

**Engineering Committee
Reporting Items
June 14, 2010**

1. Project Contracts, Task Orders, and Change Orders
 - a. Action items (recommendations to Board of Trustees):
 - i. None.
 - b. Action items (consider acceptance by Engineering Committee):
 - i. None.
 - c. Reporting Items (approved by General Manager):
 - i. LCWTP Filter Aid Polymer System Upgrade Project: \$1,581.38 to Hills Construction for additional ½-inch ball valves and changes to PLC enclosure. (Change Order 003)
 - ii. LCWTP Filter Aid Polymer System Upgrade Project: Additional 31 days to contract to Hills Construction for change in field conditions due to winter time water demands (Change Order 002).
2. Discussed Salt Lake Aqueduct tracts 473-477
3. Discussed changes to Policies and Procedures chapter 16
4. Discussed Project Reports

Metropolitan Water District of Salt Lake & Sandy CAPITAL PROJECT REPORT

June 2010

Last Updated: June 10, 2010

Capacity Improvement Projects

Owner Controlled Insurance Program

Project Data:

Owner Controlled Insurance:	Liberty Mutual
Date Program Began:	October 2003
Final Obligation Date:	December 30, 2010
Budget (FY10):	\$200,000.00
Invoiced FY10:	\$131,974.27

Diane Richards (GL)

Ken Covert (WC)

Non-Capacity Improvement Projects

LCWTP – Solids Handling (Waste Wash Water Gate Repair)

Project Data:

Design Engineer:	MWDSLS
Contractor:	Prime Machine
Notice to Proceed:	November 10, 2008
Substantial Completion Date:	October 28, 2009
Final Completion Date:	November 2, 2009
Estimated Project Cost:	\$1,250,000.00
Engineering Contract Amount:	N/A
Engineering Change Orders:	N/A
Construction Contract Amount:	\$864,248.00
Construction Change Orders:	\$-22,630.00
Project Total:	\$841,618.00
Percent Change Orders:	-2.62%

The waste wash water gate repair project was completed November 2, 2009. In summary, the project will save the District \$295,561.20 annually, which has a payback period of 2.85 years.

Terminal Reservoir Replacement Project – Final Design

Project Data:

Design Engineer:	Bowen, Collins & Associates
Contractor:	N/A
Notice to Proceed:	November 30, 2009
Substantial Completion Date:	N/A
Final Completion Date (Design):	June 30, 2011
Estimated Project Cost:	\$33,500,000.00
Engineering Contract Amount:	\$699,850.00
Engineering Change Orders:	\$0.00
Construction Contract Amount:	\$32,602,179.00 (begin 2015)
Construction Change Orders:	N/A
Project Total:	\$33,302,029.00
Percent Change Orders:	0.00%

Draft Design Memorandums' (DMs) 2 thru 5 were received June 1, 2010 for initial review by project manager. Work producing design documents for the chemical building has begun with the remaining aspects of the project to follow once the DMs have been finalized.

Little Cottonwood Water Treatment Plant – Post Treatment Chemical Building Filter Aid Polymer System

Project Data:

Design Engineer:	Bowen, Collins & Associates
Contractor:	Hills Construction, Inc.
Notice to Proceed:	January 14, 2010
Substantial Completion Date:	May 15, 2010
Final Completion Date:	June 1, 2010
Estimated Project Cost:	\$575,000.00
Engineering Contract Amount:	\$127,634.00
Engineering Change Orders:	\$0.00
Construction Contract Amount:	\$343,690.00
Construction Change Orders:	\$11,867.51
Project Total:	\$490,824.91
Percent Change Orders:	3.45%

Substantial completion for this project was given on May 25, 2010. All twenty of the filters have been upgraded and made available for operations. The Contractor is actively working on the punch list. All remaining activities look to be finished by June 14, 2010.

Little Cottonwood Water Treatment Plant – UPS Replacement

Project Data:

Design Engineer:	Staff
Contractor:	Staff
Notice to Proceed:	n/a
Substantial Completion Date:	n/a
Final Completion Date:	May 17, 2010
Estimated Project Cost:	\$32,000.00
Engineering Contract Amount:	n/a
Engineering Change Orders:	n/a
Construction Contract Amount:	n/a
Construction Change Orders:	n/a
Project Total:	\$ 25,746.98
Percent Change Orders:	0.00%

The District received three competitive quotes for a 20 kilovolt-ampere (kVA) uninterruptible power supply (UPS) system. A purchase order was issued to Tech Connect for equipment and startup services. District staff installed and wired the new UPS, and the UPS manufacturer helped commission the newly installed UPS. The new UPS is now in service.

Little Cottonwood Water Treatment Plant – Site Support Drain Separation Project

Project Data:

Design Engineer:	Bowen, Collins & Associates & Staff
Contractor:	N/A
Notice to Proceed:	January 11, 2010
Substantial Completion Date:	N/A
Final Completion Date:	June 30, 2010
Estimated Project Cost:	\$100,000.00
Engineering Contract Amount:	\$7,500.00
Engineering Change Orders:	\$0.00
Construction Contract Amount:	N/A
Construction Change Orders:	N/A
Project Total:	\$7,500.00
Percent Change Orders:	0.00%

The Technical Memorandum (TM) was recently completed and distributed on June 1, 2010. Several options are available for staff to consider including free draining, pumping or a combination of free drain and pumping. An internal workshop to determine course of action is scheduled for June 15, 2010.

Salt Lake Aqueduct Improvements - Cathodic Protection

Project Data:

Design Engineer:	Corrosion Control Technologies
Contractor:	Mike Zimmerman, Well Service
Notice to Proceed:	March 2, 2009
Substantial Completion Date:	July 28, 2009
Final Completion Date:	January 30, 2010
Estimated Project Cost:	\$600,000.00
Engineering Contract Amount:	\$60,720.00
Engineering Change Orders:	\$0.00
Construction Contract Amount:	\$466,465.71
Construction Change Orders:	\$26,868.90
Project Total:	\$554,054.61
Percent Change Orders:	4.85%

After close interval survey testing to determine corrosion “collection” and “discharge” locations, the District and its Corrosion Engineer, CCT, have come to an understanding, in principle, with Questar Gas to mitigate cathodic protection interference to Questar Gas infrastructure. Costs will be shared with both entities. The District’s expected share of the costs will not exceed \$52,000. Approximately \$46,000 will be for labor performed by Questar Gas and its contractors and \$6,000 for materials. These

efforts will extend into FY2011, with an estimated completion by August 30, 2010. The costs described above are not reflected in the table.

Salt Lake Aqueduct Improvements - Flow Meter Replacement Program

Project Data:

Design Engineer:	Staff
Contractor:	Staff & Cameron Measurement Systems
Notice to Proceed:	June 21, 2010
Substantial Completion Date:	N/A
Final Completion Date:	June 30, 2010
Estimated Project Cost:	\$55,000.00
Engineering Contract Amount:	N/A
Engineering Change Orders:	N/A
Construction Contract Amount:	\$12,500.00
Construction Change Orders:	\$0.00
Project Total:	\$47,360.00
Percent Change Orders:	0.00%

This project includes the procurement, installation, and configuration of two replacement SLA ultrasonic flow meters (one for the Deer Creek Reservoir dam SLA raw water intake flow and one for the Little Cottonwood Water Treatment Plant SLA finished water flow). The meter equipment has been procured and is scheduled to be installed by the end of June.

Jordan Narrows Pump Station – Installation of Transformer

Project Data:

Design Engineer:	Bowen, Collins & Associates & Staff
Contractor:	Probst Electric, Inc.
Notice to Proceed:	October 6, 2009
Substantial Completion Date:	December 15, 2009
Final Completion Date:	May 4, 2010
Estimated Project Cost:	\$100,000.00
Engineering Contract Amount:	\$19,899.00
Engineering Change Orders:	\$0.00
Construction Contract Amount:	\$21,500.00
Construction Change Orders:	\$2,742.99
Project Total:	\$44,141.99
Percent Change Orders:	6.21%

Installation work associated with the new transformer was substantially complete on December 15, 2009. An electrical load test on the newly installed transformer, including the operation of all pumps and related electrical gear, was performed on May 3rd and 4th, 2010. Successful load test results have been acquired, and final completion status for the project has been approved.

Jordan Narrows Pump Station – Utah Lake Pump Station

Project Data:

Design Engineer:	Bowen, Collins & Associates
Contractor:	n/a
Notice to Proceed:	n/a
Substantial Completion Date:	n/a
Final Completion Date:	n/a
Estimated Project Cost:	\$8.5 million (unconfirmed)
Engineering Contract Amount:	\$879,746.00
Engineering Change Orders:	\$0
Construction Contract Amount:	n/a
Construction Change Orders:	n/a
Project Total:	\$879,746.00
Percent Change Orders:	0%

The Board of Canal Presidents (BOCP) selected Bowen, Collins & Associates for the Design and Construction Management contract for the Utah Lake Pump Station Replacement Project. The design contract shall be executed once the Engineering Reimbursement Contract with the BOCP and Contract Pumpers is executed. Expected notice to proceed with design is late June 2010.

IS/SCADA Replacement

Project Data:

Design Engineer:	Staff
Contractor:	Great Basin Electronics, Inc. & Staff
Notice to Proceed:	April 7, 2010
Substantial Completion Date:	n/a
Final Completion Date:	June 18, 2010
Estimated Project Cost:	\$162,000.00
Engineering Contract Amount:	n/a
Engineering Change Orders:	n/a
Construction Contract Amount:	\$160,244.22
Construction Change Orders:	\$0.00
Project Total:	\$160,244.22
Percent Change Orders:	0.00%

This project includes the procurement, installation, and configuration of Process Control/Supervisory Control and Data Acquisition replacement servers, ozone system instrumentation, and backup communications utilizing microwave radio technology. All equipment has been procured, and about 90% has been installed and configured. The remaining equipment should be installed by 6/11/2010, with final completion on 6/18/2010.

Miscellaneous Capital Expenditures

Capital Item	FY2010 Budget	Expensed	Description	Date Completed
Fleet	\$50,000.00	\$48,115.42	Replacement of two vehicles.	10/27/10
Incubator	\$15,000.00	\$0.00	As of April 30, 2010 Budget Report	
Ultraviolet (UV) Instrumentation	\$7,500.00	\$7,200.00	As of April 30, 2010 Budget Report	

Little Dell Dam – Capital Improvements

The following Capital Improvements were requested by Salt Lake City Department of Public Utilities for FY2010:

- **New Adit Ventilator** - \$10,000. The Adit ventilator was not addressed during FY2010. This Capital need has been placed on the FY2011 request with critical status.
- **Crack-seal and Seal the Access Roads** - \$21,000 Crack Repair, \$70,000 Slurry Seal. These items were not addressed in FY2010. Both items have been placed on the FY2011 Capital Request.
- **New Staff Gauge** - \$50,000. Was not addressed in FY2010. This item has been placed on the future projects list, post FY2011.
- **Upgrade Instrumentation System** - \$60,000. This item was not addressed in FY2010. This project was placed on the FY2011 request and the budget request revised to \$99,000.
- **Remote Front Gate Operator** - \$50,000. This project was not addressed in FY2010 and has been placed on the future projects list, post FY2011.

Total Request FY2010: \$261,000

Total Invoiced FY2010: \$0

Jordan Aqueduct System – Capital Projects

The following Capital Improvements were requested by Jordan Valley Water Conservancy District for FY2010 for the Jordan Aqueduct System:

- New water supply equipment and emergency response building – Project moved to FY2012.
- Jordan Valley Water Treatment Plant Chlorine Dioxide Project – Final contract documents received in May and are being reviewed by Division of Drinking Water (DDW). Anticipate Notice to Proceed (NTP) in September 2010. This project will have a “testing” phase or a “Pre-Compliance Sampling period” around February 2012 to March 2012. Final completion anticipated by March 2012.
- Jordan Valley Water Treatment Plant Filter and Chemical Building Seismic Upgrade – On-going project with work expected to continue into FY2011.
- Jordan Aqueduct Chlorine Booster Station – The 30% (Preliminary Design) documents were received in May. The schedule is to proceed with design this year, go out to bid late winter and begin construction next calendar year. The plan is to bring this project on-line on or before the Chlorine Dioxide Project, February 2012.
- JA-4 Cathodic Protection System – Project postponed to FY2012.
- Normal Capital Improvements – No report.

Total Request FY2010: \$1,796,214

Expected Invoice for FY2010: \$731,000

Encroachment Program Report

Last updated: May 26, 2010

Aqueduct Encroachment Applications

Calendar Year	Applications Received	Agreements Executed	Applications Denied/Withdrawn	Pending @ Period End
Thru May 24 th 2010	17	10	18	23
2009	22	14	4	34
2008	24	12	0	30
2007/06	32	8	6	18
Totals	95	44	28	

Brochure Mailings

	Mailing	Notices Sent	District Contacted	Staff Contact/Meeting	Council Presentation
Salt Lake County					
Draper City	12/03/09	35	0	08/04/09	TBD 08/25/09 & 09/08/09
Sandy City	11/10/09	196	3	08/10/09	09/08/09
Comm. 21	01/12/10	42	20	02/04/10	Open House
Cottonwood Heights	01/06/10	130	3	05/19/09	12/29/09
Holladay	12/17/09	60	0	11/03/09	TBD
Canyon Cove HOA	n/a	n/a	n/a	11/25/09	
Jim Palmer Dist. 5	n/a	n/a	n/a	11/17/09	
SLCo.	n/a	n/a	n/a	11/12/09	
Granite Comm. Assoc. of Comm. Councils Together	11/10/09	w/Sandy	0	TBD	TBD
Mt. Olympus	02/16/10	95	2	n/a	12/10/09 01/19/10
East Millcreek	02/22/10	154	3	n/a	02/04/10
Canyon Rim	02/03/10	27	0	n/a	01/19/10
Utah County					
Orem City	10/29/09	36	0	08/17/09	09/08/09
Lindon City	11/03/09	48	0	08/13/09	10/20/09
Pleasant Grove	10/06/09	69	4	07/14/09	08/11/09
Cedar Hills City	11/19/09	100	1	09/09/09	TBD
Alpine City	09/08/09	43	1	07/06/09	07/28/09
Highland City	09/23/09	54	0	04/21/09	05/19/09
Provo City	n/a	n/a	n/a	TBD	TBD
Utah County	w/ Cities			TBD	TBD
Wasatch County					
Wasatch County	02/25/10	12	0	12/01/09	TBD
Total		1105	37		

Note: Items bolded reflect changes from last report.

Survey Program Report

Last updated: May 26, 2010

Task Order	Tract	Consultant	Amount	Change Order(s)	Total	Spent to Date	Percent Spent	Completed
09.01.01	422,424 (partial) (Serdar)	RBB	\$2,800.00		\$2,800.00	\$2,620.00	94%	9/10/2009
09.01.02	340 (Crofts)	RBB	\$5,000.00	\$6,565.00	\$11,565.00	\$11,565.00	100%	5/24/2010
09.01.03	225 (Robinson)	RBB	\$5,000.00	\$2,310.00	\$7,310.00	\$7,310.00	100%	11/12/2009
09.01.04	River Oaks De-Annexation	RBB	\$6,000.00	\$5,000.00	\$11,000.00	\$10,875.00	99%	
09.02.01	408 (partial) (Alcorn)	Cornerstone	\$4,727.50		\$4,727.50	\$4,727.50	100%	8/6/2009
09.02.02	337 (partial) (Brown)	Cornerstone	\$5,000.00		\$5,000.00	\$4,450.00	89%	8/30/2009
09.02.03	330 (Alpine)	Cornerstone			----- CANCELLED -----			
09.02.04	469, 469A, 470 (IOB)	Cornerstone	\$3,800.00	\$3,950.00	\$7,750.00	\$7,750.00	100%	11/23/2009
09.02.05	Jordan Narrows	Cornerstone	\$8,000.00	\$6,204.92	\$14,204.92	\$14,204.92	100%	5/24/2010
09.02.06	S-09-1076 Garage Legal	Cornerstone	\$575.00		\$575.00	\$575.00	100%	3/24/2010
PO27092	330A (Teichert)	Cornerstone	\$5,000.00		\$5,000.00	\$5,000.00	100%	7/31/2009
09.06.01	SLCo Plats	PEC	\$3,500.00		\$3,500.00	\$3,500.00	100%	4/22/2010
09.06.02	Utah Co Plats	PEC	\$7,200.00		\$7,200.00	\$0.00	0%	
09.07.01	473 – 477 (N of Skyline HS)	Stanley	\$8,500.00	\$4,800.00	\$13,300.00	\$4,500.00	34%	
09.07.02	221 – 224 (PG Orchard)	Stanley	\$13,055.00	\$780.00	\$13,835.00	\$1,200.00	9%	
Total			\$78,157.50	\$29,609.92	\$107,767.42	\$78,277.42	73%	

Note: Items bolded reflect changes from last report.