Engineering Services Key Activities for the Month of June 2007

Summary

- Recent Events
- Construction Contract Updates
- Integrated Area Studies
- Supply and Delivery Reliability:

Inland Feeder Program
Mills Water Treatment Plant Capacity Upgrade
Perris Valley Pipeline

• Infrastructure Reliability:

CRA Pumping Plant Reliability Program
Jensen Water Treatment Plant Improvements Program
Weymouth Water Treatment Plant Improvements Program

Water Quality:

Oxidation Retrofit Programs

• Regulatory:

Chlorine Containment and Handling Facilities

Attachments

Monthly Progress Report of Construction and Procurement Contracts for May 2007.

Detailed Report

This report details key engineering activities for the month of June 2007.

Recent Events:

Committee Chairs' Site Visits – On June 4th, Chair Koopman and Vice-Chair Morris of the Engineering & Capital Programs Committee and Chair Brown and Vice-Chair DeJesus of the Water Quality & Operations Committee visited the Diemer and Skinner plants on a reconnaissance trip. The purpose of this trip was to update and examine the numerous construction activities, and preview the upcoming committee actions in light of the recent reassessment of the CIP. This reconnaissance will also help prepare for the annual inspection trip proposed in September. Figure 1, taken on top of Skinner Module No. 7, capped the trip – it signifies the transfer of completed Skinner Module No. 7 from Engineering to Operations. Testing has been completed and the 110-mgd Module No. 7 is now in operation.



Figure 1: Chairs of the Engineering and Capital Programs Committee "handing over the keys" for Module No. 7 to the Chairs of the Water Quality and Operations Committee.

Recent Events (cont.)

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.

- Washwater Reclamation Plant No. 3 was completed in December 2006.
- Module No. 7 construction was completed and is undergoing operational start-up and testing. It is expected that the module will be placed into full service in early July providing an additional 110-mgd of treatment capacity at the Skinner plant (Figure 2).
- The Chemical Systems Modifications construction is approximately 98 percent complete and is scheduled to be completed on September 1, 2007. The chemical feed systems which support Module No. 7 were completed in May 2007.

The overall program is on schedule and is within budget.



Figure 2: Module No. 7 Sedimentation Basin

Construction Contract Updates:

Jensen ORP: The Jensen ozone facilities were completed in July 2005 and the ozonation system has been on-line for almost two years. The contractor, Kiewit Pacific Co., has submitted a claim to Metropolitan on this contract. Staff has met with the contractor in an effort to reach resolution. The status of negotiations will be reported to the Board.

Skinner Chemical System Modifications: Kiewit Pacific Co. is currently constructing the Skinner Chemical Systems Modifications. The construction contract consists of site work and construction of chlorine containment and handling facilities; water quality monitoring vaults; chemical tank farms; chemical (concrete) trenches; cut-and-cover pipe galleries; and extensive buried utility systems. To date, the construction is approximately 98 percent complete. The contractor has submitted a claim which is being reviewed by staff. The status of negotiations will be reported to the Board.

Completed Construction Contract: The following contract was completed this month:

Desert Pavement Maintenance

Integrated Area Studies:

The collaborative Integrated Area Study (IAS) process is aimed at better integrating local and regional planning efforts and clarifying policy issues related to facility planning. The IAS effort involves technical discussions, demand projections, determination of facility needs, policy clarifications, and project evaluations. The overall IAS effort now includes four independent studies that focus on specific portions of Metropolitan's service area. Joint meetings are also conducted to discuss policy issues. During the May joint meeting, the conclusions of previous policy discussions were summarized and the approach to evaluating project performance and assembling portfolios of projects was described.

In June, project portfolios for the Riverside/San Diego IAS were assembled and the overall performance of each portfolio was evaluated according to the performance measures and weighting of objectives (Figure 3) determined early in the IAS process. It was found that each portfolio required additional Metropolitan treatment capacity and that a new Metropolitan treatment plant is preferred over expanding existing facilities. The advantages and disadvantages of the various combinations of local and regional projects were discussed in a combined IAS meeting in late June.

An IAS workgroup met twice during this period to review proposed projects that would introduce local potable water into Metropolitan's treated water system and to discuss related policy issues. Initial feedback indicated broad support for emergency-use proposals but limited support for routine-use proposals.

The Rialto and West Valley IAS teams each met and gained a consensus on near-term issues. Discussions will continue next month on long-term issues for both areas.

Supply and Delivery Reliability:

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 to Diamond Valley Lake. Eight of nine construction contracts have been completed. Recent activities include the following:

• Arrowhead East Tunnel (AET) – In May and early June, the tunnel boring machine (TBM) encountered varying geologic conditions, including pockets of weak ground and high water inflows. The TBM mined 340 feet in May and 270 feet in early June. During May, the TBM continued mining along the final curve on the AET tunnel. This curve is approximately 1,400 feet long and is anticipated to take three to four

months to complete. The total length of tunnel mined to date is 18,210 feet (81 percent of the tunnel's length).

- Arrowhead West Tunnel (AWT) Variable geologic conditions were encountered in May and early June, including crossing a small fault zone and pockets of high water inflows. During the month of May, the contractor conducted several significant major maintenance activities on the TBM including replacing the screw auger/barrel, as well as relocating a key section of two-way rail spur inside the tunnel (Figure 4). In light of these major maintenance activities, the TBM made good progress and mined 315 feet in May and 345 feet in early June. The total length of tunnel mined to date is 11,545 feet (58 percent of the tunnel's length). The six-month running average for mining production on AWT remains at over 500 feet per month, and the tunnel mining operation is now back on the revised milestone schedule that was set forth in the August 2006 contract amendment.
- Program Management In June, the Board authorized amending an existing consulting agreement to provide project controls and auditing functions to various aspects of the project. This recommended action will be accompanied by a transfer of funds from the program's remaining budget into the active project account to cover the anticipated expenditures.

The Arrowhead Tunnels are expected to be completed in 2010, and the program is within the Board-approved budget of \$1.186 billion.

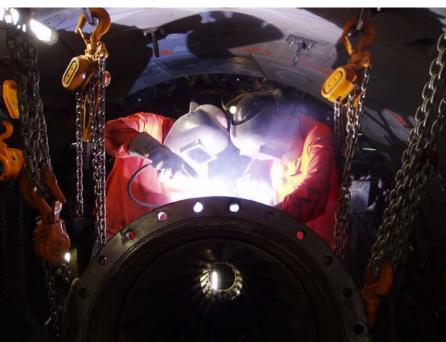


Figure 3: Arrowhead West Tunnel – Crew welding on auger tub

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 five 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. Bids were opened on May 10, 2007, and the Board awarded the construction contract in June 2007. The planned 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. The planned completion date for rehabilitation of Modules Nos. 1 and 2 is November 2009.
- <u>Solids Handling Upgrade</u> A study is underway to assess whether operational changes, upgrades of the lagoons, and/or new facilities (thickeners, wash water reclamation plant, mechanical dewatering equipment and storage) are required to reliably treat the plant's full 326-mgd capacity. The study is scheduled to be completed in August 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 of the upgraded chemical facilities is scheduled to be completed in November 2009. Figure 5 shows the existing alum-ferric chloride tank farm that will be modified.
- <u>Post-Filter Disinfection Upgrades</u> Initial results from the preliminary design have identified an interim operational strategy that can be used to support a 326-mgd plant flow by late-2009.

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



Figure 4: Existing alum-ferric chloride tank farm will be modified for 326 mgd capacity

Supply and Delivery Reliability (cont.):

Perris Valley Pipeline: This 96-inch diameter pipeline will extend from the Mills plant and provide service to Eastern Municipal Water District (EMWD) and Western Municipal Water District of Riverside County (WMWD). A portion of the pipeline at the Mills plant was constructed via a contract issued by WMWD. Metropolitan is moving to construct the remaining portions of the project under the revised project plan approved by the Board in October 2006.

- North Reach Bids for the North Reach construction contract were opened on June 21st. Award of the construction contract is scheduled for the July Board. Construction of the North Reach is planned to be completed by June 2008 to allow water deliveries to EMWD prior to peak summer 2008 demands.
- <u>Pipe Fabrication</u> Northwest Pipe Company is underway with fabrication of pipe for the North Reach (Figure 6).
- <u>South Reach</u> Kennedy/Jenks Consultants is underway with final design of the South Reach which is expected to be completed by December 2007.



Figure 5: Completed pipe section

Infrastructure Reliability:

CRA Pumping Reliability Program: This program was established to maintain reliability of the Colorado River Aqueduct (CRA) pumping plants and support facilities. Recent activities include the following:

- <u>Desert Water Tank Access and Safety Improvements</u> This project will improve access to the pumping plant water tanks. Preliminary design is scheduled to be completed by the end of June 2007. Final design is scheduled to commence in September 2007 and to be completed by March 2008.
- Intake Pumping Plant Instrumentation Replacement and Automation Project The objectives of this project include automation of pump operation, collection of water quality data, and integration of the operational/control data of the pumps into Metropolitan's SCADA System. This project will be executed in two phases. The first phase is the Pump Unit No. 1 Instrumentation Replacement and Automation Project. Final design was completed in January 2006; demolition was completed in December 2006, and Phase I construction began in January 2007. Figure 7 show new cable trays and equipment panels installed in the Intake Unit No. 1 pump bay. Phase I construction is scheduled to be completed by January 2008. Phase II is scheduled to begin upon the successful completion of Phase I.
- <u>Circulating Water System Improvements</u> This project will replace deteriorated circulating water strainers and piping at all five CRA pumping plants. Installation of the strainers and replacement of associated valves and piping is being performed by Metropolitan forces. Construction at Iron Mountain Pumping Plant is complete, and scheduled work at the remaining plants is scheduled to be completed by December 2007.

The program is on schedule to be completed in fiscal year 2011/12 and is within budget.



Figure 6: New installation at Unit 1 Pump Bay

Infrastructure Reliability (cont.):

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:

- Washwater Pump Modifications Phases 1 and 2 Final design for Phase 1 is scheduled to be completed by August 2007. Phase 1 will install a recirculation line with a modulating valve to reduce frequent pump on/off cycling and stabilize the reclaimed washwater return flow rate to the main plant influent. Phase 2 will retrofit ten pumps in the washwater reclamation plants with variable speed motor drives to provide uniform and controlled flow to the washwater reclamation plants. Final design for Phase 2 will commence after the start-up and successful operation of Phase 1.
- Reactivate Mixing and Settling Basins 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 July 2007.
- <u>Solids Thickener Capacity Increase</u> Two new solids thickeners are under design to increase solids processing capacity. Final design is scheduled to be completed by August 2007.
- Module No. 1 Filter Valve Refurbishment The four valves in Filter Bank No. 16 were replaced in February 2007. An evaluation is underway to prioritize the replacement sequence of the remaining valves in Module No. 1, and a subsequent Board action is planned for late 2007 to authorize refurbishment or procurement of replacement valves for the other filter banks in Module No.1.
- <u>Alum-to-Polymer Tank Conversion</u> Preliminary design is scheduled to be completed in July 2007 for the conversion of the plant's existing alum tank to polymer service.
- <u>Administration Building Seismic Upgrades</u> Final design is underway for upgrades that will strengthen the seismic integrity of the Administration Building (Figure 8).

The program is on schedule and is within budget.



Figure 7: Jensen Administration Building

Infrastructure Reliability (cont):

Weymouth Water Treatment Plant Improvements Program: This program was initiated to maintain reliability and improve the operating efficiency of the Weymouth plant through specific improvements projects. The program currently contains 17 projects. Recent activities include the following:

- La Verne Power System Upgrade Project Final design is 7 percent complete.
- Weymouth Perimeter Improvements The Weymouth perimeter improvements will be constructed in several phases. Construction of Phase 1 improvements along the west plant boundary is ongoing and is planned to be complete by summer 2007 (Figure 9). Construction of the second phase, which includes landscaping and perimeter improvements along the north and south plant boundaries, has started and is scheduled to be complete by the end of 2007.
- <u>Junction Structure Seismic Upgrades</u> Final design is 25 percent complete.
- <u>Plant Operations & Maintenance Center</u> In June, the Board awarded a construction contract for the Weymouth Plant Operations & Maintenance Center.
- <u>Basin 1 & 2 Rehabilitation</u> In June, design of 36 new flocculators for Weymouth Basin No. 1 was completed and materials for fabrication were ordered.
- Weymouth Chemical Tank Farm Upgrade Final design of the coagulant and polymer tank farm upgrades is 99 percent complete.
- <u>Washwater Reclamation Reliability Study</u> The study is 90 percent complete.
- Weymouth Microturbine Metropolitan forces have installed the electrical duct bank for connecting the
 microturbines to the Weymouth plant domestic/fire water pumps circuitry and the underground conduit
 for electrical power, instrumentation and communication. The South Coast Air Quality Management
 District has delivered the four microturbines and natural gas compressors to the La Verne central
 warehouse for later installation.



Figure 8: Concrete placement for pilasters at the Weymouth plant

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 has been completed and the Board awarded the construction contract in June 2007.
- <u>Jensen Plant</u> The plant's ozone system became fully operational on July 1, 2005.
- <u>Skinner Plant</u> Construction of the ozone contactors and Ozone Generation Building continues. Construction is approximately 54 percent complete.
- Weymouth Plant Final design is complete and advertisement for bids occurred in April 2007. Bids are scheduled to be opened in early July 2007.
- <u>Diemer Plant</u> Construction of the ORP Site Preparation work is approximately 50 percent complete and is scheduled to be completed in March 2008 (Figure 10). Construction of the new Plant Maintenance Facilities is complete with the Notice of Completion filed with the county. Construction of the Vehicle Maintenance Center is approximately 94 percent complete. Construction of Phase I of the Chemical Tank Farm Improvements for the ORP is approximately 96 percent complete. Final design of the ozone facilities is approximately 95 percent complete with the 99 percent submittal expected in early July.



Figure 9: Diemer site preparation

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 25 percent complete. Figure 11 shows construction of temporary unloading platform that will be used until the permanent facility is completed.
- <u>Mills Plant</u> Construction of the chlorine containment facilities is 55 percent complete. Start-up testing for Phase 1 construction is planned for July 2007.
- Skinner Plant Construction of the chlorine containment facilities is 95 percent complete.

The program is on schedule to be completed in fiscal year 2009/10 and is within budget.



Figure 10: Temporary unloading platform field testing

MONTHLY PROGRESS REPORT OF CONSTRUCTION AND PROCUREMENT CONTRACTS May 2007

(Progress Through May 25, 2007)

Summary of Progress										
		Construction		Related Procurement						
Number of Contracts		21		5						
Total Bid Amount of Contracts in Progress	\$	954,766,077	\$	52,940,934						
Number of Contracts Awarded This Month		1		0						
Total Bid Amount of Contracts Awarded This Month	\$	197,776		-						
Contract Gross Earnings This Month*	\$	20,031,697	\$	462,307						

*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. 1648, Gene Wash Airfield Extension, in the amount of \$197,776, was awarded to McCormick Construction Co. The work consists of furnishing, applying, rolling and compacting PG70-10 asphalt concrete mix on the extended runway at the Gene Wash Airfield followed by painting a single dashed centerline.

Contracts Completed This Month

Procurement Contract No. 1601, Fabricated Steel Pipe and Fittings for the Robert A. Skinner Water Treatment Plant Oxidation Retrofit Program and Washwater Reclamation Plant No. 3, was completed on May 25, 2007.

Summaries/Status of Contracts

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

Summary of Construction Contracts (Page 1 of 3)

			Summary of Construction Contracts (Pa												
Cont. No.	Spec. No.	Feature	Contractor		ntract Amount	Ea	rnings This Month	ı	Earnings To Date		Net Extra ork To Date	Start Date	Contract Completion Date	Estimated Completion Date	Estimated Percent Complete
		Inland Feeder Contract		F	Projected Cost to Complete										
1542	1437	Arrowhead Tunnels Project ¹	J. F. Shea Const Inc/Kenny Const Co., JV	\$	397,000,000	\$	5,186,858	\$	224,039,871		N/A	8/2/02	9/15/10	9/10	56%
		Inland Feeder Totals		\$	\$ 397,000,000		5,186,858	\$	224,039,871	\$	-				
		Miscellaneous Contracts			Bid Amount										
1593	1489	Skinner Water Treatment Plant Expansion No. 4 Moduel No. 7	J. R. Filanc Construction Company, Inc.	\$	76,383,645	\$	-	\$	81,552,485	\$	5,187,161	1/5/05	4/20/07	6/07	99%
1607		Diemer Water Treatment Plant Entrance Relocation, Vehicle Maintenance Center, and Solids Handling Facilities	Brutoco Engineering & Construction, Inc.	\$	29,260,000	\$	359,260	\$	28,309,567	\$	543,985	6/13/05	5/17/07	6/07	95%
1609	1483	Skinner Water Treatment Plant Oxidation Retrofit Program and Washwater Reclamation Plant No. 3	Shimmick Construction/Obayashi Corp. JV	\$	184,650,000	\$	4,665,433	\$	99,696,211	\$	1,853,610	7/28/05	1/8/09	1/09	53%
1613	1533	Robert B. Diemer Washwater Tank Pumps Replacement	DenBoer Engineering & Construction, Inc.	\$	355,000	\$	90,500	\$	235,500	\$	-	11/9/05	10/23/06	6/07	66%²
1616	1498	Skinner Water Treatment Plant Chemical Systems Modifications	Kiewit Pacific Co.	\$	109,944,000	\$	3,324,635	\$	109,658,030	\$	1,613,015	11/28/05	6/5/07	6/07	98%
1619		Mills Water Treatment Plant Main Entrance Road Realignment and Perimeter Landscaping	Mega Way Enterprises	\$	3,295,000	\$	3,542	\$	3,166,223	\$	-	1/25/06	7/2/07	7/07	96%
1620	1495	Diemer Water Treatment Plant Chemical System Upgrades	Brutoco Engineering & Construction, Inc.	\$	13,960,000	\$	192,950	\$	14,240,954	\$	448,404	1/13/06	8/14/07	8/07	99%
1628	1517	Mills Water Treatment Plant Chemical System Upgrades	J. R. Filanc Construction Co., Inc.	\$	19,914,600	\$	872,679	\$	12,730,379	\$	63,022	5/2/06	2/7/08	2/08	64%

¹ Earnings for this project are as of April 25, 2007.

²Contract work substantially complete. Punchlist work remaining.

May 2007 (Progress Through May 25, 2007)

Summary of Construction Contracts (Page 2 of 3)

Cont.	Spec. No.	Feature	Contractor	Co	ntract Amount	Ea	rnings 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	\$	2,780,435	\$ 38,446,360	\$	272,283	5/15/06	2/22/08	2/08	54%
1632	1518A	Weymouth Water Treatment Plant Chemical System Upgrades	Brutoco Engineering & Construction, Inc.	\$	3,985,000	\$	135,650	\$ 3,808,774	\$	87,244	6/19/06	11/26/07	11/07	94%
1633	1516A	Jensen Water Treatment Plant Chlorine Containment and Fluoride Project	Brutoco Engineering & Construction, Inc.	\$	19,988,000	\$	1,105,561	\$ 7,866,659	\$	31,272	8/29/06	7/1/08	7/08	39%
1634	1564	Rialto Pipeline Improvements - Phase 1 Sectionalizing Structures No. 1 and No. 3	J.F. Shea Construction, Inc.	\$	6,109,028	\$	238,108	\$ 5,265,130	\$	54,100	9/5/06	8/2/07	8/07	85%
1636	1546A	F. E. Weymouth Water Treatment Plant Perimeter Improvements, Phase I	Pima Corp. dba Advanced Construction	\$	2,648,710	\$	151,500	\$ 1,884,110	\$	-	10/24/06	7/5/07	7/07	71%
1640	1542	Air Release and Vacuum Valve Relocation for Treated Water Pipelines Construction Package No.1	Steve P. Rados, Inc.	\$	2,806,400	\$	10,000	\$ 310,000	\$	-	12/18/06	12/28/07	12/07	11%
1641	1561A	Colorado River Aqueduct Siphons, Transitions, Canals, and Tunnels Rehabilitation and Improvements	W.A. Rasic Construction Co., Inc.	\$	10,250,000	\$	637,850	\$ 9,542,500	\$	-	12/11/06	6/27/07	6/07	93%
1642	1543	Air Release and Vacuum Valve Relocation for Treated Water Pipelines Construction Package No. 2	PPC Construction, Inc.	\$	1,195,115	\$	2,000	\$ 198,826	\$	-	1/2/07	10/26/07	10/07	17%
1643	1544	Air Release and Vacuum Valve Relocation for Treated Water Pipelines Construction Package No. 3	Abhe & Svoboda, Inc.	\$	1,678,240	\$	-	\$ 92,924	\$	-	1/2/07	10/26/07	10/07	6%
1646	1547	F. E. Weymouth Water Treatment Plant Perimeter Improvements, Phase II	Pima Corp. dba Advanced Construction	\$	413,240	\$	58,820	\$ 78,820	\$	-	4/19/07	1/7/08	1/08	19%

(Progress Through May 25, 2007)

Summary of Construction Contracts (Page 3 of 3)

Cont. No.	Spec. No.	Feature	Contractor	Coi	Contract Amount E		Earnings This Month				Net Extra ork To Date	Start Date	Contract Completion Date	Estimated Completion Date	Estimated Percent Complete
		Miscellaneous Contracts			Bid Amount										
1647	1505	Desert Pavement Maintenance Program Fiscal Year 2006/07	Copp Contracting, Inc.	\$	215,868	\$	215,916	\$	215,916	\$	(680)	5/9/07	6/5/07	6/07	99%
1648	1596	Gene Wash Airfield Extension	McCormick Construction Co.	\$	197,776	\$	-	\$	-	\$	1	5/28/07	7/10/07	7/07	0%
				\$	557,766,077	\$	14,844,839	\$	417,299,368	\$	10,153,416				
		Total Value of Construction	on Contracts in Progress	\$	954,766,077	\$:	20,031,697	\$	641,339,239	\$	10,153,416				

(Progress Through May 25, 2007)

MWDMETROPOLITAN WATER DISTRICT OF SOUTHERN CALIFORNIA

		Summary of C	Construction and Procur	ement Contracts	Completed This M	onth Pending Final	Payment		
Cont. No.	Spec. No.	Feature	Contractor	Bid Amount	Estimated Final Earnings	Total Net Value of Extra Work	Date Work Accepted	Date Notice of Completion Recorded	Date Final Payment Due
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	\$ 8,403,059	\$ (141,941)	5/25/07	N/A	7/24/07

			Sumi	mary	of Procurem	ent (Contracts					
Cont. No.	Spec. No.	Feature	Contractor	В	id Amount		rnings 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	\$	-	\$	6,196,004	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	\$	462,307	\$	8,403,059	3/22/05	5/25/07	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	\$	-	\$	943,892	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	
1645	1547	Steel Pipe and Fittings for Perris Valley Pipeline	Northwest Pipe Company	\$	17,955,170	\$	-	\$	10,153,617	3/5/07	11/1/08	
		Total Value of Procuremer	t Contracts in Progress	\$	52,940,934	\$	462,307	\$	25,696,572			



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 56%

Estimated Completion Date September 2010

Details:

Projected Cost to Complete \$397,000,000
Earnings To Date \$224,039,871 *

Earnings This Month \$5,186,858 *

Contract Start 8/2/02

Contract Completion 9/15/10

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:

Contract Start

Duration in Working Days

Contract Completion

Estimated Percent Complete

 Percent Extra Work
 6.8%

 Estimated Completion Date
 June 2007

 Details:
 F6,383,645

 Bid Amount
 \$76,383,645

 Earnings To Date
 \$81,552,485

 Net Extra Work To Date
 \$5,187,161

 Earnings This Month
 \$0

 Net Extra Work This Month
 \$0

99%

1/5/05

4/20/07

527

*Earnings for this project are as of April 25, 2007.

Inland Feeder Program Arrowhead Tunnels Project



Installation of new auger section on Arrowhead West TBM

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



Removal of fire pump to exchange impellers at potable water pump station



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.

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



New belt filter press in operation

At a Glance:

Estimated Percent Complete 95%
Percent Extra Work 1.9%
Estimated Completion Date June 2007

Details:

\$29,260,000 **Bid Amount** Earnings To Date \$28,309,567 Net Extra Work To Date \$543,985 Earnings This Month \$359,260 Net Extra Work This Month \$0 Contract Start 6/13/05 **Duration in Working Days** 350 Contract Completion 5/17/07

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.

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



Installation of plant inlet conduit

At a Glance:

Estimated Percent Complete 53%
Percent Extra Work 1.00%
Estimated Completion Date January 2009

Details: **Bid Amount** \$184,650,000 Earnings To Date \$99,696,211 Net Extra Work To Date \$1,853,610 Earnings This Month \$4,665,433 Net Extra Work This Month \$276.083 7/28/05 Contract Start **Duration in Working Days** 865 1/8/09 Contract Completion



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.

Robert B. Diemer Water Treatment Plant Washwater Tank Pumps Replacement



Removal of pump motor for repairs

At a Glance:

Estimated Percent Complete 66%
Percent Extra Work 0.00%
Estimated Completion Date June 2007
Details:

Bid Amount \$355,000 Earnings To Date \$235,500 Net Extra Work To Date \$0 Earnings This Month \$90.500 Net Extra Work This Month \$0 Contract Start 11/9/05 **Duration in Working Days** 200 Contract Completion 10/23/06 *

Contract No. 1616 Specifications No. 1498

Contractor: Kiewit Pacific Co.

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.

Skinner Water Treatment Plant Expansion No. 4 Chemical Systems Modifications



HVAC system in Chlorine Building

At a Glance:

Estimated Percent Complete 98%
Percent Extra Work 1.5%
Estimated Completion Date June 2007
Details:

\$109,944,000 **Bid Amount** Earnings To Date \$109,658,030 Net Extra Work To Date \$1,613,015 Earnings This Month \$3,324,635 \$28,931 Net Extra Work This Month Contract Start 11/28/05 **Duration in Working Days** 380 Contract Completion 6/5/07

*Contract work substantially complete. Punchlist work remaining.



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.

Mills Water Treatment Plant Main Entrance Road Realignment and Perimeter Landscaping



New electronic gate and drop arms at main entrance

At a Glance:

Estimated Percent Complete 96% Percent Extra Work 0.00% **Estimated Completion Date** July 2007 Details: **Bid Amount** \$3,295,000 Earnings To Date \$3,166,223 Net Extra Work To Date \$0 Earnings This Month \$3,542 Net Extra Work This Month \$0 Contract Start 1/25/06 **Duration in Working Days** 365

7/2/2007

Contract No. 1620 Specifications No. 1495

Contractor: Scope:

Contract Completion

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.

Brutoco Engineering & Construction, Inc.

Diemer Water Treatment Plant Chemical System Upgrades



Installation of new pipe and equipment at west side of existing sulfuric tanks

At a Glance:

Estimated Percent Complete 99% Percent Extra Work 3.2% **Estimated Completion Date** August 2007 Details: \$13,960,000 **Bid Amount** Earnings To Date \$14,240,954 Net Extra Work To Date \$448,404 Earnings This Month \$192,950 Net Extra Work This Month \$0 Contract Start 1/13/06 270 **Duration in Working Days** 8/14/07 Contract Completion



Contract No. 1628
Specifications No. 1517
Contractor: J. R. Filanc Construction Co., Inc.

Scope:

At a Glance:

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.

Mills Water Treatment Plant Chemical System Upgrades



Concrete placement for caustic unloading slab

Estimated Percent Complete

Percent Extra Work

Estimated Completion Date

Details:

Bid Amount

Earnings To Date

Net Extra Work To Date

\$63,022

Earnings This Month \$872,679

Net Extra Work This Month \$9,728

Contract Start 5/2/06

Duration in Working Days 360

Contract Completion 2/7/08

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.

Diemer Water Treatment Plant Site Preparation for Oxidation Retrofit Program



Installation of new fire water line along Solids Handling Facility access road

At a Glance:

Estimated Percent Complete 54% Percent Extra Work 0.39% **Estimated Completion Date** February 2008 Details: \$70,516,455 **Bid Amount** Earnings To Date \$38,446,360 Net Extra Work To Date \$272,283 Earnings This Month \$2,780,435 Net Extra Work This Month \$5,064 Contract Start 5/15/06 **Duration in Working Days** 445 Contract Completion 2/22/08

Contract No. 1632
Specifications No. 1518A
Contractor: Brutoco Engineering & Construction, Inc.

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

Weymouth Water Treatment Plant Chemical System Upgrades



Sandblasting of unloading area in progress

At a Glance:

Estimated Percent Complete 94%
Percent Extra Work 2.19%
Estimated Completion Date November 2007
Details:
Bid Amount \$3,985,000

 Bid Amount
 \$3,985,000

 Earnings To Date
 \$3,808,774

 Net Extra Work To Date
 \$87,244

 Earnings This Month
 \$135,650

 Net Extra Work This Month
 \$0

 Contract Start
 6/19/06

 Duration in Working Days
 360

 Contract Completion
 11/26/07

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.

Joseph Jensen Water Treatment Plant Chlorine Containment and Fluoride Project



Placement of rail cars for the temporary Chlorine Unloading Facility

At a Glance:

Contract Start

Duration in Working Days

Contract Completion

Estimated Percent Complete 39% Percent Extra Work 0.2% **Estimated Completion Date July 2008** Details: **Bid Amount** \$19,988,000 Earnings To Date \$7,866,659 Net Extra Work To Date \$31,272 Earnings This Month \$1,105,561 Net Extra Work This Month \$0

8/29/06

460

7/1/08

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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.

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



Backfill operation in progress

At a Glance: Estimated Percent Complete

0.89% Percent Extra Work **Estimated Completion Date** August 2007 Details: **Bid Amount** \$6,109,028 Earnings To Date \$5,265,130 Net Extra Work To Date \$54,100 \$238,108 Earnings This Month Net Extra Work This Month Contract Start 9/5/06 **Duration in Working Days** 230

85%

8/2/07

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.

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



Concrete placement for slab-on-grade

At a Glance:

Estimated Percent Complete 71% Percent Extra Work 0.00% **Estimated Completion Date July 2007** Details: **Bid Amount** \$2,648,710 Earnings To Date \$1,884,110 Net Extra Work To Date \$0 Earnings This Month \$151,500 Net Extra Work This Month \$0 Contract Start 10/24/06 **Duration in Working Days** 160 Contract Completion 7/5/07

1640 Specifications No. 1542

Contractor: Steve P. Rados, Inc.

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 aboveground locations within the cities of Los Angeles, Alhambra, Commerce, Montebello, Monterey Park, Rosemead, and South Pasadena.

11%

260

12/28/07

At a Glance:

Estimated Percent Complete Percent Extra Work 0.00% Estimated Completion Date December 2007 Details: **Bid Amount** \$2,806,400 Earnings To Date \$310,000 Net Extra Work To Date \$0 Earnings This Month \$10.000 Net Extra Work This Month \$0 Contract Start 12/18/06

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



New 8-inch combination valves being tested at Val-Matic in Chicago

Contract No. 1641 Specifications No. 1561A

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

Scope:

Duration in Working Days

Contract Completion

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 93% Percent Extra Work 0.00% Estimated Completion Date June 2007 Details: **Bid Amount** \$10,250,000 Earnings To Date \$9,542,500 Net Extra Work To Date \$0 Earnings This Month \$637,850 Net Extra Work This Month \$0 Contract Start 12/11/06 **Duration in Working Days** 140 Contract Completion 6/27/07

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



Preparing manhole stem and guide brackets for painting



Contract No. 1642 Specifications No. 1543

PPC Construction, Inc. Contractor:

Scope:

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

At a Glance:

Estimated Percent Complete 17% Percent Extra Work 0.00% October 2007 **Estimated Completion Date** Details: **Bid Amount** \$1,195,115 Earnings To Date \$198,826 Net Extra Work To Date \$0 Earnings This Month \$2,000 Net Extra Work This Month \$0 Contract Start 1/2/07 **Duration in Working Days** 210

10/26/07

6%

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



New foundation slab and brass piping at site in Los Angeles County

Contract No. 1643 Specifications No. 1544

Abhe & Svoboda, Inc. Contractor:

Scope:

Contract Completion

The work consists of removal of existing subsurface vacuum and air release valves; abatement of lead, PCBs and asbestoscontaining material inside subsurface vaults; and modification and extension of piping system for installation of new Metropolitan-furnished vacuum and air release valves at aboveground 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

Percent Extra Work 0.00% **Estimated Completion Date** October 2007 Details: **Bid Amount** \$1,678,240 Earnings To Date \$92,924 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. 3



Piping material at fabrication shop in Livermore, CA

Contract No. 1646
Specifications No. 1547
Contractor: Pima Corp. dba Advanced Construction

Scope:

The work consists of landscape and irrigation improvements along the north and south boundaries of the plant and around Building No. 4.

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



Trench for irrigation piping

At a Glance:

Contract Start

Duration in Working Days

Contract Completion

Estimated Percent Complete 19% Percent Extra Work 0.00% Estimated Completion Date January 2008 Details: **Bid Amount** \$413,240 Earnings To Date \$78,820 Net Extra Work To Date \$0 Earnings This Month \$58,820 Net Extra Work This Month \$0

4/19/07

1/7/08

6/5/07

180

Contract No. 1647
Specifications No. 1595

Contractor: Copp Contracting, Inc.

Desert Pavement Maintenance Project Fiscal Year 2006/07

Scope:

The work consists of cape sealing Iron Mountain Airstrip and Kaiser Mine Airstrip followed by painting a single dashed centerline, and slurry sealing Iron Mountain Pump Station.

At a Glance:

Contract Completion

Estimated Percent Complete 99% Percent Extra Work -0.32% **Estimated Completion Date** June 2007 Details: **Bid Amount** \$215,868 Earnings To Date \$215,916 Net Extra Work To Date -\$680 Earnings This Month \$215,916 Net Extra Work This Month -\$680 Contract Start 5/9/07 **Duration in Working Days** 30



Asphalt maintenance completed at Iron Mountain Pump Station



Contract No. 1648
Specifications No. 1596

Contractor: McCormick Construction Co.

Scope:

The work consists of furnishing, applying, rolling and compacting PG70-10 asphalt concrete mix on the extended runway at the Gene Wash Airfield followed by painting a single dashed centerline.

At a Glance	(4)ance:

Duration in Working Days

Contract Completion

Estimated Percent Complete	0%
Percent Extra Work	0.00%
Estimated Completion Date	July 2007
Details:	
Bid Amount	\$197,776
Earnings To Date	\$0
Net Extra Work To Date	\$0
Earnings This Month	\$0
Net Extra Work This Month	\$0
Contract Start	5/28/07

30

7/10/07

Gene Wash Airfield Extension



Existing site conditions