesel fuel and sodium hypochlorite at the Intake Pumping Plant. Figure 10 shows the sodium hypochlorite unloading pad that will provide chemical spill containment at the Intake Pumping Plant. Construction at Intake Pumping Plant is approximately 90 percent complete and is scheduled for completion by March 2007.
- <u>Desert Septic System Study</u> This project will assess the aging pipes and leach fields at all five CRA pumping plants. The study will provide recommendations for repair and rehabilitation to avoid potential spills of sewage. Preliminary engineering for this study is scheduled to be completed in June 2007.

The program is on schedule to be completed in fiscal year 2008 and is within budget.



Figure 10: Intake Pumping Plant's new unloading pad for sodium hypochlorite

MONTHLY PROGRESS REPORT OF CONSTRUCTION AND PROCUREMENT CONTRACTS December 2006

(Progress Through December 25, 2006)

Summary of Progress								
Construction Related Procurement								
Number of Contracts	30	4						
Total Bid Amount of Contracts in Progress	\$ 1,057,315,496	\$ 34,985,764						
Number of Contracts Awarded This Month	1	0						
Total Bid Amount of Contracts Awarded This Month	\$ 154,499	\$ -						
Contract Gross Earnings This Month*	\$ 31,733,440	\$ 373,520						

*Note: Earnings reflected in this report represent the value of the work performed by the contractor through the 25th day of the month. Earnings include contract retention and other similar deductions from amounts earned by the contractor but otherwise required to be withheld by Metropolitan by law or by contract. Further, payments are made in the month following the performance of the work. For these reasons, contract payments reflected in Metropolitan's financial system will be less than the earnings shown in this report until the final payment has been made to the contractor.

Contracts Awarded This Month

Contract No. 1644, Joseph Jensen Water Treatment Plant Filter Valve Replacement, in the amount of \$154,499, was awarded to Brutoco Engineering & Construction, Inc. The work consists of the removal and replacement of four existing butterfly valves located on Basin 16 of Module 1.

Contracts Completed This Month

Contract No. 1625, Joseph Jensen Water Treatment Plant Elevator Rehabilitation, was completed on December 11, 2006, and the notice of completion was recorded on December 15, 2006.

Contract No. 1639, San Diego Canal Rehabilitation Phase I, was completed on December 6, 2006, and the notice of completion was recorded on December 7, 2006.

Summaries/Status of Contracts

The summaries/status of current construction and construction-related procurement contracts are provided on the following pages.

(Progress Through December 25, 2006)

Summary of Construction Contracts (Page 1 of 2)

Cont. No.	Spec. No.	Feature	Contractor	Co	ontract Amount	Ea	rnings This Month	Earnings To Date	Net Extra Work To Date	Start Date	Contract Completion Date	Estimated Completion Date	Estimated Percent Complete
		Inland Feeder Contract			Projected Cost to Complete								
1542	1437	Arrowhead Tunnels Project ¹	J. F. Shea Const Inc/Kenny Const Co., JV	\$	397,000,000	\$	5,435,956	\$ 202,260,734	N/A	8/2/02	9/15/10	9/10	51%
			Inland Feeder Totals	\$	397,000,000	\$	5,435,956	\$ 202,260,734	\$ -				
		Miscellaneous Contracts			Bid Amount								
1589	1492	Weymouth Water Treatment Plant Solids Handling Facilities	Brutoco Engineering & Construction, Inc.	\$	14,090,000	\$	-	\$ 14,375,774	\$ 285,774	10/20/04	3/30/06	12/06 ²	99%
1593	1489	Skinner Water Treatment Plant Expansion No. 4 Module No. 7	J. R. Filanc Construction Company, Inc.	\$	76,383,645	\$	1,622,005	\$ 77,997,342	\$ 5,184,920	1/5/05	3/19/07	4/07	96%
1598	1479	San Diego Pipeline No. 6 North Reach	J. F. Shea Construction, Inc.	\$	65,806,000	\$	133,574	\$ 65,877,423	\$ 617,569	1/24/05	2/1/07	2/07	99%
1607	1504	Diemer Water Treatment Plant Entrance Relocation, Vehicle Maintenance Center, and Solids Handling Facilities	Brutoco Engineering & Construction, Inc.	\$	29,260,000	\$	1,326,701	\$ 24,353,880	\$ 102,637	6/13/05	3/7/07	3/07	83%
1609	1483	Skinner Water Treatment Plant Oxidation Retrofit Program and Washwater Reclamation Plant No. 3	Shimmick Construction/Obayashi Corp. JV	\$	184,650,000	\$	3,874,446	\$ 76,054,237	\$ 890,667	7/28/05	1/8/09	1/09	41%
1612	1528	Diemer Water Treatment Plant Rehabilitate Filter Surface Wash Headers	Norman A. Olsson Construction, Inc.	\$	1,849,331	\$	54,748	\$ 1,711,798	\$ 68,319	10/12/05	9/25/07	9/07	89%
1613	1533	Diemer Washwater Tank Pumps Replacement	DenBoer Engineering & Construction, Inc.	\$	355,000	\$	1	\$ 145,000	\$ 1	11/9/05	10/23/06	1/07	41%
1614	1505	Diemer Plant Maintenance Facilities	Brutoco Engineering & Construction, Inc.	\$	8,219,000	\$	335,692	\$ 7,747,714	\$ 107,746	11/9/05	3/8/07	3/07	93%
1616	1498	Skinner Water Treatment Plant Chemical Systems Modifications	Kiewit Pacific Co.	\$	109,944,000	\$	7,943,284	\$ 77,626,946	\$ 1,143,550	11/28/05	6/5/07	6/07	70%
1619	1400	Mills Water Treatment Plant Main Entrance Road Realignment and Perimeter Landscaping	Mega Way Enterprises	\$	3,295,000	\$	296,100	\$ 2,128,801	\$ -	1/25/06	7/2/07	7/07	65%
1620	1495	Diemer Water Treatment Plant Chemical System Upgrades	Brutoco Engineering & Construction, Inc.	\$	13,960,000	\$	483,250	\$ 12,747,548	\$ 136,708	1/13/06	5/18/07	5/07	90%
1623	1540	Foothill Feeder Carbon Fiber Liner Repairs	Fibrwrap Construction, Inc.	\$	1,250,000	\$	-	\$ 577,282	\$ -	1/30/06	4/24/07	4/07	46%
1625	1527	Jensen Water Treatment Plant Elevator Rehabilitation	Excel Elevator Services, Inc.	\$	98,500	\$	-	\$ 111,879	\$ 15,379	6/8/06	12/11/06	12/06	100%
1627	1531	Diamond Valley Lake East Recreation Area Searl Parkway Improvements, Phase 2	Griffith Company	\$	6,242,068	\$	233,133	\$ 5,620,712	\$ 39,569	3/27/06	1/9/07	1/07	89%
1628	1517	Mills Water Treatment Plant Chemical System Upgrades	J. R. Filanc Construction Co., Inc.	\$	19,914,600	\$	1,065,363	\$ 5,591,342	\$ 2,799	5/2/06	2/4/08	2/08	28%

¹ Earnings for this project are as of November 25, 2006.

² Time extension pending.

Summary of Construction Contracts (Page 2 of 2)

Cont. No.	Spec. No.	Feature	Contractor	Cor	Contract Amount		Earnings This Month		Earnings To Date	Net Extra Work To Date		Start Date	Contract Completion Date	Estimated Completion Date	Estimated Percent Complete
		Miscellaneous Contracts			Bid Amount										
1631	1535	Diemer Water Treatment Plant Site Preparation for Oxidation Retrofit Program	Kiewit Pacific Co.	\$	70,516,455	\$	4,529,676	\$	20,506,984	\$	14,822	5/15/06	2/19/08	2/08	29%
1632	1518A	Weymouth Water Treatment Plant Chemical System Upgrades	Brutoco Engineering & Construction, Inc.	\$	3,985,000	\$	314,723	\$	1,074,544	\$	-	6/19/06	11/19/07	11/07	27%
1633	1516A	Jensen Water Treatment Plant Chlorine Containment and Fluoride Project	Brutoco Engineering & Construction, Inc.	\$	19,988,000	\$	559,528	\$	2,296,528	\$	-	8/29/06	6/23/08	6/08	11%
1634	1564	Rialto Pipeline Improvements - Phase 1 Sectionalizing Structures No. 1 and No. 3	J.F. Shea Construction, Inc.	\$	6,109,028	\$	159,910	\$	233,690	\$	-	9/5/06	8/2/07	8/07	4%
1635	1573	Copper Basin Security Fiber Optic Cable Network System	The Fishel Company	\$	529,350	\$	89,196	\$	457,915	\$	-	9/15/06	2/9/07	2/07	87%
1636	1546A	F. E. Weymouth Water Treatment Plant Perimeter Improvements, Phase I	Pima Corp. dba Advanced Construction	\$	2,648,710	\$	335,600	\$	695,600	\$	-	10/24/06	6/12/07	6/07	26%
1637	1488	Intake Pumping Plant Secondary Containment Structures	DenBoer Engineering & Construction, Inc.	\$	541,000	\$	-	\$	467,030	\$	-	10/16/06	7/3/07	2/07	86%
1638	1571	Foothill Feeder Santa Clara Valley Pipeline Repair	Mladen Buntich Construction Co., Inc.	\$	1,841,000	\$	170,000	\$	190,000	\$	-	10/10/06	2/6/07	2/07	10%
1639	1539A	San Diego Canal Rehabilitation Phase I	SEMA Construction, Inc.	\$	2,755,555	\$	2,665,555	\$	2,755,555	\$	-	10/16/06	12/6/06	12/06	100%
1640	1542	Air Release and Vacuum Valve Relocation for Treated Water Pipelines Construction Package No.1	Steve P. Rados, Inc.	\$	2,806,400	\$	30,000	\$	30,000	\$	-	12/18/06	12/28/07	12/07	0%
1641	1561A	Colorado River Aqueduct Siphons, Transitions, Canals, and Tunnels Rehabilitation and Improvements	W.A. Rasic Construction Co., Inc.	\$	10,250,000	\$	75,000	\$	75,000	\$	-	12/11/06	6/28/07	6/07	1%
1642	1543	Air Release and Vacuum Valve Relocation for Treated Water Pipelines Construction Package No.2	PPC Construction, Inc.	\$	1,195,115	\$	-	\$	-	\$	-	1/2/07	10/26/07	10/07	0%
1643	1544	Air Release and Vacuum Valve Relocation for Treated Water Pipelines Construction Package No.3	Abhe & Svoboda, Inc.	\$	1,678,240	\$	-	\$	-	\$	-	1/2/07	10/26/07	10/07	0%
1644	1555	Joseph Jensen Water Treatment Plant Filter Valve Replacement	Brutoco Engineering & Construction, Inc.	\$	154,499	\$	-	\$	-	\$	-	12/21/06	3/19/07	3/07	0%
				\$	660,315,496	\$	26,297,484	\$	401,450,524	\$ 8	,610,459				
		Total Value of Construction	on Contracts in Progress	\$	1,057,315,496	\$	31,733,440	\$	603,711,258	\$ 8	,610,459				

(Progress Through December 25, 2006)

Summary of Construction and Procurement Contracts Completed This Month Pending Final Payment

Cont. No.	Spec. No.	Feature	Contractor	Bid	Amount	_	stimated al Earnings	_	tal Net Value Extra Work	Date Work Accepted	Date Notice of Completion Recorded	Date Final Payment Due
1625	1527	l_, ' _ ,	Excel Elevator Services, Inc.	\$	98,500	\$	111,879	\$	15,379	12/11/06	12/15/06	2/9/07
1639	1539A	San Diego Canal Rehabilitation Phase I	SEMA Construction, Inc.	\$	2,755,555	\$	2,755,555	\$	-	12/6/06	12/7/06	2/4/07

	Summary of Procurement Contracts											
Cont. No.	Spec. No.	Feature	Contractor	E	Bid Amount		nings This Month	Ear	nings to Date	Starting Date	Delivery Date	Remarks
1582	1480	Oxygen/Ozone System Equipment for the Robert A. Skinner Water Treatment Plant Oxidation Retrofit Program	Ozonia North America	\$	8,409,000	\$	-	\$	6,185,084	6/22/04	11/30/08	Payments on this contract are made quarterly
1601	1519	Fabricated Steel Pipe and Fittings for the Robert A. Skinner Water Treatment Plant Oxidation Retrofit Program and Washwater Reclamation Plant No. 3	Ameron International	\$	8,545,000	\$	373,520	\$	7,734,346	3/22/05	03/22/06	Pipe is continuously fabricated and delivered. Estimated completion 3/07.
1622	1515A	Oxygen/Ozone System Equipment for the Robert B. Diemer and F. E. Weymouth Water Treatment Plants Oxidation Retrofit Program	Ozonia North America	\$	15,322,800	\$	-	\$	229,842	2/2/06	6/3/10	Payments on this contract are made quarterly
1624	1552	Butterfly Valves for the Second Lower Cross Feeder, Rialto Pipeline, and the Perris Valley Pipeline	Hughes Water & Sewer Ltd.	\$	2,708,964	\$	-	\$	-	2/21/06	7/3/07	
		Total Value of Procuremer	t Contracts in Progress	\$	34,985,764	\$	373,520	\$	14,149,272			



Contract No. 1542 Specifications No. 1437

Contractor: J. F. Shea Const Inc/Kenny Const Co., JV

Scope of Work:

The project consists of purchasing two tunnel boring machines (TBMs); excavating two 12-foot interior finished diameter tunnels; constructing three portal structures; furnishing and installing a precast concrete segmental liner and a final liner for the Arrowhead West tunnel. Project modified to a cost reimbursable contract effective April 26, 2006.

At a Glance:

Estimated Percent Complete 51%
Estimated Completion Date September 2010

Details:

Projected Cost to Complete \$397,000,000

Earnings To Date \$202,260,734 *

Earnings This Month \$5,435,956 *

Contract Start 8/2/02

Contract Completion 9/15/10

Inland Feeder Program Arrowhead Tunnels Project



Repair of railroad track in Arrowhead West Tunnel

Contract No. 1589 Specifications No. 1492

Contractor: Brutoco Engineering & Construction, Inc.

Scope:

The work consists of upgrading an existing sludge pump station; constructing two gravity thickeners, a new solids dewatering facility building to house three new filter belt presses, a truck loading facility, four solids storage hoppers, and associated work.

99%

280

3/30/06

At a Glance:

Estimated Percent Complete

Percent Extra Work 2.03% **Estimated Completion Date** January 2007 Details: Bid Amount \$14,090,000 Earnings To Date \$14,375,774 Net Extra Work To Date \$285,774 Earnings This Month \$0 Net Extra Work This Month \$0 Contract Start 10/20/04

* Earnings for this project are as of November 25, 2006.

Duration in Working Days

Contract Completion

Weymouth Water Treatment Plant Solids Handling Facilities



System operations inspection

^{**} Time extension pending.

Contract No.	1593
Specifications No.	1489

Contractor: J. R. Filanc Construction Company, Inc.

Scope:

The work consists of construction of a water treatment module, new utilities, a new pumping station, a new electrical switchgear facility, and associated work.

At a Glance:

Estimated Percent Complete 96%
Percent Extra Work 6.79%
Estimated Completion Date April 2007

Details: Bid Amount \$76,383,645 Earnings To Date \$77,997,342 Net Extra Work To Date \$5,184,920 Earnings This Month \$1,622,005 Net Extra Work This Month \$62,099 Contract Start 1/5/05 Duration in Working Days 527 Contract Completion 3/19/07

Skinner Water Treatment Plant Expansion No. 4 Module No. 7



Mechanical piping in cross tunnel

Contract No. 1598 Specifications No. 1479

Contractor: J. F. Shea Construction, Inc.

Scope:

The work consists of the construction of approximately seven miles of fabricated steel pipeline, constructing facility connections, installing butterfly valves, and associated work.

99%

500

2/1/07

At a Glance:

Estimated Percent Complete

Duration in Working Days

Contract Completion

0.94% Percent Extra Work **Estimated Completion Date** February 2007 Details: Bid Amount \$65,806,000 Earnings To Date \$65,877,423 Net Extra Work To Date \$617,569 Earnings This Month \$133,574 Net Extra Work This Month \$375 Contract Start 1/24/05

San Diego Pipeline No. 6 North Reach



Hydroseeding right-of-way along Borel Road

Contract No. 1607 Specifications No. 1504

Contractor: Brutoco Engineering & Construction, Inc.

Scope:

The work consists of construction of gravity thickeners; a solids dewatering facility building; a truck loading facility; elevated solids storage hoppers; a pump station; vehicle maintenance building; and entrance gate facilities.

At a Glance:

Estimated Percent Complete 83%
Percent Extra Work 0.35%
Estimated Completion Date March 2007

Details:

Bid Amount	\$29,260,000
Earnings To Date	\$24,353,880
Net Extra Work To Date	\$102,637
Earnings This Month	\$1,326,701
Net Extra Work This Month	\$0
Contract Start	6/13/05
Duration in Working Days	350
Contract Completion	3/7/07

Diemer Water Treatment Plant Entrance Relocation, Vehicle Maintenance Center, and Solids Handling Facilities



Leak testing of concrete structure for sludge thickeners

Contract No. 1609 Specifications No. 1483

Contractor: Shimmick Construction/Obayashi Corp. JV

Scope:

The work consists of construction of buildings and water treatment structures, washwater reclamation plant, chemical and liquid oxygen facilities, cooling water pump station, power substation, switchgear building, and associated work.

41%

1/8/09

At a Glance:

Estimated Percent Complete

Contract Completion

Percent Extra Work 0.48% **Estimated Completion Date** January 2009 Details: Bid Amount \$184,650,000 Earnings To Date \$76,054,237 Net Extra Work To Date \$890,667 Earnings This Month \$3,874,446 Net Extra Work This Month \$67,289 Contract Start 7/28/05 Duration in Working Days 865

Skinner Water Treatment Plant Oxidation Retrofit Program and Washwater Reclamation Plant No. 3



Coating joint adjacent to inlet valve vault



Contract No. 1612 Specifications No. 1528

Scope:

Contractor:

The work consists of replacement of filter surface wash main piping with stainless steel piping; removal, refurbishment, and reinstallation of existing filter surface wash headers and valves; and seismic upgrading of all pipe supports.

Norman A. Olsson Construction, Inc.

At a Glance:

Estimated Percent Complete 89%
Percent Extra Work 3.69%
Estimated Completion Date September 2007

Details:

 Bid Amount
 \$1,849,331

 Earnings To Date
 \$1,711,798

 Net Extra Work To Date
 \$68,319

 Earnings This Month
 \$54,748

 Net Extra Work This Month
 \$0

 Contract Start
 10/12/05

 Duration in Working Days
 479

 Contract Completion
 9/25/07

Diemer Water Treatment Plant Rehabilitate Filter Surface Wash Headers



Installation of pipe hangers in filters

Contract No. 1613
Specifications No. 1533

Contractor: DenBoer Engineering & Construction, Inc.

Scope:

The work consists of the replacement of existing pumps, motors, check valves, pressure indicators, and reduced voltage motor starters.

41%

10/23/06

At a Glance:

Estimated Percent Complete

Contract Completion

Percent Extra Work 0.00% **Estimated Completion Date** January 2007 Details: **Bid Amount** \$355,000 \$145,000 Earnings To Date Net Extra Work To Date \$0 Earnings This Month \$0 Net Extra Work This Month \$0 Contract Start 11/9/05 **Duration in Working Days** 200

Diemer Water Treatment Plant Washwater Tank Pumps Replacement



Motor control center



Contract No. 1614

Specifications No. 1505

Contractor: Brutoco Engineering & Construction, Inc.

Scope:

The work consists of the construction of a new maintenance building, installation of an electrical substation/transformer, and associated work.

At a Glance:

Estimated Percent Complete 93%
Percent Extra Work 1.31%
Estimated Completion Date March 2007
Details:
Bid Amount \$8,219,000

Earnings To Date \$7,747,714

Net Extra Work To Date \$107,746

Earnings This Month \$335,692

Net Extra Work This Month \$3,657

Contract Start 11/9/05

Duration in Working Days 260

3/8/07

70%

6/5/07

Diemer Water Treatment Plant Plant Maintenance Facilities



Installation of overhead bridge crane

Contract No. 1616 Specifications No. 1498

Contractor: Kiewit Pacific Co.

Estimated Percent Complete

Contract Completion

Contract Completion

Scope:

The work consists of the construction of a chlorine containment and handling facility, water quality monitoring vaults, chemical tank farms, pipe galleries, and new utilities; installation of plant compressed air systems and associated work.

At a Glance:

Percent Extra Work 1.04% **Estimated Completion Date** June 2007 Details: **Bid Amount** \$109,944,000 Earnings To Date \$77,626,946 Net Extra Work To Date \$1,143,550 Earnings This Month \$7,943,284 Net Extra Work This Month \$119,172 11/28/05 Contract Start **Duration in Working Days** 380

Skinner Water Treatment Plant Expansion No. 4 Chemical Systems Modifications



Steel tanks and structural steel at caustic tank farm



Contract No. 1619 Specifications No. 1400

Contractor: Mega Way Enterprises

Scope:

The work consists of constructing a new entrance road, a guard station, new fencing, and landscaping.

At a Glance:

Estimated Percent Complete 65%
Percent Extra Work 0.00%
Estimated Completion Date July 2007

Details:

Bid Amount \$3,295,000
Earnings To Date \$2,128,801
Net Extra Work To Date \$0
Earnings This Month \$296,100
Net Extra Work This Month \$0
Contract Start \$1/25/06
Duration in Working Days \$365
Contract Completion \$7/2/07

Mills Water Treatment Plant Main Entrance Road Realignment and Perimeter Landscaping



Installation of guard station at Alessandro Blvd. main entrance

Contract No. 1620 Specifications No. 1495

Contractor: Brutoco Engineering & Construction, Inc.

Scope:

The work consists of demolition of existing washwater reclamation facility; construction of sulfuric acid feed and storage system and three other chemical storage tanks; and installation of chemical trenches and chemical lines.

At a Glance:

Contract Completion

 Estimated Percent Complete
 90%

 Percent Extra Work
 0.98%

 Estimated Completion Date
 May 2007

 Details:
 Bid Amount
 \$13,960,000

 Earnings To Date
 \$12,747,548

Net Extra Work To Date\$136,708Earnings This Month\$483,250Net Extra Work This Month\$0Contract Start1/13/06Duration in Working Days270

5/18/07

Diemer Water Treatment Plant Chemical System Upgrades



Installation of canopy roof gutter



Contract No. 1623 Specifications No. 1540

Contractor: Fibrwrap Construction, Inc.

Scope:

The work consists of installing layers of carbon-fiber reinforcing liner to the interior surface of the Foothill Feeder at two locations.

At a Glance:

Estimated Percent Complete 46%
Percent Extra Work 0.00%
Estimated Completion Date April 2007
Details:

Bid Amount \$1,250,000
Earnings To Date \$577,282
Net Extra Work To Date \$0
Earnings This Month \$0
Net Extra Work This Month \$0
Contract Start 1/30/06
Duration in Working Days \$80

4/24/07

100%

12/11/06

Foothill Feeder Carbon Fiber Liner Repairs



An example of carbon-fiber reinforcing liner

Contract No. 1625 Specifications No. 1527

Contractor: Excel Elevator Services, Inc.

Scope:

The work consists of complete modernization and rehabilitation of the elevator at the Jensen Administration Building.

At a Glance:

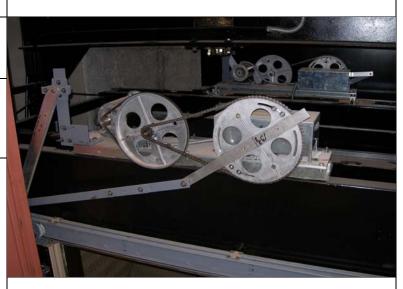
Estimated Percent Complete

Actual Contract Completion

Contract Completion

Percent Extra Work 15.61% Completion Date December 2006 Details: Bid Amount \$98,500 Earnings To Date \$111,879 Net Extra Work To Date \$15.379 Earnings This Month \$0 Net Extra Work This Month \$0 Contract Start 6/8/06 Duration in Working Days 110

Jensen Water Treatment Plant Elevator Rehabilitation



Updated mechanism for door operator

December 2006



Contract No. 1627 Specifications No. 1531

Contractor: Griffith Company

Scope:

The work consists of grading and construction of a new roadway, drainage channel, and associated work.

At a Glance:

Estimated Percent Complete 89%
Percent Extra Work 0.63%

Estimated Completion Date January 2007

Details:

Bid Amount \$6,242,068 Earnings To Date \$5,620,712 Net Extra Work To Date \$39,569 Earnings This Month \$233,133 Net Extra Work This Month \$0 Contract Start 3/27/06 Duration in Working Days 180 1/9/07 Contract Completion

Diamond Valley Lake East Recreation Area Searl Parkway Improvements, Phase 2



Searl Parkway extension

Contract No. 1628
Specifications No. 1517

Contractor: J. R. Filanc Construction Co., Inc.

Scope:

The work consists of construction of new chlorine containment facility including truck unloading and acid storage buildings, evaporator room, injection facility, and chlorine scrubber areas.

28%

0.01%

2/4/08

At a Glance:

Estimated Percent Complete

Percent Extra Work

Contract Completion

Estimated Completion Date February 2008 Details: **Bid Amount** \$19,914,600 Earnings To Date \$5,591,342 \$2,799 Net Extra Work To Date Earnings This Month \$1,065,363 Net Extra Work This Month \$0 Contract Start 5/2/06 Duration in Working Days 360

Mills Water Treatment Plant Chemical System Upgrades



Installation of chlorine scrubber



Contract No. 1631 Specifications No. 1535

Contractor: Kiewit Pacific Co.

Scope:

The work consists of demolition of shop building, underground fuel tanks, and steel pipelines; installation of more than 3,000 feet of steel pipe, motor control center, remote transmitting unit, LPG tank and vaporizer, subdrain systems, and associated work.

At a Glance:

Estimated Percent Complete 29% Percent Extra Work 0.02% **Estimated Completion Date** February 2008 Details:

Bid Amount \$70,516,455 Earnings To Date \$20,506,984 Net Extra Work To Date \$14,822 Earnings This Month \$4,529,676 Net Extra Work This Month \$0 Contract Start 5/15/06 **Duration in Working Days** 445 2/19/08

Diemer Water Treatment Plant Site Preparation for Oxidation Retrofit Program



Plant influent line to be relocated

Contract No. 1632 Specifications No. 1518A

Contractor: Brutoco Engineering & Construction, Inc.

Scope:

The work consists of construction of fluorosilicic acid unloading, storage and injection facilities, steel roof canopies, and associated work.

At a Glance:

Estimated Percent Complete

Contract Completion

Contract Completion

Percent Extra Work 0.00% Estimated Completion Date November 2007 Details: **Bid Amount** \$3,985,000 Earnings To Date \$1,074,544 Net Extra Work To Date \$0 Earnings This Month \$314,723 Net Extra Work This Month \$0 Contract Start 6/19/06 **Duration in Working Days** 360

27%

11/19/07

Weymouth Water Treatment Plant Chemical System Upgrades



New fluoride roof structure installed



Contract No. 1633
Specifications No. 1516A

Contractor: Brutoco Engineering & Construction, Inc.

Scope:

The work consists of construction of new chlorine containment facility, evaporator room, and chlorine scrubber area, new fluorosilicic acid unloading, storage and injection facility, and associated work.

At a Glance:

Estimated Percent Complete 11%
Percent Extra Work 0.00%
Estimated Completion Date June 2008

Details:

Bid Amount \$19,988,000
Earnings To Date \$2,296,528
Net Extra Work To Date \$0
Earnings This Month \$559,528
Net Extra Work This Month \$0
Contract Start 8/29/06
Duration in Working Days 460
Contract Completion \$6/23/08

Joseph Jensen Water Treatment Plant Chlorine Containment and Fluoride Project



Installation of shoring box on top finished water effluent line. Pipe in foreground was relocated

Contract No. 1634
Specifications No. 1564

Contractor: J.F. Shea Construction, Inc.

Scope:

The work consists of removing pre-stressed concrete cylinder pipe; fabricating and installing steel pipe; constructing valve vaults; furnishing a removable bulkhead, and associated work.

At a Glance:

Estimated Percent Complete

Contract Completion

Percent Extra Work 0.00% August 2007 Estimated Completion Date Details: **Bid Amount** \$6,109,028 Earnings To Date \$233,690 Net Extra Work To Date \$159,910 Earnings This Month Net Extra Work This Month \$0 Contract Start 9/5/06 **Duration in Working Days** 230

4%

8/2/07

Rialto Pipeline Improvements - Phase 1 Sectionalizing Structures No. 1 and No. 3



Preparation for shoring installation

SITT ROOKEOU KEI OKT

December 2006

Contract No.	1635
Specifications No.	1573

Contractor: The Fishel Company

Scope:

The work consists of furnishing and installing aerial and underground fiber optic cable and equipment.

At a Glance:

Estimated Percent Complete 87%

Percent Extra Work 0.00%

Estimated Completion Date February 2007

Details:

Bid Amount \$529,350
Earnings To Date \$457,915
Net Extra Work To Date \$0
Earnings This Month \$89,196
Net Extra Work This Month \$0
Contract Start 9/15/06
Duration in Working Days \$100

2/9/07

26%

Copper Basin Security
Fiber Optic Cable Network System



Patch panel at Copper Basin chlorine structure

Contract No. 1636 Specifications No. 1546A

Contractor: Pima Corp. dba Advanced Construction

Scope:

Contract Completion

The work consists of landscape, lighting and irrigation improvements; decorative fencing; and extending paved parking.

At a Glance:

Estimated Percent Complete

Percent Extra Work 0.00% Estimated Completion Date June 2007 Details: **Bid Amount** \$2,648,710 Earnings To Date \$695,600 Net Extra Work To Date \$0 Earnings This Month \$335,600 Net Extra Work This Month \$0 Contract Start 10/24/06 **Duration in Working Days** 160 Contract Completion 6/12/07

F. E. Weymouth Water Treatment Plant Perimeter Improvements, Phase I



Perimeter wall foundation formwork

METROPOLITAN WATER DISTRICT OF SOUTHERN CALIFORNIA

December 2006

Contract No.	1637
Specifications No.	1488

Contractor: DenBoer Engineering & Construction, Inc.

Scope:

The work consists of constructing sodium hypochlorite and diesel fuel delivery truck unloading pads, and eight secondary containment basins for transformers.

At a Glance:

Estimated Percent Complete 86% Percent Extra Work 0.00% **Estimated Completion Date** February 2007 Details: **Bid Amount** \$541,000 Earnings To Date \$467,030 Net Extra Work To Date \$0 Earnings This Month \$0 Net Extra Work This Month \$0 Contract Start 10/16/06

180

7/3/07

Intake Pumping Plant Secondary Containment Structures



Completed containment slab for sodium hypochlorite

Contract No. 1638 Specifications No. 1571

Contractor: Mladen Buntich Construction Co., Inc.

Scope:

The work consists of removal and replacement of prestressed concrete cylinder pipe with welded steel pipe liner.

At a Glance:

Duration in Working Days

Contract Completion

Estimated Percent Complete 10%
Percent Extra Work 0.00%

Estimated Completion Date February 2007

Details:

Bid Amount \$1,841,000

Bid Amount \$1,841,000

Earnings To Date \$190,000

Net Extra Work To Date \$0

Earnings This Month \$170,000

Net Extra Work This Month \$0

Contract Start \$10/10/06

Duration in Working Days \$0

Contract Completion \$2/6/07

Foothill Feeder Santa Clara Valley Pipeline Repair



Installation of temporary shoring system



Contract No. 1639 Specifications No. 1539A

Contractor: SEMA Construction, Inc.

Scope:

The work consists of dewatering canal; removal of existing concrete canal liner and ladders; construction of new subgrade and canal section; spillway backfill; and installation of new ladders.

At a Glance:

Estimated Percent Complete	100%	
Percent Extra Work	0.00%	
Completion Date	December 2006	
Details:		
Bid Amount	\$2,755,555	
Earnings To Date	\$2,755,555	
Net Extra Work To Date	\$0	
Earnings This Month	\$2,665,555	
Net Extra Work This Month	\$0	
Contract Start	10/16/06	

60

12/6/06

San Diego Canal Rehabilitation Phase I



Shotcrete placement at Olive Street siphon

Contract No. 1640 Specifications No. 1542

Contractor: Steve P. Rados, Inc.

Duration in Working Days

Actual Contract Completion

Scope:

The work consists of furnishing new replacement valves, pipes, and fittings for Metropolitan's inventory; removal of existing subsurface vacuum and air release valves; abatement of lead, PCBs and asbestos-containing material inside subsurface vaults; and modification and extension of piping system for installation of new vacuum and air release valves at above-ground locations within the cities of Los Angeles, Alhambra, Commerce, Montebello, Monterey Park, Rosemead, and South Pasadena.

At a Glance:

At a Glarice.		
Estimated Percent Complete	1%	
Percent Extra Work	0.00%	
Estimated Completion Date	December 2007	
Details:		
Bid Amount	\$2,806,400	
Earnings To Date	\$30,000	
Net Extra Work To Date	\$0	
Earnings This Month	\$30,000	
Net Extra Work This Month	\$0	
Contract Start	12/18/06	
Duration in Working Days	260	
Contract Completion	12/28/07	

Air Release and Vacuum Valve Relocation for Treated Water Pipelines
Construction Package No. 1



Example of an air-release and vacuum valve cover



Contract No. 1641 Specifications No. 1561A

Contractor: W.A. Rasic Construction Co., Inc.

Scope:

The work consists of dewatering barrel siphons for replacement of existing equipment and cast iron flanges with new stainless steel valves, preparation for Metropolitan's engineering investigations, and installation of internal seals; fabrication of blocker and sealer gates; repairs and recoating of radial gates; and installation of a acoustic flow measurements system.

At a Glance:

Estimated Percent Complete 1%
Percent Extra Work 0.00%
Estimated Completion Date June 2007

Details:

Bid Amount \$10,250,000 \$75,000 Earnings To Date Net Extra Work To Date \$0 Earnings This Month \$75,000 Net Extra Work This Month \$0 Contract Start 12/11/06 **Duration in Working Days** 140 6/28/07 Contract Completion

Colorado River Aqueduct Siphons, Transitions, Canals, and Tunnels Rehabilitation and Improvements



Radial gate to be repaired and recoated

Contract No. 1642 Specifications No. 1543

Contractor: PPC Construction, Inc.

Scope:

The work consists of removal of existing subsurface vacuum and air release valves; abatement of lead, PCBs and asbestos-containing material inside subsurface vaults; and modification and extension of piping system for installation of new Metropolitan-furnished vacuum and air release valves at above-ground locations within the cities of Brea, Covina, Diamond Bar, San Dimas, and portions of Los Angeles County.

At a Glance:

Estimated Percent Complete 0% Percent Extra Work 0.00% Estimated Completion Date October 2007 Details: Bid Amount \$1,195,115 Earnings To Date \$0 Net Extra Work To Date \$0 Earnings This Month \$0 Net Extra Work This Month \$0 Contract Start 1/2/07 **Duration in Working Days** 210 Contract Completion 10/26/07

Air Release and Vacuum Valve Relocation for Treated Water Pipelines
Construction Package No. 2



Example of subsurface valve being relocated

METROPOLITAN WATER DISTRICT OF SOUTHERN CALIFORNIA

December 2006

Contract No. 1643 Specifications No. 1544

Abhe & Svoboda, Inc. Contractor:

Scope:

The work consists of removal of existing subsurface vacuum and air release valves; abatement of lead, PCBs and asbestos-containing material inside subsurface vaults; and modification and extension of piping system for installation of new Metropolitan-furnished vacuum and air release valves at above-ground locations within the cities of Culver City, Los Angeles, Norwalk, Santa Fe Springs, and portions of Los Angeles County.

At a Glance:

Estimated Percent Complete 0% Percent Extra Work 0.00% Estimated Completion Date October 2007 Details: **Bid Amount** \$1,678,240 Earnings To Date \$0 Net Extra Work To Date \$0

Earnings This Month \$0 Net Extra Work This Month \$0 Contract Start 1/2/07

Contract Completion 10/26/07

210

Air Release and Vacuum Valve Relocation for Treated Water Pipelines Construction Package No. 3



Example of air release and vacuum valve relocated above-ground

Contract No. 1644 Specifications No. 1555

Contractor: Brutoco Engineering & Construction, Inc.

Scope:

The work consists of removal and replacement of four existing butterfly valves located on Basin 16 of Module 1.

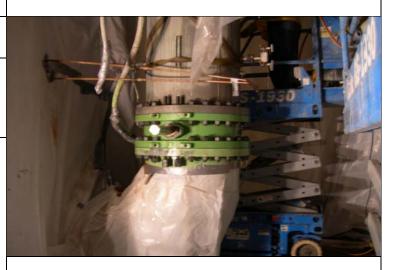
At a Glance:

Contract Completion

Duration in Working Days

Estimated Percent Complete 0% Percent Extra Work 0.00% **Estimated Completion Date** March 2007 Details: Bid Amount \$154,499 Earnings To Date \$0 Net Extra Work To Date \$0 Earnings This Month \$0 Net Extra Work This Month \$0 Contract Start 12/21/06 **Duration in Working Days** 60 3/19/07

Joseph Jensen Water Treatment Plant Filter Valve Replacement



Installation of spare butterfly valve at filter effluent