

AGENDA
REGULAR CITY COUNCIL MEETING
COUNCIL CHAMBERS
5000 CLARK AVENUE
LAKEWOOD, CALIFORNIA

May 9, 2017

ADJOURNED MEETING: Water Asset Management and Rate Study; 6:00 p.m.
Water Meter Replacement and Billing Services Proposal *EXECUTIVE BOARD ROOM*

CALL TO ORDER

INVOCATION: Ahmed Rafi, Member of the Lakewood Muslim Community

PLEDGE OF ALLEGIANCE: Girl Scout Troop 1023

ROLL CALL: Mayor Diane DuBois
Vice Mayor Steve Croft
Council Member Ron Piazza
Council Member Todd Rogers
Council Member Jeff Wood

ANNOUNCEMENTS AND PRESENTATIONS:

ROUTINE ITEMS:

All items listed within this section of the agenda are considered to be routine and will be enacted by one motion without separate discussion. Any Member of Council may request an item be removed for individual discussion or further explanation. All items removed shall be considered immediately following action on the remaining items.

RI-1 Approval of Minutes of the Meeting held April 25, 2017

RI-2 Approval of Personnel Transactions

RI-3 Approval of Registers of Demands

RI-4 Approval of Amendment to Intergovernmental Relations Committee

RI-5 Authorization for Rynerson Park Sewer Main Design Services by Willdan Engineering

RI-6 Approval of Water Sale Agreement, WD-3329, with Long Beach Water Department

AGENDA
LAKWOOD SUCCESSOR AGENCY

1. Approval of Register of Demands

City Council Agenda

May 9, 2017

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**AGENDA
LAKEWOOD HOUSING SUCCESSOR AGENCY**

1. Approval of Register of Demands

ORAL COMMUNICATIONS:

ADJOURNMENT

Any qualified individual with a disability that would exclude that individual from participating in or attending the above meeting should contact the City Clerk's Office, 5050 Clark Avenue, Lakewood, CA, at 562/866-9771, ext. 2200; at least 48 hours prior to the above meeting to ensure that reasonable arrangements can be made to provide accessibility to the meeting or other reasonable auxiliary aids or services may be provided.

Copies of staff reports and other writings pertaining to this agenda are available for public review during regular business hours in the Office of the City Clerk, 5050 Clark Avenue, Lakewood, CA 90712

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TO: The Honorable Mayor and City Council

SUBJECT: 2017 Water Master Plan

INTRODUCTION

The 2017 Water Master Plan is an update to the 2002 Plan and provides a framework for existing and future water system planning. The plan's objectives include five primary areas: hydraulic modeling, supply and demand analysis, infrastructure planning, operational assessment, and financial assessment. The 2017 Water Master Plan is a reevaluation of the City's water system capacity based on updated water use patterns and serves as a reference document for existing and future water system operations and maintenance.

STATEMENT OF FACT

On November 8, 2016, the City Council approved an agreement with Stetson Engineers Inc. (Stetson) to prepare a Water Master Plan and Water Rate Study. The Water Master Plan included a comprehensive long-term capital improvement program. Summarized below are Stetson's findings of the city's water system:

- **HYDRAULIC MODELING**

Watermain Replacement: Distribution pipe deficiencies were identified based on certain pressure, velocity, head loss, and fire flow criteria using a computer hydraulic model for existing and future maximum day demands plus fire flow conditions. Undersized pipes were given priority for upgrade to larger-sized pipes followed by degradation due to age. A total of 133 existing pipes, approximately 20.7 miles, are recommended as "first priority" pipes and should be upgraded in diameter of 8 to 12 inches.

- **SUPPLY & DEMAND**

Groundwater Wells: The City has 10 potable groundwater wells and one irrigation well. Combined, the potable wells produce 11,675 gallons-per-minute, which exceeds our average system demand. The wells range between 7 and 80 years, with wells #4 and #8, are 80 and 72 years of age respectively. These wells are at the end of their useful life. Two new wells are needed to replace the capacity of the aged and low-producing wells within the next 20 years.

Storage Reservoirs: The City utilizes seven steel reservoirs and two concrete reservoirs with a total water storage capacity of 12.9 million gallons (MG). However, to meet current storage demands, the City only needs 4.8 - 5.3 MG forecasted in the in the next 25 years. Under current and future water demands, the city has more than double the amount of water storage capacity (see table below). In addition, inspection reports recommend that Reservoir 22 be removed from service because it has a leak beyond repair. The City's existing reservoirs have sufficient storage capacity under current and future conditions with Reservoir 22 removed from service.

Reservoir Storage Requirements							
Year	Potable Demands			Storage Requirements			Total Required Storage
	Potable Water Demands ⁽¹⁾	ADD ⁽²⁾	MDD ⁽³⁾	Equalization Storage ⁽⁴⁾	Fire Storage ⁽⁵⁾	Emergency Storage ⁽⁶⁾	
	(AFY)	(MGD)	(MGD)	(MG)	(MG)	(MG)	
2015	6,174	5.5	8.0	2.0	1.4	1.4	4.8
2020	6,668	6.0	9.0	2.3	1.4	1.5	5.2
2025	6,801	6.1	9.0	2.3	1.4	1.5	5.2
2030	6,937	6.2	9.0	2.3	1.4	1.6	5.2
2035	7,076	6.3	9.0	2.3	1.4	1.6	5.3
2040	7,098	6.3	9.0	2.3	1.4	1.6	5.3

Notes:
 ADD = Average Day Demand
 MDD = Maximum Day Demand
⁽¹⁾ Potable water demands
⁽²⁾ 1 MGD = 1,120 AFY
⁽³⁾ MDD = 1.5 x ADD
⁽⁴⁾ Equalization storage is based on 25 percent of the MDD
⁽⁵⁾ Fire storage is based on 6,000 gpm for 4 hours.
⁽⁶⁾ Emergency storage is based on 25 percent of the ADD

• **INFRASTRUCTURE PLANNING**

Advanced Meter Infrastructure (AMI): The City has been piloting Automated Meter Reading (AMR) System from more than 25 years. AMR meters are read by walk-by or drive-by, still bi-monthly. In December 2014, staff received Bureau of Reclamation (BOR) Grant Funds to pilot an Advanced Meter Infrastructure (AMI) Program. In FY 2015/16, 320 AMI meters were installed and another 350 AMI are planned to be installed using recently secured Prop 84 Grant Funds. The AMI Pilot Program has been successful to:

1. Maximizing reading success rate and billing accuracy
2. Reducing meter reading employee time and equipment costs
3. Optimizing water use efficiency
4. Improving communication and responsiveness to customers

To fully receive the benefits of an AMI Program, 100% meter deployment is necessary. Also, since most meters are more than 25 years and at the end of their useful life, this is the ideal time to switch from a Manual Meter Reading Program to an AMI network. With the addition to seeing the above pilot program benefits deployed throughout the service area, the following long-term benefits of AMI include:

1. Eliminate field meter manual read times
2. Provide timely water system data including water usage, pressure, and anomaly.
3. Obtain accurate hourly and daily water demand data for a more effective demand/supply management.

4. Enhance customer service through improved timely leak detection and troubleshooting
5. Improve asset and inventory management
6. Real-time theft detection and outage management
7. Real-time detection of meter failures
8. Customize water use data for targeted water conservation programs
9. Reduce carbon footprint

- **OPERATIONAL ASSESSMENT**

Recycled Water System: Currently, the city's recycled water system has 41 metered connections and uses about 500 acre-feet of recycled water per year. Full expansion of the recycled water system to irrigate all city parks, medians, and panels would include 11 miles of additional pipeline and supply 159 acre-feet per year. The estimated cost to construct the proposed recycled water system expansion is approximately \$7,700 per acre-foot or \$18.7 Million and is significantly higher than the City's existing cost of using potable water. It is not recommended that the City pursue the expansion of its recycled water system at this time unless grant funding is available. However, more analysis should be given to incorporating the stormwater capture facility at Bolivar Park and Mayfair Park as a component of the non-potable water system and/or connecting to Central Basin Municipal Water Districts (CBMWD) recycled water system, and exploring the potential to connect the recycled water system to the Lakewood Golf Course.

Supervisory Control and Data Acquisition (SCADA) System: The City incorporates a SCADA system to control different parts of its water system facilities from one central location. The City's SCADA System hardware is outdated and Microsoft has not supported the operating system-Windows XP since 2014. Therefore, Stetson recommends that the SCADA improvements are included in the CIP schedule.

Asset Management Plan: All water supply assets have been identified, itemized, and placed in a routine maintenance and replacement schedule. The data has been used in the Master Plan analysis, especially for CIP project scheduling. Staff will perform routine scheduled maintenance and annually evaluate asset condition, which will aid in extending an assets useful life.

- **FINANCIAL ASSESSMENT**

Stetson has cultivated a 20 year capital improvement program that when paired with the Rate Schedule, ensures that the City is able to meet debt service requirements, timely replacement of capital assets, and helps extend larger asset's useful life through annual routine maintenance. Annual Capital Cost is summarized below:

Fiscal Year	Annual CIP Total
2017-18	\$2,695,300
2018-19	\$1,983,800
2019-20	\$1,580,800
2020-21	\$1,264,900
2021-22	\$1,744,350
2022-23	\$1,508,300
2023-24	\$1,484,100
2024-25	\$1,469,300
2025-26	\$1,552,300
2026-27	\$1,477,400
2027-28	\$1,508,150
2028-29	\$1,516,450
2029-30	\$1,512,500
2030-31	\$1,525,700
2031-32	\$1,542,100
2032-33	\$1,542,300
2033-34	\$1,426,200
2034-35	\$1,514,200
2035-36	\$1,432,300
2036-37	\$1,567,500

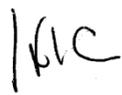
SUMMARY

The Water Resources Committee has reviewed the 2017 Water Master Plan Summary and directed staff to present its findings at a City Council Study Session. Additionally, staff has worked with Stetson and the project team to develop a water system Capital Improvement Program and proposed water rate structure to ensure rate stabilization to meet future operating and capital improvement costs.

RECOMMENDATION

Staff recommends that the City Council receive report.

Jason J. Wen, Ph.D., P.E. 
 Water Resources Director

Howard L. Chambers 
 City Manager



City of Lakewood

DRAFT - 2017 Water System Master Plan



April 2017



Control Automation Design, Inc.



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EXECUTIVE SUMMARY

The City of Lakewood's Department of Water Resources (City) 2017 Water System Master Plan Update (2017 Update) is an update of the City's 2002 Water System Master Plan. This 2017 Update provides details on the City's historical and future demands, its water supply sources and water quality requirements, the City's water production and distribution facilities, and the City's finished water pumping, storage, and distribution facilities. The 2017 Update also provides conclusions and recommendations, including cost estimates for improvements and an implementation plan.

Water Supplies and Demands

A summary of the City's historical and projected water demands is provided in Table ES-1 and Table ES-2. The following summarizes the water demand information provided.

- The majority of the City's potable water supplies comes from groundwater production. The City uses recycled water supplies from the Los Angeles County Sanitation Districts (LACSD) through the City of Cerritos. The City also has access to imported water from Metropolitan Water District of Southern California (MWD) through Central Basin Municipal Water District.
- The City's historical water demands averaged 9,175 AFY, with a range between 6,869 and 10,369 AFY.
- Projected water demands from 2020 to 2040 are estimated to be lower than the current water demand of approximately 7,100 AFY due to the City's built-out condition and the City's implementation of required water conservation measures.



Table ES-1 Historical Water Demands

Fiscal Year	Potable Water Demand (AF)	Recycled Water Demand (AF)	Total Water Demand (AF)
1996-97	9,473	541	10,015
1997-98	8,538	388	8,926
1998-99	8,878	446	9,324
1999-00	9,127	478	9,605
2000-01	8,718	405	9,123
2001-02	9,194	423	9,617
2002-03	9,070	346	9,416
2003-04	9,433	426	9,859
2004-05	8,841	303	9,144
2005-06	9,205	380	9,585
2006-07	9,929	440	10,369
2007-08	9,432	413	9,846
2008-09	8,641	383	9,024
2009-10	9,070	442	9,512
2010-11	7,713	429	8,143
2011-12	8,022	452	8,474
2012-13	9,275	487	9,762
2013-14	8,690	549	9,239
2014-15	7,177	468	7,645
2015-16	6,387	482	6,869
Average	8,741	434	9,175

**Table ES-2 Projected Water Demands**

Year	Potable Water Demand (AF)	Recycled Water Demand (AF)	Total Water Demand (AF)
2020	6,667	502	7,169
2025	6,801	502	7,303
2030	6,937	502	7,439
2035	7,076	502	7,578
2040	7,098	502	7,600

Water Production and Distribution Facilities

Summary listings of the City’s water production and distribution facilities are provided in Tables ES-3 through ES-7. The City’s water facilities include the following.

- 10 potable wells and 1 irrigation well
- Plant 4 includes 3 storage tanks, 7 booster pumps, 2 wells, and an arsenic treatment system.
- Plant 13 includes 5 storage tanks and 4 booster pumps.
- Plant 22 includes a reservoir, one well, and 4 booster pumps.
- Two imported water connections with MWD.
- Three emergency connections with the City of Cerritos, the City of Long Beach, and Golden State Water Company.

Table ES-3 Groundwater Production Wells

Name	Year of Installation	Well Depth (ft bgs)	Motor Size (hp)	Capacity (gpm)	Services
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<u>Potable</u>					
Well #2A	1970	656	50	500	System
Well #4	1937	656	75	700	System
Well #8	1945	385	75	1,000	Plant 4 Tanks
Well #10	1950	876	60	975	Plant 4 Tanks
Well #13A	2003	1,120	100	1,200	Plant 13 Tanks
Well #15A	2001	1,050	100	1,750	Plant 4 Tanks
Well #17	1951	1,134	100	1,100	System
Well #18	1951	1,108	100	1,000	System
Well #22	1996	1,080	200	1,200	Plant 22 Reservoir
Well #27	2010	970	200	2,250	Plant 4 Tanks
Total				11,675	
<u>Irrigation</u>					
Well #6	1969	602	40	500	Irrigation

Table ES-4 Booster Pump Facilities

Name	Year of Installation	Power (hp)	Capacity (gpm)
Plant 4, Booster #2	1965	50	1,000
Plant 4, Booster #3	1965	50	1,000
Plant 4, Booster #4	1965	100	1,700
Plant 4, Booster #5	1965	100	2,000
Plant 4, Booster #6	1965	50	1,000
Plant 4, Booster #7	1965	60	1,120
Plant 4, Booster #8	2017	125	2,600



Plant 13, Booster #1	2017	40	800
Plant 13, Booster #2	2017	50	1,000
Plant 13, Booster #3	2017	75	1,500
Plant 13, Booster #4	2017	75	1,500
Plant 22, Booster #1	1990	40	750
Plant 22, Booster #2	1990	40	925
Plant 22, Booster #3	1990	40	950
Plant 22, Booster #4	1990	60	1,350
Total			19,795

Table ES-5 Water Storage Facilities

Name	Year of Installation	Material	Capacity (MG)	Source
Plant 4, Tank 1	1965	Steel	1.5	Wells #8, #10, #15A, #27
Plant 4, Tank 2	1965	Steel	1.5	Wells #8, #10, #15A, #27
Plant 4, Tank 3	1996	Pre-Stressed Concrete	5.4	Wells #8, #10, #15A, #27
Plant 13, Tank 1	1950	Steel	0.454	Well #13A
Plant 13, Tank 2	1950	Steel	0.454	Well #13A
Plant 13, Tank 3	1950	Steel	0.454	Well #13A
Plant 13, Tank 4	1997	Steel	0.454	Well #13A
Plant 13, Tank 5	1965	Steel	0.22	Well #13A
Reservoir 22	1954	Cast-in Place Concrete	2.5	Well #22



Total			12.9	
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Table ES-6 Imported Water Connections (MWD / CBMWD)

Name	Location	Capacity (cfs)	Capacity (gpm)
CENB-43	Southeast corner of Allington Street and Woodruff Avenue	15	6,700
CENB-49	East Union Pacific Railroad right of way and south of Carson Street	15	6,700

Table ES-7 Emergency Interconnections

Name	Location	Direction	Size (Inches)	Capacity (gpm)
City of Cerritos	Palo Verde Avenue at Andy Street	2-way	12	5,000
City of Long Beach	Palo Verde Avenue south of Carson Street	2-way	12	5,000
Golden State Water Company (GSWC)	North side of Carson Street at the San Gabriel River	2-way	12	5,000

Conclusions and Recommendations



The 2017 Update recommends an initial 10-year CIP project schedule from fiscal year 2017-18 through fiscal year 2026-27. Additional improvements will be needed after the initial 10-year CIP project schedule to replace aging facilities and address other water system needs. As a result, the 2017 Update provides an additional CIP summary schedule from fiscal year 2027-28 through fiscal year 2036-37. The following is a listing of conclusions and recommendations from the 2017 Update for inclusion in the CIP project schedule.

Water Quality

- 1) Continue monitoring and reporting in accordance with Title 22 requirements. Continue monitoring for upcoming regulations (including establishment of a 1,2,3-Trichloropropane Maximum Contaminant Level). It is recommended the City update its existing Vulnerability Assessment and Emergency Response Plan reports as needed.

Groundwater Wells (Casings)

- 2) Based on current life expectancy projections, two wells (Wells #4 and #8) have a theoretical estimated remaining service life of less than five years. Replacement of these wells should be considered in the near future.
 - a. **The 2017 Update recommends construction of a new well in the near future.** Construction of a new well will provide sufficient replacement production capacity in the event Wells #4 and #8 are removed from service. The City is currently in the process of constructing a new production well which will be able to replace the combined capacities of Wells #4 and #8.
- 3) Three wells (Wells #10, #17, and #18) have an estimated remaining service life of less than ten years. Redevelopment of these well casings on a regular basis is recommended. Replacement of these wells should be considered in 10 to 25 years. **The 2017 Update recommends construction of a new well in the future to provide sufficient replacement production capacity.**



- 4) Two wells (Wells #2A and #6) have an estimated remaining service life of 11 years. All other wells appear to have at least 20 years of projected remaining life expectancy. Although life expectancy projections for these wells should continue to be reviewed periodically, there are no immediate recommendations for these wells at this time.

Groundwater Wells (Pumps)

- 5) The Well #10 pump was originally installed in 1950 and the pump was last replaced in 2003. Although SCE pump tests indicate the well pump is currently efficient, the well pump should be scheduled for replacement if pump efficiency declines. Remaining well pump components should be replaced pursuant to the City's Asset Management Plan (see Item 23 below).
- 6) The Well #8 pump was originally installed in 1945 and the pump and motor were last replaced in 1997. The Well #8 pump should be scheduled for replacement (if the well is not replaced as recommended above). SCE pump tests for Well #8 are not available. Remaining well pump components should be replaced pursuant to the City's Asset Management Plan (see Item 23 below).
- 7) Based on recent SCE pump test results, there are currently four well pumps which are operating inefficiently (Wells #2A, #15A, #18, and #6). However, the motors and/or pumps for Wells #2A, #15A, and #18 have been replaced within the past seven years. Although there may be annual energy cost savings associated with improving or replacing these well pumps, there does not appear to be an overall economic benefit at this time.
 - a. **The City's Asset Management Plan (See Item 23 below) recommends replacement of the pumps for Wells #2A, #15A, and #18 within the next several years.** The immediate replacement of these well pumps have not been included in the 10-year CIP schedule.

Booster Pumps

- 8) Based on recent SCE pump test results, there is currently four booster pumps which are operating inefficiently (Plant 4, Boosters #2, #4, #6, and #8). Refurbishment or replacement of the Booster #8 pump appears economical and SCE estimates the potential annual energy savings



will be approximately \$5,800 per year. **The 2017 Update recommends replacement of the Plant 4, Booster #8 pump.** The City installed a new booster pump/motor in April 2017.

- 9) Plant 4 booster pumps (Boosters #2, #4, #6, and #7) have a remaining service life of two years and should be scheduled for replacement or refurbishment. **The 2017 Update recommends replacement of these booster pumps in the near future.**
- 10) Plant 22, Boosters #1, #2, #3, and #4 have a remaining service life of seven years. Replacement or refurbishment of should be considered periodically to increase the remaining service life. However, replacement of these booster pumps is not necessary if Reservoir 22 is removed from service (see recommendation below).

Storage Reservoirs

- 11) The City's existing reservoirs have sufficient storage capacity to meet equalization, emergency, and fire flow requirements under current and future conditions. In addition, the City's existing reservoirs have sufficient storage capacity under current and future conditions with Reservoir 22 removed from service.
- 12) The City's three oldest water storage facilities (Plant 13, Tank 1, Tank 2 and Tank 3) have an estimated remaining service life of 12 years. Although life expectancy projections for these reservoirs should continue to be reviewed periodically, there are no immediate recommendations for these reservoirs at this time.
 - a. The Asset Management Plan (see Item 23 below) recommends replacement of these three tanks in 2020. Replacement of these the three tanks have not been included in the 10-year CIP schedule.
- 13) In general, steel reservoirs should be recoated every 20 years (without cathodic protection) and 25 years (with cathodic protection) to ensure proper protection against corrosion.



- b. Plant 13, Tanks 1, 2, 3, 4 and 5 were last coated over 20 years ago. **Although these reservoirs include cathodic protection, the 2017 Update recommends the City recoat these reservoirs in the next 5 to 10 years.**
- 14) Recent reservoir inspections reports prepared for each of the City's storage facilities recommend the following:
- c. Perform regular cleaning, inspection and repair cycles every two years for each reservoir.
 - d. For Plant 13, Tanks 4 and 5, recoat roof exterior and do not use cathodic system rectifier until it is repaired for Tank 5. The City has indicated it has recently recoated the roof exterior for Plant 13, Tanks 4 and 5.
 - e. For Reservoir 22, repair the cracking in the interior roof and walls and floors or replace the concrete. Due to the high cost of required repairs, the inspection report recommends replacement of Reservoir 22.
- 15) The City may consider preparing comprehensive analysis reports for each of its reservoirs. The reports would include corrosion and structural/seismic evaluations based on applicable standards and guidelines (including from the American Water Works Association and the Occupation Safety and Health Administration).
- 16) **The 2017 Update recommends the City remove Reservoir 22 from service.** The inspection report for Reservoir 22 recommends replacement of the reservoir. The City's existing reservoirs have sufficient storage capacity under current and future conditions with Reservoir 22 removed from service. In addition, the hydraulic model only identified an additional 3 model node locations with fire flow deficiencies with as a result of Reservoir 22 being removed from service (see discussion below).

Imported Water Connections

- 17) Perform routine testing and maintenance on the CENB-49 connection located in the southwestern part of the system. The hydraulic model indicates retaining CENB-49 will provide a hydraulic benefit to the system. The City has placed the CENB-43 connection in an inactive status as of 2017.



Recycled Water System

- 18) The City's existing recycled water distribution system includes approximately six miles of pipeline and serves approximately 502 AFY to over 40 metered connections. A proposed recycled water expansion would increase the system by an additional 11 miles and serve an additional 159 AFY of recycled water. The estimated cost to construct the proposed recycled water system expansion is approximately \$7,700 per AF and is significantly higher than the City's existing cost of using potable water. It is not recommended the City pursue this expansion of its recycled water system at this time.
- 19) The City may be able to provide approximately 434 AFY of recycled water service to the Lakewood Golf Course if the City of Long Beach is unable to continue providing service (as a result of reduced recycled water supplies) and the City installs additional infrastructure. The proposed recycled water service would include construction of approximately 3 miles of pipeline. The estimated cost to construct the proposed recycled water system expansion is approximately \$500 per AF, which excludes the cost to purchase recycled water. The City should continue seeking potential grants to fund an expansion of City's existing recycled water system.

Supervisory Control and Data Acquisition (SCADA) System

- 20) Control Automation Design (CAD) performed a review of the City's existing SCADA system. CAD recommended radio network, SCADA software, and hardware (i.e. Programmable Logic Controller) upgrades at various sites. **The 2017 Update recommends the City implement these SCADA improvements into its CIP schedule.**

AMR / Billing System

- 21) The City's current billing system is not designed for use with water systems. In addition, the City manually obtains meter readings and can only access data on a bimonthly basis. **The 2017 Update recommends the City incorporate advanced meter infrastructure (AMI) improvements into its CIP schedule** to improve data collection from meters and simplify the billing process for customers. The new system will include an AMI system, including software and



managed services implementation and AMI network management, and replacement of all the City's meters and registers.

Asset Management Plan

- 22) GHD prepared an "Asset Management Plan" to serve as a long-range planning document for managing the water production facility assets owned and operated by the City (including facilities associated with Plants 4, 13, and 22), over the next 10 to 20 years. The Asset Management Plan provides a schedule of annual investment costs (including rehabilitation and replacement of facilities) required to maintain service. **The 2017 Update recommends the City incorporate the recommended Asset Management Plan replacement schedule into the City's CIP schedule.**

Hydraulic Modeling

- 23) The hydraulic model was updated with the 2014/2015 pipe replacement records and 2015 pump test data, and re-calibrated based on 2016 fire flow test data. Hydraulic modeling runs were performed for existing and future maximum day demands plus fire flow conditions. Distribution pipe deficiencies were identified based on certain pressure, velocity, head loss, and fire flow criteria.
- 24) The hydraulic model identified 125 model node locations with fire flow deficiencies under the maximum day demand plus fire flow conditions requirements based on an existing average annual demand of 7,100 AFY. The model also identified an additional 3 model node locations with fire flow deficiencies as a result of removing Reservoir 22 from service. The model was used to identify 133 pipeline improvements to resolve all the fire flow deficiencies. **The 2017 Update recommend replacement of these 133 pipelines (first priority) with larger diameter pipelines.** Replacement of these pipelines will solve any deficiencies associated with removing Reservoir 22 from service.
- 25) **The 2017 Update recommend replacement of an additional 36 pipelines (first priority) due to historical maintenance problems and leaks.**
- 26) Using the age, material, and pipeline size data in the hydraulic model, an additional 68 pipeline locations for upgrades (second priority) have been identified for the annual replacement program. These secondary priority pipelines include transmission mains 10-inches or larger and greater than 60 years old. These aging pipelines are critical in delivering water through the City's distribution system and should be



replaced before they begin to fail. In addition, second priority pipelines include the replacement of 4-inch cast iron pipe and greater than 60 years old. Approximately 89 percent of the City’s distribution system leaks have been associated with this type of pipe (i.e. 4-inch cast iron pipe greater than 60 years old). **The 2017 Update recommends replacement of these 38 pipeline replacements (second priority)**

Table ES-8 provides the summary of the City’s annual CIP budget based on the recommendations provided in the 2017 Update.

Table ES-8 Capital Improvement Plan (CIP) Budget Summary

Fiscal Year	Annual Total
2017-18	\$2,450,400
2018-19	\$2,500,300
2019-20	\$2,497,900
2020-21	\$2,509,000
2021-22	\$2,474,200
2022-23	\$2,488,800
2023-24	\$2,464,600
2024-25	\$2,449,800
2025-26	\$2,532,800
2026-27	\$2,457,900
2027-28	\$2,488,650
2028-29	\$2,496,950
2029-30	\$2,493,000
2030-31	\$2,506,200
2031-32	\$2,522,600
2032-33	\$2,522,800
2033-34	\$2,406,700
2034-35	\$2,494,700
2035-36	\$2,412,800
2036-37	\$2,548,000

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TO: The Honorable Mayor and City Council

SUBJECT: Water Rate Study – Transitional Water Rate Schedule

INTRODUCTION

On November 8, 2016, the City Council approved an agreement with Stetson Engineers Inc. (Stetson) to prepare a Water Master Plan and Water Rate Study. The reason for having the water rate study performed was to develop a defensible water rate structure that provides greater fiscal stability for Water Resources and incorporates tiers to promote conservation. RFC over the last six months has developed a water rate structure for Council review. The resulting water rate study provides for greater stability, includes a tiered rates to promote conservation and incorporates the nexus requirement between rates and their costs.

STATEMENT OF FACT

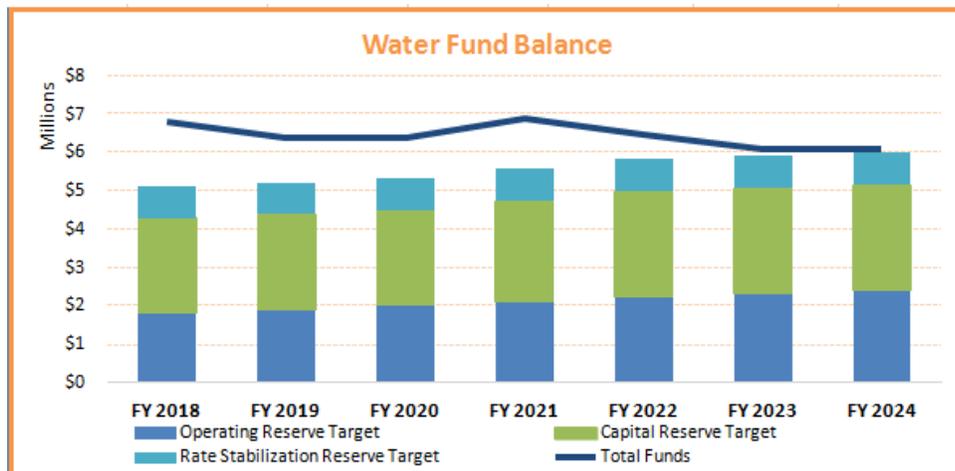
RFC’s methodology for determining the rate structure involved three steps:

- Setting the financial goals and reserve levels
- Evaluating capital projects, financing and cash flow analysis
- Cost allocations and rate design

Financial goals, policies and reserve levels

First the rate structure RFC developed must meet current legal provisions, which includes the cost of service requirements of Proposition 218 and 26 (the nexus), ground water sustainability requirement of AB 3030, and the various legislative actions relating to water conservation. Second the designed rate satisfies the financial goal of greater stability by increasing the fixed (meter) rate to be 25 percent of revenues. The rate structure also includes tiers that are designed to promote conservation.

The proposed rate structure also provides for desired reserve levels. The reserve levels include an operating reserve of 90 days (25 percent of operations and maintenance), a capital reserve equivalent to the five-year average spent on capital improvement projects, and a rate stabilization reserve equivalent to ten percent of consumption (commodity) revenue.



Evaluating capital projects, financing and cash flow analysis

The Capital Improvement Program (CIP) used in the Rate Study is based on the Water Asset Management study performed concurrent with the Rate Study. Financing methods such as save then pay, issuing debt, and the leasing water rights were reviewed and have been incorporated in to the Rate Study. Cash flow is largely contingent on water sales and the Rate Study has water sales projected to increase seven percent over Fiscal Year 2016-2017 as the usage rebounds after the drought.

Cost allocations and rate design

The rate structure developed is based on the cost of service and each rate is built by identifying the nexus and the allocation of various cost components. These cost components are water supply costs, delivery costs, the cost of extra capacity for peak flow, desired conservation, meter maintenance and customer service. Based on industry standard, the costs of water supply, delivery conservation and a portion of the extra capacity costs are covered by the commodity/volumetric rate. The cost of meter maintenance, customer services and the remaining portion of extra capacity are covered by the meter rate; and is designed to cover 25 percent of revenue to provide fiscal stability.

The developed Rate Structure includes meter rates for all sizes of meters for regular use and for fire, and three commodity rates for single family residence, multi-family residence, and all non-residential (commercial, institution, fire, irrigation-potable).

The overall the Rate Study found that there needed to be a shift in revenue collection to where all water customers are paying for water service instead of relying so heavily on the high volume users.

This shift is realized by increasing the meter rate and in the case of residential charging for the four units of free water that we now offer. Since all customers pay this cost, revenue collection becomes less volatile. In the final rate structure developed by RFC the meter rates increase and we are charging for the free water, while the commodity rates decline from what we have currently.

Rather than implementing the RFC rate structure, the Water Resources Committee recommends that we ease into the RFC rate structure by implementing a “Transitional Rate Structure” over a five-year time period to mitigate the cost increases to residential customers. In the Transitional Rate Structure the meter and private fire rate as developed through the Water Rate Study would go into effect in Fiscal Year 2019 for all customers, but delayed by one year; for residential customers this is a \$1.35/month increase, and the meter rate increase in subsequent years is an average annual increase of \$0.36 to \$0.38/month.

During this Transitional Rate Structure time period the commodity rate would stay constant at \$3.50/unit, however in each fiscal year from 2020 through 2023 we would phase out one of the free units of water at the rate set by the RFC Rate Study. This phasing out the free units would result in a monthly increase of \$1.45 in Fiscal Year 2020, \$1.51 in Fiscal Year 2021, \$1.57 in Fiscal Year 2022, and \$1.64 in Fiscal Year 2023.

For the average residential customer at 20 units of water they would experience monthly increase (meter and commodity rates) as follows for fiscal years 2019 through 2023: \$1.35, \$1.80, \$1.94, \$2.09 and \$1.29. As a frame of reference, increases for 20-unit residential customers for fiscal years 2010 through 2016 saw an average increase of \$2.18/month each year.

By Fiscal Year 2023 the Transitional Rate Structure ends for residential customers and the unit rate for the first 14 units of water is projected at \$3.27, \$3.57 for the 15th through 25th unit of water and \$3.94 for units of water used in excess of 25 units. Similarly, there would be a transitional rate structure for multi-family residential customers and all non-residential customers with full implementation of the RFC rate structure by 2025 and 2024 respectively.

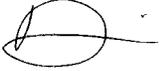
The implementation of the RFC rate structure insures that the rates are defensible and properly structured in allocating costs to various customers, as well as provide fiscal stability for the Water Fund. The transition rates take the water utility in the right direction and get to the RFC water rate structure in five years. The Water Resources Committee studied the rates, both the RFC water rates and the transitional rates, and proposes approving noticing per Proposition 218 a water rate structure that covers fiscal years 2018 through 2021 as follows:

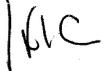
		Current Rates FY 2018	July 1, 2018 FY 2019	July 1, 2019 FY 2020	July 1, 2020 FY 2021
<u>Bi-Monthly Meter Charge</u>					
All Accounts (Potable)	Meters				
5/8" or 3/4"	18,328	\$15.00	\$17.69	\$18.40	\$19.14
1"	959	\$22.50	\$27.37	\$28.47	\$29.61
1 1/2"	279	\$37.47	\$51.58	\$53.65	\$55.80
2"	376	\$53.70	\$80.64	\$83.87	\$87.23
3"	47	\$96.15	\$172.64	\$179.55	\$186.74
4"	16	\$142.37	\$308.23	\$320.56	\$333.39
6"	3	\$249.75	\$632.67	\$657.98	\$684.30
8"	0	\$344.66	\$1,165.33	\$1,211.95	\$1,260.43
Private Fire	Meters				
2"	0	\$45.00	\$8.91	\$9.27	\$9.65
3"	1	\$56.25	\$25.88	\$26.92	\$28.00
4"	31	\$70.31	\$55.15	\$57.36	\$59.66
6"	60	\$87.89	\$160.20	\$166.61	\$173.28
8"	37	\$109.86	\$341.38	\$355.04	\$369.25
10"	2	\$137.33	\$613.92	\$638.49	\$664.03
<u>Commodity Rate (\$/hcf)</u>					
	Units				
	1-2				
	3 rd				\$3.01
	4 th			\$2.89	\$3.01
	>4	\$3.50	\$3.50	\$3.50	\$3.50
	>25	\$3.50	\$3.50	\$3.50	\$3.63
	Units				
MFR	all	\$3.50	\$3.50	\$3.50	\$3.50
Non-Residential	all	\$3.50	\$3.50	\$3.50	\$3.50

RECOMMENDATION

The Water Resources Committee and staff recommend that the City Council:

- Receive and file the Raftelis Financial Consultants (RFC) Water Rate Study
- Approve the Transitional Water rate Structure for fiscal years 2018 through 2021
- Approve the noticing process of the rate structure to occur no later than March 2018.

Diane Perkin 
Director of Administrative Services

Howard L. Chambers 
City Manager

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STUDY SESSION

May 9, 2017

TO: The Honorable Mayor and City Council

SUBJECT: Advanced Metering Infrastructure (AMI) and Billing Modernization Project

INTRODUCTION

Over the past 25 years the Water Resources Department has been piloting Automated Meter Reading (AMR) systems – walk-by reading smart meters. In recent years, AMR system has been replaced by AMI technology where all meter readings are collected remotely by the fixed-base network. Our recent pilot programs including AMI meters were funded with Bureau of Reclamation Grants and most recently with Proposition 84 Grants. Approximately 320 meters were installed through these grants. The success of these pilot programs has prompted staff to research options to install smart meters throughout the city.

STATEMENT OF FACT

The pilot programs demonstrated that the smart meters greatly enhance meter reading capability and billing accuracy, while reducing labor and equipment costs and optimizing efficiency. Customer communications and support also vastly improved. Staff researched options for implementing smart-meters citywide. It was in this search that staff came to know Fathom, a company that operates over 140 public water systems with smart-metering technology and customer service solutions.

Fathom presented to the Water Committee a smart-metering and customer service solution. The Fathom proposal is twofold. There is the operational component of work-orders, billing and customer service, the other is the capital component of the purchase and installation of the meters and the corresponding financing mechanism.

The customer service solution Fathom provides would enable us to increase the accuracy of billed water charges, improve customer consumption metering, provide proactive customer communication and issue resolution, increase data availability provide online tools for customers and city customer service staff to assist customers, and provide efficiency by reducing manual reading of meters and leak detection. This operational component involves partnering with Fathom where they monitor the system and issue necessary work-orders, process the billing and payments, and are on call for customer inquiries. The cost of the operational component is offset by the savings the City will realize in reduced labor and equipment costs and the revenue enhancement that is accomplished with greater accuracy and consumption data.

The capital component would be financed through a lease-purchase financing. This is the type of financing the City used in the replacement of the streetlights and the installation of the photovoltaic

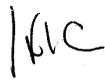
system. The financing would be for 15 years. The City Council approved locking in a rate at its March 14, 2017 meeting for this purpose. Fathom would be responsible for major problems or replacement of the meters, and are completely responsible for and host the software. The main benefit of installing smart meters is the data that will be collected and available timely to the Water Resources Department. This data of water-flow, leaks and pressure will assist Water Resources in determining with relative certainty which lines need to be replaced, if new wells are needed and where to meet local water demands. This information will reduce capital outlay costs. Since much of the water infrastructure is underground it is difficult to know when is the best time to replace it, with the data that is provided through the smart meters and pressure sensors a more confident replacement schedule of infrastructure can be made.

At this Study Session, the highlights of Fathom's proposal will be presented. Enclosed is a copy of the Fathom presentation made to the Water Resources Committee.

RECOMMENDATION

The Water Resources Committee and staff recommend proceeding with writing an agreement and financing documents with Fathom for smart meter installation and customer service solution, approved by the City Attorney as to form, and bring to the City Council for consideration at the May 23, 2017 meeting

Diane Perkin 
Director of Administrative Services

Howard L. Chambers 
City Manager

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Routine Items

Routine Item 1 – City Council Minutes
will be available prior to the meeting.

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COUNCIL AGENDA
May 9, 2017

TO: The Honorable Mayor and City Council
SUBJECT: Report of Personnel Transactions

	<u>Name</u>	<u>Title</u>	<u>Schedule</u>	<u>Effective Date</u>
1. FULL-TIME EMPLOYEES				
A. Appointments	None			
B. Changes	None			
C. Separations	None			
	Natascha Martin	Administrative Assistant II	22B	05/04/2017
2. PART-TIME EMPLOYEES				
A. Appointments	None			
	Laura Lopez	Relief Telephone Op/Service Rec	B	04/26/2017
B. Changes	None			
C. Separations	None			

Howard L. Chambers
City Manager

HLC

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**CITY OF LAKEWOOD
FUND SUMMARY 4/20/2017**

In accordance with section 2521 of the Lakewood Municipal Code there is presented herewith a summary of obligations to be paid by voucher 81583 through 81677. Each of the following demands has been audited by the Director of Administrative Services and approved by the City Manager.

1010	GENERAL FUND	326,789.75
1020	CABLE TV	1,961.67
1030	CDBG CURRENT YEAR	458.33
1050	COMMUNITY FACILITY	20,892.50
3070	PROPOSITION "C"	4,374.81
5010	GRAPHICS AND COPY CENTER	4,367.59
5020	CENTRAL STORES	1,336.63
5030	FLEET MAINTENANCE	3,633.00
7500	WATER UTILITY FUND	47,648.23
8000	BUS DEV REVOLVING LOAN PROG	258.48
8020	LOCAL REHAB LOAN	800.00
8030	TRUST DEPOSIT	2,287.14
		414,808.13

Council Approval

Date

City Manager

Attest

City Clerk

Director of Administrative Services

**CITY OF LAKEWOOD
SUMMARY CHECK REGISTER**

CHECK #	CHECK DATE	VEND #	VENDOR NAME	GROSS	DISC.	CHECK AMOUNT
81583	04/20/2017	4842	A T & T CORP	226.95	0.00	226.95
81584	04/20/2017	4878	B.R. BREWER SIGN & GRAPHICS	427.60	0.00	427.60
81585	04/20/2017	4800	BISHOP COMPANY	96.66	0.00	96.66
81586	04/20/2017	1935	BREA. CITY OF	41,052.15	0.00	41,052.15
81587	04/20/2017	5000	CALANOC. PATRICK	58.50	0.00	58.50
81588	04/20/2017	4988	CENTER THEATRE GROUP	1,143.00	0.00	1,143.00
81589	04/20/2017	7500	CENTRAL BASIN MUNICIPAL WATER	1,200.00	0.00	1,200.00
81590	04/20/2017	59274	CERTIFIED PLANT GROWERS INC	61.34	0.00	61.34
81591	04/20/2017	4972	CHARTER COMMUNICATIONS HOLDINGS. LLC	5,299.14	0.00	5,299.14
81592	04/20/2017	45894	CINTAS CORPORATION	59.94	0.00	59.94
81593	04/20/2017	60195	CR TRANSFER INC	2,801.49	0.00	2,801.49
81594	04/20/2017	62407	CRN AM CAR WASH INC.	72.00	0.00	72.00
81595	04/20/2017	4442	DANIEL'S TIRE SERVICE INC	805.63	0.00	805.63
81596	04/20/2017	4641	DAO. THAO	689.00	0.00	689.00
81597	04/20/2017	2548	DAY. KATHY	331.50	0.00	331.50
81598	04/20/2017	4739	DEERE & COMPANY	185.72	0.00	185.72
81599	04/20/2017	27200	DICKSON R F CO INC	45,041.55	0.00	45,041.55
81600	04/20/2017	730	ECONOMIC DEVELOPMENT ADMINISTRATION	258.48	0.00	258.48
81601	04/20/2017	52316	FEDERAL EXPRESS CORP	66.22	0.00	66.22
81602	04/20/2017	47841	GARDNER TRACTOR SERVICE	6,953.00	0.00	6,953.00
81603	04/20/2017	13030	ACCO BRANDS USA LLC	87.37	0.00	87.37
81604	04/20/2017	4945	GHD INC.	4,000.00	0.00	4,000.00
81605	04/20/2017	65779	GOLDEN STATE WATER COMPANY	8,151.08	0.00	8,151.08
81606	04/20/2017	33150	GRAINGER W W INC	217.18	0.00	217.18
81607	04/20/2017	62491	HANDS ON MAILING &	191.38	0.00	191.38
81608	04/20/2017	35477	HARA M LAWNMOWER CENTER	53.56	0.00	53.56
81609	04/20/2017	42031	HOME DEPOT	112.99	0.00	112.99
81610	04/20/2017	41897	HOSE-MAN THE	89.36	0.00	89.36
81611	04/20/2017	65891	HUMAN SERVICES ASSOCIATION	458.33	0.00	458.33
81612	04/20/2017	65712	IDMODELING INC	2,037.50	0.00	2,037.50
81613	04/20/2017	4622	JHM SUPPLY INC	1,204.62	0.00	1,204.62
81614	04/20/2017	36167	KARTER. JANET	28.60	0.00	28.60
81615	04/20/2017	53311	LAKEWOOD MEALS ON WHEELS	514.50	0.00	514.50
81616	04/20/2017	69	LAKEWOOD PROJECT SHEPHERD	568.40	0.00	568.40
81617	04/20/2017	53849	LAKEWOOD ROTARY CLUB	90.00	0.00	90.00
81618	04/20/2017	53849	LAKEWOOD ROTARY CLUB	945.70	0.00	945.70
81619	04/20/2017	18550	LAKEWOOD. CITY OF	100.00	0.00	100.00
81620	04/20/2017	3564	LONG BEACH. CITY OF	196.97	0.00	196.97
81621	04/20/2017	4482	MALTY INTERNATIONAL GROUP INC	38.66	0.00	38.66
81622	04/20/2017	65220	STEVEN MAHR PRINTING INC.	377.75	0.00	377.75
81623	04/20/2017	52344	MMASC	85.00	0.00	85.00
81624	04/20/2017	4443	O'REILLY AUTOMOTIVE STORES INC	440.57	8.09	432.48
81625	04/20/2017	47554	OFFICE DEPOT BUSINESS SVCS	984.27	0.00	984.27
81626	04/20/2017	4497	PACIFIC COACHWAYS CHARTER SERVICES	4,206.25	0.00	4,206.25

**CITY OF LAKEWOOD
SUMMARY CHECK REGISTER**

CHECK #	CHECK DATE	VEND #	VENDOR NAME	GROSS	DISC.	CHECK AMOUNT
81627	04/20/2017	65659	PHASE II SYSTEMS INC	4,104.71	0.00	4,104.71
81628	04/20/2017	56812	PATSCO DESIGNS	654.34	0.00	654.34
81629	04/20/2017	4494	PIERSON, JEREMY L.	501.80	0.00	501.80
81630	04/20/2017	15600	LONG BEACH PUBLISHING CO	400.00	0.00	400.00
81631	04/20/2017	4753	RAMIREZ, EDUARDO	100.00	0.00	100.00
81632	04/20/2017	63364	REEVES NORM HONDA	419.20	0.00	419.20
81633	04/20/2017	2374	RICHARDS WATSON & GERSHON INC	158.54	0.00	158.54
81634	04/20/2017	4956	ROSS AVIATION INVESTMENT, LLC	4,517.34	0.00	4,517.34
81635	04/20/2017	4949	ROSSI, GEORGE	250.00	0.00	250.00
81636	04/20/2017	56957	SALCO GROWERS INC	53.83	0.00	53.83
81637	04/20/2017	66280	BARRY SANDLER ENTERPRISES	175.85	0.00	175.85
81638	04/20/2017	4736	SKILL SURVEY, INC.	288.00	0.00	288.00
81639	04/20/2017	52279	SMART & FINAL INC	520.24	0.00	520.24
81640	04/20/2017	886	HAUSER JOHN	1,000.21	0.00	1,000.21
81641	04/20/2017	26900	SO CALIF SECURITY CENTERS INC	10.43	0.00	10.43
81642	04/20/2017	29400	SOUTHERN CALIFORNIA EDISON CO	91,740.36	0.00	91,740.36
81643	04/20/2017	29500	SOUTHERN CALIFORNIA GAS CO	2,795.04	0.00	2,795.04
81644	04/20/2017	4026	SPASEFF TED C	237.50	0.00	237.50
81645	04/20/2017	49529	SPICERS PAPER INC	495.65	4.56	491.09
81646	04/20/2017	37930	STANDARD INSURANCE CO UNIT 22	2,387.90	0.00	2,387.90
81647	04/20/2017	37930	STANDARD INSURANCE CO UNIT 22	10,524.19	0.00	10,524.19
81648	04/20/2017	2559	STANLEY CONVERGENT SECURITY	600.00	0.00	600.00
81649	04/20/2017	64602	STAPLES CONTRACT & COMMERCIAL INC	3,900.44	0.00	3,900.44
81650	04/20/2017	44104	STATE WATER RESOURCES CONTROL BOARD	200.00	0.00	200.00
81651	04/20/2017	977	STEVEN ENTERPRISES	61.12	0.00	61.12
81652	04/20/2017	60359	CNS INDUSTRIES INC	1,019.73	0.00	1,019.73
81653	04/20/2017	2372	TGIS CATERING SVCS INC	199.83	0.00	199.83
81654	04/20/2017	65737	U S BANK NATIONAL ASSOCIATION	2,999.99	0.00	2,999.99
81655	04/20/2017	1676	U S TELEPACIFIC CORP	532.05	0.00	532.05
81656	04/20/2017	4873	TRANSAMERICA LIFE INSURANCE COMPANY	2,350.28	0.00	2,350.28
81657	04/20/2017	47854	TRUESDAIL LABORATORIES INC	1,283.00	0.00	1,283.00
81658	04/20/2017	60685	TURF STAR	369.25	0.00	369.25
81659	04/20/2017	1437	U S BANK NATIONAL ASSOCIATION	34,595.24	0.00	34,595.24
81660	04/20/2017	4642	UTILITY COST MANAGEMENT LLC	386.25	0.00	386.25
81661	04/20/2017	64652	CELLCO PARTNERSHIP	3,183.44	0.00	3,183.44
81662	04/20/2017	33350	WATER WELL SUPPLY	32,751.31	0.00	32,751.31
81663	04/20/2017	40925	WEST COAST ARBORISTS INC	73,351.20	0.00	73,351.20
81664	04/20/2017	37745	WESTERN EXTERMINATOR CO	52.00	0.00	52.00
81665	04/20/2017	3837	WORTHINGTON FORD	79.33	0.00	79.33
81666	04/20/2017	3699	ALVAREZ, VANESSA	170.00	0.00	170.00
81667	04/20/2017	3699	BARR, DARREN	40.00	0.00	40.00
81668	04/20/2017	3699	COOK, JEWEL	240.00	0.00	240.00
81669	04/20/2017	3699	DAVIS, TIYONDA	5.00	0.00	5.00
81670	04/20/2017	3699	ENERGY REMODELING INC	100.56	0.00	100.56

**CITY OF LAKEWOOD
SUMMARY CHECK REGISTER**

CHECK #	CHECK DATE	VEND #	VENDOR NAME	GROSS	DISC.	CHECK AMOUNT
81671	04/20/2017	3699	KHO. NAZIA	15.00	0.00	15.00
81672	04/20/2017	3699	PHUNG, KEN	53.00	0.00	53.00
81673	04/20/2017	3699	PREMIUM TERMITE & PEST CONTROL	800.00	0.00	800.00
81674	04/20/2017	3699	RICO, ILEANA	250.00	0.00	250.00
81675	04/20/2017	3699	SALAZAR, BRIANDA	250.00	0.00	250.00
81676	04/20/2017	3699	SIM, SAMOEUN	101.80	0.00	101.80
81677	04/20/2017	4684	AMAZON.COM LLC	1,535.92	0.00	1,535.92
Totals:				<u>414,820.78</u>	<u>12.65</u>	<u>414,808.13</u>

**CITY OF LAKEWOOD
FUND SUMMARY 4/27/2017**

In accordance with section 2521 of the Lakewood Municipal Code there is presented herewith a summary of obligations to be paid by voucher 81678 through 81775. Each of the following demands has been audited by the Director of Administrative Services and approved by the City Manager.

1010	GENERAL FUND	1,378,047.25
1020	CABLE TV	106.16
1030	CDBG CURRENT YEAR	85.25
1050	COMMUNITY FACILITY	3,055.75
1070	RETIREE MEDICAL	448.00
1336	STATE COPS GRANT	16,228.45
3001	CAPITAL IMPROV PROJECT FUND	39,382.17
3060	PROPOSITION "A"	1,000,000.00
3070	PROPOSITION "C"	22.60
5010	GRAPHICS AND COPY CENTER	428.83
5020	CENTRAL STORES	836.93
5030	FLEET MAINTENANCE	1,777.91
6020	GEOGRAPHIC INFORMATION SYSTEM	20.00
7500	WATER UTILITY FUND	55,212.26
8030	TRUST DEPOSIT	200.00
		2,495,851.56

Council Approval

_____ Date

_____ City Manager

Attest

_____ City Clerk

_____ Director of Administrative Services

**CITY OF LAKEWOOD
SUMMARY CHECK REGISTER**

CHECK #	CHECK DATE	VEND #	VENDOR NAME	GROSS	DISC.	CHECK AMOUNT
81678	04/27/2017	58000	AMERICAN TRUCK & TOOL RENTAL INC	257.34	0.00	257.34
81679	04/27/2017	4126	AUTOZONE PARTS INC	8.47	0.00	8.47
81680	04/27/2017	443	B&M LAWN AND GARDEN INC	120.45	0.00	120.45
81681	04/27/2017	66044	BENNETT-BOWEN & LIGHTHOUSE INC	23.38	0.00	23.38
81682	04/27/2017	66457	BRENNTAG PACIFIC INC	2,797.43	0.00	2,797.43
81683	04/27/2017	63208	BRIGHT, KEVIN S.	77.20	0.00	77.20
81684	04/27/2017	4998	C BELOW, INC.	340.00	0.00	340.00
81685	04/27/2017	5000	CALANOC, PATRICK	6.50	0.00	6.50
81686	04/27/2017	307	CALIF. STATE DISBURSEMENT UNIT	155.07	0.00	155.07
81687	04/27/2017	53983	CALIF STATE FRANCHISE TAX BOARD	517.24	0.00	517.24
81688	04/27/2017	53983	CALIF STATE FRANCHISE TAX BOARD	70.80	0.00	70.80
81689	04/27/2017	45894	CINTAS CORPORATION	81.11	0.00	81.11
81690	04/27/2017	4654	BRAGG INVESTMENT COMPANY, INC.	65.31	0.00	65.31
81691	04/27/2017	4776	CORELOGIC, INC.	170.50	0.00	170.50
81692	04/27/2017	4380	CAPITAL ONE NATIONAL ASSOCIATION	22.60	0.00	22.60
81693	04/27/2017	60195	CR TRANSFER INC	2,819.18	0.00	2,819.18
81694	04/27/2017	3359	CROP PRODUCTION SERVICES, INC.	3,551.62	0.00	3,551.62
81695	04/27/2017	3199	EDCO WASTE SERVICES LLC	390,020.85	0.00	390,020.85
81696	04/27/2017	64038	EDWARDS TECHNOLOGIES INC	816.75	0.00	816.75
81697	04/27/2017	4987	ENVIRONMENTAL COMPLIANCE PRODUCTS, INC.	9,911.25	0.00	9,911.25
81698	04/27/2017	52316	FEDERAL EXPRESS CORP	91.17	0.00	91.17
81699	04/27/2017	63519	FLUE STEAM INC	198.00	0.00	198.00
81700	04/27/2017	4884	FRONTIER CALIFORNIA INC.	79.99	0.00	79.99
81701	04/27/2017	5005	GIEMONT, GREGORY S.	261.00	0.00	261.00
81702	04/27/2017	4836	GONZALEZ, RAMIRO	2,000.00	0.00	2,000.00
81703	04/27/2017	61769	GRAUTEN, EVELYN R	792.35	0.00	792.35
81704	04/27/2017	3285	GREENO, KAREN	709.80	0.00	709.80
81705	04/27/2017	4205	GRIFFITH AIR TOOL INC	143.62	0.00	143.62
81706	04/27/2017	58838	HANSON AGGREGATES LLC	100.00	0.00	100.00
81707	04/27/2017	42031	HOME DEPOT	269.90	0.00	269.90
81708	04/27/2017	41897	HOSE-MAN THE	59.86	0.00	59.86
81709	04/27/2017	4622	JHM SUPPLY INC	2,194.15	0.00	2,194.15
81710	04/27/2017	4180	JONES RICHARD D. A PROF LAW CORP	16,750.00	0.00	16,750.00
81711	04/27/2017	4939	LAKWOOD AOUATIC SPORTS CLUB	280.80	0.00	280.80
81712	04/27/2017	18300	LAKWOOD CHAMBER OF COMMERCE	1,833.33	0.00	1,833.33
81713	04/27/2017	55469	LAKWOOD CITY EMPLOYEE ASSOCIATION	2,180.00	0.00	2,180.00
81714	04/27/2017	53849	LAKWOOD ROTARY CLUB	90.00	0.00	90.00
81715	04/27/2017	18550	LAKWOOD, CITY OF	200.00	0.00	200.00
81716	04/27/2017	18400	LAKWOOD, CITY WATER DEPT	12,692.30	0.00	12,692.30
81717	04/27/2017	4783	LANDCARE HOLDINGS INC	7,184.28	0.00	7,184.28
81718	04/27/2017	4896	LEVINE, STEPHEN M.	300.00	0.00	300.00
81719	04/27/2017	20950	LOS ANGELES CO ASSESSOR	20.00	0.00	20.00
81720	04/27/2017	21600	LOS ANGELES CO SHERIFFS DEPT	831,503.51	0.00	831,503.51
81721	04/27/2017	45069	LOS ANGELES CO/DEPT PW BLDG SVCS	74,339.79	0.00	74,339.79

**CITY OF LAKEWOOD
SUMMARY CHECK REGISTER**

CHECK #	CHECK DATE	VEND #	VENDOR NAME	GROSS	DISC.	CHECK AMOUNT
81722	04/27/2017	36844	LA COUNTY DEPT OF PUBLIC WORKS	4,282.11	0.00	4,282.11
81723	04/27/2017	22600	MARTIN & CHAPMAN CO	28,202.83	0.00	28,202.83
81724	04/27/2017	4224	MATT-CHLOR INC	292.67	0.00	292.67
81725	04/27/2017	23130	MC MASTER-CARR SUPPLY CO	145.52	0.00	145.52
81726	04/27/2017	4446	MIDAMERICA ADMIN & RETIREMENT	448.00	0.00	448.00
81727	04/27/2017	61672	MUSCULAR DYSTROPHY ASSOC INC	20.00	0.00	20.00
81728	04/27/2017	4443	O'REILLY AUTOMOTIVE STORES INC	96.66	11.23	85.43
81729	04/27/2017	47554	OFFICE DEPOT BUSINESS SVCS	547.13	0.00	547.13
81730	04/27/2017	4587	OSCAR'S ELECTRIC INC.	350.00	0.00	350.00
81731	04/27/2017	4794	DUCOING ENTERPRISES. INC.	1,455.84	0.00	1,455.84
81732	04/27/2017	51171	PERS LONG TERM CARE PROGRAM	301.10	0.00	301.10
81733	04/27/2017	66116	PETERSEN, LOUISE	187.20	0.00	187.20
81734	04/27/2017	1615	PFM ASSET MANAGEMENT LLC	3,083.72	0.00	3,083.72
81735	04/27/2017	47285	ROTARY CORP	225.19	0.00	225.19
81736	04/27/2017	45437	S & J SUPPLY CO	467.05	0.00	467.05
81737	04/27/2017	63691	SAF-T-FLO	2,067.83	38.43	2,029.40
81738	04/27/2017	4309	SAFESHRED	25.00	0.00	25.00
81739	04/27/2017	3153	SECTRAN SECURITY INC	134.62	0.00	134.62
81740	04/27/2017	240	SGS TESTCOM	13.29	0.00	13.29
81741	04/27/2017	39268	SHARRARD, RICHARD	153.60	0.00	153.60
81742	04/27/2017	52279	SMART & FINAL INC	458.56	0.00	458.56
81743	04/27/2017	26900	SO CALIF SECURITY CENTERS INC	3.26	0.00	3.26
81744	04/27/2017	29400	SOUTHERN CALIFORNIA EDISON CO	23,951.25	0.00	23,951.25
81745	04/27/2017	29500	SOUTHERN CALIFORNIA GAS CO	793.88	0.00	793.88
81746	04/27/2017	49529	SPICERS PAPER INC	432.81	3.98	428.83
81747	04/27/2017	60359	CNS INDUSTRIES INC	333.20	0.00	333.20
81748	04/27/2017	38679	WESTERN EXTERMINATOR COMPANY	241.78	0.00	241.78
81749	04/27/2017	4830	TELECOM LAW FIRM PC	2,137.50	0.00	2,137.50
81750	04/27/2017	59212	TETRA TECH INC	3,120.00	0.00	3,120.00
81751	04/27/2017	4364	THE RINKS-LAKEWOOD ICE	87.75	0.00	87.75
81752	04/27/2017	60685	TURF STAR	113.18	0.00	113.18
81753	04/27/2017	53760	UNITED WAY- GREATER LOS ANGELES	10.00	0.00	10.00
81754	04/27/2017	17640	WAXIE ENTERPRISES INC	586.38	0.00	586.38
81755	04/27/2017	62628	WELLS C. PIPELINE MATERIALS	11,507.94	0.00	11,507.94
81756	04/27/2017	4230	WEST HOLLYWOOD, CITY OF	1,000,000.00	0.00	1,000,000.00
81757	04/27/2017	37745	WESTERN EXTERMINATOR CO	287.50	0.00	287.50
81758	04/27/2017	35146	WILLDAN ASSOCIATES	39,382.17	0.00	39,382.17
81759	04/27/2017	63471	XANTHE CORP	22.75	0.00	22.75
81760	04/27/2017	3699	ALFATHER, DEANA	259.03	0.00	259.03
81761	04/27/2017	3699	GRANDA, SHERRI	250.00	0.00	250.00
81762	04/27/2017	3699	HAYES, GINA	250.00	0.00	250.00
81763	04/27/2017	3699	HERNANDEZ, AMY	70.00	0.00	70.00
81764	04/27/2017	3699	HERNANDEZ-VICTOR, PATRICIA	250.00	0.00	250.00
81765	04/27/2017	3699	JOHNSON, SHIRLEY	250.00	0.00	250.00

**CITY OF LAKEWOOD
SUMMARY CHECK REGISTER**

CHECK #	CHECK DATE	VEND #	VENDOR NAME	GROSS	DISC.	CHECK AMOUNT
81766	04/27/2017	3699	JOYA, ANNIE	250.00	0.00	250.00
81767	04/27/2017	3699	LARA, JOSE	250.00	0.00	250.00
81768	04/27/2017	3699	MARTIN, SUSAN	250.00	0.00	250.00
81769	04/27/2017	3699	MIKHAIEL, EVELIN	250.00	0.00	250.00
81770	04/27/2017	3699	MOSBYSHIELDS, KATHLEEN	250.00	0.00	250.00
81771	04/27/2017	3699	NORTON, KEYLEE	250.00	0.00	250.00
81772	04/27/2017	3699	PABLO, ARMANDO	250.00	0.00	250.00
81773	04/27/2017	3699	RAYOS, LOVELY	250.00	0.00	250.00
81774	04/27/2017	3699	ROMERO, NANCY	250.00	0.00	250.00
81775	04/27/2017	3699	VELAZOUEZ, GRICELDA	250.00	0.00	250.00
Totals:				<u>2,495,905.20</u>	<u>53.64</u>	<u>2,495,851.56</u>

**CITY OF LAKEWOOD
SUMMARY ACH/WIRE REGISTER APRIL 2017**

ACH date	Amount	Recipient	Purpose	Period
4/4/17	132,941.94	CalPERS	PERS contribution	Mar 12-25, 2017
4/4/17	4,249.23	CalPERS	PERS 457	Mar 12-25, 2017
4/12/17	106,150.59	IRS via BofA	Fed taxes	Mar 26-Apr 8, 2017
4/12/17	7,415.65	Southland C/U	employee savings account	Mar 26-Apr 8, 2017
4/12/17	6,098.50	F&A Fed C/U	employee savings account	Mar 26-Apr 8, 2017
4/12/17	25,777.22	EDD	State taxes	Mar 26-Apr 8, 2017
4/13/17	17,141.74	ICMA	ICMA 457	Mar 26-Apr 8, 2017
4/13/17	2,647.72	MidAmerica	ARS aka APPLE	Mar 26-Apr 8, 2017
4/13/17	3,425.00	PARS via U.S. Bank	excess stackable plan	Mar 26-Apr 8, 2017
4/13/17	7,350.70	PARS via U.S. Bank	stackable plan	Mar 26-Apr 8, 2017
4/13/17	18,124.15	PARS via Citibank	defined contribution	Mar 26-Apr 8, 2017
4/13/17	6,510.37	PARS via U.S. Bank	defined benefit; retirement	Mar 26-Apr 8, 2017
4/19/17	132,364.41	CalPERS	PERS contribution	Mar 26-Apr 8, 2017
4/19/17	3,349.23	CalPERS	PERS 457	Mar 26-Apr 8, 2017
4/21/17	57,432.69	City Light & Power	monthly maint fee	Apr 2017
4/25/17	279.18	CalPERS	Replacement Benefit Fund	CY 2017
4/26/17	104,913.99	IRS via BofA	Fed taxes	Apr 9 - 22, 2017
4/26/17	7,415.65	Southland C/U	employee savings account	Apr 9 - 22, 2017
4/26/17	5,848.50	F&A Fed C/U	employee savings account	Apr 9 - 22, 2017
4/27/17	17,141.74	ICMA	ICMA 457	Apr 9 - 22, 2017
4/27/17	1,977.64	MidAmerica	ARS aka APPLE	Apr 9 - 22, 2017
4/27/17	10,721.57	PARS via U.S. Bank	stackable plan	Apr 9 - 22, 2017
4/27/17	13,132.92	PARS via Citibank	defined contribution	Apr 9 - 22, 2017

Council Approval

Date

City Manager

Attest

City Clerk

Director of Administrative Services

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COUNCIL AGENDA

May 9, 2017

TO: The Honorable Mayor and City Council

SUBJECT: Amending Membership of IR Committee

INTRODUCTION

In 1979 when the City Council first established the committee which is now known as the IR Committee, the City Manager and City Attorney were designated as committee members.

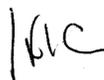
STATEMENT OF FACT

The IR Committee is comprised of the Mayor, Vice Mayor, City Manager and City Attorney. All other Council committees are comprised only of two council members, with the City Manager and City Attorney in advisory capacities.

RECOMMENDATION

It is recommended that the City Council amend the IR Committee membership by removing the City Manager and City Attorney as members so that the IR Committee is run in the same manner as all other council committees. The City Manager and City Attorney would continue to attend IR Committee meetings, but in advisory capacities.

Howard L. Chambers
City Manager



Steve Skolnik
City Attorney

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TO: The Honorable Mayor and City Council

SUBJECT: Rynerson Park Sewer Main Design – Willdan Engineering

INTRODUCTION

The three restrooms in Rynerson Park have been connected to septic systems since they were built in the late 1980's. These septic systems no longer function effectively, and must be replaced with a sewer main.

STATEMENT OF FACT

Lakewood has had an on-call agreement for city engineering services of all types with Willdan Engineering since 2002. Willdan's engineers are fully capable of designing a new sewer main that can serve the restrooms in Rynerson Park. The new sewer main would begin at the north end of the parking lot, and proceed southward on City property where it would enter SCE property for a short distance before connecting to the Sanitation District sewer trunk line that travels in an easterly direction across Rynerson Park to the intersection of Studebaker and Centralia.

In addition to the preparation of the plans, specifications and estimate for the new sewer main, Willdan will prepare the necessary documents to apply for a Sanitation District permit to connect to their line, and to apply to SCE for an easement to construct our new main on their property. Staff has already had preliminary discussions with the staff of both the Sanitation District and SCE to ascertain preliminary feasibility for our plan, and now formal application with plans will be needed to continue with the process.

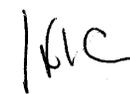
Willdan will also provide the survey information needed to allow our City Architect to prepare the site plans for our proposed prefabricated replacement picnic shelters and bathrooms. It is our intention to replace the three old rustic bathroom buildings that cannot be upgraded to meet current codes and ADA standards with two new compliant prefabricated bathroom buildings suitable for park use, appropriately located on City property in the park. The two new bathrooms will have the same total number of fixtures as are presently in the three existing buildings. We will also replace two of the three picnic shelters that are past their useful life and suffering with termites and deterioration due to age.

RECOMMENDATION

Staff recommends that the City Council:

1. Authorize Willdan Engineering to provide design services in the amount of \$23,730 for Rynerson Park Sewer Project under their existing on-call agreement.

Lisa Ann Rapp 
Director of Public Works

Howard L. Chambers 
City Manager

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COUNCIL AGENDA

May 9, 2017

TO: The Honorable Mayor and City Council

SUBJECT: Water Sale Agreement WD-3329 with Long Beach Water Department

INTRODUCTION

The water purchase agreement, WD-3039, issued in 2012 with Long Beach Water Department expired on June 30, 2016. A new updated agreement is needed to allow the City of Lakewood to sell its surplus water to Long Beach.

STATEMENT OF FACT

The City of Lakewood owns 9,432 acre-feet of Allowed Pumping Allocation (APA) of extraction rights in the Central Basin. The Central Basin Groundwater Judgment limits water purveyors to the extraction of adjudicated rights and a certain percentage of the utilities' extraction rights that are not exercised can be carried over to the next fiscal year.

In an effort to gain beneficial use to the City's excess pumping rights, the Department of Water Resources (DWR) proposes a new agreement with the City of Long Beach Water Department (LBWD) for the purchase of the City's excess water supply. The agreement would provide for the DWR to pump and convey water to Long Beach through the inter-connection on Palo Verde Avenue south of Carson Street. The amount of water purchased would be determined through discussions between the agencies on an annual basis. The cost per acre-foot would be the average between the set floor and ceiling prices. The "Price Floor" would be the current acre-foot Replenishment Assessment (RA) paid by Lakewood to the Water Replenishment District plus Long Beach Operation and Maintenance (O&M) Costs. The "Price Ceiling" would be the difference of the Metropolitan Water District (MWD) of Southern California's Tier 1 Rate applicable to Long Beach minus Long Beach O&M Costs. The FY 16-17 water purchase price would be \$638 per acre-foot, which is the average of the Price Floor and the Price Ceiling. Future rate adjustments will be made based on the formula used above with updated actual costs.

On April 20, 2017, the Water Resources Committee authorized staff to recommend that the City Council approve a water purchase agreement with the City of Long Beach Water Department and upon approval as to form by the City Attorney, authorize its execution by the Mayor on behalf of the City.

FISCAL IMPACT

The City forecasts having up to 1,500 acre-feet of excess water available for sale to the Long Beach Water Department. The water sale agreement would allow the City to receive up to \$957,000 in direct water sales.

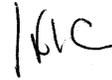
RECOMMENDATION

The Water Resources Committee recommends that the City Council approve a water purchase agreement, WD-3329, with the City of Long Beach Water Department and upon approval as to form by the City Attorney, authorize its execution by the Mayor on behalf of the City.



Jason J. Wen, Ph.D., P.E.
Water Resources Director

Howard L. Chambers
City Manager



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*Successor
Agency*

**CITY OF LAKEWOOD SUCCESSOR AGENCY - PROJECT AREAS
FUND SUMMARY 4/20/2017**

In accordance with section 2521 of the Lakewood Municipal Code there is presented herewith a summary of obligations to be paid by voucher 202 through 202. Each of the following demands has been audited by the Director of Administrative Services and approved by the City Manager.

2902	ENFORCEABLE OBLIGATIONS	512.00
		<hr/>
		512.00

Council Approval

Date

City Manager

Attest

City Clerk

Director of Administrative Services

**CITY OF LAKEWOOD SUCCESSOR AGENCY - PROJECT AREAS
SUMMARY CHECK REGISTER**

<u>CHECK #</u>	<u>CHECK DATE</u>	<u>VEND #</u>	<u>VENDOR NAME</u>	<u>GROSS</u>	<u>DISC.</u>	<u>CHECK AMOUNT</u>
202	04/20/2017	4428	COLANTUONO HIGHSMITH & WHATLEY	512.00	0.00	512.00
Totals:				<u>512.00</u>	<u>0.00</u>	<u>512.00</u>

**CITY OF LAKEWOOD SUCCESSOR AGENCY - PROJECT AREAS
FUND SUMMARY 4/27/2017**

In accordance with section 2521 of the Lakewood Municipal Code there is presented herewith a summary of obligations to be paid by voucher 203 through 203. Each of the following demands has been audited by the Director of Administrative Services and approved by the City Manager.

2902	ENFORCEABLE OBLIGATIONS	1,750.00
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		1,750.00

Council Approval

Date

City Manager

Attest

City Clerk

Director of Administrative Services

**CITY OF LAKEWOOD SUCCESSOR AGENCY - PROJECT AREAS
SUMMARY CHECK REGISTER**

CHECK #	CHECK DATE	VEND #	VENDOR NAME	GROSS	DISC.	CHECK AMOUNT
203	04/27/2017	4079	HARRELL & COMPANY ADVISORS LLC	1,750.00	0.00	1,750.00
Totals:				<u>1,750.00</u>	<u>0.00</u>	<u>1,750.00</u>

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*Housing
Successor*

**CITY OF LAKEWOOD SUCCESSOR AGENCY - HOUSING
FUND SUMMARY 4/20/2017**

In accordance with section 2521 of the Lakewood Municipal Code there is presented herewith a summary of obligations to be paid by voucher 303 through 303. Each of the following demands has been audited by the Director of Administrative Services and approved by the City Manager.

3901	HOUSING SUCCESSOR AGENCY	62.00
		<hr/>
		62.00

Council Approval

Date

City Manager

Attest

City Clerk

Director of Administrative Services

**CITY OF LAKEWOOD SUCCESSOR AGENCY - HOUSING
SUMMARY CHECK REGISTER**

<u>CHECK #</u>	<u>CHECK DATE</u>	<u>VEND #</u>	<u>VENDOR NAME</u>	<u>GROSS</u>	<u>DISC.</u>	<u>CHECK AMOUNT</u>
303	04/20/2017	40572	CHICAGO TITLE CO	62.00	0.00	62.00
Totals:				<u>62.00</u>	<u>0.00</u>	<u>62.00</u>

**CITY OF LAKEWOOD SUCCESSOR AGENCY - HOUSING
FUND SUMMARY 4/27/2017**

In accordance with section 2521 of the Lakewood Municipal Code there is presented herewith a summary of obligations to be paid by voucher 304 through 305. Each of the following demands has been audited by the Director of Administrative Services and approved by the City Manager.

3901	HOUSING SUCCESSOR AGENCY	700.05
		<hr/>
		700.05

Council Approval

_____ Date

_____ City Manager

Attest

_____ City Clerk

_____ Director of Administrative Services

**CITY OF LAKEWOOD SUCCESSOR AGENCY - HOUSING
SUMMARY CHECK REGISTER**

CHECK #	CHECK DATE	VEND #	VENDOR NAME	GROSS	DISC.	CHECK AMOUNT
304	04/27/2017	3699	D & D INSTALLATION INC	350.00	0.00	350.00
305	04/27/2017	3699	REYNOLDS, KRISTINA	350.05	0.00	350.05
Totals:				<u>700.05</u>	<u>0.00</u>	<u>700.05</u>