FIRST AMENDMENT TO AGREEMENT FOR PREPARATION OF RECYCLED WATER MASTER PLAN

THIS FIRST AMENDMENT to the above-referenced agreement is entered into on January 19, 2021, by and between T.R. Holliman and Associates, Inc. ("Consultant"), and the City of Santa Ana, a charter city and municipal corporation organized and existing under the Constitution and laws of the State of California ("City").

RECITALS

A. The parties entered into Agreement No. A-2018-029, dated February 20, 2018, by which Consultant agreed to prepare a Recycled Water Master Plan for the Water Resources Division of the Public Works Agency ("Agreement").

B. The Agreement remains in effect through February 19, 2021, with provision for extension.

C. The parties now wish to extend the term of the Agreement, expand the scope of work, and increase the amount to be expended under the Agreement in consideration of the expanded scope.

The Parties therefore agree:

1. **Section 1, Scope of Services,** is amended to include the scope of services described on Exhibit A.

2. **Section 2.a., Compensation**, is amended to increase the total sum to be expended under the term of the Agreement by $242,418, which is comprised of (1) the base sum of $220,380 plus (2) a contingency in the amount of $22,038 for additional services at the City's sole discretion.

3. **Section 3, Term,** is amended to extend the term of the Agreement through February 19, 2023.

4. Except as modified by this First Amendment, all terms and conditions of the Agreement shall remain in full force and effect.

IN WITNESS WHEREOF, the parties hereto have executed this First Amendment to the Agreement on the date and year first written above.

ATTEST

_____

Daisy Gomez
Clerk of the Council

CITY OF SANTA ANA

_____

Kristine Ridge
City Manager

APPROVED AS TO FORM
Sonia R. Carvalho
City Attorney

By:_____
John M. Funk
Senior Assistant City Attorney

CONSULTANT

_____
By: Thomas R. Holliman, PE
Title: President/Managing Engineer

RECOMMENDED FOR APPROVAL

_____
Nabil Saba
Executive Director
Public Works Agency

AMENDMENT NO. 1 TO AGREEMENT FOR PREPARATION OF RECYCLED WATER MASTER PLAN BETWEEN CITY OF SANTA ANA AND T.R. HOLLIMAN AND ASSOCIATES, INC.

Exhibit A

Scope of Work for Consulting Services

Additional Recycled Water Use Sites and City of Santa Ana Medians

The City of Santa desires to have all of its existing recycled water use sites evaluated, and all information related to the use of recycled water verified and documented. In addition, the City desires to have additional properties close to the Green Acres Project (GAP) pipeline connected to the GAP to provide recycled water. TRHA identified thirty-five (35) potential connections, and four (4) City medians which are adjacent to the GAP and could be converted by installing a standard City water connection and meter. These sites were identified in the Phase 1 group of sites in the City's Recycled Water Master Plan, prepared by TRHA.

The City has requested that TRHA provide the necessary technical support to complete the conversions, as well as verify that all required information has been obtained and documented for the City's existing recycled water customers from the GAP.

It is assumed that each site is individually owned and that each site will be converted separately from the other. The conversion work with consist of the following tasks and related items for each commercial conversion site, it is assumed that the City medians will require less effort to convert but will still include many of the elements of the commercial site conversion. The hours for converting the medians is shown in the combined cost estimate for this work in **Attachment B.**

Task 1: Project Management and Coordination

1. Develop, maintain, and distribute a Project Schedule through completion of the project and activation of recycled water.
2. Attend Project Management and Coordination meetings. Assume four (4) one-hour meetings.
3. Prepare monthly progress reports which will be e-mailed to the City Project Manager.

Task 2: Existing Recycled Water Customer Inventory

The City wants to have a complete and verified profile for each of its existing recycled water customers. To complete this task TRHA will complete the following work items.

1. Review customer information from the City of Santa Ana including customer account information for all existing recycled water customers being served by the GAP pipeline.
2. Field verify owner information including Owner's name, key contact information, location of recycled water connection and potable connection including GPS location of service connections, name, and contact information for the Onsite Supervisor for each existing site.
3. Provide a complete and verified MER supplement for each existing recycled water customer.

Task 3 - Verification of Regulatory Compliance – Existing Recycled Water Customers

To ensure that all existing recycled water customers are operating their systems in conformance with City, OCWD, and DDW requirements TRHA will perform the following items**.**

1. Perform site inspections to confirm that each existing recycled water site is following City of Santa Ana, OCWD, and DDW requirements including color coding, signs, Onsite Supervisor verification, delineated use areas, etc.
2. Identify any non-compliance areas and work with Owner and City representatives to correct.
3. Provide statement that effective the date of the inspections that the use site is following all regulatory requirements.
4. **Optional task** – assist, and/or perform cross connection and overspray inspections.

Task 4 - Identification of additional recycled water customers along Green Acres Project (GAP) pipeline

The City would like to evaluate the potential for adding new users to their existing recycled water users, to accomplish TRHA will complete the following tasks.

1. Using the City's Recycled Water Master Plan as a base, TRHA will review all the potential recycled water users which can be connected directly to the GAP pipeline by means of a standard City service connection. For those users, TRHA will field verify the domestic water and irrigation water (if available) meter locations and provide GPS coordinates. TRHA has identified thirty-five (35) potential commercial customers along the GAP and four (4) City medians.
2. TRHA will also evaluate any potential "clusters" of customers which might be served from a short extension lateral from the GAP pipeline. In those cases, TRHA will identify the potential construction cost and the total amount of recycled water that could be delivered through the lateral extension. It is expected that the laterals will be limited to a maximum of 500 feet from the GAP pipeline.
3. TRHA will provide the City with a map showing the location of the thirty-five (35) potential commercial customers, and the four (4) City Medians.
4. From the list of thirty-five potential conversions, TRHA will recommend ten sites for conversion, plus the four City Medians for a total of fourteen (14) sites.
5. TRHA will make an initial contact with all City approved potential customers to verify ability to use recycled water (no conflicts with customer's existing operations) and gather key contact information.
6. TRHA will provide the City with a final report indicating the recommended location of the ten (10) new recycled water customers from the GAP pipeline, and the City approved "clusters", and four (4) City Medians. This will include a cost per customer for the service connections and onsite conversion work, with all required documentation.

Task 4.1 Conduct Site Assessments. The following tasks will be completed for each of the recommended fourteen (14) sites.

Task 4.1.1 – Site Assessment

1. Assess the commercial site to understand the various water systems (potable, non-potable (industrial), irrigation and recycled) as it relates to the converting to the use of recycled water.
2. Assess the existing backflow preventions device(s) and any other information pertinent to converting to the use of recycled water.
3. Determine what improvements need to be made to complete the conversion. The primary focus for this is on cross-connection/separation and Title 22 compliance.
4. Provide GPS coordinates for the domestic water meter, irrigation control valves, and quick couplers.

Task 4.1.2 – Technical Memorandum

Provide the City with a Draft Technical Memorandum and draft schematic describing the needed changes. This Draft Technical Memorandum will be the basis of a Master Engineers Report supplement.

Task 4.1.3 - On-Site Conversion Drawings

Prepare final schematics of the potable, non-potable (industrial), irrigation and recycled water systems in the areas of concern to convey the current and proposed condition for each site.

Task 4.1.4 - Conduct Preliminary Cross Connection Test

Conduct a preliminary cross-connection test at the site to confirm the on-site conversion drawings are correct and accurate. The preliminary cross connection test will be an abbreviated shutdown test to determine the presence of a cross connection only. The shutdown test required for final certification of the site will be completed in **Task 4.1.9**.

Task 4.1.5 - MER Supplement

1. Prepare Master Engineers Report (MER) Supplement

Prepare a MER supplement for the site for submission by the City to the State Water Resource Control Board - Division of Drinking Water (DDW) and Orange County Healthcare Agency (OCHCA) for approval. Provide to City and the site owner for review and comment.

2. Incorporate comments and finalize supplement

Incorporate comments and provide to City for submittal to the DDW and OCHCA for review and comment.

Task 4.1.6 - Assist with Obtaining Permit(s) and Regulatory Approval

1. Provide technical assistance to the site owner as they obtain permit(s) from the City of Santa Ana.
2. Provide technical assistance to the site owner with questions/comments from DDW on the Engineering Reports.

3. Incorporate comments from DDW/OCHCA into the Engineering Reports to obtain approval.

Task 4.1.7 - General Engineering Support
Provide general engineering support. Assume 8 hours.

Task 4.1.8 - Construction Oversight

1. Oversee retrofit construction
Oversee retrofit construction work by Contractor, coordinate with site owner & Contractor to achieve compliance with recycled water regulations and document progress with field notes / photographs. This will include obtaining GPS coordinates for the potable water meter, recycled water meter, irrigation control valve boxes, quick couplers, hose bibbs, and other related appurtenances.

2. DDW and OCHCA Coordination Meetings
Arrange and attend meeting(s) with the owner, City, DDW and or OCHCA to address issues as they arise during construction. Assume two (2) meetings at 2 hours each.

Task 4.1.9 - Final Cross Connection Testing
Participate in the final cross connection testing with DDW, OCHCA, and City representation to obtain final project approval.

Task 4.1.10 - Facilitate Grant Application (**Optional Task**)
Assist the site owner with application for Metropolitan Water District of Southern California's On-Site Retrofit Program (http://www.bewaterwise.com/on-site-retrofit-program.html).

T.R. HOLLIMAN & ASSOCIATES

Exhibit B

Task Description	T. Holliman, PE Project Mgr. ($180/hr)	CAD Designer ($90/hr)	John Robinson, Principal Planner ($150/hr)	GPS Field Tech (SUB) $125/hr	Admin/Clerical ($75/hr)	Total Hours	Total Fee
Task 1: Project Management and Coordination							
1. Develop, maintain, and distribute a Project Schedule through completion of the project and activation of recycled water.	4		1		1	6	$ 945
2. Attend Project Management and Coordination meetings. Assume four (4) one-hour meetings.	4		4			8	$ 1,320
3. Prepare monthly progress reports which will be e-mailed to the City Project Manager.	2				1	3	$ 435
Subtotal Task 1:	**10**	**0**	**5**	**0**	**2**	**17**	**$ 2,700**
Task 2: Existing Recycled Water Customers (23 use sites)							
1. Review existing customer information (2 hrs. per customer)			46		4	50	$ 7,200
2. Field verify and document all onsite information (2 hrs. per site)			46			46	$ 6,900
3. Provide complete and verified MER supplement for each existing use site (2 hrs. per site)	46				4	50	$ 8,580
Subtotal Task 2:	**46**	**0**	**92**	**0**	**8**	**146**	**$ 22,680**
Task 3 : Verification of Regulatory Compliance for Existing Customers (23 use sites)							
1. Perform site inspections to confirm each site is in conformance with City, OCWD, and DDW requirements (2 hrs. per site)			46			46	$ 6,900
2. Identify any non-compliance issues and work with owners to correct (2 hrs. per site)			46			46	$ 6,900
3. Provide statement that effective the date of the inspections the sites were in compliance	23					23	$ 4,140
Subtotal Task 3:	**23**	**0**	**92**	**0**	**0**	**115**	**$ 17,940**
4. **Optional Task** - perform cross connection testing and overspray inspections (2 hrs per site)			46			46	$ 6,900
Task 4: Conduct Site Assessment (10 commercial sites plus 4 City medians, estimate assumes 12 sites with each median equal to 0.50 commercial sites)	**Unit Cost Estimate for Each Use Site**						
Task 4.1 – Site Assessment							
1. Assess the commercial site to understand the various water systems (potable, non-potable (industrial), irrigation and recycled) as it relates to the converting to the use of recycled water.	1		4			5	$ 780
2. Assess the existing backflow preventions device(s) and any other information pertinent to converting to the use of recycled water.	1		2			3	$ 480
3. Determine what improvements need to be made to complete the conversion. The primary focus for this is on cross-connection/separation and Title 22 compliance.	1		4			5	$ 780
Task 4.2 – Technical Memorandum							
Provide the City with a Draft Technical Memorandum and draft schematic describing the needed changes. This Draft Technical Memorandum will be the basis of a MER Supplement.	4	8			1	13	$ 1,515
Task 4.3: On-Site Conversion Drawings							
Prepare final schematics of the potable, non-potable (industrial), irrigation and recycled water systems in the areas of concern to convey the current and proposed condition for each site.	1	32	4			37	$ 3,660
Task 4.4: Conduct Preliminary Cross Connection Test							
Conduct a preliminary cross-connection test at the site to confirm the on-site conversion drawings are correct and accurate. The preliminary cross connection test will be an abbreviated shutdown test for cross connection only. The extended period shutdown test required for final certification of the site will be completed in Task 4.9.			2			2	$ 300
Task 4.5: MER Supplement							
Task 4.5.1 – Prepare Supplement							
Prepare MER Supplement for each site for submission by the City to the State Water Resource Control Board - Division of Drinking Water (DDW) and Orange County Healthcare Agency (OCHCA) for approval. Provide to City and the site owner for review and comment.	1		2	8	1	12	$ 1,555
Task 4.5.2 – Incorporate comments and finalize report							
Incorporate comments and provide to City for submittal to the State Water Resource Control Board - Division of Drinking Water (DDW) and Orange County Health Care Agency (OCHCA) for review and comment.	1	2	2		1	6	$ 735
Task 4.6: Assist with Obtaining Permit(s) and Regulatory Approval							
1. Provide technical assistance to the site owner as they obtain permit(s) from the City of Santa Ana.			4		1	5	$ 675
2. Provide technical assistance to the site owner with questions/comments from DDW on the Engineering Reports.	1		2			3	$ 480
3. Incorporate comments from DDW/OCHCA into the Engineering Report to obtain approval.	1		2		1	4	$ 555
Task 4.7: General Engineering Support							
Provide general engineering support. Assume 8 hours.	2					2	$ 360
Task 4.8: Construction Oversight							

Task 4.8.1 – Oversee retrofit construction							
Oversee retrofit construction work by Contractor, coordinate with site owner & Contractor to achieve compliance with recycled water regulations and document progress with field notes / photographs.			8			8	$ 1,200
Task 4.8.2 – Coordination Meetings							
Arrange and attend meeting(s) with the owner, City DDW or OCHCA to address issues as they arise during construction.	1		4			5	$ 780
Task 4.9: Final Cross Connection Testing							
Participate in the final cross connection testing with DDW, OCHCA, and City representation to obtain final project approval.			6			6	$ 900
Total:	**15**	**42**	**46**	**8**	**5**	**116**	**14,755**
Task 10: Facilitate Grant Application (OPTIONAL TASK)							
Assist the site owner with application for MWD's On-Site Retrofit Program.			8			8	$ 1,200

TOTAL AMENDMENT TASKS 1 - 4

Task 1	$	2,700
Task 2	$	22,680
Task 3	$	17,940
Task 4 (12 sites)	$	177,060
Total	$	220,380