



# **RIVERSIDE PUBLIC UTILITIES**

## **Board Memorandum**

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**BOARD OF PUBLIC UTILITIES**

**DATE: OCTOBER 23, 2017**

**GENERAL MANAGER'S REPORT**

**ITEM NO: 24**

# **Riverside Public Utilities**

## **Open Work Orders Greater than \$200,000**

### **As of September 30, 2017**

**Riverside Public Utilities**  
**Open Capital Work Order Summary Report - Electric Fund**  
**September 2017**

Project / Subproject or WO	Project Description	Board Approval Date	Board Approved Estimate <sup>(7)</sup>	Project Estimate	Year to Date	Life to Date	Available Balance	Last Activity Date	Job Status (Based on Proj. Est.)		Project Status
					Total as of 9/30/2017	Total as of 9/30/2017			% Spent	% Completed	
Open Work Orders/Projects with Budgeted or Actual expenditures > \$200,000											
Advanced Technology <sup>(3)</sup>											
1619634	Operational Data Management System - Electric	05/09/16	3,189,500	3,189,500	32,958	1,900,508	1,288,992	06/30/17	60%	65%	In implementation phase.
1707248	Advanced Metering Infrastructure - Electric	06/12/17	3,000,000	1,890,000	-	-	1,890,000	09/23/16	0%	0%	Pending start date.
	Subtotal			5,079,500	32,958	1,900,508	3,178,992				
Cable Replacement											
1409723	Canyon Crest Area Circuit 1215	11/06/15	1,175,000	1,175,000	670	1,028,971	146,029	07/13/17	88%	95%	As-builts in progress.
1319813	Canyon Crest Area Circuit 1218	04/10/17	967,000	967,000	(161,282)	254,843	712,157	07/27/17	26%	50%	In construction.
	Subtotal			2,142,000	(160,612)	1,283,814	858,186				
CIS Banner Upgrade											
1104202	CIS Replacement	06/01/12	8,859,000	8,859,000	-	8,242,223	616,777	11/30/16	93%	95%	Completed, pending closure.
	Subtotal			8,859,000	-	8,242,223	616,777				
City-Wide Communciations Network											
1719921	Magnolia Avenue	04/24/17	2,189,489	2,189,489	8,483	36,316	2,153,173	09/21/17	2%	15%	In construction.
1524282	Land Mobile Radio (LMR) system (Electric Portion)	09/26/16	3,000,000	1,650,000	46,682	1,614,856	35,144	09/21/17	98%	95%	Completed, pending closure.
1423750	Riverside Substation to Hunter Substation	04/24/17	465,000	465,000	6,994	37,805	427,195	09/21/17	8%	15%	In design.
1423746	Fiber Use License Agmt.- County of Riverside	01/22/16	325,000	325,000	-	340,484	(15,484)	06/30/17	105%	95%	Closed on 9/12/17.
	Subtotal			4,629,489	62,159	2,029,461	2,600,028				
Distribution Automation Reliability											
1309568	Distribution Automation Program	01/18/13	960,000	960,000	1,302	681,312	278,688	07/15/17	71%	65%	In construction.
	Subtotal			960,000	1,302	681,312	278,688				
GO 165 Upgrades/Relocations											
Various	GO-165 Pole Replacements - Citywide	09/25/17	1,125,000	1,125,000	-	-	1,125,000	No activity	0%	0%	Pending start date.
1804337	Four (4) Electrical Vaults & Manholes	09/25/17	557,000	557,000	834	834	556,166	08/24/17	0%	0%	Pending start date.
1722605	OH & UG Electric Dist. System Inspections	06/26/17	2,844,000	2,388,000	-	-	2,388,000	03/08/17	0%	0%	Pending start date.
	Subtotal			4,070,000	834	834	4,069,166				
Line Rebuilds											
1606533	Palm Avenue Circuit 454	06/27/16	228,000	228,000	-	273,379	(45,379)	06/30/17	120%	100%	Completed, closed.
	Subtotal			228,000	-	273,379	(45,379)				

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					Total as of 9/30/2017	Total as of 9/30/2017			% Spent	% Completed	
Major 4/12Kv Conversions											
1521822	Plaza Substation - Circuit 456	09/18/15	933,000	933,000	-	131,926	801,074	06/01/17	14%	25%	In construction.
1521820	Plaza Substation - Circuit 452	09/18/15	1,446,000	1,446,000	140,942	810,188	635,812	09/27/17	56%	55%	In construction.
1503125	Magnolia Substation - Circuit 46	04/17/15	1,833,000	1,833,000	155,831	1,757,475	75,525	08/26/17	96%	90%	In construction.
1501824	Plaza Substation - Circuit 454	09/18/15	1,349,000	1,349,000	-	1,366,960	(17,960)	08/30/17	101%	95%	Completed, pending as-builts.
1411795	Magnolia - Underground Conversion	04/02/15	2,250,000	2,250,000	6,854	1,641,182	608,818	06/01/17	73%	90%	In construction.
1319390	Magnolia - Overhead Conversion	09/19/14	1,577,100	1,577,100	-	1,786,478	(209,378)	06/21/17	113%	95%	In construction.
	Subtotal			9,388,100	303,627	7,494,209	1,893,891				
Major Feeders											
1525536	Diana Avenue	01/22/16	850,000	850,000	325	800,208	49,792	07/13/17	94%	95%	Completed, pending as-builts.
	Subtotal			850,000	325	800,208	49,792				
Major Overhead/Underground Conversions											
1604758	7105 Old Frontage 215 Rd	(2)	(2)	208,182	630	189,573	18,609	09/21/17	91%	99%	Completed, pending as-builts.
0913192	Tyler Street Widening	08/07/15	816,000	816,000	-	871,531	(55,531)	06/30/17	107%	95%	Completed, pending as-builts.
	Subtotal			1,024,182	630	1,061,104	(36,922)				
Major Street Light Projects											
1611216	Citywide Streetlight L.E.D. Conversion	07/25/16	1,150,000	1,150,000	21,618	182,395	967,605	09/27/17	16%	17%	In design.
1518574	Tyler Street Widening Project	08/07/15	141,000	141,000	83	233,478	(92,478)	08/10/17	85%	85%	In construction.
	Subtotal			1,291,000	21,701	415,873	875,127				
Major Tract Distribution											
1518525	Jurupa Avenue - New Tract 28987	11/06/15	320,000	320,000	-	13,740	306,260	06/01/16	4%	0%	On-hold.
070016 / 07	Tract 29596 Krameria Ave <sup>(4)</sup>	07/20/07	500,000	500,000	-	468,292	31,708	03/13/14	94%	95%	In construction.
070016 / 02	Tract 29515 Phase 2 & Sewer Lift Station <sup>(5)</sup>	11/16/07	345,000	345,000	-	344,419	581	06/01/16	100%	95%	Completed, pending as-builts.
	Subtotal			1,165,000	-	826,450	338,550				
Major Transmission Line Projects											
1503115	Freeman-Kaiser-Harvey Lynn	12/18/15	300,000	300,000	1,019	176,848	123,152	09/07/17	59%	50%	Pending start date.
	Subtotal			300,000	1,019	176,848	123,152				
Neighborhood Streetlight Retrofit											
1523553	Wood Streets Streetlights Phase 2	02/13/17	2,300,000	2,300,000	283,258	768,758	1,531,242	09/27/17	33%	5%	In construction.
080022 / 01	Wood Streets Streetlights Phase I <sup>(6)</sup>	10/18/13	1,909,600	1,909,600	-	1,791,660	117,940	03/01/16	94%	95%	Completed, pending as-builts.
	Subtotal			4,209,600	283,258	2,560,418	1,649,182				

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					Total as of 9/30/2017	Total as of 9/30/2017			% Spent	% Completed	
RTRP and STP Project											
642975	230 KV Station	03/05/15	42,605,521	42,605,521	160,606	26,258,057	16,347,464	09/21/17	62%	15%	In design.
812940	69 KV Station <sup>(1)</sup>	11/06/09	24,000,000	24,096,844	-	18,306,368	5,790,476	06/29/17	76%	99%	Completed, pending as-builts.
	Subtotal			66,702,365	160,606	44,564,425	22,137,940				
SCADA											
1024305	Electric SCADA System Upgrades	06/27/16	2,938,307	2,938,307	-	2,737,329	200,978	08/10/16	93%	99%	Completed, pending closure.
	Subtotal			2,938,307	-	2,737,329	200,978				
Substation Bus and Upgrades											
1603079	Springs & Orangecrest	02/19/16	1,700,000	1,700,000	204	1,119,828	580,172	07/27/17	66%	60%	Pending construction.
1601400	Springs, Freeman and Mt. View	07/25/16	5,530,000	5,530,000	11,313	2,791,832	2,738,168	09/21/17	50%	45%	In construction.
1311245	Orangecrest, Riverside,Springs & La Colina	03/21/14	1,925,805	1,925,805	7,737	1,979,356	(53,551)	09/21/17	103%	75%	In construction.
1411145	La Colina Switchgear 3 & 4	03/21/14	534,051	534,051	-	72,523	461,528	06/01/17	14%	25%	On-hold.
1024965	Electronic Security Monitoring and Access Control	09/16/11	5,000,000	5,000,000	57	5,112,334	(112,334)	07/13/17	102%	100%	Closed on 8/29/17.
1020992	La Colina & Hunter	05/03/13	649,885	649,885	-	457,843	192,042	06/01/16	70%	90%	On-hold.
	Subtotal			15,339,741	19,311	11,533,716	3,806,025				
Substation Transformer Addition											
1619571	Plaza Substation	10/24/16	460,000	460,000	4,197	432,985	27,015	09/21/17	94%	95%	Completed, pending as-builts.
1514752	Mobile Substation #3	05/23/16	2,198,993	2,198,993	3,992	1,863,398	335,595	09/21/17	85%	95%	Completed, pending activation.
	Subtotal			2,658,993	8,189	2,296,383	362,610				
SCE Condemnation Costs											
1704094	Annexation 95 & 99 areas	10/24/16	444,000	444,000	-	-	444,000	No activity	0%	0%	On-hold.
	Subtotal			444,000	-	-	444,000				
				132,279,277	735,304	88,877,661	43,400,782				
Total Electric Fund - Open Work Orders											

**Notes:**

- (1) This work is part of Project 050009 & included within the \$24,000,000 authorized by PU Board and includes various work orders closed in prior years.
- (2) 100% customer funded project
- (3) Advanced Technology projects includes both capital expenditures and professional services.
- (4) Work includes both WO 0704432 & 0704434
- (5) Work includes both WO 0702819 & 0702820
- (6) Work includes both WO 809099 & 0809101
- (7) Board approved estimate is the total amount of the work order which can include operating & maintenance costs as well as combined Electric & Water projects.

Items in **BLUE** represent work orders with no activity in the last 60 days.

**Riverside Public Utilities**  
**Open Capital Work Order Summary Report - Water Fund**  
**September 2017**

Project / Subproject or WO	Project Description	Board Approval Date	Board Approved Estimate <sup>(2)</sup>	Project Estimate	Year to Date	Life to Date	Available Balance	Last Activity Date	Job Status (Based on Proj. Est.)		Project Status
					Total as of 09/30/2017	Total as of 09/30/2017			% Spent	% Completed	
Open Work Orders/Projects with Budgeted or Actual expenditures > \$200,000											
Advanced Technology <sup>(1)</sup>											
1707248	Advanced Metering Infrastructure - Water	06/12/17	3,000,000	1,110,000	-	-	1,110,000	09/23/16	0%	0%	Pending start date.
1619634	Operational Data Management System - Water	05/09/16	4,907,000	1,717,500	17,747	994,136	723,364	05/09/16	58%	65%	In implementation phase.
	Subtotal			2,827,500	17,747	994,136	1,833,364				
Asset Management System											
1424073	Water Asset Management	06/20/14	2,530,400	2,048,689	7,430	2,148,398	(99,709)	08/16/17	105%	95%	Completed, pending closure.
	Subtotal			2,048,689	7,430	2,148,398	(99,709)				
Aquifer Storage & Recovery System											
1202806	Riverside North Aquifer Storage & Recovery	10/07/11	1,800,000	1,800,000	23,133	447,714	1,352,286	07/01/17	25%	10%	In environmental evaluation phase.
	Subtotal			1,800,000	23,133	447,714	1,352,286				
Development Costs											
1504840	Santa Ana River Habitat Conservation	09/05/14	325,000	325,000	-	134,256	190,744	06/30/17	41%	25%	In biological evaluation phase.
	Subtotal			325,000	-	134,256	190,744				
Facility Rehabilitation											
1727627	John W. North Treatment Plant Trains	07/10/17	368,000	368,000	286	286	367,714	No Activity	0%	0%	No Activity.
1712678	Flume 3 Groundwater Well	02/13/17	255,672	255,672	(41,366)	94,973	160,699	07/01/17	37%	100%	Completed, pending closure.
1712677	Gage 92-3 Groundwater Well	02/13/17	264,626	264,626	-	10,383	254,243	06/01/17	4%	10%	In construction.
1712676	Tippecanoe Groundwater Well	02/13/17	301,454	301,454	(130,397)	65,465	235,989	07/27/17	22%	100%	Completed, pending closure.
1712675	Raub 6 Groundwater Well	02/13/17	297,582	297,582	617	12,474	285,108	08/24/17	4%	10%	In construction.
1712389	Raub 7 Groundwater Well	02/13/17	267,288	267,288	(99,095)	65,560	201,728	07/01/17	25%	100%	Completed, pending closure.
1610216	Riverside Golf Course Drip Irrigation System	02/19/16	240,000	240,000	-	230,449	9,551	06/30/17	96%	100%	Completed, pending closure.
1524282	Land Mobile Radio (LMR) system (Water Portion)	09/26/16	3,000,000	1,350,000	-	1,283,051	66,949	08/10/17	95%	95%	Completed, pending commisioning.
1508449	Palmyrita Well	11/07/14	215,000	215,000	1,189	8,233	206,767	08/15/17	4%	5%	On-hold.
	Subtotal			3,559,622	(268,766)	1,770,874	1,788,748				

**Riverside Public Utilities**  
**Open Capital Work Order Summary Report - Water Fund**  
**September 2017**

Project / Subproject or WO	Project Description	Board Approval Date	Board Approved Estimate <sup>(2)</sup>	Project Estimate	Year to Date	Life to Date	Available Balance	Last Activity Date	Job Status (Based on Proj. Est.)		Project Status
					Total as of 09/30/2017	Total as of 09/30/2017			% Spent	% Completed	
Main Replacements											
1619730	Tenth and Eleventh Street	08/22/16	2,245,000	2,245,000	89,101	1,582,965	662,035	08/24/17	71%	85%	In construction.
1602941	Larchwood Place	10/16/15	895,000	865,000	1,749	475,204	389,796	06/30/17	55%	100%	Completed, pending closure.
1518913	Brockton Ave. & Palm Ave. Railroad Crossings	08/22/16	688,000	688,000	-	659,307	28,693	06/30/17	96%	100%	Completed, pending closure.
1515609	Arlington Ave. & Western Ave.	06/06/16	1,241,000	1,241,000	71,078	992,703	248,297	08/24/17	80%	85%	In construction.
1515505	Ambs Drive	06/06/16	1,523,000	1,523,000	5,077	1,103,807	419,193	08/24/17	72%	100%	Completed, pending closure.
1515504	Arroyo Drive	11/14/16	2,040,000	2,040,000	36,459	1,620,185	419,815	08/30/17	79%	80%	In construction.
1513392	Colorado Ave and Toyon Road	05/22/17	2,978,000	2,978,000	362,786	553,274	2,424,726	09/22/17	19%	30%	In construction.
1507007	Jasmine and Columbus	10/03/14	679,000	679,000	-	-	679,000	No Activity	0%	0%	On-hold.
1422097	Indiana Avenue and Mary St.	07/10/17	2,017,000	2,017,000	10,462	121,580	1,895,420	09/21/17	6%	10%	In construction.
1415931	California and Monroe	12/12/14	973,500	973,500	-	820,305	153,195	06/01/17	84%	95%	In construction.
1107917	Magnolia Ave and Ramona Dr	04/10/17	2,704,000	2,704,000	583,376	970,566	1,733,434	09/26/17	36%	70%	In construction.
Subtotal				17,953,500	1,160,088	8,899,896	9,053,604				
Recycled Water Facilities											
1722078	Jackson Street - Phase 1 & 2 Water Sites Retrofit	04/24/17	434,730	434,730	23,979	33,942	400,788	09/26/17	8%	5%	In construction.
1521905	Jackson Street - Phase 1	01/22/16	8,609,000	8,609,000	323,422	861,953	7,747,047	09/27/17	10%	5%	In construction.
Subtotal				9,043,730	347,401	895,895	8,147,835				
System Expansion											
1703061	Crestlawn-Norco	11/14/16	1,339,000	1,339,000	17,692	1,123,912	215,088	09/21/17	84%	100%	Completed, pending closure.
Subtotal				1,339,000	17,692	1,123,912	215,088				
Utility Agreement Projects - Caltrans SR-91 HOV											
1112062	UA 21699 - Misc. Utility Relocations	11/18/11	1,555,000	1,555,000	(35,404)	455,190	1,099,810	09/27/17	29%	99%	Completed, pending closure.
1112059	UA 21702 - Ivy St Bridge	08/19/11	1,600,000	1,600,000	(26,413)	1,333,551	266,449	09/27/17	83%	99%	Completed, pending closure.
Subtotal				3,155,000	(61,817)	1,788,741	1,366,259				
Total Water Fund - Open Work Orders				42,052,041	1,242,908	18,203,822	23,848,219				

**NOTE:**

(1) Advanced Technology projects includes both capital expenditures and professional services.

(2) Board approved estimate is the total amount of the work order which can include operating & maintenance costs as well as combined Electric & Water projects.

Items in blue represent work orders with no activity in the last 60 days.



# **RIVERSIDE PUBLIC UTILITIES**

## **Board Memorandum**

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**BOARD OF PUBLIC UTILITIES**

**DATE: OCTOBER 23, 2017**

**GENERAL MANAGER'S REPORT**

**ITEM NO: 24**

# **Riverside Public Utilities**

## **Closed Work Order Reports**

### **As of September 30, 2017**

Riverside Public Utilities  
Closed Capital Work Order Summary Report - Electric Fund  
September 2017

Project / Subproject or WO	Project Description	Start Date	End Date	Board Approved Estimate	Final Project Cost	Variance	% Variance
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**CLOSED Capital Work Orders with Budget or Actual expenditures > \$200,000**

**Cable Replacement**

1525067	Ward 5 Cable Rejuvenation	7/1/2016	8/3/2017	\$ 449,000	\$ 311,639	\$ 137,361	30.59%
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*1) Note on Final Project Cost:*

Project was completed successfully under the approved budget. The scope of the project was reduced during construction based on need and to eliminate potential project growth and impacting change orders.

*2) Impact to Customer Service:*

The cable rejuvenation provides customers with greater reliability.

*3) Impact to System Reliability:*

The rejuvenation of Ward 5 cables improved the reliability while extending the life of the system.

**Line Rebuilds**

1607467	Magnolia Ave. and Harrison Street.	9/26/2016	8/3/2017	\$ 230,000	\$ 241,348	\$ (11,348)	-4.93%
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*1) Note on Final Project Cost:*

Project was completed successfully. City Crews slightly exceeded the project estimated cost limits due to additional work.

*2) Impact to Customer Service:*

Replacement of the underground switch with a new pad mounted switch has improved system reliability. In addition, will reduce down time for restoring service if an outage is experienced by the customer.

*3) Impact to System Reliability:*

System reliability has been improved in this area.



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**CLOSED Capital Work Orders with Budget or Actual expenditures > \$200,000**

**Major 4/12Kv Conversions**

1616413	Plaza Substation on Elizabeth Street	2/25/2016	6/22/2017	\$ 220,000	\$ 251,280	\$ (31,280)	-14.22%
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*1) Note on Final Project Cost:*

Project successfully completed. Additional scope was added to the project needed to extend the feeder cable to accommodate ongoing 4-12kV projects in the area.

*2) Impact to Customer Service:*

The Plaza Substation project will help improve safety and efficiency of the 12kV electrical system serving the area.

*3) Impact to System Reliability:*

The Plaza Substation project improves the reliability and redundancy of RPU's electric system with improved operations.

**Major Overhead/Underground Conversions**

1202319	Riverside Ave RR Grade Separation	11/15/2013	7/31/2017	\$ 616,200	\$ 703,254	\$ (87,054)	-14.13%
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*1) Note on Final Project Cost:*

The project is complete. Construction was impacted and additional work was required due to concurrently running 4-12 kV projects in the area. Also, revisions to the storm water pump station affected the conduit layout.

*2) Impact to Customer Service:*

Improved traffic conditions, safety, and emergency response to the area.

*3) Impact to System Reliability:*

System reliability was improved due to replacement of aged overhead facilities with underground facilities. Underground facilities will facilitate switching during emergency response events.

**Total Electric Fund - Closed Work Orders**

<u>\$ 1,515,200</u>	<u>\$ 1,507,521</u>	<u>\$ 7,679</u>
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Closed Capital Work Order Summary Report - Water Fund  
September 2017

Project / Subproject or WO	Project Description	Start Date	End Date	Board Approved Estimate	Final Project Cost	Variance	% Variance
<b>CLOSED Capital Work Orders with Budget or Actual expenditures &gt; \$200,000</b>							
Please note: No Closed Water Work Orders over \$200,000 to report for the month of September 2017.							
<b>Total Water Fund - Closed Work Orders</b>				<u>\$ -</u>	<u>\$ -</u>	<u>\$ -</u>	