

- Engineering Services Key Activities for the Month of July 2007

Summary

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 - Chlorine Containment and Handling Facilities
 - Energy Management Program

Attachments

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

Detailed Report

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

Board Report (Engineering Key Activities Report for the month of July 2007)

Recent Events:

Diemer Site Preparation Project: On July 11, a key milestone in the project was reached as the contractor made the first placement of Roller Compacted Concrete (RCC) to create the foundation pad for the future ozone building and ozone contactors (Figure 1). Placement of RCC will proceed throughout the summer, temperatures permitting.



Figure 1: First Roller Compacted Concrete placement at Diemer plant

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 reached a tentative settlement with the contractor which will be recommended to the Board in August.

Skinner Chemical System Modifications: Kiewit Pacific Co. is currently constructing the Skinner Chemical Systems Modifications, which consists of site work and addition 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. The contractor has submitted a claim to Metropolitan on this contract. Staff has reached a tentative settlement with the contractor, which will be recommended to the Board in August.

Completed Construction Contract: The following contracts were completed this month:

- Skinner Water Treatment Plant Expansion No. 4, Module No. 7
- Diemer Water Treatment Plant Washwater Tank Pumps Replacement

Date of Report: August 21, 2007

Board Report (Engineering Key Activities Report for the month of July 2007)

Integrated Area Studies:

The collaborative Integrated Area Studies (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 (Figure 2).

In July, updates were provided to Metropolitan's Member Agency Managers and to Eastern Municipal Water District's Board of Directors regarding the IAS process, conclusions from the policy discussions, and draft results of the project portfolios. Also during July, the top performing project portfolios for the Riverside/San Diego IAS were further examined and refined.



Figure 2: Policy discussions in joint IAS meeting

Supply and Delivery Reliability:

Central Pool Augmentation Tunnel Geotechnical Feasibility: In June 2006, the Board authorized geotechnical and geological investigations along the Cleveland Tunnel alignment through the Cleveland National Forest, in order to assess the economic feasibility of the approved tunnel alignment. The geotechnical investigation consists of a field exploration phase and a data analysis phase. The field exploration commenced in February 2007 with the drilling of two boreholes in the Cleveland National Forest. Both boreholes reached their targeted depths of 2,512.5 feet and 2,184.5 feet below ground surface in the month of July (Figure 3). Field work included geotechnical testing and piezometer installation. The data analysis phase will be completed by December 2007. Following completion of the data analysis, tunnel feasibility studies will commence.



Figure 3: Drill site for Borehole No. C-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 to Diamond Valley Lake. Eight of nine construction contracts have been completed. Recent activities include the following:

- Arrowhead East Tunnel (AET) – In June and early July, the tunnel boring machine (TBM) encountered varying geologic conditions, including pockets of weak ground, high groundwater pressures, and high water inflows. The TBM mined 405 feet in June and 100 feet through mid-July. During June, the TBM continued mining along the final curve on the AET tunnel. As of early July, approximately 65 percent of the curve has been mined. This curve is approximately 1,400 feet long and is anticipated to take two more months to complete. The total length of tunnel mined to date is 18,445 feet (82 percent of the tunnel’s length). Figure 4 shows the inspector in AET documenting tunnel advancement progress.
- Arrowhead West Tunnel (AWT) – Stable geologic conditions were encountered in June and early July, which resulted in excellent mining progress. A new single-best day mining record of 80 feet was achieved by the AWT TBM. The TBM mined 775 feet in June, which was the third-highest mining production month on this tunnel drive. Approximately 455 feet was mined through mid-July. The total length of tunnel mined to date is 12,430 feet (63 percent of the tunnel’s length). The six-month running average for mining production on AWT remains at over 550 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.

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



Figure 4: Inspection of Arrowhead East Tunnel

Supply and Delivery Reliability (cont.):

Reservoir Cover Replacement Program: This program consists of replacement of the floating covers, installation of liners, and related repairs at the Orange County, Palos Verdes, and Skinner Finished Water Reservoirs. The existing floating covers at these three facilities have reached the end of their useful lives and require replacement.

- Orange County Reservoir – Final design of the replacement floating cover and reservoir liner is being coordinated with the California Department of Health Services and Division of Safety of Dams. Geotechnical investigations and a computerized hydraulic model of proposed inlet channel modifications have been completed. Final design is 75 percent complete and is scheduled to be completed by November 2007.
- Skinner Finished Water Reservoir – Final design is 15 percent complete with completion scheduled for December 2007.
- Palos Verdes Reservoir – Final design is scheduled to begin following completion of the cover designs for the Orange County and Skinner Reservoirs.

The program is on schedule to be completed by fiscal year 2009/2010 and is within budget.



Figure 5: Concrete liner to be repaired at the Orange County reservoir

Board Report (Engineering Key Activities Report for the month of July 2007)

Supply and Delivery Reliability (cont.):

Rialto Pipeline Improvements: This program will enable continued operation of the Rialto Pipeline for isolated reaches during scheduled or emergency repairs. This program is being implemented in three phases. Recent activities include the following:

- Phase 1 – Valve Vault Construction – Construction of the two isolation valve structures in the cities of Rancho Cucamonga and Claremont was completed in July 2007. Figure 6 shows the backfill work completed at Structure No. 3 in Claremont. Fabrication of the 96-inch sectionalizing valves has been completed and the valves were delivered to the site in June. The valves are scheduled to be installed during Phase 2 construction.
- Phase 2 – Bulkhead Structure and Valve Installation Final Design – Final design was completed in June 2007, and bids will be opened in August. A request to the Board for award of the construction contract is scheduled for September 2007. This phase includes construction of a bulkhead isolation structure and installation of the two sectionalizing valves.
- Phase 3 – Live Oak Reservoir Pumpback System Final Design – Final design is 5 percent complete and is scheduled to be completed by May 2008.

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



Figure 6: Access for Structure No. 3 in the City of Claremont

Board Report (Engineering Key Activities Report for the month of July 2007)

Supply and Delivery Reliability (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.

- Wastewater Reclamation Plant No. 3 was completed in December 2006.
- Module No. 7 was placed into service on July 5, 2007 and will provide an additional 110-mgd of treatment capacity at the Skinner plant (Figure 7).
- The Chemical Systems Modifications construction is approximately 99 percent complete and is scheduled to be completed in September 2007. The chemical feed systems that support Module No. 7 were completed in May 2007.

The overall program is on schedule and is within budget.



Figure 7: Module No. 7 sedimentation basin (looking south)

Infrastructure Reliability:

Conveyance and Distribution System Rehabilitation Program: This program was initiated to maintain reliable deliveries through specific repair and rehabilitation projects on Metropolitan’s pipelines, reservoirs, and control structures. The program currently contains 52 projects, of which 20 have been completed. Recent activities include the following:

- San Diego Pipeline No. 5 Repairs – Metropolitan forces completed repair of two 24-foot long distressed segments of prestressed concrete cylinder pipe (PCCP) with up to 50 and 20 prestressed wire breaks on San Diego Pipeline No. 5. The work involved replacing two 96-inch diameter PCCP segments with equivalent lengths of welded steel pipe (Figure 8). The repairs were completed on June 12, 2007, two days ahead of schedule.
- Middle Feeder Cathodic Protection – On June 26, 2007, all bids were rejected for the construction of a cathodic protection system for the Middle Feeder Cathodic Protection Project. This project will be re-advertised and a request to the Board for award of the construction contract is planned for October 2007.
- Lakeview Pipeline Cathodic Protection – Bids were opened on July 10, 2007 for the Lakeview Pipeline Cathodic Protection project. The construction contract will be awarded under the General Manager's authority.

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



Figure 8: Newly installed pipe segment on San Diego Pipeline No. 5

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 Water Treatment Plant Expansion No. 4 Program. Recent activities include the following:

- Dry Polymer System Control Panel Replacement – The project replaced three existing control panels in the Dry Polymer Building. Construction is complete; testing of the new control panels was completed in July (Figure 9).
- Electrical Buildings Upgrade – The project will replace obsolete electrical equipment and install air conditioning systems and insulation in twelve electrical buildings to improve reliability. Final design is 35 percent complete and is scheduled to be completed by December 2007.
- Ground Fault Protection Upgrade – The project will upgrade the ground fault protection system to reduce the potential for plant shutdowns caused by electrical ground faults. Final design is 50 percent complete and is scheduled to be completed by December 2007.
- Plant-Wide Replacement of Turbidimeters and Particle Counters – The project will replace the existing turbidimeters and particle counters in Modules Nos. 1 to 6. Replacement at Modules Nos. 1 to 3 is complete. Replacement at Modules Nos. 4 to 6 is scheduled to be completed in December 2007 after the Chemical Systems Modifications contract has been completed.
- Plant No. 2 Filter Surface Wash Valve and Actuator Replacement – This project will replace the existing surface wash valves and actuators in Modules Nos. 4 to 6. The project is 15 percent complete and is scheduled to be completed by April 2008.

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



Figure 9: Dry polymer system control panel

Water Quality:

Distribution System – Treated Water Cross Connection Prevention Program: This program will relocate air release and vacuum valves from subsurface vaults along treated-water feeders to above-ground locations to eliminate potential cross connections. The valves at 160 sites have been relocated to date, with another 300 sites scheduled to be modified under this program.

The initial three construction contracts, which address 74 sites, are approximately 20 percent complete. Staff is reviewing contractor submittals and coordinating the contractors’ plans and permits with the cities and local agencies. Final design of the remaining 226 sites is underway and is scheduled for completion by December 2007. Figure 10 shows the fabrication of an elbow for a valve connection.

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



Figure 10: Elbow connection

Board Report (Engineering Key Activities Report for the month of July 2007)

Water Quality (cont.):

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:

- Mills Plant – The plant's ozone system became fully operational in March 2003. In June 2007, the Board awarded a construction contract for two additional ozone contactors to upgrade the plant's ozonation system capacity to 326 mgd. The construction completion date for contactors Nos. 3 & 4 is June 2009 and installation of the ozone equipment is scheduled to be completed by September 2009.
- Jensen Plant – The plant's ozone system became fully operational on July 1, 2005.
- Skinner Plant – Construction of the ozone contactors and Ozone Generation Building continues and construction completion is scheduled for December 2008. Construction is approximately 57 percent complete (Figure 11).
- Weymouth Plant – Final design is complete and bids were opened on July 13, 2007. Staff is evaluating the results.
- Diemer Plant – Construction of the ORP site preparation work is approximately 60 percent complete and is scheduled to be completed in March 2008. Construction of the Vehicle Maintenance Center is approximately 96 percent complete. Construction of Phase I of the Chemical Tank Farm Improvements for the ORP is approximately 98 percent complete. Final design of the ozone facilities is approximately 97 percent complete.



Figure 11: Skinner ozone contactor construction

Board Report (Engineering Key Activities Report for the month of July 2007)

Regulatory:

All Facilities – Install Roofs for Chemical Tank Farms: This program consists of installation of roof canopies over chemical tank farms at the Jensen, Mills, and Weymouth treatment plants. Roof canopies will prevent the capture of rainwater within the containment areas and the subsequent need for its disposal as contaminated waste.

- Construction of fluoride roof structures at the Mills and Jensen Plants is complete (Figure 12).
- Construction of the four Weymouth tank farm roof structures is 75 percent complete.
- Final design of the roof canopies over the Jensen caustic, ferric chloride, and sulfuric acid tank farms is 80 percent complete, and is scheduled to be completed by December 2007.

The program is on schedule to be completed in fiscal year 2007/2008 and is within budget.



Figure 12: Jensen fluoride tank covered by roof structure

Board Report (Engineering Key Activities Report for the month of July 2007)

Regulatory (cont.):

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:

- Diemer and Weymouth Plants – The Diemer and Weymouth projects were completed in 2002 and 2005, respectively, and are fully operational.
- Skinner Plant – Construction of the chlorine containment facilities is 95 percent complete. Start-up testing is planned for August 2007. The Skinner facility is shown in Figure 13.
- Jensen Plant – Construction of the chlorine containment facilities is 30 percent complete. The temporary unloading platform has been placed into full operation, and demolition of the existing unloading shed is scheduled to begin in August 2007.
- Mills Plant – Construction of the chlorine containment facilities is 60 percent complete. Start-up testing for Phase 1 construction is planned for August 2007.

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



Figure 13: Skinner Chlorine Containment Facility

Board Report (Engineering Key Activities Report for the month of July 2007)

Regulatory (cont):

Energy Management Program: Metropolitan's Energy Management Program was initiated to coordinate all energy management efforts undertaken to enhance Metropolitan's energy efficiency and cost effectiveness, reduce greenhouse gas emissions, and support renewable energy projects.

- In June 2007, the Board authorized preliminary design and preparation of environmental documentation for a 1-MW solar energy project at the Skinner Water Treatment Plant. This solar facility is expected to generate electrical power to serve approximately 1/2 of the current Skinner demand and approximately 1/6 of the post-ORP Skinner demand. In addition, the project will reduce Metropolitan's indirect greenhouse gas emissions by 1.75 to 2.5 million pounds of carbon dioxide annually.
- In July, Metropolitan submitted its greenhouse gas emissions inventory data for 2005 and 2006 to the California Climate Action Registry. The data are currently being certified per the Registry's General Reporting Protocol.
- In July, Metropolitan initiated a District-wide assessment effort to determine the feasibility of solar energy projects at the remaining water treatment plants and other facilities. This assessment is currently underway and will provide a high-level screening evaluation of the feasibility for solar energy systems to off-load part of the electrical demand at treatment plants, pump stations and office locations (such as Union Station). This assessment will examine electrical load, space availability, construction cost and local cost of electricity to determine the economic feasibility of additional solar energy projects.
- Studies are underway to determine the feasibility of expanding Metropolitan's hydro-electric power generation capacity and to install wind energy projects at Colorado River Aqueduct sites.



**MONTHLY PROGRESS REPORT
OF CONSTRUCTION AND PROCUREMENT CONTRACTS
June 2007**
(Progress Through June 25, 2007)

Summary of Progress		
	Construction	Related Procurement
Number of Contracts	23	4
Total Bid Amount of Contracts in Progress	\$ 978,352,077	\$ 44,395,934
Number of Contracts Awarded This Month	2	0
Total Bid Amount of Contracts Awarded This Month	\$ 23,586,000	-
Contract Gross Earnings This Month*	\$ 21,314,692	\$ -
<i>*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.</i>		

Contracts Awarded This Month

Contract No. 1649, F. E. Weymouth Water Treatment Plant Operations and Maintenance Building, in the amount of \$9,030,000, was awarded to Brutoco Engineering & Construction, Inc. The work consists of constructing a new centralized Operations and Maintenance Building of approximately 26,566 square feet including a Weld Shop, Machine Shop, Pipe Shop, Carpentry Shop, Test Area, Parts Storage Area, Instrumentation Shop, office areas, and restrooms/locker rooms.

Contract No. 1650, Henry J. Mills Water Treatment Plant Ozone Contactors 3 and 4, in the amount of \$14,556,000, was awarded to C.W. Roen Construction Co. The work consists of constructing two new contactors, installing Metropolitan-furnished ozone equipment, and making tie-ins to existing process and utility lines within the existing contactor structure.

Contracts Completed This Month

Contract No. 1593, Robert A. Skinner Water Treatment Plant Expansion No. 4 Module No. 7, was completed on June 15, 2007 and the notice of completion was recorded on June 20, 2007.

Contract No. 1647, Desert Pavement Maintenance Project for Fiscal Year 2006/07, was completed on June 5, 2007 and the notices of completion were recorded on June 13, 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)

Cont. No.	Spec. No.	Feature	Contractor	Contract Amount	Earnings 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	\$ 5,955,159	\$ 229,995,030	N/A	8/2/02	9/15/10	9/10	58%
		Inland Feeder Totals		\$ 397,000,000	\$ 5,955,159	\$ 229,995,030	\$ -				
		Miscellaneous Contracts		Bid Amount							
1593	1489	Robert A. Skinner Water Treatment Plant Expansion No. 4 Module No. 7	J. R. Filanc Construction Company, Inc.	\$ 76,383,645	\$ 795,715	\$ 82,348,201	\$ 5,964,556	1/5/05	6/15/07	6/07	100%
1607	1504	Robert B. Diemer Water Treatment Plant Entrance Relocation, Vehicle Maintenance Center, and Solids Handling Facilities	Brutoco Engineering & Construction, Inc.	\$ 29,260,000	\$ 451,913	\$ 28,761,480	\$ 518,285	6/13/05	6/15/07	08/07 ²	97%
1609	1483	Robert A. Skinner Water Treatment Plant Oxidation Retrofit Program and Washwater Reclamation Plant No. 3	Shimmick Construction/Obayashi Corp. JV	\$ 184,650,000	\$ 5,430,570	\$ 105,126,781	\$ 2,440,137	7/28/05	1/15/09	1/09	56%
1613	1533	Robert B. Diemer Water Treatment Plant Washwater Tank Pumps Replacement	DenBoer Engineering & Construction, Inc.	\$ 355,000	\$ 119,500	\$ 355,000	\$ -	11/9/05	10/23/06	7/07	99% ³
1616	1498	Robert A. Skinner Water Treatment Plant Chemical Systems Modifications	Kiewit Pacific Co.	\$ 109,944,000	\$ 1,369,066	\$ 111,027,096	\$ 1,613,315	11/28/05	6/5/07	6/07	99%
1619	1400	Henry J. Mills Water Treatment Plant Main Entrance Road Realignment and Perimeter Landscaping	Mega Way Enterprises	\$ 3,295,000	\$ 3,542	\$ 3,169,765	\$ -	1/25/06	10/26/07	10/07	96%
1620	1495	Robert B. Diemer Water Treatment Plant Oxidation Retrofit Program Chemical System Upgrades	Brutoco Engineering & Construction, Inc.	\$ 13,960,000	\$ 109,450	\$ 14,350,404	\$ 448,404	1/13/06	8/14/07	8/07	99%
1628	1517	Henry J. Mills Water Treatment Plant Chemical System Upgrades	J. R. Filanc Construction Co., Inc.	\$ 19,914,600	\$ 772,034	\$ 13,502,413	\$ 63,022	5/2/06	2/7/08	2/08	68%

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

² Time extension pending.

³ Contract work substantially complete. Punchlist work remaining.



Summary of Construction Contracts (Page 2 of 3)

Cont. No.	Spec. No.	Feature	Contractor	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	\$ 3,124,855	\$ 41,571,215	\$ 298,405	5/15/06	2/27/08	2/08	59%
1632	1518A	F. E. Weymouth Water Treatment Plant Chemical System Upgrades	Brutoco Engineering & Construction, Inc.	\$ 3,985,000	\$ 228,000	\$ 4,036,774	\$ 87,244	6/19/06	11/28/07	11/07	99%
1633	1516A	Joseph Jensen Water Treatment Plant Jensen Chlorine Containment and Fluoride Project	Brutoco Engineering & Construction, Inc.	\$ 19,988,000	\$ 379,304	\$ 8,245,963	\$ 246,979	8/29/06	7/1/08	7/08	41%
1634	1564	Rialto Pipeline Improvements - Phase 1 Sectionalizing Structures No. 1 and No. 3	J.F. Shea Construction, Inc.	\$ 6,109,028	\$ 1,278,586	\$ 6,543,716	\$ 882,379	9/5/06	8/14/07	8/07	94%
1636	1546A	F. E. Weymouth Water Treatment Plant Perimeter Improvements, Phase I	Pima Corp. dba Advanced Construction	\$ 2,648,710	\$ 197,500	\$ 2,081,610	\$ 20,000	10/24/06	7/9/07	7/07	78%
1640	1542	Air Release and Vacuum Valve Relocation for Treated Water Pipelines Construction Package No.1	Steve P. Rados, Inc.	\$ 2,806,400	\$ 353,350	\$ 663,350	\$ -	12/18/06	12/28/07	12/07	24%
1641	1561A	Colorado River Aqueduct Siphons, Transitions, Canals, and Tunnels Rehabilitation and Improvements	W.A. Rasic Construction Co., Inc.	\$ 10,250,000	\$ 304,738	\$ 9,847,238	\$ 10,238	12/11/06	6/27/07	6/07	96%
1642	1543	Air Release and Vacuum Valve Relocation for Treated Water Pipelines Construction Package No. 2	PPC Construction, Inc.	\$ 1,195,115	\$ 10,600	\$ 209,426	\$ -	1/2/07	10/26/07	10/07	18%
1643	1544	Air Release and Vacuum Valve Relocation for Treated Water Pipelines Construction Package No. 3	Abhe & Svoboda, Inc.	\$ 1,678,240	\$ 357,114	\$ 450,038	\$ -	1/2/07	10/26/07	10/07	27%
1646	1547	F. E. Weymouth Water Treatment Plant Perimeter Improvements, Phase II	Pima Corp. dba Advanced Construction	\$ 413,240	\$ 73,696	\$ 152,516	\$ -	4/19/07	1/7/08	1/08	37%



Summary of Construction Contracts (Page 3 of 3)

Cont. No.	Spec. No.	Feature	Contractor	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							
1647	1595	Desert Pavement Maintenance Project Fiscal Year 2006/07	Copp Contracting, Inc.	\$ 215,868	\$ -	\$ 215,236	\$ (680)	5/9/07	6/5/07	6/07	100%
1648	1596	Gene Wash Airfield Extension	McCormick Construction Co.	\$ 197,776	\$ -	\$ -	\$ -	5/28/07	7/10/07	7/07	0%
1649	1559	F. E. Weymouth Water Treatment Plant Operations and Maintenance Building	Brutoco Engineering & Construction, Inc.	\$ 9,030,000	\$ -	\$ -	\$ -	7/13/07	5/26/08	5/08	0%
1650	1549	Henry J. Mills Water Treatment Plant Ozone Contactors 3 and 4	C.W. Roen Construction Co.	\$ 14,556,000	\$ -	\$ -	\$ -	7/23/07	5/15/09	5/09	0%
				\$ 581,352,077	\$ 15,359,533	\$ 432,658,222	\$ 12,592,284				
Total Value of Construction Contracts in Progress				\$ 978,352,077	\$ 21,314,692	\$ 662,653,252	\$ 12,592,284				




Summary of Construction and Procurement Contracts Completed This Month 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
1593	1489	Robert A. Skinner Water Treatment Filtration Plant Expansion No. 4 Module No. 7	J. R. Filanc Construction Company, Inc.	\$ 76,383,645	\$ 82,974,475	\$ 6,590,830	6/15/07	6/20/07	8/14/07
1647	1595	Desert Pavement Maintenance Project Fiscal Year 2006/07	Copp Contracting, Inc.	\$ 215,868	\$ 215,236 *	\$ (680)	6/5/07	6/13/07	8/4/07

*Combination of credit and bid quantity variations caused the estimated final earnings to be less than bid amount.

Summary of Procurement Contracts

Cont. No.	Spec. No.	Feature	Contractor	Bid Amount	Earnings This Month	Earnings 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
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 Procurement Contracts in Progress				\$ 44,395,934	\$ -	\$ 17,293,513			

Contract No.	1542	Inland Feeder Program Arrowhead Tunnels Project
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	58%	
Estimated Completion Date	September 2010	
Details:		
Projected Cost to Complete	\$397,000,000	
Earnings To Date	\$229,995,030 *	
Earnings This Month	\$5,955,159 *	
Contract Start	8/2/02	
Contract Completion	9/15/10	
		Installation of transformer for ventilation fan in Arrowhead West TBM

Contract No.	1593	Robert A. Skinner Water Treatment Plant Expansion No. 4 Module No. 7
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	100%	
Percent Extra Work	7.8%	
Completion Date	June 2007	
Details:		
Bid Amount	\$76,383,645	
Earnings To Date	\$82,348,201	
Net Extra Work To Date	\$5,964,556	
Earnings This Month	\$795,715	
Net Extra Work This Month	\$777,395	
Contract Start	1/5/05	
Duration in Working Days	527	
Actual Contract Completion	6/15/07	
		New flocculation and sedimentation basins in operation

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

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	97%
Percent Extra Work	1.8%
Estimated Completion Date	August 2007
Details:	
Bid Amount	\$29,260,000
Earnings To Date	\$28,761,480
Net Extra Work To Date	\$518,285
Earnings This Month	\$451,913
Net Extra Work This Month	-\$25,700
Contract Start	6/13/05
Duration in Working Days	350
Contract Completion	6/15/07 *

**Robert B. Diemer Water Treatment Plant
Entrance Relocation, Vehicle Maintenance Center,
and Solids Handling Facilities**



Installation of lights and vehicle lift equipment in lower level of new Vehicle Maintenance Center


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.	
At a Glance:	
Estimated Percent Complete	56%
Percent Extra Work	1.3%
Estimated Completion Date	January 2009
Details:	
Bid Amount	\$184,650,000
Earnings To Date	\$105,126,781
Net Extra Work To Date	\$2,440,137
Earnings This Month	\$5,430,570
Net Extra Work This Month	\$309,364
Contract Start	7/28/05
Duration in Working Days	865
Contract Completion	1/15/09


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




Concrete placement for manhole on Plant 2 inlet conduit


*Time extension pending.


Contract No. 1613 Specifications No. 1533 Contractor: DenBoer Engineering & Construction, Inc.	Robert B. Diemer Water Treatment Plant Washwater Tank Pumps Replacement
Scope: The work consists of the replacement of existing pumps, motors, check valves, pressure indicators, and reduced voltage motor starters.	
At a Glance: Estimated Percent Complete 99% * Percent Extra Work 0.00% Estimated Completion Date July 2007	
Details: Bid Amount \$355,000 Earnings To Date \$355,000 Net Extra Work To Date \$0 Earnings This Month \$119,500 Net Extra Work This Month \$0 Contract Start 11/9/05 Duration in Working Days 200 Contract Completion 10/23/06	Completed installation of new pump


Contract No. 1616 Specifications No. 1498 Contractor: Kiewit Pacific Co.	Robert A. Skinner Water Treatment Plant Chemical Systems Modifications
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: Estimated Percent Complete 99% Percent Extra Work 1.5% Estimated Completion Date June 2007	
Details: Bid Amount \$109,944,000 Earnings To Date \$111,027,096 Net Extra Work To Date \$1,613,315 Earnings This Month \$1,369,066 Net Extra Work This Month \$300 Contract Start 11/28/05 Duration in Working Days 380 Contract Completion 6/5/07	Lighting outside of Sodium Hypochlorite Building


*Contract work substantially complete. Punchlist work remaining.


Contract No.	1619	Henry J. Mills Water Treatment Plant Main Entrance Road Realignment and Perimeter Landscaping
Specifications No.	1400	
Contractor: Mega Way Enterprises		 <p style="text-align: center;">Landscape maintenance at Alessandro entrance</p>
Scope: The work consists of constructing a new entrance road, a guard station, new fencing, and landscaping.		
At a Glance:		
Estimated Percent Complete	96%	
Percent Extra Work	0.00%	
Estimated Completion Date	October 2007	
Details:		
Bid Amount	\$3,295,000	
Earnings To Date	\$3,169,765	
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	
Contract Completion	10/26/07	


Contract No.	1620	Robert B. Diemer Water Treatment Plant Oxidation Retrofit Program Chemical System Upgrades
Specifications No.	1495	
Contractor: Brutoco Engineering & Construction, Inc.		 <p style="text-align: center;">Chemical injection system</p>
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:		
Estimated Percent Complete	99%	
Percent Extra Work	3.2%	
Estimated Completion Date	August 2007	
Details:		
Bid Amount	\$13,960,000	
Earnings To Date	\$14,350,404	
Net Extra Work To Date	\$448,404	
Earnings This Month	\$109,450	
Net Extra Work This Month	\$0	
Contract Start	1/13/06	
Duration in Working Days	270	
Contract Completion	8/14/07	


Contract No. 1628 Specifications No. 1517 Contractor: J. R. Filanc Construction Co., Inc.	Henry J. Mills Water Treatment Plant Chemical System Upgrades
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.	
At a Glance: Estimated Percent Complete 68% Percent Extra Work 0.32% Estimated Completion Date February 2008	
Details: Bid Amount \$19,914,600 Earnings To Date \$13,502,413 Net Extra Work To Date \$63,022 Earnings This Month \$772,034 Net Extra Work This Month \$0 Contract Start 5/2/06 Duration in Working Days 360 Contract Completion 2/7/08	
Installation and termination of conductors	


Contract No. 1631 Specifications No. 1535 Contractor: Kiewit Pacific Co.	Diemer Water Treatment Plant Site Preparation for Oxidation Retrofit Program
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 59% Percent Extra Work 0.42% Estimated Completion Date February 2008	
Details: Bid Amount \$70,516,455 Earnings To Date \$41,571,215 Net Extra Work To Date \$298,405 Earnings This Month \$3,124,855 Net Extra Work This Month \$26,122 Contract Start 5/15/06 Duration in Working Days 445 Contract Completion 2/27/08	
Foundation for Roller Compacted Concrete	

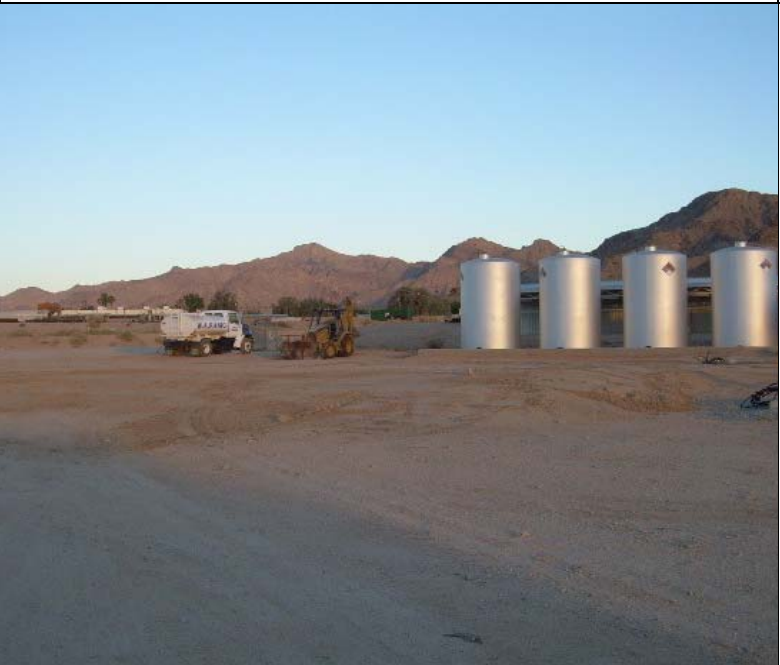
Contract No. 1632 Specifications No. 1518A Contractor: Brutoco Engineering & Construction, Inc.	F. E. Weymouth Water Treatment Plant Chemical System Upgrades
The work consists of construction of fluorosilicic acid unloading, storage and injection facilities, steel roof canopies, and associated work.	
At a Glance:	
Estimated Percent Complete 99% Percent Extra Work 2.2% Estimated Completion Date November 2007	
Details:	
Bid Amount \$3,985,000 Earnings To Date \$4,036,774 Net Extra Work To Date \$87,244 Earnings This Month \$228,000 Net Extra Work This Month \$0 Contract Start 6/19/06 Duration in Working Days 360 Contract Completion 11/28/07	
	Polymer Tank Farm

Contract No. 1633 Specifications No. 1516A Contractor: Brutoco Engineering & Construction, Inc.	Joseph Jensen Water Treatment Plant Jensen Chlorine Containment and Fluoride Project
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 41% Percent Extra Work 1.2% Estimated Completion Date July 2008	
Details:	
Bid Amount \$19,988,000 Earnings To Date \$8,245,963 Net Extra Work To Date \$246,979 Earnings This Month \$379,304 Net Extra Work This Month \$215,707 Contract Start 8/29/06 Duration in Working Days 460 Contract Completion 7/1/08	
	Underground ductbank for new scrubber equipment

Contract No. 1634 Specifications No. 1564 Contractor: J.F. Shea Construction, Inc.	Rialto Pipeline Improvements - Phase 1 Sectionalizing Structures No. 1 and No. 3	
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 94% Percent Extra Work 14.4% Estimated Completion Date August 2007		
Details: Bid Amount \$6,109,028 Earnings To Date \$6,543,716 Net Extra Work To Date \$882,379 Earnings This Month \$1,278,586 Net Extra Work This Month \$828,279 Contract Start 9/5/06 Duration in Working Days 230 Contract Completion 8/14/07		
		Testing of applied coating

Contract No. 1636 Specifications No. 1546A Contractor: Pima Corp. dba Advanced Construction	F. E. Weymouth Water Treatment Plant Perimeter Improvements, Phase I	
Scope: The work consists of landscape, lighting and irrigation improvements; decorative fencing; and extending paved parking.		
At a Glance: Estimated Percent Complete 78% Percent Extra Work 0.76% Estimated Completion Date July 2007		
Details: Bid Amount \$2,648,710 Earnings To Date \$2,081,610 Net Extra Work To Date \$20,000 Earnings This Month \$197,500 Net Extra Work This Month \$20,000 Contract Start 10/24/06 Duration in Working Days 160 Contract Completion 7/9/07		
		Concrete placement for walls along Gladstone Avenue

Contract No. 1640 Specifications No. 1542 Contractor: Steve P. Rados, Inc.	Air Release and Vacuum Valve Relocation for Treated Water Pipelines Construction Package No. 1
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: Estimated Percent Complete 24% Percent Extra Work 0.00% Estimated Completion Date December 2007	
Details: Bid Amount \$2,806,400 Earnings To Date \$663,350 Net Extra Work To Date \$0 Earnings This Month \$353,350 Net Extra Work This Month \$0 Contract Start 12/18/06 Duration in Working Days 260 Contract Completion 12/28/07	
	New air release and vacuum valve enclosures at contractor's yard

Contract No. 1641 Specifications No. 1561A Contractor: W.A. Rasic Construction Co., Inc.	Colorado River Aqueduct Siphons, Transitions, Canals, and Tunnels Rehabilitation and Improvements
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 96% Percent Extra Work 0.10% Estimated Completion Date June 2007	
Details: Bid Amount \$10,250,000 Earnings To Date \$9,847,238 Net Extra Work To Date \$10,238 Earnings This Month \$304,738 Net Extra Work This Month \$10,238 Contract Start 12/11/06 Duration in Working Days 140 Contract Completion 6/27/07	
	Demobilization of construction yard in progress

Contract No. 1642
Specifications No. 1543
Contractor: PPC Construction, Inc.

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

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 **18%**
Percent Extra Work **0.00%**
Estimated Completion Date **October 2007**

Details:
Bid Amount **\$1,195,115**
Earnings To Date **\$209,426**
Net Extra Work To Date **\$0**
Earnings This Month **\$10,600**
Net Extra Work This Month **\$0**
Contract Start **1/2/07**
Duration in Working Days **210**
Contract Completion **10/26/07**

Flanges for steel pipe fabrication

Contract No. 1643
Specifications No. 1544
Contractor: Abhe & Svoboda, Inc.

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



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 **27%**
Percent Extra Work **0.00%**
Estimated Completion Date **October 2007**

Details:
Bid Amount **\$1,678,240**
Earnings To Date **\$450,038**
Net Extra Work To Date **\$0**
Earnings This Month **\$357,114**
Net Extra Work This Month **\$0**
Contract Start **1/2/07**
Duration in Working Days **210**
Contract Completion **10/26/07**

New air release and vacuum valves

<p>Contract No. 1646 Specifications No. 1547 Contractor: Pima Corp. dba Advanced Construction</p>	<p>F. E. Weymouth Water Treatment Plant Perimeter Improvements, Phase II</p>
<p>Scope: The work consists of landscape and irrigation improvements along the north and south boundaries of the plant and around Building No. 4.</p>	
<p>At a Glance:</p> <p>Estimated Percent Complete 37% Percent Extra Work 0.00% Estimated Completion Date January 2008</p>	
<p>Details:</p> <p>Bid Amount \$413,240 Earnings To Date \$152,516 Net Extra Work To Date \$0 Earnings This Month \$73,696 Net Extra Work This Month \$0 Contract Start 4/19/07 Duration in Working Days 180 Contract Completion 1/7/08</p>	<p>Area on west side of Building No. 4 to receive new landscaping</p>
<p>Contract No. 1647 Specifications No. 1595 Contractor: Copp Contracting, Inc.</p>	<p>Desert Pavement Maintenance Project Fiscal Year 2006/07</p>
<p>Scope: The work consists of cap sealing Iron Mountain Airstrip and Kaiser Mine Airstrip followed by painting a single dashed centerline, and slurry sealing Iron Mountain Pump Station.</p>	
<p>At a Glance:</p> <p>Estimated Percent Complete 100% Percent Extra Work -0.32% Completion Date June 2007</p>	
<p>Details:</p> <p>Bid Amount \$215,868 Earnings To Date \$215,236 Net Extra Work To Date (Credit) -\$680 Earnings This Month \$0 Net Extra Work This Month \$0 Contract Start 5/9/07 Duration in Working Days 30 Actual Contract Completion 6/5/07</p>	<p>Cap sealing of Iron Mountain Airstrip</p>

<p>Contract No. 1648 Specifications No. 1596 Contractor: McCormick Construction Co.</p>	<p>Gene Wash Airfield Extension</p>
<p>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.</p>	
<p>At a Glance:</p> <p>Estimated Percent Complete 0% Percent Extra Work 0.00% Estimated Completion Date July 2007</p>	
<p>Details:</p> <p>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 Duration in Working Days 30 Contract Completion 7/10/07</p>	<p>Grading extension to Gene Airstrip</p>
<p>Contract No. 1649 Specifications No. 1559 Contractor: Brutoco Engineering & Construction, Inc.</p>	<p>F. E. Weymouth Water Treatment Plant Operations and Maintenance Building</p>
<p>Scope: The work consists of constructing a new centralized Operations and Maintenance Building of approximately 26,566 square feet including a Weld Shop, Machine Shop, Pipe Shop, Carpentry Shop, Test Area, Parts Storage Area, Instrumentation Shop, office areas, and restrooms/locker rooms.</p>	
<p>At a Glance:</p> <p>Estimated Percent Complete 0% Percent Extra Work 0.00% Estimated Completion Date May 2008</p>	
<p>Details:</p> <p>Bid Amount \$9,030,000 Earnings To Date \$0 Net Extra Work To Date \$0 Earnings This Month \$0 Net Extra Work This Month \$0 Contract Start 7/13/07 Duration in Working Days 220 Contract Completion 5/26/08</p>	<p>Future site of Operations and Maintenance Building</p>

Contract No. 1650 Specifications No. 1549 Contractor: C.W. Roen Construction Co.	Henry J. Mills Water Treatment Plant Ozone Contactors 3 and 4
Scope: The work consists of constructing two new contactors, installing Metropolitan-furnished ozone equipment, and making tie-ins to existing process and utility lines within the existing contactor structure.	
At a Glance: Estimated Percent Complete 0% Percent Extra Work 0.00% Estimated Completion Date May 2009	
Details: Bid Amount \$14,556,000 Earnings To Date \$0 Net Extra Work To Date \$0 Earnings This Month \$0 Net Extra Work This Month \$0 Estimated Contract Start 7/23/07 Duration in Working Days 460 Estimated Contract Completion 5/15/09	