



*Dedicated to
Satisfying our Community's
Water Needs*

**AGENDA
MESA WATER DISTRICT
BOARD OF DIRECTORS
Tuesday, January 17, 2017
1965 Placentia Avenue, Costa Mesa, CA 92627
3:30 p.m. Special Board Meeting**

**ENGINEERING AND OPERATIONS COMMITTEE MEETING
Tuesday, January 17, 2017 at 3:30 p.m.**

CALL TO ORDER

PLEDGE OF ALLEGIANCE

PUBLIC COMMENTS

Non-Agendized Matters: Members of the public are invited to address the Board on matters which are not on the Agenda. Each speaker is limited to three (3) minutes. The Board will set aside thirty (30) minutes for public comments.

Agendized Matters: Members of the public may comment on Agenda items before action is taken, or after the Board has discussed the item. Each speaker is limited to five (5) minutes.

CONSENT CALENDAR ITEMS:

Approve all matters under the Consent Calendar by one motion unless a Board member, staff, or a member of the public requests a separate action.

1. Developer Project Status Report
2. Mesa Water® and Other Agency Projects Status Report
3. Water Quality Call Report
4. Committee Policy & Resolution Review or Development
5. Water Operations Status Report
6. Municipal Water District of Orange County Activities Update
7. Orange County Water District Activities Update

PRESENTATION AND DISCUSSION ITEMS:

Items recommended for approval at this meeting may be agendized for approval at a future Board meeting.

8. Committee Meeting Dates and Chair Appointment
9. Well 9B Project Status Update

ACTION ITEMS:

None

REPORTS:

10. Report of the General Manager
11. Directors' Reports and Comments



INFORMATION ITEMS:

None

In compliance with California law and the Americans with Disabilities Act, if you need disability-related modifications or accommodations, including auxiliary aids or services in order to participate in the meeting, or if you need the agenda provided in an alternative format, please contact the District Secretary at (949) 631-1206. Notification 48 hours prior to the meeting will enable Mesa Water District (Mesa Water®) to make reasonable arrangements to accommodate your requests.

Agenda materials that are public records, which have been distributed to a majority of the Mesa Water Board of Directors (Board), will be available for public inspection at the District Boardroom, 1965 Placentia Avenue, Costa Mesa, CA and on Mesa Water's website at www.MesaWater.org. If materials are distributed to the Board less than 72 hours prior or during the meeting, the materials will be available at the time of the meeting.

ADJOURNMENT

DEVELOPER PROJECT STATUS REPORT

PROJECT STATUS - DEVELOPER PROJECTS			
FILE NO.	PROJECT ADDRESS	PROJECT DESCRIPTION	PROJECT NOTES/STATUS
MC 2065	1677 Superior	Tract Homes	<p>New plans received 2/27/14. Plans have been routed to other departments for plan review 3/11/14. Field investigation completed 3/17/14. Plans reviewed and sent for revisions 3/20/14. Mylars received, fees paid, and plans signed 5/5/14. Abandonment done and installed 800' pipe 6/30/14. Board accepted easement on 7/10/14 and meters set. Tested water line and tied into system on 7/28/14. Installed 18 - 1" meters on 11/20/14. Installed 6 - 1" meters on 6/5/15. Phased development project - Construction and inspections in progress. Installed 12 - 1" meters on 1/28/16. Inspector completed a site visit to check status on 4/20/16. Installed 4 - 1" meters on 5/12/16. Meter boxes installed on 10/4/16. Backflow devices checked on 10/17/16. Developing checklist for project closeout. (12/14/16)</p>
MC 2126	573 Victoria	37 New Homes	<p>Plans received and plan check fees paid 10/7/14. Design of improvements found not to be satisfactory, and a meeting was held on 10/23/14 to discuss design alternatives. New meeting held on 2/6/15. Awaiting revised plans from developer. Revised plans submitted 4/6/15. Plans sent back for second revision 4/7/15. Plans sent back for third revision 7/17/15. Plans currently in fourth plan check 7/30/15. Plans approved and permit issued on 8/20/15. Hot-tap and service abandonment on 10/20/15. Pipeline installation ongoing 10/22/15. Pipeline pressure tested on 11/23/15. Bac-T testing completed on 11/30/15 & 12/1/15. Mainline turned on 12/25/15. Meter boxes installed and angle-stops locked on 1/19/15. Services lowered on 6/30/16 in preparation of meter installation. Meter box placement for model homes on 7/13/16. Regular site visit on 12/8/16 with no progress to report. (12/14/16)</p>

DEVELOPER PROJECT STATUS REPORT

PROJECT STATUS - DEVELOPER PROJECTS			
FILE NO.	PROJECT ADDRESS	PROJECT DESCRIPTION	PROJECT NOTES/STATUS
MC 2134	2026 Placentia	15 New Homes	Plans received and fees paid on 10/30/14. Plans reviewed on 10/30/14 and circulated for Dept. signatures. Plan check comments issued to Engineer on 11/13/14. Received revised plans 1/6/14. Plan check completed and permit issued 2/9/15. PreCon meeting held 2/11/15. Inspection ongoing as work progresses. Main hot-tap performed on 5/5/15. Services installed by contractor on 5/7/15. 16 - 1 inch meters installed and locked on 7/6/15. Inspector checked status of the project on 12/2/15. Backflow tested on two model units on 2/25/16. Backflow tested on 8 units on 4/5/16. Regular site visit on 12/8/16 with no progress to report. (12/14/16)
MC 2149	1620-1644 Whittier Ave and 970 16th St	89 Single Family Homes	Plans received and plan check fees paid 2/2/14. Working with developer to receive more information about the floor plans and irrigation as of 2/3/15. Hydraulic model is being performed by RBF. Conceptual Plan Check Completed and returned to customer 4/20/15. Second plan check returned to customer on 5/1/15. Third plan check returned to customer on 5/21/15. Permit issued on 7/23/15. Pre-con meeting held on 7/27/15. Pipeline installation on 10/21/15. Pressure test and chlorination on 11/5/15. Bac-T testing completed on 11/24/15 and 11/25/15. Waterline tied-in at Whittier, Newhall, and West 16th Street and angle-stops locked on 12/14/15. 4 - 1" meters installed on model homes on 2/25/16. 1 - 1.5" irrigation meter and 1 - 1" domestic meter installed and locked on 4/5/16. Inspected rock base on 7/11/16. Installed 7 - 1" meters on 7/13/16. Flow-thru tested on 8/25/16 and 9/8/16. Rock base and meters installed on 11/3/16. Flow-thru check on 12/1/16. (12/14/16)
MC 2168	650 Hamilton	24 Single Family Homes	Plans received and plan check fees paid 4/30/15. Comments returned on 5/21/15. Permit issued on 6/16/15. Fireline installed and turned on 9/29/15. Meters and boxes installed and locked on 1/21/16. Irrigation backflow tested and flow-thru system on models tested 3/31/16. Flow-thru tested for 6 units on 7/11/16. Flow-thru tested for 7 units on 7/26/16. Flow-thru tested for 7 units on 9/28/16. Meters unlocked on 11/29/16. (12/14/16)

DEVELOPER PROJECT STATUS REPORT

PROJECT STATUS - DEVELOPER PROJECTS			
FILE NO.	PROJECT ADDRESS	PROJECT DESCRIPTION	PROJECT NOTES/STATUS
MC 2177	125 East Baker Street	240 Unit Apartment Complex	<p>Concept plans received and plan check fees paid on 6/11/15. First plan check comments returned on 7/31/15. Second plan check returned on 8/20/15. Third plan check submitted on 10/8/15. Additional information provided on 10/28/15. Hydraulic model initiated on 11/5/15. Additional information requested on 12/28/15 and information was provided on 1/4/16. Hydraulic model completed on 3/1/16. Adjacent supporting Mesa Water system improvements are not required. Revised plans submitted on 4/6/16. Final mylars and payment received and permit issued on 5/4/16. Permit issued on 5/10/16. Precon held on 5/24/16. Abandoned water connections on 6/28/16. Installed hydrant, domestic, and fireline tap on 7/7/16. Abandoned 2 services on 7/27/16. Installed 1 fire hydrant on 8/1/16. Pipeline lateral installed on 10/5/16. Backflows tested on 10/24/16. Turned on mainline on 11/18/16. (12/14/16)</p>
MC 2187	2245 Tustin Ave	Single Family Home	<p>Plans received and plan check fees paid on 7/8/15. Second plan check submitted on 7/31/15 and comments returned on 8/17/15. Fees paid on 3/1/16. Permit issued on 3/11/16. Meter installed on 8/26/16. Regular site visit on 11/4/16 with no progress to report. (12/14/16)</p>
MC 2196	580 Anton Ave	250 Unit Apartment Complex	<p>Plans received and plan check fees paid on 7/28/15. Plan check comments returned 8/28/15, requesting information to complete a hydraulic model. Requested information provided on 10/25/15. Hydraulic model initiated on 11/5/15. Hydraulic model completed on 2/1/16. Mesa Water system improvements are not required. Fees paid and permit issued on 2/9/16. Pre-con held on 2/29/16. Abandoned waterline on 3/15/16. Shutdown test on 7/19/16. Valve replaced on 10/3/16 to allow for abandonment. (12/14/16)</p>
MC 2202	2880 Mesa Verde Drive East	10 Single Family Homes	<p>Plans received and plan check fees paid on 8/19/15. First submittal returned on 9/11/15. Second submittal received 10/29/15 and returned on 11/6/15. Permit issued on 12/10/15. 6" manifold installed on 1/19/16. Services installed on 1/20/16. 10 - 1" meters and 1 - 5/8" meter installed and locked on 1/28/16. Flow-thru test on 6/13/16 failed, contractor to reconfigure plumbing system. Model home flow-thru test on 7/10/16. Flow-thru test on 10/21/16. (12/14/16)</p>

DEVELOPER PROJECT STATUS REPORT

PROJECT STATUS - DEVELOPER PROJECTS			
FILE NO.	PROJECT ADDRESS	PROJECT DESCRIPTION	PROJECT NOTES/STATUS
MC 2203	1239 Victoria Street	28 Single Family Homes	Plans received and plan check fees paid on 8/25/15. Second submittal received on 10/25/15 and returned on 11/6/15. Mylars and fees delivered on 11/25/15. Permit issued on 11/30/15. Pre-con held on 1/4/2016. Installed 2 - 8" manifolds on 1/14/16. Installed services on 1/28/16. Abandoned existing services on 1/29/16. 28 - 1" meters installed and locked on 2/22/16. Backflows tested on 6/20/16. Flow-thru tested on model homes on 7/20/16. Backflows tested on 8/18/16. Backflows tested on 12/7/16. (12/14/16)
MC 2204	1672 Placentia	31 Single Family Homes	Plans received and plan check fees paid on 8/26/15. Plan check picked up by customer on 10/6/15. Second plan check submitted on 2/11/16 and returned on 2/26/16. Mylars submitted, fees paid, and permit issued on 5/5/16. Tee cut-ins on 6/22/16. Pressure Test and Bac-T test on 7/7/16. Water main turned on 7/21/16. Services installed and locked off on 9/6/16. Meter installation on 10/28/16. Backflows tested on 11/16/16. (12/14/16)
MC 2206	247 E 23rd St	Single Family Home	Plans received and plan check fees paid on 9/21/15. Plans did not require changes. Fees paid on 11/25/15. Permit issued on 12/1/15. Pre-con held on 1/27/16. 1 - 1" meter installed on 2/4/16. Property owner contacted to check project status on 8/3/16. Regular site visit on 10/7/16 with no progress to report. (12/14/16)
MC 2208	353 & 355 Rochester St.	2 Single Family Homes	Plans received and plan check fees paid on 9/22/15. First submittal picked up on 10/23/15. Second plan check submitted on 11/19/15. Second plan check completed 12/3/16. Second plan check picked up from counter on 2/29/16. Third plan check submitted on 3/14/16, awaiting pick-up at the plan check desk. Fees paid and permit issued on 11/4/16. (12/14/16)
MC 2212	1499 Monrovia Ave	Fireline installation	Plans received and plan check fees paid on 9/29/15. First submittal picked up on 10/23/15. Second plan check submitted on 10/29/15. Second plan check returned on 11/13/15. Mylars delivered on 11/23/15. Fees paid and permit issued on 12/13/15. Checked status on 7/13/16, no work apparent. Project delayed until end of the calendar year. Property owner has asked for a 3 month extension of the permit. (12/14/16)

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FILE NO.	PROJECT ADDRESS	PROJECT DESCRIPTION	PROJECT NOTES/STATUS
MC 2214	1944 Church St	2 Single Family Homes	Plans received and plan check fees paid on 10/5/15. First submittal returned on 10/26/15. Fees paid on 12/15/15. Final mylars and payment received and permit issued on 1/29/16. Water services installed on 8/23/16. 2 - 1 inch water meters installed on 8/26/16. Shutdown for abandonment on 11/14/16. (12/14/16)
MC 2215	119 Cecil Pl	3 Single Family Homes	Plans received and plan check fees paid on 10/5/15. First submittal returned on 10/26/15. Fees paid on 12/15/15. Final mylars and payment received and permit issued on 1/29/16. Attended pre-con meeting on 9/1/16. 3 - 1 inch meters and meter boxes installed on 9/29/16. (12/14/16)
MC 2216	320 E 18th St	4 Single Family Homes	Plans received and plan check fees paid on 10/5/15. First submittal returned on 10/26/15. Fees paid on 12/15/15. Permit issued on 1/29/16. Pre-construction meeting held on 11/15/16. (12/14/16)
MC 2224	286-288 15th Street	2 Single Family Homes	Plans received and plan check fees paid on 11/18/15. Plans were determined to be incomplete and additional information was requested on 11/19/15 and provided on 12/28/15. First plan check returned on 12/30/15. Second plan check submitted on 1/25/16. Second plan returned on 2/24/16. Fees paid and permit issued on 12/2/16. (12/14/16)
MC 2225	215 Knox Place	2 Single Family Homes	Plans received and plan check fees paid on 11/18/15. Plans were determined to be incomplete and additional information was requested on 11/19/15 and provided on 12/28/15. First plan check returned on 12/30/15. Second plan check submitted on 1/25/16. Second plan check returned on 2/12/16. Fees paid and permit issued on 12/2/16. (12/14/16)
MC 2230	217 Cabrillo	2 Attached Dwellings	Plans received and plan check fees paid on 12/22/15. Plan check in progress. First plan check returned on 1/25/16. Second plan check submitted on 1/26/16. Second plan check returned on 2/2/16. Fees paid and permit issued on 3/11/16. Precon held on 5/24/16. Meter and box installed on 6/8/16. Regular site visit on 12/4/16 homes are still under construction. (12/14/16)

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FILE NO.	PROJECT ADDRESS	PROJECT DESCRIPTION	PROJECT NOTES/STATUS
MC2232	189-191 Merrill Place	2 Single Family Homes	Plans received and plan check fees paid on 2/1/16. Plan check completed on 2/12/16 and picked up on 2/29/16. Second plan check received on 3/10/16. Awaiting Mylar drawings and fee payment. Owner contacted on 12/4/16 for project status. (12/14/16)
MC2233	1560 Placentia	81 Single Family Homes	Plans received and plan check fees paid on 1/20/16. Request for additional information requested on 1/28/16. Requested information submitted on 2/24/16. Plan check picked up on 4/18/16. Second plan check submitted on 5/18/16. Mylar drawings and fee payment received on 7/5/16. Permit issued on 7/11/16. Mainline installed on 8/24/16. Hydrant laterals installed on 8/25/16. Services installed on 9/1/16. Mainline installed on 9/20/16. Pressure and Bac-T test on 9/28/16. Laterals installed on 9/29/16 and 10/5/16. Mainline charged on 10/17/16. Angle stop adjusted on 12/6/16. (12/14/16)
MC2235	671 W 17th Street	177 Condos	Plans received and plan check fees paid on 1/21/16. Hydraulic model initiated 2/24/16. Second plan check submitted on 3/24/16 and picked up 4/17/16. Mylar drawings and fee payment received on 7/5/16. Permit issued on 7/11/16. Demolition of existing services on 8/16/16. Mainline installation on 12/6/16. (12/14/16)
MC2236	527-531 Bernard Street	10 Single Family Homes	Plans received and plan check fees paid on 2/8/16. Plan check returned on 2/12/16. Second plan check received on 4/21/16. Fees paid and permit issued on 6/13/16. Manifold installed on 7/19/16. Regular inspection site visit on 11/4/16 with no progress to report. (12/14/16)
MC2237	2245 Santa Ana Avenue	Meter Upgrade	Plans received and plan check fees paid on 2/29/16. Plan check completed 3/24/16. Fee paid and permit issued on 5/16/16. Regular inspection site visit on 11/4/16 with no progress to report. (12/14/16)
MC2240	222 E 15th Street	Meter Upgrade	Plans received and plan check fees paid on 3/25/16. Plan check picked up on 4/20/16. Fee paid and permit issued on 5/10/16. Meter installed on 6/13/16. Regular inspection site visit on 11/4/16 with no progress to report. (12/14/16)
MC2243	165-171 22nd Street	2 Single Family Homes	Plans received and plan check fees paid on 4/20/16. Plan check picked up on 5/17/16. Fees paid and permit issued on 11/18/16. Water service installed on 12/1/16. (12/14/16)

DEVELOPER PROJECT STATUS REPORT

PROJECT STATUS - DEVELOPER PROJECTS			
FILE NO.	PROJECT ADDRESS	PROJECT DESCRIPTION	PROJECT NOTES/STATUS
MC2245	522-526 Bernard Street	10 Single Family Homes	Plans received and plan check fees paid on 5/11/16. Second plan check received on 6/10/16. Second plan check returned on 6/22/16. Permit issued on 7/11/16. Manifold installed on 7/19/16. Regular inspection site visit on 11/4/16 with no progress to report. (12/14/16)
MC2247	1808-1810 Pomona Ave	2 Single Family Homes	Plans received and plan check fees paid on 5/20/16. Second plan check received on 6/23/16. Second plan check returned on 7/11/16. Fees paid and permit issued on 7/28/16. (12/14/16)
MC2252	1100 South Bristol Street	Ganahl Lumber	Plans received and plan check fees paid on 6/1/16. Hydrant flow test completed on 9/7/16. Final plan check completed and returned on 10/28/16. Fees paid and permit issued on 11/29/16. (12/14/16)
C002-16-01	167 Magnolia	2 Single Family Homes	Plans received and plan check fees paid on 6/23/16. Resubmittal received on 7/28/16. Fees paid and permit issued on 8/26/16. Attended pre-con on 9/1/16. Meter and box placement on 10/12/16. (12/14/16)
C003-16-01	788 Center Street	2 Single Family Homes	Plans received and plan check fees paid on 6/28/16. Plans returned on 7/14/16. Awaiting final fee payment. (1/9/17)
C004-16-01	2073-2080 Tablelands Way	8 Single Family Homes	Plans received and plan check fees paid on 6/23/16. Resubmittal received on 7/29/16. Fees paid and permit issued on 8/24/16. Manifold installed on 9/27/16. Meters and backflows installed on 11/13/16. (12/14/16)
C0005-17-01	22nd and Santa Ana	12 Single Family Homes	Plans received and plan check fees paid on 7/22/16. Plans returned on 8/3/16. Fees paid and permit issued on 9/28/16. Manifold installed on 11/2/16. Service abandonment on 12/7/16. (12/14/16)
C0006-17-01	155 Flower Street	2 Single Family Homes	Plans received and plan check fees paid on 8/1/16. Plans returned on 8/11/16. Fees paid and permit issued on 9/22/16. (12/14/16)
C0006-17-02	163 Flower Street	2 Single Family Homes	Plans received and plan check fees paid on 8/1/16. Plans returned on 8/11/16. Fees paid and permit issued on 9/22/16. (12/14/16)
C0007-17-01	1620 Orange	2 Single Family Homes	Plans received and plan check fees paid on 8/10/16. Plans waiting to be picked up. (1/9/17)
C0008-17-01	410 Walnut Place	4 Single Family Homes	Plans received and plan check fees paid on 8/10/16. Plans returned on 8/24/16. Awaiting resubmittal. (1/9/17)
C0009-17-01	3011 Ceylon	Meter Upgrade	Plans received and plan check fees paid on 8/16. Plans picked up on 10/18/16. Fees paid and permit issued on 12/5/16. (12/14/16)

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FILE NO.	PROJECT ADDRESS	PROJECT DESCRIPTION	PROJECT NOTES/STATUS
C0010-17-01	1053 W. Wilson	2 Single Family Homes	Plans received and plan check fees paid on 8/30/16. Plans picked up on 10/4/16. Fees paid and permit issued on 11/18/16. (12/14/16)
C0011-17-01	527 Anton	Fire Hydrant Relocation	Plans received and plan check fees paid on 9/8/16. Plans waiting to be picked up. (1/9/17)
C0012-17-01	2300 Harbor Blvd	33 Detached Condos	Plans received and plan check fees paid on 9/15/16. Plans picked up on 10/18/16. Plans submitted for second plan check on 12/6/16. Awaiting final fee payment. (1/9/17)
C0012-17-02	929 Baker Street	55 Detached Condos	Plans received and plan check fees paid on 9/27/16. Plans picked up on 10/18/16. Awaiting final fee payment. (1/9/17)
C0013-17-01	2803 Royal Palm Drive	Fire Station	Plans received and plan check fees paid on 8/25/16. Plans picked up on 10/4/16. (1/9/17)
C0014-17-01	Segerstrom Center for the Arts	Water Main Relocation	Plans received and plan check fees paid on 10/19/16. Plans picked up on 11/5/16. (1/9/17)
C0015-17-01	548 Victoria Street	5 Single Family Homes	Plans received and plan check fees paid on 10/26/16. Plans returned on 11/9/16. Awaiting final fee payment. (1/9/17)
C0016-17-01	3101 Redhill	Commercial Building	Plans received and plan check fees paid on 11/22/16. Plans returned on 11/29/16. Meeting held with owner on 1/5/17. Project on hold. (1/9/17)
C0017-17-01	166 Rochester	2 Single Family Homes	Plans received and plan check fees paid on 12/7/16. Plans returned on 12/15/16 and resubmitted on 1/5/17. Plan check in progress. (1/9/17)

**MESA WATER® AND OTHER AGENCY PROJECTS STATUS REPORT
JANUARY 2017**

Project Title: MWRF Finished Water Quality Polishing Project

File No.: M17-005

Description: Enhance finished water quality at the MWRF via Pilot Scale test

Status: Technical memo completed 4/13. Initiated bench test on 6/24/13. Draft bench test report received 8/5/13. Next steps are to refine dosing, perform a full-scale pilot test, and estimate design and construction costs. Notice to proceed on pilot test design given on 9/17/13. Full scale pilot test plan submitted to CDPH for approval 10/15/13. CDPH approved the plan 11/7/13. Carollo Engineers finalized construction plans and conducted pre-bid meeting 11/26/2013. Bids are due 12/12/13. Only one bid received. Carollo requested bids from additional contractors. Second bid received on 1/8/14. J.R. Filanc Construction, Inc. lowest bidder. Project kick off meeting took place on 2/24/14. Installation of the SBS Addition System is to be completed 3/14/2014. The Full Scale Pilot Start Up and testing started on March 19, 2014 and completed May 27, 2014. Report to be submitted on 7/3/2014. Meeting with Trussell Technologies to discuss staff comments held on 7/30/14. Meeting to review next phase recommendations held on 8/19/14. Revised Draft Final Report submitted August 27, 2014. Staff reviewed the Report and provided comments. The re-revised Draft Report submitted 10/9/14. Staff reviewed the report and recommended for approval continued operations of the full-scale polishing pilot until a permanent full-scale system can be implemented (E&O Committee meeting 10/21/14). Request for extension of the operation of the MWRF Water Polishing Project pilot testing past December 4, 2014 granted by DDW on November 11, 2014. Developing RFP for design of the permanent SBS addition system (2/6/15). RFP distributed 2/27/15 and proposals received 3/26/15. Selection interviews held on 4/9/15. Team Carollo/Trussell is proposed for the project. Proposal approved by E&O Committee 4/21/2015 and Board 5/14/2015. Contract with Carollo finalized 6/12/15 and the kickoff meeting held on 6/17/15. Preliminary Design Report received 8/3/15. Progress meeting and conference call with Carollo to discuss the review comments was held on 8/25/15 and 10/1/15, respectively. 60% design package submitted on 10/28/15. Review comments sent to Carollo on 11/23/15. Meeting with Carollo to discuss water chemistry and chemical dosing systems at the MWRF held on December 7, 2015. 90% design submitted on 2/1/16. Staff reviewed the submittal, provided comments and discussed the comments and project requirements at the meeting held on 3/2/16. Design completed on 4/1/16. Project sent out to bid on 4/4/2016. Two bids received on 5/4/16. Staff recommended that the Board of Directors award a contract to the lowest bidder J.R. Filanc. E&O Committee recommended approval on 5/17/16. Board approved the project on 6/9/16. Kick-off meeting held on 6/28/16. Construction activities began at the MWRF on 9/21/16 with demolishing for the SBS Tank pad and trenching for new piping. Up to date the contractor has installed the following:

- Supports and skid mounted SBS and Sodium Hypochlorite (SH) metering pumps
- SBS and SH double containment piping

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- Power, control conduits, wiring and termination in the Chemical Building.
- Concrete pad for the new Clean in Place (CIP) Pump
- CIP suction and discharge piping system
- Pneumatic actuators onto the existing degasifier inlet valves
- Softened water piping including tie in to existing system, pneumatic and block and bleed valves. Completed pneumatic air system

- New SS316 piping and air-vacuum valves for the Carbonic Acid System
- Completed coating of SBS tank containment area
- Completed installation of SBS tank and appurtenances including piping, vents, pneumatic valve and level indication

The contractor is working on completing installation of the CIP pump, new chemical analyzers, ammonia diffuser, integration of newly installed equipment with SCADA, repairing paving, and painting of exterior piping. (1/6/17)

Project Title: OC-44 Replacement and Rehabilitation Evaluation and Cathodic Protection Study

File No.: M 2034

Description: Evaluate potential repair and replacement options

Status: Contract awarded to RBF Consulting 2/12/13. Kick-off meeting held on 2/21/13. TM 1, 2 and 3 reviewed by Mesa Water® and City of Huntington Beach. Revised TM 1 and 3 submitted 6/12/13. Final study report due 7/31/13. Staff requested RBF to perform hydraulic modeling and habitat assessment to supplement original SOW. A meeting with MWDOC, MET and RBF to analyze possible new service connections on the OC Feeder held on 6/25/13. Workshop to discuss TM's held on 7/2/13. Meeting to discuss PDR, permitting, work plan and design concerns held on 7/16/13. Draft PDR and final design scope proposal received 8/6/13. Hydraulic studies "Evaluation of MWD Water Supply Facilities" and "Analysis of Emergency Supply from OC-44 and OCF" received 8/8/13. Staff reviewed the PDR and Hydraulic Study reports and submitted comments to RBF 9/12/13. Received proposal for design of OC-44 Pipeline Rehabilitation Project 9/24/13. Proposal approved by E&O Committee 11/19/13 and by Board on 12/12/13. Staff prepared change order to RBF. Kick-off meeting held on 01/22/14. Project on progress. Outreach coordination meetings with project stakeholders took place on 2/14/2014. RBF is working with City of Newport Beach, County of Orange, and Irvine Company on receiving permits for surveying and geotechnical boring work. Orange County Health Care Permit issued 3/24/2014. Geotechnical boring conducted on 3/28/14. The county of Orange permit was issued April 7, 2014. Biological and Topographic Survey started in mid-April and will continue through the end of July. Scour analysis completed on May 29, 2014. Jurisdictional Delineation completed on 6/30/2014. Project progress meeting with RBF and City of Huntington Beach held on 7/2/14 to review environmental

**MESA WATER® AND OTHER AGENCY PROJECTS STATUS REPORT
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assessment and predesign requirements. The design of the pipeline rehabilitation started on 7/8/2014. 60% plans and specifications submitted for review 9/8/2014. Staff is coordinating with City of Huntington Beach and finalizing review of the design package. Initial Study and Mitigated Negative Declaration submitted 11/2/14. Staff is reviewing the submittal (11/6/14). 60% review meeting with City of Huntington Beach and RBF held on 12/1/14. 90% design submittal received on 2/5/15. Notice of Intent (NOI) posted at County Clerk and State Clearinghouse on 1/29/15. Initial Study/Mitigated Negative Declaration (IS/MND) posted on Mesa Water® website and distributed to agencies/parties identified on distribution list on 1/29/15. Permit applications submitted to the regulatory agencies, legal notice posted in the Daily Pilot, and hard copy of IS/MND posted at front counter on 1/29/15 for public review. The review period concluded 2/27/15. Three comment letters received. Prepared written responses to the comments and held public hearing at the Board Meeting on 4/9/15. 90% design submittal comments sent back to RBF on 3/26/15. Additional questions from RBF analyzed in coordination with the City of Huntington Beach and comments provided to RBF on 6/1/15. Progress meeting with RBF and City of Huntington Beach held 7/1/15. RBF is working with the regulatory agencies on obtaining encroachment permits and/or certifications. On 7/16/15 the consultant is scheduled to meet with the US Army Corps of Engineers (USACE) to discuss initial comments and obtain additional directions. Due to USACE staff shortage the permit is anticipated to be issued in March 2016. RBF is working with Regional Water Quality Control Board (RWQCB) on drafting the 401 Water Quality Certification for the project. The 401 Water Quality Certification was issued on 9/29/15. Comments to the California Department of Fish and Wildlife (CDFW) draft agreement were sent by RBF on 7/17/15. The CDFW permit is predicted to be issued in late October, 2015. In mid-June, 2015 RBF provided response to the California Coastal Commission's (CCC) comments. The comments from CCC were received in the late July, 2015 and the permit is expected to be issued in mid-November, 2015. Permit from Caltrans obtained on August 17, 2015. 100% design package submitted on 7/21/15. Scour protection evaluation and recommendations submitted on 11/5/15. The CDFW should be issued by 12/18/15. The USACE has indicated that their permit should be issued in mid-January 2016. The Habitat Mitigation and Monitoring Plan (HMMP) has been updated by Michael Baker (former RBF) to reflect the USACE's process and submitted to Mesa Water® for review on 1/8/16. Once the HMMP is revised and approved (1/19/16) it will be forward to all agencies, including Coastal Commission. Draft 1602 Streambed Permit obtained on 12/18/15. Final 1602 Streambed Permit pending CDFW will be issued while HMMP is accepted. U.S. Army Corps of Engineers' 404 permit received on 2/10/16. Revised HMMP sent to CCC for review and approval. Project is pending CCC's approval at an upcoming hearing. On 2/29/16 a meeting with Fletcher Jones Motorcars, City of Newport Beach, MBI (former RBF), and City of Huntington Beach was held to discuss issues associated with proposed construction activities. Traffic Plan prepared and submitted to the City of Newport Beach for approval on 6/29/16. Per request of CCC a dewatering plan was prepared and submitted for approval. Mesa Water® staff, MBI and CCC met on 10/6/16 and discussed mitigation conditions.

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Project approved at CCC Public Hearing on 12/7/16. Coastal Development Permit for Construction anticipated in late January, 2017. Final bid set will be completed once all permits are issued. Project in progress. (1/6/17)

Project Title: Well Automation and Rehabilitation

File No.: MC 2101

Description: Rehabilitate all clear water wells and add remote control SCADA capabilities

Status: Design: RFP for Design Services released on 7/1/2014. Pre-proposal meeting held on 7/9/2014. 6 proposals received on 7/28/2014; interviewed 3 shortlisted firms on 8/6/2014. Recommendation to award contract to Carollo Engineers approved by E&O on 8/19/2014; Board approval requested on 9/11/2014. Project kickoff meeting held on 10/1/2014. Draft Permit plan received for review on 11/3/14. . Well Standardization workshop held on 11/21/14 to align on site layouts, chemical tank sizing, and instrumentation. Draft Preliminary Design Report received on 1/12/2015, and reviewed in workshops on January 21, 2015 and February 3, 2015, and March 3, 2015. 60% received on April 13, 2015. Meeting to resolve review comments scheduled for April 27, 2015.

Construction Management (CM) Services: Released and RFP for CM services on December 30, 2014 Preproposal meeting held on January 12, 2015. Four (4) proposals were received on January 26, 2015. Three proposers were interviewed on February 4, 2015, and the recommended Contract with RBF was approved by the Board on March 12, 2015.

60% design received on April 13, 2015. General 60% Design Review workshop held on April 27, 2015 and electrical/instrumentation review workshop held on May 11, 2015. Working on optimizing construction sequence. Electrical design workshop scheduled for June 25, 2015. 90% design submittal received on July 15, 2015. Engineer's Estimate of probable cost at 90% is approximately \$10.1. Workshop to review and address 90% comments held on July 29, 2015. Contractor prequalification package sent to eight (8) General Contractors on July 18, 2015. Four prequalification applications were received on August 17, 2015. 100% Design received on September 16, 2015. Notice Inviting Sealed Bids was released to four prequalified contractors on October 5, 2015. Job Walks were conducted on October 13, 2015 for prequalified Prime Contractors and on November 3, 2015. Addenda and clarifications in response to bidder's questions have been issued. Bid opening was extended to January 7, 2016 to allow for recent changes for new Well 9 layout. Four bids were received on January 7, 2016. An action item to award a contract to the lowest bidder was approved by the Engineering and Operations Committee on January 16, 2016 and by the full Board on February 11, 2016. Notice to proceed was sent on April 4, 2016. Preconstruction meeting held on April 12, 2016. The project is in the pre-construction submittal phase with several Requests for Information and equipment submittals received from the Contractor by the Construction Manager, and reviewed and responded to by the

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Design Engineer. Construction activities began at Well 5 on October 3, 2016 with demolition and well rehabilitation beginning in the first week. Video of Well 5 showed scale on the louvers, and potential failure of an unused sounding tube and a small area of the louvers potentially requiring swage patches. Repair completed on November 29, 2016. Well 5 rehabilitation resumed on December 3, 2016. Well 5 chemical facility pad has been constructed and is awaiting a weather forecast of 8 days with no predicted rain to apply the chemical-resistant coatings to the concrete. Well 5 pumping development began on January 4, 2017, and produced fine sand at pumping rates above 1100 gpm. The cause of the sand is being investigated. Construction of the Well 7 chemical facility is also in progress while Well 7 remains in operation. (updated 1/6/17)

Project Title: Two New Wells

File No.: MC 2158

Description: New wells and real estate services to identify and acquire property

Status: Change Order to Well Rehabilitation and Automation approved at January 20, 2015 E&O to retain Carollo and subconsultant Geotechnical Consultants Inc. (GTC) to provide typical well site layout and hydrogeological investigation to identify promising locations for two new 2,000-gpm clear wells. Met with Real Estate Professionals on February 2, 2015, to discuss scope of work for well site property identification and acquisition. Met with OCWD Chief Hydrogeologist on March 24, 2015, to identify study area for new well sites. Gave Notice to Proceed to Real Estate company on May 4, 2015, and provided consultant report on preferred well site property characteristics. Real Estate consultant developed an advertisement postcard to describe the type of property needed, and sent it to over 1,000 commercial and industrial property owners in the study area. Three sites have been presented for evaluation. Also met with the Laguna Beach County Water District (LBCWD) Manager of Engineering and Operations on October 13, 2015, to discuss development of a jointly-owned well on property in Fountain Valley owned by LBCWD. An offer to purchase one site was presented to the property owner on November 16, 2016. The owner has not responded, and the offer time frame has expired. An offer for a different property was prepared and presented on January 6, 2016. Owner has decided to lease the property rather than selling. A third property is being evaluated by staff and OCWD for potential interference from the OCWD mid-basin injection. Travel time analysis results from OCWD showed that the property is inside the six month travel time window. A meeting was held on February 22, 2016, with OCWD and DDW to discuss the travel time analysis, and DDW determined that it would not issue a permit for a drinking water well at the site. A meeting with the City of Santa Ana Water Department was held to discuss the possibility of a jointly-owned well on a City of Santa Ana-owned site. An offer to purchase was presented to a property owner for an underutilized portion of a property on May 4, 2016. The offer was rejected. A revised offer was submitted on June 7, 2016. The owner has decided not to sell the property. Staff is working with Voit Real Estate to identify and evaluate underutilized sites in the vicinity of the study area. One

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underutilized site on Sunflower Boulevard was considered but rejected for being only 200 feet from the current Well 9B site, which would add significantly to pumping costs at both sites. Another site near Bristol and St. Gertrude was considered, but rejected due to the cost of the property, its location adjacent to a residential area, and the cost of construction of two miles of pipeline to Mesa Water's service area. A purchase agreement for an industrial site in Santa Ana is being negotiated. The purchase agreement includes a 45 day contingency period, escrow close date of March 31, 2017, and 18 month leaseback to the seller. Notice to proceed with a Phase 1 Environmental Site Assessment and Property Condition Assessment will be initiated upon close of escrow, with the report due in 30 days. (Updated 1/6/17)

Project Title: Well 9B

File No.: MC 2229

Description: Replacement of Well 9

Status: Kickoff meeting was held on January 22, 2016. Well design criteria for depth, expected screen intervals, and expected pumping rate were established. Well design decisions include a continuous diameter of 18 inches with stainless steel casing and wire wrapped screen. Detailed design is in process. Draft bid documents reviewed and returned on March 25, 2016. Bid documents were released on April 22, 2016. The pre-bid site meeting was held on May 18, 2016 and attended by four bidders. Three bids were received by the deadline of June 7, 2016. The low bid from Weber Water Resources is approximately 30% below the Engineer's Estimate. Notice to Proceed was issued to the contractor on July 19, 2016. Destruction of the existing well began on August 4, 2016 and was completed on August 19, 2016. The drilling of Well 9B began on August 29, 2016 and is currently in progress. The 304L Stainless Steel Casing is scheduled to arrive on site on September 14, 2016. Initial test pumping yielded a specific capacity of 13 gpm/ft, much lower than the 17-20 gpm/ft expected. As a result the test pump was removed and the well underwent further chemical development. Pump platform has been constructed and the contractor is currently running power to the new location. Pipework and fit-out is expected to be completed this week. OC Flood Control completed its project in the Banning Channel on 12/29/16. The Contractor installed the well pump, paved the site, prepped the pipework, and completed the necessary water sample tests. The State Water Resources Control Board is scheduled to complete their site visit and issue the well permit on January 17, 2016 and issue the well permit shortly thereafter. Project in progress.

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Project Title: MWRF Parking Project

File No.: M 2052

Description: Conduct parking layout design

Status: Parking study prepared by Onward Engineering in November 2013. The Board approved alternative # 3 Parking Along the MWRF Frontage on Gisler Ave. on 3/15/2014. RFP for the parking design in consultants' review (11/6/14). RFP sent out to consultants 11/25/14. Proposals due 12/19/14. Interview with three consultants held on 1/7/15. Recommendation brought to January E and O for consideration of approval and will be brought to the Board on 2/12/15 for approval. Project approved 2/12/15. Kick-off meeting held on 2/19/15. Design in progress. 30% design submittal submitted 3/23/15. Staff met with C.J. Segerstrom and discussed concept and details of the proposed parking layout. Segerstrom verbally approved the project. City of Costa Mesa approved the concept and currently consultant is evaluating the landscape requirements with the City of Costa Mesa. E and O Committee accepted the conceptual design and provided comments on 5/19/15. The condition approval from Segerstrom received on 6/29/15. Staff is working with the designer (CivilSource), Mesa Water's attorney, and City of Costa Mesa on addressing Segerstrom's comments. Staff is reviewing the Initial Study/Summary of Findings Report received on 8/3/15. Staff has addressed all Segerstrom's requests included in their 6/29/15 letter and prepared a response letter. Approved construction plans were received from the City of Costa Mesa on 12/29/15. The final bid package completed 3/15/16. Encroachment Permit Application submitted to the City on 3/6/16. Hold Harmless Agreement for the Installation of Off-Site Parking Improvements within Public Right-of-Way received on 5/4/16. Staff reviewed the Agreement and sent comments to the City of Costa Mesa on 5/27/16. City approved all revisions as proposed by Mesa Water® and sent the agreement for signature on 6/24/16. The Engineering and Operations Committee reviewed the Agreement at July 19, 2016 meeting and recommended Board approval. Board approval obtained on August 11, 2016. Agreement sent to the City for execution and recording on 9/7/16. Recorded Agreement received from the City on 10/19/16.

Project Title: Reservoir 1 and 2 Improvements

File No.: M17-102

Description: Installation of gas flow meters at Reservoir 1 and Reservoir 2,

Status: Staff prepared Scope of Work and sent a request for quote to on-call Engineering consultant (As-Needed Design Consultant) to provide:

Design and specifications for installation of gas meters for Res 1, Res 2, and Well 5. Evaluation and design of Res 1 Air Vent Covers and Roof Membrane, and design for replacement of Res 1 silencers. Request for quote sent out 3/5/15. Brady Engineers selected for the project. Kickoff meeting held on 4/7/15. 30% design package submitted 5/27/15. Designer is working on addressing the review comments and

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continuing the design (7/10/15). Well 5 gas meter moved into the well automation and rehabilitation project scope of work. 100% Design Package received on 8/4/15. Meeting with the designer to discuss reviewers' comments held on 8/10/15. The designer is revising the design and final bid package is anticipated to be submitted on 9/4/15. The final bid package submitted on 10/12/15. Staff has reviewed the submittal (11/5/15). Project advertised for bid on April 6, 2016. Pre-Bid meeting held on 4/20/16. Bids opened on 5/17/16. Two bids received for \$516,000 and \$556,600. Staff reviewed the bids and recommended E&O Committee to approve the lower bid. E&O Committee recommended approval of the project on 6/21/16. Kick-off meeting was held on 8/3/16. Construction began on 9/12/16. To date the contractor has installed the following:

- roof membrane at Reservoir 1
- skylights and silencers at the Pump House of Reservoir 1
- gas meters for Waukesha engines at Reservoirs 1 and 2, and
- Repaired and painted air vent covers at Reservoir 1

The contractor is working on replacement of the roof membrane at the Pump House of Reservoir 1. Project in progress. (1/6/17)

Project Title: Pipeline Testing Program

File No.: MC 2112

Description: Implement Resolution No. 1442 Replacement of Assets to annually perform non-destructive testing of 1% of the distribution system, and destructive testing of segments that are shown to have less than 70% of original wall thickness by non-destructive testing.

Status: Identifying segments for FY 2015 non-destructive testing and arranging for excavation and removal of segments that tested below 70% remaining wall thickness in FY2014 non-destructive testing. Released a Request for Proposal for a consultant to administer the program and develop standard operating processes on February 6, 2015. Three proposals were received on February 26, 2015, and interviews conducted on March 4, 2015. A contract with RBF was approved by the Board on April 9, 2015. Kickoff meeting held on April 21, 2015. Project status meeting held on June 8, 2015. Draft deliverable of prioritization of asbestos concrete pipe (ACP) for non-destructive testing received on June 26, 2015; updated draft received on August 7, 2015. Draft deliverable with recommendations for non-destructive testing technologies for metallic pipe received on August 7, 2015. Draft evaluation of destructive testing laboratories and tests received on August 21, 2015; final report received on September 16, 2015. Echologics performed non-destructive testing of 3 miles of ACP from July 13-17, 2015. Draft report received on August 14, 2015; final report received on September 1, 2015. Based on the Echologics reports from 2013 and 2015, ten ACP segments were selected for sampling and destructive testing. Three ferrous material pipelines with a history of repairs were also selected for field sampling and destructive testing. Draft bid documents for field sampling received on October 16, 2015. Final bid documents were released to three on-call contractors on November 23, 2015, for bids. Pre-bid meeting

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was held on December 7, 2015 and attended by all three of the bidders. Three bids were received on December 16, 2015. All bids exceeded the budget and the General Manager's signing authority. An action item to approve a contract with the low bidder was approved by the Engineering and Operations Committee on January 19, 2016, and by the Board on February 11, 2016. Notice to Proceed with field sampling was given on March 7, 2016. An encroachment permit from the City of Costa Mesa was received on April 25, 2016. Field sampling began on May 16, 2016 and completed on June 28, 2016. Samples were shipped to MEIC Lab in Portland, Oregon, for destructive testing on July 7, 2016. Samples were received at MEIC on July 11, 2016. Lab results, including estimates of remaining useful life, were received on October 24, 2016. Non-destructive testing of the next 3 miles of ACP was completed on September 16, 2016, and the draft report was received October 1, 2016. All of the ACP and Cast Iron Pipe (CIP) showed less than 70% remaining wall thickness compared to its assumed original thickness. Sampling eight sections of ACP and two sections of CIP is planned in the first quarter of 2017.

Project Title: MWRF Outreach Center

File No.: MC 2147

Description: Report on the feasibility of reconfiguring and potentially expanding the functional uses of the MWRF Operations and Administration Building to include a multi-purpose room and educational forum.

Status: Mesa Water® is coordinating with IBI Group (designer) on the feasibility of implementing an education and outreach center at the MWRF. Kick-off meeting was held on 6/1/2015. Program Requirement Questionnaire meetings were held on 6/9/2015 and 6/17/15. Program Report delivered to Mesa Water® for review on 7/7/2015. 60% design concepts are scheduled for submittal on 08/14/15. 100% concept design received on 09/29/15. Virtual rendering received on 10/6/15. Concept designs presented at the October Board Workshop. A follow-up planning session was held at the November Engineering and Operations Committee Meeting to capture the Board's input on evaluating reduced cost options and to revisit the existing Boardroom improvements. Board directed staff to develop a scope of work to evaluate scaled down layouts of the MWRF Outreach Center and revisit expanded layouts of the main Boardroom. Engineering and Operations Committee approved a contract amendment with IBI Group to reflect the revised scope of work. Item was approved by the Board February 11, 2016. IBI Group performed an inspection of the existing Boardroom on February 25, 2016 and are in the process of developing conceptual layouts. Staff review and meeting occurred on April 11, 2016. Conceptual layout work has been deferred.

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Project Title: Mesa Water® Main Office HVAC Study

File No.: MC 2171

Description: Evaluate the existing HVAC system and provide recommendations for improved efficiency and operations of the system.

Status: Mesa Water® has contracted with Goss Engineering Inc. to perform this study. Kick off meeting was held January 13, 2016. Goss Engineering performed a field survey of both main campus buildings over the course of three days. Draft report with results and recommendations was reviewed by staff. The final report was delivered on June 30, 2016 and was reviewed by staff for completeness. Staff presented the findings and recommendation to the Board of Directors at the July E&O Committee Meeting. Board approved contract to move forward with the design of a complete Variable Refrigerant Flow system. Contract has been executed and returned to Goss Engineering. Project kick-off and notice to proceed was issued on November 30, 2016. 50% drawings have been delivered for review and comments returned.

Project Title: Reservoirs 1 & 2 Pumps, Controls, and Chemical System Assessment Project

File No.: MC 2173

Description: Evaluate the existing Pumps, Controls, and Chemical Systems at Reservoirs 1 & 2. The project includes lab testing of pump efficiency, physical assessment of pumps and pipework, assessment of the existing control system, and preliminary design of a chemical dosing system. Recommendations for improved efficiency and operations of the system will be included in a final report.

Status: Mesa Water® has contracted with Hazen & Sawyer to perform this study. Kick off meeting was held September 30, 2015. The consultant performed a field survey of both Reservoirs 1 & 2 over two days. A preliminary outline of technical memo 1 was provided on December 11, 2015. Initial data requests were responded to by December 7, 2015, with follow up responses provided on January 7, 2016 (SCADA Data) and February 9, 2016 (Jockey Pump Data). Pump testing scope of work has been reviewed by Mesa Water® and returned to the Consultant for revision. TM-1 has been reviewed by staff and returned to the consultant. Pump extraction plan and bid documents are currently being reviewed by staff. The Consultant has begun the preliminary design of a chemical dosing system. Request for bids for the pump extraction will be released in August 2016. Bids for the pump extraction were submitted and reviewed. The item was presented to the Engineering and Operations Committee at the September 20, 2016 meeting. Contract has been executed. Field assessment was completed on October 19, 2016. Factory pump testing scheduled in early January 2017 to ensure coordination with Res 1 & 2 roof and silencer improvements. Further field tests conducted on December 2, 2016. Pump 2 from Reservoir 1 was removed and sent to the factory test facility on January 3, 2017. The motor control system

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technical memo is due the week of January 9, 2017.

Project Title: Other Agency Project Coordination

File No.:

Description: Median construction in Placentia Ave. between Wilson St. and Adams Ave.

Status: Mesa Water® 16" main runs 5' East of the street center line. Mesa Water® is coordinating with designer and City on design of necessary protection and root barrier for the water main. 85% design plans received on (12/22/14). Plan review in progress 1/8/15. Plan review comments sent to the City 2/6/15. Mesa Water® provided update comments to landscaping plans on 6/17/15. Mesa Water® continuing to coordinate with the City, Stivers and Associates, Inc., and City Designer on layout of project. Revised final plans submitted for Mesa Water® review on 11/19/15. Staff reviewed the submittal in cooperation with Mesa Water® landscape consultant (Stivers Associates) and submitted comments to the City Designer on 12/28/15. The comments have been accepted by the Designer and Final Plans were submitted on 2/9/16. New comments sent to the designer on 2/18/16. The revised final plans received on 3/21/16 and approved by Mesa Water® on 3/31/16. City of Costa Mesa awaiting state funding for the project. (1/6/17)

Project Title: Other Agency Project Coordination

File No.: M 2106

Description: Water main relocation in New Hampshire Dr. due to Greenville-Banning Channel Improvements by County of Orange.

Status: Relocation of 12" water main is required due to enlarged box culvert on Greenville-Banning Channel. Task Order No. RBF-2 issued to RBF Consulting on June 24, 2014 for design of the relocation. Mesa Water® is coordinating with County of Orange and RBF. Design in progress. Hydraulic analysis received from RBF 9/12/14 indicated that taking the New Hampshire pipeline out of service during construction of the Greenville-Banning Channel will have no adverse impacts on the distribution system (8/9/14). Mesa Water® is working with OCFCD on finalizing the cooperative agreement. E&O Committee approved the agreement 11/18/14. Pipeline relocation design package submitted to Mesa Water® on 1/31/15. Mesa Water® is coordinating with OCFCD and consultant to address final comments. Plans and specifications for the pipeline relocation completed 3/3/15 and forwarded to OCFCD on 3/5/15. Project was delayed until Spring of 2016. Attended the pre-construction meeting on 7/21/15. Construction meeting with OCFCD's contractor Sukut Construction (Sukut) held on 4/7/16. Staff is coordinating with OCFCD and Sukut on project schedule. Two new 12-inch valves installed by Mesa Water® on New Hampshire Dr. at Idaho Ave. on 7/7/16 and air-vac valve relocated on 7/18/16. Approx. 110 ft. long section of existing 12" water main removed and existing box culvert demolished on 7/25/16. Construction of

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the new box culvert and water main replacement were completed in September, 2016.
Completion of the Channel Improvements Project is scheduled for mid-February, 2017.

Water Quality Call Report

December 2016

Date: 12/8/2016
Source: Phone /Visit
Address: 3048 Kittendale
Description: Customer noticed residue in the sink, the shower, and the dog's water bowl.

Outcome: During site visit, water sample was taken at outside hose bib. Water was clear and had normal pH, temperature, and chlorine residual. Explained to customer about water hardness and soap curd. Customer was satisfied.

Date: 12/13/2016
Source: Phone
Address: 1543 Orange Ave.
Description: Customer is re-piping his house and wants to determine if he should use copper or PEX.

Outcome: Explained to customer that Mesa Water® does not make any recommendations on the type of pipe material to use for re-piping and the decision is up to the customer. Customer asked if the water is aggressive. Explained to customer that the Langlier Saturation Index and Aggressive Index data show that the water is not aggressive. The most recent Lead and Copper Rule sampling also shows that the water is not aggressive.

Date: 12/15/2016
Source: Phone
Address: 2061 West Place Dr.
Description: Customer just moved in and noticed hydrogen sulfide smell in the hot water.

Outcome: Spoke with customer and recommended he flush his plumbing system. Asked customer to call back if odor issue is not resolved.

Date: 12/27/2016
Source: Phone/Visit
Address: 294 Princeton
Description: Customer states that the water smells like “tarnish”
Outcome: Customer was not home during the site visit. Took sample from front yard hose bib and did not detect any odor from the water. Called customer and suggested she flush throughout the home or call a plumber to inspect the plumbing/water heater.

Date: 12/28/2016
Source: Phone
Address: 2805 La Salle
Description: Customer wanted to know the grains per gallon of hardness so he could set his water softener.
Outcome: Provided customer the range and average grains per gallons of hardness.

Date: 12/28/2016
Source: Phone
Address: 324 Esther Street
Description: Customer noticed the water turned black for a few seconds and then cleared up. She did not observe any floating particles. It happened twice from a bathroom faucet with the hot water running.
Outcome: Suggested to customer that the next time she experience the black water, she should turn off the hot water immediately and see if the black water appears in the cold water. If it's determined to come exclusively from the hot water then she can follow up with the water heater manufacturer or a plumber since it's an internal issue at that point. Customer was satisfied with the suggestion and declined a site visit. She will call back if black water returns.

**MESA WATER DISTRICT
COMMITTEE POLICY & RESOLUTION
REVIEW OR DEVELOPMENT**

ENGINEERING & OPERATIONS COMMITTEE

Policy Assignments for 2017

Policy Name	Resolution	Date Adopted	Revision Schedule	Next Review
Rules and Regulations for Water Services (will include review of meter capacity charges and easement procedures)	Resolution No. 1470	02/09/16	Review and update as needed	TBD
Standard Specifications and Drawings	Resolution No. 1449	08/14/14	Review and update as needed	August 2018

Water Operations Status Report
July 1, 2016 -December 31, 2016

Operations Department Status Report	Wk Unit	Plan Days	Act Days	Plan Qty	Act Qty	Plan Cost	Actual Cost
01 - HYDRANTS							
WD-0101 - HYDRANT MAINTENANCE	HYDRANTS	84	117	1691	2265	\$67,012	\$77,714
WD-0102 - HYDRANT PAINTING	HYDRANTS	8	2	211	46	\$6,843	\$821
Program 01 TOTAL		92	119			\$73,855	\$78,535
02 - VALVES							
WD-0201 - DISTRIBUTION VALVE MAINTENANCE	VALVES	56	89	1202	1694	\$45,241	\$60,827
WD-0202 - NIGHT VALVE MAINTENANCE	VALVES	8	1	82	12	\$6,453	\$321
Program 02 TOTAL		64	90			\$51,694	\$61,148
03 - METERS							
WD-0301 - NEW METER INSTALLATION	METERS	9	6	60	51	\$16,881	\$20,308
WD-0302 - RAISE REPLACE METER BOX	BOXES	11	7	50	17	\$11,503	\$4,730
WD-0305 - ANGLE STOP/BALL VALVE REPLACE	REPLACE	33	55	67	105	\$32,567	\$34,053
WD-0306 - LARGE METER TEST/REPAIR - C	TESTS	9	9	59	48	\$6,792	\$6,134
Program 03 TOTAL		62	77			\$67,743	\$65,225
04 - MAIN LINES							
WD-0400 - MAIN LINE REPAIR	REPAIRS	60	92	10	15	\$53,097	\$70,108
WD-0402 - AIR VAC MAINTENANCE/REPAIR	REPAIRS	13	12	80	89	\$10,440	\$7,942
Program 04 TOTAL		73	104			\$63,537	\$78,050
05 - SERVICE LINES							
WD-0501 - SERVICE LINE REPAIR	REPAIRS	24	44	10	14	\$16,222	\$28,229
Program 05 TOTAL		24	44			\$16,222	\$28,229
06 - CAPITAL							
CAP AV - CAPITAL AIR VACUUM REPLACE	AIR VACS	2	3	3	2	\$1,198	\$1,654
CAP BI - CAPITAL BYPASS & METER INSTALL	REPLACE	3	0	1	0	\$2,775	\$0
CAP FH - CAPITAL HYDRANT UPGRADE	HYDRANTS	70	42	10	11	\$81,021	\$47,978
CAP LM - CAPITAL LARGE METERS	METERS	6	9	25	30	\$22,854	\$20,838
CAP MV - CAPITAL MAINLINE VALVE REPLACE	VALVES	45	95	9	15	\$56,447	\$75,550
CAP SL - CAPITAL SERVICE LINE REPLACE	SERVICES	13	1	5	1	\$10,984	\$736
CAP SM - CAPITAL SMALL METERS	METERS	60	49	600	592	\$78,288	\$82,052
CAP SS - CAPITAL SAMPLE STATION REPLACE	STATIONS	5	4	5	9	\$4,187	\$2,932
Program 06 TOTAL		204	203			\$257,754	\$231,740
VACANT POSITIONS			7				\$4,949
TOTAL						\$530,805	\$547,876



*Dedicated to
Satisfying our Community's
Water Needs*

MEMORANDUM

TO: Engineering and Operations Committee
FROM: Phil Lauri, P.E., Assistant General Manager
DATE: January 17, 2017
SUBJECT: Municipal Water District of Orange County Activities Update

RECOMMENDATION

This report is for information only.

STRATEGIC PLAN

Goal #1: Provide a safe, abundant, and reliable water supply.
Goal #3: Be financially responsible and transparent.
Goal #7: Actively participate in regional water issues.

PRIOR BOARD ACTION/DISCUSSION

None.

DISCUSSION

This report on Municipal Water District of Orange County (MWDOC) issues is intended to brief the Committee and Board on activities relevant to Mesa Water District (Mesa Water®). The first section, "On-Going Issues", is a status update on current studies, reports, and/or policy work groups that staff are involved with. The second section, "Last Month's Issues", is a report on noteworthy items that were covered at the last month's MWDOC Board and Committee meetings. The last section, "Upcoming Issues", is a preview of new and forthcoming issues important to Mesa Water®. This format is intended to keep the Committee and Board informed about current and future items at MWDOC in order to provide direction to staff and its MWDOC representatives in a timely manner, if required.

ON-GOING ISSUES

WATER SUPPLY CONDITION UPDATE AND ORANGE COUNTY PERFORMANCE REPORT FOR OCTOBER 2016

- 1) For the month of October 2016, Orange County saved 19.3% (compared to the historical average for September 2013-2014), exceeding the MWDOC goal of 10%.
- 2) Total water demand for FY 2015-16 was the lowest demand since FY 1982-83.
- 3) Orange County has saved 177,000 AF compared to CY 2013.

The Northern California accumulated precipitation (8-Station Index) is reporting 28.4 inches or 193% of normal as of December 20, 2016; for the month of December accumulated precipitation was at 10.4 inches which is 2 inches above normal compared to the historical average. In summary, October 2016 was one of the wettest Octobers on record and November finished up around average.



However, the Northern California Snow Water Equivalent is at 5 inches as of December 20, which is only 61% of normal.

As of November 2016, 83% of California is still in drought conditions. This is still an extremely high number but considerably better than November 2015 when 99% of California was in a drought.

METROPOLITAN WATER DISTRICT IRP PHASE II POLICY UPDATE

Deven Upadhyay of MWD gave a presentation on the IRP Strategy. The strategy is broken into four areas; 1) Water Use Efficiency, 2) Local Resources, 3) SWP and 4) CRA.

Highlights of the presentation include:

- Changing Water Portfolio: In 1990, 41% of water was produced locally. The goal for 2040 is 65% local.
- In 1985, water use was 205 GPCD; in 2015, it was 131 GPCD.
- The next steps in conservation are: 1) Peer review of conservation incentive program, 2) Implications of new State regulations, 3) Continue to focus on outdoor water use, and 4) Future recommendations to Board as needed.
- The roadmap to reliability includes: 1) Increasing local supplies within the region, 2) Improving State Water Project system to capitalize on wet/normal year supplies (Cal Water Fix), 3) Securing at least 900 thousand acre-feet of annual Colorado River supplies even in shortage conditions, 4) Focusing on outdoor water use to further reduce per capita water use, and 5) Change State regulations to recognize local supply and conservation investments.
- The goal by 2040 is to supply 2.43 MAF on average of local production.
- How water is used: 10% homes and businesses, 49% environment, and 41% farms.

LAST MONTH'S ISSUES

MWDOC authorized the General Manager to enter into a professional service agreement with three firms for advocacy services:

1. Lewis Consulting Group for county advocacy services
2. Best, Best and Krieger for state advocacy services
3. James C. Barker, P.C. for federal advocacy services

UPCOMING ISSUES

- MWDOC Reserve Policy
- OC Reliability Study TM-4



FINANCIAL IMPACT

None.

ATTACHMENTS

None.



*Dedicated to
Satisfying our Community's
Water Needs*

MEMORANDUM

TO: Engineering and Operations Committee
FROM: Phil Lauri, P.E., Assistant General Manager
DATE: January 17, 2017
SUBJECT: Orange County Water District Activities Update

RECOMMENDATION

This report is for information only.

STRATEGIC PLAN

Goal #1: Provide a safe, abundant, and reliable water supply.
Goal #3: Be financially responsible and transparent.
Goal #7: Actively participate in regional water issues.

PRIOR BOARD ACTION/DISCUSSION

None.

DISCUSSION

This report on Orange County Water District (OCWD) issues is intended to brief the Committee and Board on activities relevant to Mesa Water District (Mesa Water®). The first section, "On-Going Issues", is a status update on current studies, reports, and/or policy work groups that staff are involved with. The second section, "Last Month's Issues", is a report on noteworthy items that were covered at the last month's OCWD Board and Committee meetings. The last section, "Upcoming Issues", is a preview of new and forthcoming issues important to Mesa Water®. This format is intended to keep the Committee and Board informed about current and future items at OCWD in order to provide direction to staff and its OCWD representatives in a timely manner, if required.

ON-GOING ISSUES

RECHARGE BASINS STATUS

OCWD Recharge Facilities include - 26 basins in Anaheim and Orange, 1,100 acres of recharge basins, 26,000 acre-feet storage capacity. Current storage is 9,442 acre-feet (36% of capacity).

UPDATE: PRADO WATER CONSERVATION ACTIVITIES

- The Army Corps of Engineers (Corps) approved a deviation to the Prado Dam Water Control Manual to allow temporary storm-water capture to elevation 503.9 feet through March 10, 2017. Rainfall events in mid to late December allowed temporary capture of approximately 12,800 acre-feet of water at Prado.



- An on-going Feasibility Study is looking at 1) Permanent elevation 505 feet water conservation in flood season, 2) Invasive species removal, 3) Habitat enhancement for endangered species, and 4) Sediment removal.
- The Corps is currently revising the schedule and budget. The primary reasons for the schedule delay are completion of the Combined Habitat Assessment Protocols (CHAP) model and the complexity of the study, since it is a multi-benefit study (ecosystem restoration and water conservation).

LAST MONTH'S ISSUES

ELECTION OF OFFICERS

- President; Director Bilodeau was elected as President.
- First Vice President; Director Anthony was elected as First Vice President.
- Second Vice President; Director Dewane was elected as Second Vice President.

CITY OF ORANGE WELL #27 - PETITION FOR EXEMPTION OF PAYMENT OF THE REPLENISHMENT ASSESSMENT AND BASIN EQUITY ASSESSMENT

The Board approved the recommendations to: 1) Receive and file petition for exemption from City of Orange for Well #27 groundwater pumping from payment of the Replenishment Assessment and Basin Equity Assessment; 2) Receive and file staff report evaluating City of Orange petition; and 3) Schedule a Public Hearing on this matter for January 18, 2017, in accordance with Section 38.1 of the District Act.

OCWD stated that the City of Orange had drilled a well and had to pump to waste for an extended time to clean the well of a bacterial virus. A total of 954 acre-feet was discharged into the Santiago Creek which is used for groundwater replenishment so no water was wasted and was returned to the basin. Section 38.1 gives the Board the right to approve such a request if the request meets two criteria. First, the water must be unfit for use and second, that the water is not wasted. The City of Orange notified OCWD of the issue and filed the appropriate application. The Board will hold a public hearing on January 18, 2017 to consider this request.

FINAL BASIN 8-1 ALTERNATIVE TO COMPLY WITH SUSTAINABLE GROUNDWATER MANAGEMENT ACT

The Board approved the recommendations to: 1) Authorize the General Manager to submit the Alternative to DWR, 2) Authorize the General Manager to submit other required information and make minor modifications to the Alternative, 3) Authorize staff to file a notice of exemption with respect to the California Environmental Quality Act.



UPCOMING ISSUES

- GAP Study
- Poseidon Project
- IRWD Lawsuit
- North & South County Groundwater Clean-up

FINANCIAL IMPACT

None.

ATTACHMENTS

None.

MEMORANDUM



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TO: Engineering and Operations Committee
FROM: Phil Lauri, P.E., Assistant General Manager
DATE: January 17, 2017
SUBJECT: Committee Meeting Dates and Chair Appointment

RECOMMENDATION

Confirm the 2017 Engineering and Operations Committee (E&O) regular meetings for the third Tuesday of each month, starting at 3:30 p.m., and appoint the Committee Chair.

STRATEGIC PLAN

Goal #4: Increase public awareness about Mesa Water® and about water.

PRIOR BOARD ACTION/DISCUSSION

This item is annually updated at the January E&O Committee meeting.

DISCUSSION

Annually, the E&O committee appoints a Committee Chair and Vice Chair and approves the regular meeting date and time. Historically, the E&O committee has been meeting at 3:30 p.m. on the third Tuesday of the month, unless that day falls on a holiday in which case the meeting moves to the following Tuesday.

In 2017, there are no revised meeting dates at this time.

FINANCIAL IMPACT

None.

ATTACHMENTS

None.



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MEMORANDUM

TO: Engineering and Operations Committee
FROM: Phil Lauri, P.E., Assistant General Manager
DATE: January 17, 2017
SUBJECT: Well 9B Project Overview

RECOMMENDATION

Receive the presentation.

STRATEGIC PLAN

Goal #1: Provide a safe, abundant, and reliable water supply.

Goal #2: Practice perpetual infrastructure renewal and improvement.

PRIOR BOARD ACTION/DISCUSSION

On October 9, 2014, the Board received a Mario Durante Well 9 update presentation.

On October 21, 2014, the E&O Committee approved a contract amendment to the Well Automation and Rehabilitation Design contract in the amount of \$26,813 to evaluate Mario Durante Well 9.

On November 18, 2014, the E&O Committee received a presentation on the findings of the Mario Durante Well 9 evaluation, and recommendation to rehabilitate the well and replace the pump. The E&O Committee directed staff to implement the recommendation, expend the necessary funds to expedite the recommendations, and provide regular updates to the Committee.

On February 17, 2015, the E&O Committee received an information item summarizing the status of the procurement process for Mario Durante Well 9 Rehabilitation and Pump Replacement.

On March 30, 2015, the Board received notification via email from the General Manager that a contract had been executed with General Pump for Mario Durante Well 9 Rehabilitation and Pump Replacement.

On May 19, July 17, September 15, and November 17, 2015, the E&O Committee received an update on the progress of Mario Durante Well 9 Rehabilitation Project.

On July 14, 2016, the Board of Directors approved filing of the Notice of Categorical Exemption from the California Environmental Quality Act and awarded a contract to Weber Water Resources for construction of the Well 9B Project.

On September 20, 2016, the Board received a Mario Durante Well 9 update presentation.

On November 15, 2016, the Board received a Mario Durante Well 9 update presentation.



DISCUSSION

Mesa Water® and Weber Water Resources held a kick-off meeting on July 15, 2016 with mobilization starting on July 28, 2016. The existing Well 9 was demolished and the site was readied for the drilling of Well 9B. Demolition of the existing Well 9 included the following:

- Removal and storage of the existing Well 9 pump and motor
- Concrete sanitary seal of existing casing and camera port
- Removal of the existing pump base support

Drilling of Well 9B and installation of the casing was completed on October 14, 2016. Design parameters of Well 9B include the following:

- Depth: ≈ 600 feet
- Diameter: 18 inch
- Casing: 304L Stainless Steel
- Expected Flow: 1700-1800 GPM

The test pump was installed on October 21, 2016, and well development commenced with the well producing a specific capacity of 13 gpm/ft. Well 9A had a specific capacity of approximately 20 gpm/ft after its construction in 1994. Based on prior performance history, it was determined that further development of the new well was required to obtain a higher specific capacity. The second round of development included airlifts, chemical treatment, and swabbing of the casing. The second round of test pumping achieved the expected flow of 1800 gpm.

Following the second round of development, the pump pedestal was constructed and the pump installed. Pipework was completed within the constraints of the existing installation and the well and discharge pipework was disinfected. Site restoration included pavement, pipe supports, cleaning of the site, and painting of the chemical sheds.

The following is a summary of remaining milestones:

- Division of Drinking Water Inspection: 1/17/17
- Permit Amendment Application Complete Letter and commencement of operations: 1/24/17

FINANCIAL IMPACT

In Fiscal Year 2017, \$1,560,000 is budgeted; no additional funding is required.

	<u>Project Estimate Amounts</u>	<u>Project Cost Amounts</u>
Initial Project Estimate (FY 2016)	\$ 1,560,000	
Original Contracts		\$ 1,093,803
Change orders #1		\$ 53,888
Requested funding		<u>0</u>
Revised Contracts		<u>\$ 1,147,690</u>
Actual spent to date		\$ 709,099
Revised Project Estimate	\$ 1,147,690	



ATTACHMENTS

None.

REPORTS:

10. REPORT OF THE GENERAL MANAGER:

REPORTS:

11. DIRECTORS' REPORTS AND COMMENTS: