

PROFESSIONAL CONSULTANT SERVICES AGREEMENT

LARRY WALKER ASSOCIATES, INCORPORATED

[Trash Capture Implementation Plan; RFQ No. 1799]

THIS PROFESSIONAL CONSULTANT SERVICES AGREEMENT ("Agreement") is made and entered into this _____ day of _____, 2018 ("Effective Date"), by and between the CITY OF RIVERSIDE ("City"), a California charter city and municipal corporation and LARRY WALKER ASSOCIATES, INCORPORATED, a California corporation ("Consultant").

1. **Scope of Services.** City agrees to retain and does hereby retain Consultant and Consultant agrees to provide the services more particularly described in Exhibit "A," "Scope of Services" ("Services"), attached hereto and incorporated herein by reference, in conjunction with Trash Recapture Implementation Plan; RFQ No. 1799 ("Project").

2. **Term.** This Agreement shall be effective on May 1, 2018, and shall remain in effect until December 1, 2018, unless otherwise terminated pursuant to the provisions herein.

3. **Compensation/Payment.** Consultant shall perform the Services under this Agreement for the total sum not to exceed Fifty-Nine Thousand Seventy Dollars (\$59,070), payable in accordance with the terms set forth in Exhibit "B." Said payment shall be made in accordance with City's usual accounting procedures upon receipt and approval of an itemized invoice setting forth the services performed. The invoices shall be delivered to City at the address set forth in Section 4 hereof.

4. **Notices.** Any notices required to be given, hereunder shall be in writing and shall be personally served or given by mail. Any notice given by mail shall be deemed given when deposited in the United States Mail, certified and postage prepaid, addressed to the party to be served as follows:

To City

Public Works Department
City of Riverside
Attn: Michael Roberts
3900 Main Street, 4th Floor
Riverside, CA 92522

To Consultant

Larry Walker Associates, Incorporated
Attn: Karen Ashby
785 Grand Avenue, Suite 200
Carlsbad, CA 92008

5. **Prevailing Wage.** If applicable, Consultant and all subcontractors are required to pay the general prevailing wage rates of per diem wages and overtime and holiday wages determined by the Director of the Department of Industrial Relations under Section 1720 et seq. of the California Labor Code and implemented by Resolution No. 13346 of the City Council of the City of Riverside. The Director's determination is available on-line at www.dir.ca.gov/dlsr/DPreWageDetermination.htm and is referred to and made a part hereof; the wage rates therein ascertained, determined, and specified are referred to and made a part hereof as though fully set forth herein.

6. **Contract Administration.** A designee of the City will be appointed in writing by the City Manager or Department Director to administer this Agreement on behalf of City and shall be referred to herein as Contract Administrator.

7. **Standard of Performance.** While performing the Services, Consultant shall exercise the reasonable professional care and skill customarily exercised by reputable members of Consultant's profession practicing in the Metropolitan Southern California Area, and shall use reasonable diligence and best judgment while exercising its professional skill and expertise.

8. **Personnel.** Consultant shall furnish all personnel necessary to perform the Services and shall be responsible for their performance and compensation. Consultant recognizes that the qualifications and experience of the personnel to be used are vital to professional and timely completion of the Services. The key personnel listed in Exhibit "C" attached hereto and incorporated herein by this reference and assigned to perform portions of the Services shall remain assigned through completion of the Services, unless otherwise mutually agreed by the parties in writing, or caused by hardship or resignation in which case substitutes shall be subject to City approval.

9. **Assignment and Subcontracting.** Neither party shall assign any right, interest, or obligation in or under this Agreement to any other entity without prior written consent of the other party. In any event, no assignment shall be made unless the assignee expressly assumes the obligations of assignor under this Agreement, in a writing satisfactory to the parties. Consultant acknowledges that any assignment may, at the City's sole discretion, require City Manager and/or City Council approval. Consultant shall not subcontract any portion of the work required by this Agreement without prior written approval by the responsible City Contract Administrator. Subcontracts, if any, shall contain a provision making them subject to all provisions stipulated in this Agreement, including without limitation, the insurance obligations set forth in Section 12. The Consultant acknowledges and agrees that the City is an intended beneficiary of any work performed by any subcontractor for purposes of establishing a duty of care between any subcontractor and the City.

10. **Independent Contractor.** In the performance of this Agreement, Consultant, and Consultant's employees, subcontractors and agents, shall act in an independent capacity as independent contractors, and not as officers or employees of the City of Riverside. Consultant acknowledges and agrees that the City has no obligation to pay or withhold state or federal taxes or to provide workers' compensation or unemployment insurance to Consultant, or to Consultant's employees, subcontractors and agents. Consultant, as an independent contractor, shall be responsible for any and all taxes that apply to Consultant as an employer.

11. Indemnification.

11.1 Design Professional Defined. For purposes of this Agreement, “Design Professional” includes the following:

- A. An individual licensed as an architect pursuant to Chapter 3 (commencing with Section 5500) of Division 3 of the Business and Professions Code, and a business entity offering architectural services in accordance with that chapter.
- B. An individual licensed as a landscape architect pursuant to Chapter 3.5 (commencing with Section 5615) of Division 3 of the Business and Professions Code, and a business entity offering landscape architectural services in accordance with that chapter.
- C. An individual registered as a professional engineer pursuant to Chapter 7 (commencing with Section 6700) of Division 3 of the Business and Professions Code, and a business entity offering professional engineering services in accordance with that chapter.
- D. An individual licensed as a professional land surveyor pursuant to Chapter 15 (commencing with Section 8700) of Division 3 of the Business and Professions Code, and a business entity offering professional land surveying services in accordance with that chapter.

11.2 Defense Obligation For Design Professional Liability. Consultant agrees, at its cost and expense, to promptly defend the City, and the City’s employees, officers, managers, agents and council members (collectively the “Parties to be Defended”) from and against any and all claims, allegations, lawsuits, arbitration proceedings, administrative proceedings, regulatory proceedings, or other legal proceedings to the extent the same arise out of, pertain to, or relate to the negligence, recklessness or willful misconduct of Consultant, or anyone employed by or working under the Consultant or for services rendered to the Consultant in the performance of the Agreement, notwithstanding that the City may have benefited from its work or services and whether or not caused in part by the negligence of an Indemnified Party. Consultant agrees to provide this defense immediately upon written notice from the City, and with well qualified, adequately insured and experienced legal counsel acceptable to City. Consultant will reimburse City for reasonable defense costs for claims arising out of Consultant’s professional negligence based on the percentage of Consultant’s liability. This obligation to defend as set forth herein is binding on the successors, assigns and heirs of Consultant and shall survive the termination of Consultant’s Services under this Agreement.

11.3 Indemnity For Design Professional Liability. When the law establishes a professional standard of care for Consultant’s services, to the fullest extent permitted by law, Consultant shall indemnify, protect and hold harmless the City and the City’s employees, officers, managers, agents, and Council Members (“Indemnified Parties”) from and against any and all claim for damage, charge, lawsuit, action, judicial, administrative, regulatory or arbitration proceeding,

damage, cost, expense (including counsel and expert fees), judgment, civil fines and penalties, liabilities or losses of any kind or nature whatsoever to the extent the same arise out of, pertain to, or relate to the negligence, recklessness or willful misconduct of Consultant, or anyone employed by or working under the Consultant or for services rendered to the Consultant in the performance of the Agreement, notwithstanding that the City may have benefited from its work or services and whether or not caused in part by the negligence of an Indemnified Party.

11.4 Defense Obligation For Other Than Design Professional Liability.

Consultant agrees, at its cost and expense, to promptly defend the City, and the City's employees, officers, managers, agents and council members (collectively the "Parties to be Defended") from and against any and all claims, allegations, lawsuits, arbitration proceedings, administrative proceedings, regulatory proceedings, or other legal proceedings which arise out of, or relate to, or are in any way connected with: 1) the Services, work, activities, operations, or duties of the Consultant, or of anyone employed by or working under the Consultant, or 2) any breach of the Agreement by the Consultant.

This duty to defend shall apply whether or not such claims, allegations, lawsuits or proceedings have merit or are meritless, or which involve claims or allegations that any or all of the Parties to be Defended were actively, passively, or concurrently negligent, or which otherwise assert that the Parties to be Defended are responsible, in whole or in part, for any loss, damage or injury. Consultant agrees to provide this defense immediately upon written notice from the City, and with well qualified, adequately insured and experienced legal counsel acceptable to City. This obligation to defend as set forth herein is binding on the successors, assigns and heirs of Consultant and shall survive the termination of Consultant's Services under this Agreement.

11.5 Indemnity For Other Than Design Professional Liability. Except as to the sole negligence or willful misconduct of the City, Consultant agrees to indemnify, protect and hold harmless the Indemnified Parties from and against any claim for damage, charge, lawsuit, action, judicial, administrative, regulatory or arbitration proceeding, damage, cost, expense (including counsel and expert fees), judgment, civil fine and penalties, liabilities or losses of any kind or nature whatsoever whether actual, threatened or alleged, which arise out of, pertain to, or relate to, or are a consequence of, or are attributable to, or are in any manner connected with the performance of the Services, work, activities, operations or duties of the Consultant, or anyone employed by or working under the Consultant or for services rendered to Consultant in the performance of this Agreement, notwithstanding that the City may have benefited from its work or services. This indemnification provision shall apply to any acts, omissions, negligence, recklessness, or willful misconduct, whether active or passive, on the part of the Consultant or anyone employed or working under the Consultant.

12. Insurance.

12.1 General Provisions. Prior to the City's execution of this Agreement, Consultant shall provide satisfactory evidence of, and shall thereafter maintain during the term of this Agreement, such insurance policies and coverages in the types, limits, forms and ratings required herein. The rating and required insurance policies and coverages may be modified in writing by the City's Risk Manager or City Attorney, or a designee, unless such modification is prohibited by law.

12.1.1 Limitations. These minimum amounts of coverage shall not constitute any limitation or cap on Consultant's indemnification obligations under Section 11 hereof.

12.1.2 **Ratings.** Any insurance policy or coverage provided by Consultant or subcontractors as required by this Agreement shall be deemed inadequate and a material breach of this Agreement, unless such policy or coverage is issued by insurance companies authorized to transact insurance business in the State of California with a policy holder's rating of A or higher and a Financial Class of VII or higher.

12.1.3 **Cancellation.** The policies shall not be canceled unless thirty (30) days' prior written notification of intended cancellation has been given to City by certified or registered mail, postage prepaid.

12.1.4 **Adequacy.** The City, its officers, employees and agents make no representation that the types or limits of insurance specified to be carried by Consultant pursuant to this Agreement are adequate to protect Consultant. If Consultant believes that any required insurance coverage is inadequate, Consultant will obtain such additional insurance coverage as Consultant deems adequate, at Consultant's sole expense.

12.2 **Workers' Compensation Insurance.** By executing this Agreement, Consultant certifies that Consultant is aware of and will comply with Section 3700 of the Labor Code of the State of California requiring every employer to be insured against liability for workers' compensation, or to undertake self-insurance before commencing any of the work. Consultant shall carry the insurance or provide for self-insurance required by California law to protect said Consultant from claims under the Workers' Compensation Act. Prior to City's execution of this Agreement, Consultant shall file with City either 1) a certificate of insurance showing that such insurance is in effect, or that Consultant is self-insured for such coverage, or 2) a certified statement that Consultant has no employees, and acknowledging that if Consultant does employ any person, the necessary certificate of insurance will immediately be filed with City. Any certificate filed with City shall provide that City will be given ten (10) days' prior written notice before modification or cancellation thereof.

12.3 **Commercial General Liability and Automobile Insurance.** Prior to City's execution of this Agreement, Consultant shall obtain, and shall thereafter maintain during the term of this Agreement, commercial general liability insurance and automobile liability insurance as required to insure Consultant against damages for personal injury, including accidental death, as well as from claims for property damage, which may arise from or which may concern operations by anyone directly or indirectly employed by, connected with, or acting for or on behalf of Consultant. The City, and its officers, employees and agents, shall be named as additional insureds under the Consultant's insurance policies.

12.3.1 Consultant's commercial general liability insurance policy shall cover both bodily injury (including death) and property damage (including, but not limited to, premises operations liability, products-completed operations liability, independent contractor's liability, personal injury liability, and contractual liability) in an amount not less than \$1,000,000 per occurrence and a general aggregate limit in the amount of not less than \$2,000,000.

12.3.2 Consultant's automobile liability policy shall cover both bodily injury and property damage in an amount not less than \$1,000,000 per occurrence and an aggregate limit of not less than \$1,000,000. All of Consultant's automobile and/or commercial general liability insurance policies shall cover all vehicles used in connection with Consultant's performance of this Agreement, which vehicles shall include, but are not limited to, Consultant owned vehicles, Consultant leased vehicles, Consultant's employee vehicles, non-Consultant owned vehicles and hired vehicles.

12.3.3 Prior to City's execution of this Agreement, copies of insurance policies or original certificates along with additional insured endorsements acceptable to the City evidencing the coverage required by this Agreement, for both commercial general and automobile liability insurance, shall be filed with City and shall include the City and its officers, employees and agents, as additional insureds. Said policies shall be in the usual form of commercial general and automobile liability insurance policies, but shall include the following provisions:

It is agreed that the City of Riverside, and its officers, employees and agents, are added as additional insureds under this policy, solely for work done by and on behalf of the named insured for the City of Riverside.

12.3.4 The insurance policy or policies shall also comply with the following provisions:

- a. The policy shall be endorsed to waive any right of subrogation against the City and its sub-consultants, employees, officers and agents for services performed under this Agreement.
- b. If the policy is written on a claims made basis, the certificate should so specify and the policy must continue in force for one year after completion of the services. The retroactive date of coverage must also be listed.
- c. The policy shall specify that the insurance provided by Consultant will be considered primary and not contributory to any other insurance available to the City and Endorsement No. CG 20010413 shall be provided to the City.

12.4 Errors and Omissions Insurance. Prior to City's execution of this Agreement, Consultant shall obtain, and shall thereafter maintain during the term of this Agreement, errors and omissions professional liability insurance in the minimum amount of \$1,000,000 to protect the City from claims resulting from the Consultant's activities.

12.5 Subcontractors' Insurance. Consultant shall require all of its subcontractors to carry insurance, in an amount sufficient to cover the risk of injury, damage or loss that may be caused by the subcontractors' scope of work and activities provided in furtherance of this Agreement, including, but without limitation, the following coverages: Workers Compensation, Commercial General Liability, Errors and Omissions, and Automobile liability. Upon City's request,

Consultant shall provide City with satisfactory evidence that Subcontractors have obtained insurance policies and coverages required by this section.

13. **Business Tax.** Consultant understands that the Services performed under this Agreement constitutes doing business in the City of Riverside, and Consultant agrees that Consultant will register for and pay a business tax pursuant to Chapter 5.04 of the Riverside Municipal Code and keep such tax certificate current during the term of this Agreement.

14. **Time of Essence.** Time is of the essence for each and every provision of this Agreement.

15. **City's Right to Employ Other Consultants.** City reserves the right to employ other Consultants in connection with the Project. If the City is required to employ another consultant to complete Consultant's work, due to the failure of the Consultant to perform, or due to the breach of any of the provisions of this Agreement, the City reserves the right to seek reimbursement from Consultant.

16. **Accounting Records.** Consultant shall maintain complete and accurate records with respect to costs incurred under this Agreement. All such records shall be clearly identifiable. Consultant shall allow a representative of City during normal business hours to examine, audit, and make transcripts or copies of such records and any other documents created pursuant to this Agreement. Consultant shall allow inspection of all work, data, documents, proceedings, and activities related to the Agreement for a period of three (3) years from the date of final payment under this Agreement.

17. **Confidentiality.** All ideas, memoranda, specifications, plans, procedures, drawings, descriptions, computer program data, input record data, written information, and other materials either created by or provided to Consultant in connection with the performance of this Agreement shall be held confidential by Consultant, except as otherwise directed by City's Contract Administrator. Nothing furnished to Consultant which is otherwise known to the Consultant or is generally known, or has become known, to the related industry shall be deemed confidential. Consultant shall not use City's name or insignia, photographs of the Project, or any publicity pertaining to the Services or the Project in any magazine, trade paper, newspaper, television or radio production, website, or other similar medium without the prior written consent of the City.

18. **Ownership of Documents.** All reports, maps, drawings and other contract deliverables prepared under this Agreement by Consultant shall be and remain the property of City. Consultant shall not release to others information furnished by City without prior express written approval of City.

19. **Copyrights.** Consultant agrees that any work prepared for City which is eligible for copyright protection in the United States or elsewhere shall be a work made for hire. If any such work is deemed for any reason not to be a work made for hire, Consultant assigns all right, title and interest in the copyright in such work, and all extensions and renewals thereof, to City, and agrees to provide all assistance reasonably requested by City in the establishment, preservation and enforcement of its copyright in such work, such assistance to be provided at City's expense but

without any additional compensation to Consultant. Consultant agrees to waive all moral rights relating to the work developed or produced, including without limitation any and all rights of identification of authorship and any and all rights of approval, restriction or limitation on use or subsequent modifications.

20. **Conflict of Interest.** Consultant, for itself and on behalf of the individuals listed in Exhibit "C," represents and warrants that by the execution of this Agreement, they have no interest, present or contemplated, in the Project affected by the above-described Services. Consultant further warrants that neither Consultant, nor the individuals listed in Exhibit "C" have any real property, business interests or income interests that will be affected by this project or, alternatively, that Consultant will file with the City an affidavit disclosing any such interest.

21. **Solicitation.** Consultant warrants that Consultant has not employed or retained any person or agency to solicit or secure this Agreement, nor has it entered into any agreement or understanding for a commission, percentage, brokerage, or contingent fee to be paid to secure this Agreement. For breach of this warranty, City shall have the right to terminate this Agreement without liability and pay Consultant only for the value of work Consultant has actually performed, or, in its sole discretion, to deduct from the Agreement price or otherwise recover from Consultant the full amount of such commission, percentage, brokerage or commission fee. The remedies specified in this section shall be in addition to and not in lieu of those remedies otherwise specified in this Agreement.

22. **General Compliance With Laws.** Consultant shall keep fully informed of federal, state and local laws and ordinances and regulations which in any manner affect those employed by Consultant, or in any way affect the performance of services by Consultant pursuant to this Agreement. Consultant shall at all times observe and comply with all such laws, ordinances and regulations, and shall be solely responsible for any failure to comply with all applicable laws, ordinances and regulations. Consultant represents and warrants that Consultant has obtained all necessary licenses to perform the Scope of Services and that such licenses are in good standing. Consultant further represents and warrants that the services provided herein shall conform to all ordinances, policies and practices of the City of Riverside.

23. **Waiver.** No action or failure to act by the City shall constitute a waiver of any right or duty afforded City under this Agreement, nor shall any such action or failure to act constitute approval of or acquiescence in any breach thereunder, except as may be specifically, provided in this Agreement or as may be otherwise agreed in writing.

24. **Amendments.** This Agreement may be modified or amended only by a written agreement and/or change order executed by the Consultant and City.

25. **Termination.** City, by notifying Consultant in writing, shall have the right to terminate any or all of Consultant's services and work covered by this Agreement at any time. In the event of such termination, Consultant may submit Consultant's final written statement of the amount of Consultant's services as of the date of such termination based upon the ratio that the work completed bears to the total work required to make the report complete, subject to the City's rights under Sections 15 and 26 hereof. In ascertaining the work actually rendered through the termination

date, City shall consider completed work, work in progress and complete and incomplete reports and other documents only after delivered to City.

25.1 Other than as stated below, City shall give Consultant thirty (30) days' prior written notice prior to termination.

25.2 City may terminate this Agreement upon fifteen (15) days' written notice to Consultant, in the event:

25.2.1 Consultant substantially fails to perform or materially breaches the Agreement; or

25.2.2 City decides to abandon or postpone the Project.

26. **Offsets.** Consultant acknowledges and agrees that with respect to any business tax or penalties thereon, utility charges, invoiced fee or other debt which Consultant owes or may owe to the City, City reserves the right to withhold and offset said amounts from payments or refunds or reimbursements owed by City to Consultant. Notice of such withholding and offset, shall promptly be given to Consultant by City in writing. In the event of a dispute as to the amount owed or whether such amount is owed to the City, City will hold such disputed amount until either the appropriate appeal process has been completed or until the dispute has been resolved.

27. **Successors and Assigns.** This Agreement shall be binding upon City and its successors and assigns, and upon Consultant and its permitted successors and assigns, and shall not be assigned by Consultant, either in whole or in part, except as otherwise provided in paragraph 9 of this Agreement.

28. **Venue.** Any action at law or in equity brought by either of the parties hereto for the purpose of enforcing a right or rights provided for by this Agreement shall be tried in a court of competent jurisdiction in the County of Riverside, State of California, and the parties hereby waive all provisions of law providing for a change of venue in such proceedings to any other county. In the event either party hereto shall bring suit to enforce any term of this Agreement or to recover any damages for and on account of the breach of any term or condition of this Agreement, it is mutually agreed that each party will bear their own attorney's fees and costs.

29. **Nondiscrimination.** During Consultant's performance of this Agreement, Consultant shall not discriminate on the grounds of race, religious creed, color, national origin, ancestry, age, physical disability, mental disability, medical condition, including the medical condition of Acquired Immune Deficiency Syndrome (AIDS) or any condition related thereto, marital status, sex, genetic information, gender, gender identity, gender expression, or sexual orientation, military and veteran status, in the selection and retention of employees and subcontractors and the procurement of materials and equipment, except as provided in Section 12940 of the California Government Code. Further, Consultant agrees to conform to the requirements of the Americans with Disabilities Act in the performance of this Agreement.

30. **Severability.** Each provision, term, condition, covenant and/or restriction, in whole and in part, of this Agreement shall be considered severable. In the event any provision, term,

condition, covenant and/or restriction, in whole and/or in part, of this Agreement is declared invalid, unconstitutional, or void for any reason, such provision or part thereof shall be severed from this Agreement and shall not affect any other provision, term, condition, covenant and/or restriction of this Agreement, and the remainder of the Agreement shall continue in full force and effect.

31. **Authority.** The individuals executing this Agreement and the instruments referenced herein on behalf of Consultant each represent and warrant that they have the legal power, right and actual authority to bind Consultant to the terms and conditions hereof and thereof.

32. **Entire Agreement.** This Agreement constitutes the final, complete, and exclusive statement of the terms of the agreement between the parties pertaining to the subject matter of this Agreement, and supersedes all prior and contemporaneous understandings or agreements of the parties. Neither party has been induced to enter into this Agreement by and neither party is relying on, any representation or warranty outside those expressly set forth in this Agreement.

33. **Interpretation.** City and Consultant acknowledge and agree that this Agreement is the product of mutual arms-length negotiations and accordingly, the rule of construction, which provides that the ambiguities in a document shall be construed against the drafter of that document, shall have no application to the interpretation and enforcement of this Agreement.

33.1 Titles and captions are for convenience of reference only and do not define, describe or limit the scope or the intent of the Agreement or any of its terms. Reference to section numbers, are to sections in the Agreement unless expressly stated otherwise.

33.2 This Agreement shall be governed by and construed in accordance with the laws of the State of California in effect at the time of the execution of this Agreement.

33.3 In the event of a conflict between the body of this Agreement and Exhibit "A" - Scope of Services hereto, the terms contained in Exhibit "A" shall be controlling.

34. **Exhibits.** The following exhibits attached hereto are incorporated herein to this Agreement by this reference:

Exhibit "A" - Scope of Services
Exhibit "B" - Compensation
Exhibit "C" - Key Personnel

IN WITNESS WHEREOF, City and Consultant have caused this Agreement to be duly executed the day and year first above written.

CITY OF RIVERSIDE, a California
charter city and municipal corporation
a California corporation

LARRY WALKER ASSOCIATES,
INCORPORATED, a California corporation

By: _____
City Manager

By: Kathy Walker
[Printed Name]
Assistant Treasurer
[Title]

Attest: _____
City Clerk

Certified as to Availability of Funds:

By: [Signature]
Chief Financial Officer

By: Karen Ashby
[Printed Name]
Vice President
[Title]

Approved as to Form:

By: [Signature]
Deputy City Attorney
Ruthann M. Elder

EXHIBIT “A”

SCOPE OF SERVICES

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Larry Walker Associates, Inc. (LWA) is pleased to submit this Proposal to the City of Riverside (City) to provide technical assistance for the development of the City's Trash Capture Implementation Plan. In response to the Request for Proposals (RFP), LWA has assembled a project team that has experience completing similar types of projects. To deliver enhanced control of the budget and schedule to the City, LWA will perform the work with our own staff, without subconsultants. As further demonstrated in this section, as well as *Sections D and E*, LWA offers considerable experience, proven capabilities, and an in-depth understanding of the requirements of the Statewide Trash Amendments and how to develop a pragmatic and prioritized Implementation Plan. Of significant value is our understanding of the Statewide Trash Amendments, our experience working with, and as, public agency staff, and our working and respected relationships with regulatory staff. LWA has the regulatory background, technical skills, and direct experience necessary to successfully complete the tasks requested by the City. This experience was developed over the years through various projects in the San Francisco Bay Area and Southern California and, more recently, with Phase I and Phase II municipalities complying with the Statewide Trash Amendments.

UNIQUELY QUALIFIED COMPANY

With almost 40 years of experience in California and a proven record of success on similar trash assessment and compliance projects, LWA's intimate understanding of the issues and technical and regulatory expertise will expedite project schedules, resolve regulatory issues, and deliver innovative and viable plans that are approvable by the State Water Board and Regional Water Boards.

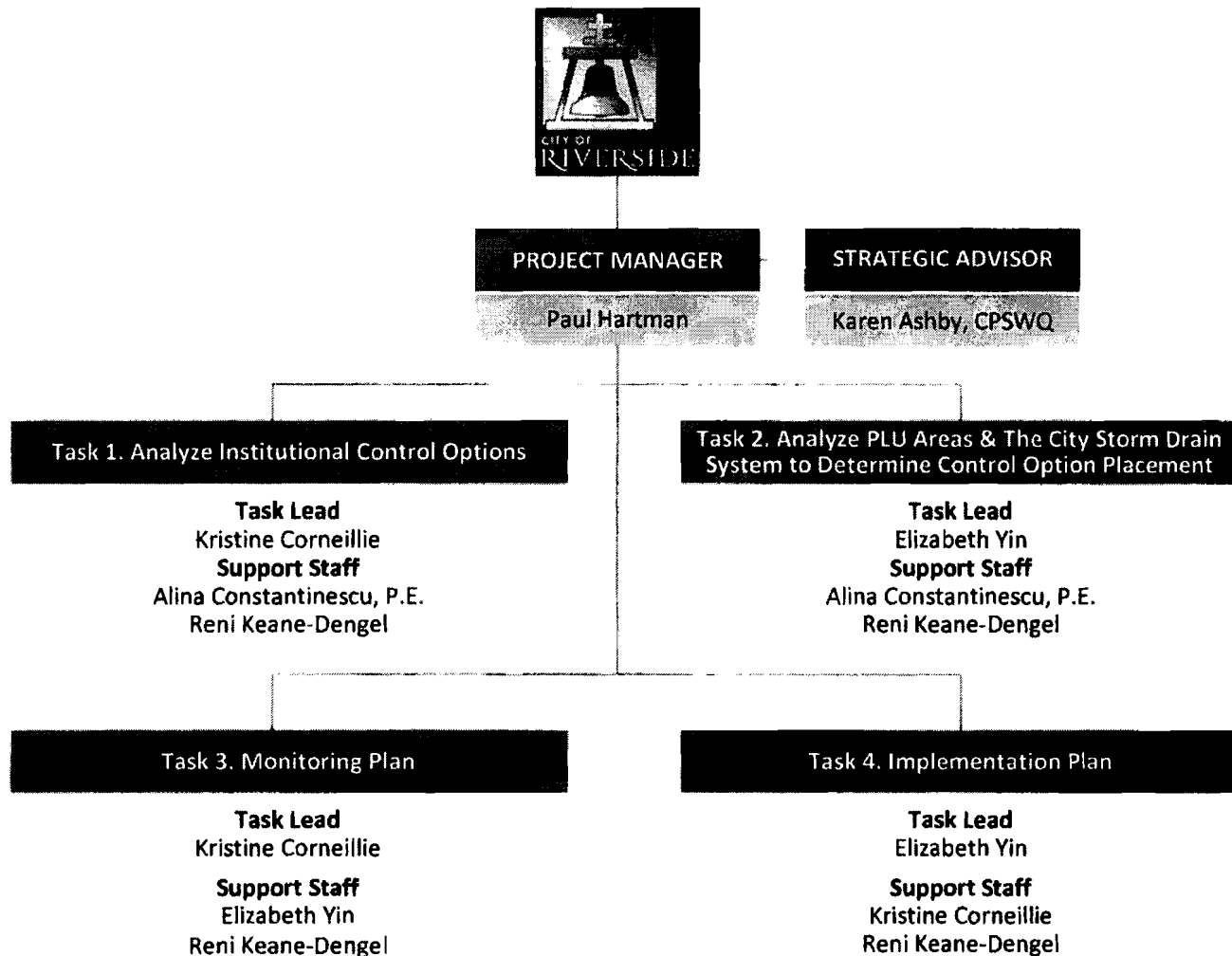
B-1 Organization and Staffing Required for the Services

The LWA project team has experience working with the regulatory, policy, legal, and technical aspects of the stormwater program and related requirements. We were intimately involved in the development of and commenting on the Statewide Trash Amendments; participation in the Statewide Trash Amendment Technical Advisory Committee; and subsequent development and implementation of the municipal Track 1 and Track 2 feasibility analyses and compliance pathways. Our organization and staffing includes engineering and stormwater professionals who have experience in the management, development, and implementation of similar projects involving complex technical tasks, including analysis of Institutional Controls, implementation procedures, cost estimates, compliance assessment, Priority Land Use (PLU) analysis, full capture systems (FCS), treatment controls, multi-benefit projects, trash capture devices, and trash assessment procedures.

The proposed staffing plan and project team organization for the development of the City's Trash Capture Implementation Plan are shown in *Figure B-1*. Additional details regarding experience and qualifications for all personnel shown in *Figure B-1* are provided in *Section D. Company Personnel* and *Appendix 1*.



Figure B-1. Project Team Organization and Staffing Chart



B-2 Statement of Understanding and Approach

The Statewide Trash Amendments¹ were approved by the Office of Administrative Law (OAL) on December 2, 2015, the official effective date for the Amendments. As the City is aware, on June 2, 2017, the Santa Ana Regional Water Board (Regional Water Board) issued a California Water Code Section 13383 letter² requiring Phase I permittees to select either Track 1 or Track 2 by September 1, 2017. Based on the initial analysis, the City selected Track 2 and submitted the required information to the Regional Water Board.

¹ Amendment to the Water Quality Control Plan for Ocean Waters of California to Control Trash (Ocean Plan) and Part 1 Trash Provisions of the Water Quality Control Plan for Inland Surface Waters, Enclosed Bays, and Estuaries of California (ISWEBE Plan) adopted by the State Water Board. http://www.waterboards.ca.gov/water_issues/programs/trash_control/documentation.shtml

² Water Code Section 13383 Order to Submit Method to comply with Statewide Trash Provisions; requirements Phase I Municipal Separate Storm Sewer System (MS4) Co-Permittees within the Jurisdiction of the Santa Ana Regional Water Quality Control Board. June 2, 2017



Subsequent to the Track 2 selection, by November 30, 2018, the City needs to submit to the Regional Water Board an Implementation Plan that describes:

- The combination of controls selected and the rationale for the selection;
- How the combination of controls is designed to achieve Full Capture System Equivalency (FCSE);
- How FCSE will be demonstrated;
- If using a methodology other than the On Land Visual Trash Assessment Approach to determine trash levels, a description of the methodology used; and,
- If proposing to select locations or land uses other than PLUs, a justification demonstrating that the alternative land uses generate trash at rates that are equivalent to or greater than the PLUs.

The tasks below are based on the City's selection of Track 2, consistent with the scope as outlined in the RFP as Exhibit A, and leverage LWA's extensive statewide experience and tools developed for trash compliance efforts.

B-2.1 Project Approach

LWA partners with our clients and stakeholders to collaboratively develop and implement pragmatic, science-based compliance programs and master plans that improve water quality and protect water resources. In this capacity, LWA will provide the City with specialized and complementary capabilities to develop the Track 2 Implementation Plan. As demonstrated in *Sections D and E*, the LWA project team has served in similar capacities in support of Track 1 and Track 2 trash compliance efforts for stormwater permittees throughout California. Hallmarks of our approach include bringing flexibility to the project elements while managing the project to meet the stated end goals, integrating multi-disciplinary experts into a cohesive working team, and providing an adaptive atmosphere that encourages productive communication among the project team, client, and stakeholders.

As further described in this section, the tasks outlined in the RFP, Exhibit A, set the stage for the necessary analysis and development of the Track 2 Implementation Plan to achieve FCSE, which will generally consist of:

- Analysis of institutional controls and current trash reduction efforts;
- Evaluation of locations for treatment and source control implementation;
- A monitoring plan to demonstrate FCSE; and,
- An Implementation Plan.

LWA will provide the technical and analytical justification for the Implementation Plan. However, LWA recognizes that the Water Code Section 13383 requirements are resource-intensive. Given the required investment to comply with the Statewide Trash Amendments, LWA is prepared to work with the City to develop the most efficient and cost-effective Track 2 Implementation Plan for moving forward, given the local conditions and submittals required on November 30, 2018. Deliverables for each task are specified below, and all tasks are reflected within the *Cost Proposal (Section G)*.

UNMATCHED VALUE

LWA has technical and regulatory expertise and experience developing Track 2 Implementation Plans consistent with the requirements of the Water Code Section 13383 Order and the Statewide Trash Amendments. Our unique expertise includes:

- *Assisting stormwater programs/public works departments with master planning for almost 40 years.*
- *Direct experience working with the State Water Board to gain approval for multi-benefit BMPs as FCS.*
- *Assisting Phase I and Phase II stormwater programs in complying with the Statewide Trash Amendments, including Track 1/Track 2 feasibility assessments, geospatial analysis and mapping, modeling, Implementation Plans, cost estimates, training, and monitoring.*
- *Strong working relationships with Santa Ana Regional Water Board and State Water Board staff.*



Preliminary Investigations, Due Diligence, and Research

LWA will perform preliminary investigations and research to efficiently guide the development of the City's Implementation Plan. As a part of this initial due diligence process, LWA proposes to meet with City staff to review the current PLU map and resolve any outstanding questions, review the parameters used to identify PLUs, and discuss areas of specific concern, such as areas prone to flooding, vandalism, or with known trash problems. During this time, LWA will also discuss the City's preferences for addressing different areas through trash reduction efforts, as well as the vision of the Implementation Plan. Information shared during this preliminary investigation will be incorporated into each of the tasks, further described below.

As desired by the City, an additional step that may be helpful would be to meet with key Regional Water Board staff, likely Barbara Barry, to discuss the Implementation Plan elements prior to its development so that the City has some certainty that the Regional Water Board will approve it. We will discuss this approach with the City to determine if, when, and how to engage with the Regional Water Board.

Task 1. Analyze Institutional Control Options [Estimated Cost: \$10,400]

LWA understands that the City has selected a Track 2 approach to comply with the Statewide Trash Amendments. Track 2 allows the City to achieve compliance through the implementation of a plan with a combination of FCS, multi-benefit projects, institutional controls, and/or other treatment controls designed to achieve FCSE. As such, the City has requested assistance in evaluating institutional control options (i.e., source control Best Management Practices (BMP)) that would comply with the Track 2 requirements and achieve FCSE.

LWA will work with the City to prepare a detailed analysis of the institutional control options including descriptions, implementation procedures, cost estimates, and the likelihood of compliance for each option and/or collectively as a package. The approach for this task includes the following:

- Identify the range of programs and develop a list of potential institutional controls that address trash. In completing this task, LWA will utilize previous lists and literature reviews that have been conducted to ensure that the evaluation is thorough.
- Identify the existing institutional controls, geographic coverage, and frequency of controls that the City currently implements. This may include, but is not limited to, local ordinances (e.g., anti-littering ordinances, bag bans), operations and maintenance programs (e.g., catch basin cleaning, street sweeping, collection of trash/location of trash bins), and public education and outreach events.
- As available, obtain programmatic data and/or literature-based values to determine the current and future potential effectiveness of the institutional controls. In some cases, trash data may be available or easy to generate to develop actual load reduction estimates specific to these controls. This evaluation will provide valuable input regarding which institutional trash control programs are likely to be most effective in addressing trash, as well as assessment of the potential for enhancements of select controls to meet the FCSE criteria (e.g., increasing the frequency or curb miles of street sweeping).

As a part of this effort, and as mentioned above, LWA will supplement this work effort with previous literature reviews and summaries that have been completed to provide a full list of potential controls that could be included in a Track 2 approach. In addition, where available, local studies will be included in the literature review.

The results of this analysis will include the descriptions, implementation procedures, estimated effectiveness, and cost information (where available) that will be integrated with the results of Task 2 and incorporated into the Implementation Plan (Task 4). Completion of this task is partially contingent upon receipt of information pertaining to the City's current trash control reduction efforts and programs, including a description of the program, the amount of trash reduced (where available), and the cost of operating and maintaining these programs.

Deliverables:

- *One conference call meeting with City staff to discuss data needs and review available information (to be held in conjunction with Task 2)*



- *Draft summary table identifying potential institutional controls for consideration under a Track 2 approach, estimated effectiveness, and costs*
- *One conference call meeting to review the summary table (to be held in conjunction with Task 2)*
- *In conjunction with Task 2, the final summary table incorporating comments received will be included in the Draft Implementation Plan (Task 4)*

Task 2. Analyze PLU Areas and the City Storm Drain System to Determine Control Option Placement [Estimated Cost: \$12,350]

In addition to the analysis of institutional controls to be completed in Task 1, the City will need to identify and include FCS, multi-benefit projects, and/or other treatment controls designed to achieve FCSE. As such, LWA will assist the City in analyzing the PLU areas, as well as the storm drain system, and determine the most cost-effective mix of small and large trash capture devices, along with the institutional controls identified in Task 1, to assist in achieving FCSE.

LWA will work with the City to identify the types of FCS that are already in place or that will be installed, City preferences for locations or devices, and potential locations for installation. The State Water Board has identified a range of public domain multi-benefit treatment systems³ as well as treatment control devices⁴ that are deemed FCS devices pursuant to the Statewide Trash Amendments. As a result, LWA will assist the City in identifying any multi-benefit treatment systems that may currently be implemented to get credit for those areas.

The configuration of the storm drain system allows for the strategic installation of the FCS. For example, a municipality could install catch basin inserts distributed throughout the storm drain system draining PLU areas, or it could install larger, regional types of systems, such as continuous deflection system (CDS) units, at strategic points identified to address an entire PLU catchment area. Identifying the number and types of FCS and their installation locations is critical to minimize the number of devices required and reduce the costs of compliance and future maintenance.

LWA has worked with Phase I and Phase II municipalities to identify regional and/or distributed locations within a storm drain system for device installation by prioritizing preferences for device type, cost, installation feasibility, and operations and maintenance considerations. Similarly, LWA will work with the City to identify priorities and provide the City with a strategic, cost-effective approach for the installation of the FCS. The results of this analysis will be integrated with the results of Task 1 and incorporated into Task 4, Implementation Plan.

Deliverables:

- *One conference call meeting with City staff to discuss data needs and review available information (to be held in conjunction with Task 1)*
- *Draft summary table and ArcGIS map package containing shapefiles identifying potential BMPs and locations*
- *One conference call meeting to review the summary table and maps (to be held in conjunction with Task 1)*
- *In conjunction with Task 1, the final summary table and maps incorporating comments received will be included in the Draft Implementation Plan (Task 4)*

Task 3. Monitoring Plan [Estimated Cost: \$15,080]

Pursuant to the Statewide Trash Amendments and the selection of Track 2, the City must develop a Monitoring Plan to demonstrate the effectiveness of the selected combination of controls (i.e., FCS, multi-benefit projects, institutional controls, and/or other treatment controls), as well as compliance with FCSE. In addition, the City must submit an annual monitoring report. The monitoring report must include a GIS map depicting the locations and

³https://www.waterboards.ca.gov/water_issues/programs/stormwater/docs/trash_implementation/fcs_list_of_mbts_04aug17.pdf

⁴https://www.waterboards.ca.gov/water_issues/programs/stormwater/docs/trash_implementation/a1_certified_fcd_rev04aug17.pdf



drainage area served by each control/project and should consider a number of management questions designed to demonstrate the effectiveness of the controls and compliance with the FCSE.

LWA will work with the City to develop a Monitoring Plan that will demonstrate the effectiveness of the Implementation Plan and how it complies with the FCSE standard. The Monitoring Plan will include trash assessment procedures based on those recommended by the Regional Water Board, monitoring report templates, and documentation necessary to show FCSE, as defined in the Implementation Plan.

In accordance with the Statewide Trash Amendments, the types of management questions that *may* be considered/incorporated when developing a Monitoring Plan include:

- 1) What type of and how many treatment controls, institutional controls, and/or multi-benefit projects have been used and in what locations?
- 2) How many FCS have been installed (if any), in what locations, and what is the individual and cumulative area served by them?
- 3) What is the effectiveness of the total combination of treatment controls, institutional controls, and/or multi-benefit projects employed by the municipal separate storm sewer system (MS4) permittee?
- 4) Has the amount of trash discharged from the MS4 decreased? If so, by how much? If not, explain why.
- 5) Has the amount of trash in the MS4's receiving water(s) decreased? If so, by how much? If not, explain why.

However, it is important to note that these are suggested questions for consideration when developing a trash monitoring program, and the focus of the City's Monitoring Plan should be to demonstrate achievement of FCSE. As a result, a typical Track 2 Monitoring Plan will likely be focused on the effectiveness of implementation strategies and would not necessarily include trash monitoring at MS4 outfalls or in the receiving waters. If determined to be beneficial, the Monitoring Plan may consider including existing monitoring programs at MS4 outfalls and/or in receiving waters to support demonstration of FCSE.

In their 13383 letter, the Regional Water Board recommends an On Land Visual Trash Assessment Approach for determining trash levels. The California Stormwater Quality Association (CASQA) is providing training statewide on this approach. LWA staff will be attending multiple sessions to enhance the monitoring tools that staff already use. Based on the Regional Water Board's recommendation, CASQA's training, and LWA's experience with other municipalities that have been complying with similar trash requirements, such as Los Angeles and San Francisco Bay Area Regions, we recommend that the City consider a monitoring program that is based on visual observations, rather than attempting to count or quantify trash via a different metric. The On Land Visual Trash Assessment Approach involves visiting predetermined areas to assess the levels of trash present and extrapolating this to surrounding or similar areas. However, LWA would like to discuss the City's current practices to determine how current efforts could be leveraged to assess trash control measures. Additionally, LWA would discuss alternative monitoring options and what may be in the City's best interest for this effort. Ideally, a Monitoring Plan could be developed and approved that would allow for multiple compliance pathways to demonstrate FCSE, giving the City maximum flexibility in implementation.

The Monitoring Plan developed for the City will include a background on the Statewide Trash Amendments, information known from existing programs, a summary of what the City is already doing, and the procedures necessary to collect information to complete the FCSE calculations described in the Implementation Plan. Additionally, the Monitoring Plan will include, as an appendix, an outline and template for reporting monitoring results each year. The template will allow the City to easily enter and update the monitoring results each year to show progress toward the Statewide Trash Amendments compliance goals and milestones.

Deliverables:

- *Draft Monitoring Plan and Annual Report template*
- *One conference call meeting to review the Monitoring Plan and Annual Report template*



- *Final Monitoring Plan and Annual Report template to be included within the Implementation Plan, Task 4*

Task 4. Implementation Plan [Estimated Cost: \$21,240]

To comply with the Statewide Trash Amendments, pursuant to Track 2, the City must submit an Implementation Plan to the Regional Water Board by November 30, 2018. Per the requirements of the Regional Water Board 13383 letter, the Implementation Plan shall describe:

- The combination of controls selected and the rationale for the selection;
- How the combination of controls is designed to achieve FCSE;
- How FCSE will be demonstrated;
- If using a methodology other than the On Land Visual Trash Assessment Approach to determine trash levels, a description of the methodology used; and,
- If proposing to select locations or land uses other than PLUs, a justification demonstrating that the alternative land uses generate trash at rates that are equivalent to or greater than the PLUs.

Through the analyses completed in Tasks 1, 2, and 3, LWA will have evaluated the City's existing institutional programs, evaluated the combination of controls required to demonstrate FCSE, and developed a monitoring and reporting methodology to demonstrate FCSE. LWA's approach to developing a Track 2 Implementation Plan will incorporate the results of these assessments, as well as the following:

- Estimate the FCSE;
- Estimate load reductions gained from implementing the combination of controls (Tasks 1 and 2); and,
- As necessary, work with City staff to develop new institutional controls that could be added, as well as associated trash reductions and costs.

LWA will develop the draft Implementation Plan to comply with the Statewide Trash Amendments. This task will include development of a draft and final outline; a description of the FCSE development methods and calculations; a description of the controls that will be implemented and how they will meet the FCSE requirements, including a refined compliance approach describing timing/phasing of BMP implementation; milestones; and a Monitoring and Reporting Plan that will be used to demonstrate FCSE. Although the Statewide Trash Amendments suggest that milestones be set at a percent reduction in trash per year (such as a 10% reduction), LWA will work with the City to develop an approach, schedule, and milestones to demonstrate compliance that is consistent with the City's Track 2 implementation approach.

The draft Implementation Plan will be submitted to the City for review and comment, and a final Implementation Plan will be submitted following the incorporation of comments received.

Deliverables:

- *Draft Implementation Plan outline (comments received will be incorporated into the Draft Implementation Plan)*
- *One conference call meeting to review the outline*
- *Draft Implementation Plan (comments received will be incorporated into the Final Implementation Plan)*
- *One conference call meeting to review the draft Implementation Plan*
- *Final Implementation Plan*

EXHIBIT "B"
COMPENSATION



G-1 Pricing

The attached fee schedule includes a stated dollar bid amount for providing services outlined in Exhibit A, Scope of Services, and a breakdown of the proposed fees as structured in Exhibit D:

- Analyze Institutional Control options;
- Analyze PLU areas and the City storm drain system to determine control option placement;
- Monitoring plan;
- Implementation Plan; and
- Grand total project cost.

The costs provided are estimates based on our understanding of the work to be completed, and may be further refined based on input from the City and adjustments of the assumptions. LWA's fee schedule may also be provided as needed and upon request. LWA will perform the work with our own staff, without subcontractors.

Exhibit D. Fee Schedule

RFP# 1799 - TRASH CAPTURE IMPLEMENTATION PLAN FEE SCHEDULE

PERSONNEL			# HOURS FOR EACH TASKS				COST	
	Proposed Key Personnel Name	Hourly Rate	Task 1 - Analyze Institutional Control options	Task 2 - Analyze PLU areas and the City storm drain system to determine control option placement	Task 3 - Monitoring Plan	Task 4 - Implementation Plan	Total Hours	Total Cost
1	Karen Ashby	\$ 275.00	4	4	4	8	20	\$5,500.00
2	Paul Hartman	\$ 250.00	12	12	12	24	60	\$15,000.00
3	Kristine Cornellie	\$ 225.00	8	8	16	12	44	\$9,900.00
4	Reni Keane-Dengel	\$ 195.00			24	24	48	\$9,360.00
5	Aline Constantinescu	\$ 195.00		10		8	18	\$3,510.00
6	Elizabeth Yin	\$ 175.00	24	24	12	20	80	\$14,000.00
7	Michelle Benson	\$ 150.00	2	2	4	4	12	\$1,800.00
8							0	\$0.00
9							0	\$0.00
10							0	\$0.00
Total			50	60	72	100	282	\$59,070.00



EXHIBIT “C”

KEY PERSONNEL



D-1 Company Personnel

The LWA project team has experience working with the regulatory, policy, legal, and technical aspects of the stormwater program and related requirements. We were intimately involved in the development of and commenting on the Statewide Trash Amendments; participation in the Statewide Trash Amendment Technical Advisory Committee; and subsequent development and implementation of the municipal Track 1 and Track 2 feasibility analyses and compliance pathways. Our team includes engineering and stormwater professionals who have experience in the management, development, and implementation of similar projects involving complex technical tasks, including spatial analyses, prioritization of needs, master planning, BMP siting, monitoring and assessment, and cost estimation.

As reflected in *Figure B-1*, the LWA team will be led by Mr. Paul Hartman as the Project Manager. He has worked with municipalities in Southern California to comply with the Statewide Trash Amendments, and has led the evaluation and development of Track 1 and Track 2 approaches, as well as the development of related implementation plans, cost estimates, and trash monitoring programs. Mr. Hartman has proven organizational and project management skills, as well as strong interpersonal and communication skills, to support stakeholder and public engagement. He has a track record in leading project teams to accomplish specific technical tasks and address complex regulatory issues to develop pragmatic programs. As the primary and day-to-day point of contact to the City for this project, Mr. Hartman will oversee the work performed for each task, manage the contract, and ensure that work is completed on time and within budget. Ms. Karen Ashby is the Strategic Advisor and will provide regulatory and technical insight from her intimate involvement in the development and implementation of the Statewide Trash Amendments. The Task Leads will be responsible for on-time completion of their assigned tasks and for coordinating all work products with the Project Manager.

LWA staff will conduct assigned tasks and participate in required meetings as needed for the duration of the project. The staff will be available upon contract award and will not be removed or replaced without consent of the City. More details on staff availability are provided below. The staff members have worked together for many years, including on the projects provided to demonstrate experience in *Section E*, thereby offering a seamless and efficient team with complementary skills.

Below are brief highlights of the qualifications and abilities for LWA's professional team and key personnel (Project Manager, Strategic Advisor, and Task Leads), along with their assigned responsibilities, contact numbers, descriptions of experience, and licenses and/or certifications. The project team members have unique experience and expertise with the feasibility analyses and development of trash implementation and monitoring plans. ***Resumes for all personnel who would be assigned to perform the Services are provided in Appendix 1.***

**PAUL HARTMAN**

Project Manager/Associate
(760) 730-9446

Responsibilities:

- Overall project performance and execution
- Ensure regulatory and contract compliance
- Primary day-to-day point of contact, communication and coordination with the City
- Resource coordination, work plan and schedule, regulatory support, and other technical support as needed

Mr. Hartman is an Associate and will serve as the Project Manager. He brings a wealth of experience in water quality, development and implementation of California municipal stormwater programs, and TMDLs. He has a B.S. in Biology and is a Laboratory Analyst, Grade II, certified by the California Water Environment Association. Over the past eight years, Mr. Hartman has led or participated in **trash compliance efforts throughout California**, including the development of FCS approaches (Track 1), alternative approaches (Track 2), trash monitoring programs, and cost estimates. Mr. Hartman has closely supported municipal clients with stormwater and trash monitoring efforts for more than 15 years and is intimately familiar with the Statewide Trash Amendments, as well as the Phase II municipal stormwater program and how the Trash Master Plan should be leveraged with existing efforts.

Ms. Ashby is Vice President and has over 25 years of experience leading stormwater and water management projects. She has a B.S. in Biological Sciences from the University of California, Irvine, and is a Certified Professional in Stormwater Quality (CPSWQ). Ms. Ashby supports municipal stormwater permittees statewide and has been instrumental in facilitating permit renewals, developing and implementing watershed and stormwater management programs, developing and implementing trash compliance programs, assessing program effectiveness, and analyzing program costs. She currently serves as the Project Manager for several stormwater programs and is directly involved in **compliance track feasibility assessments for the Statewide Trash Amendments, as well as the development of corresponding cost estimates and implementation plans**. Since 2009, Ms. Ashby has provided support to CASQA on key regulatory issues, including the **Statewide Trash Amendment Technical Advisory Committee**.

KAREN ASHBY, CPSWQ
Strategic Advisor/Vice President
(530) 753-6400

Responsibilities:

- Assist in project oversight, insights on results, and other input as needed
- Provide regulatory and other technical support as needed
- Review project documents, plans, and reports

KRISTINE CORNEILLIE

Task Lead/Senior Engineer
(408) 261-3996

Responsibilities:

- Coordinate needs for tasks and participate in meetings
- Lead and coordinate support staff
- Oversee all task activities performed by support staff

Ms. Corneillie is a Senior Engineer and will perform as a Task Lead. With 15 years of experience in the environmental engineering field, Ms. Corneillie has conducted trash assessments and prepared trash management plans for multiple municipal clients. Her Phase II experience includes **development of jurisdictional maps of PLU areas, Track 1 and Track 2 trash analysis, cost and feasibility analysis, evaluation of long-term operations and maintenance of devices, and prioritization of installation of devices in high priority PLU areas for a 10-year phased implementation for clients across California**, including the City of Napa, City of West Sacramento, Marin County Stormwater Pollution Prevention Program, and Napa County Stormwater Pollution Program. Ms. Corneillie has also identified trash management areas and controls for the City of San Mateo's Trash Reduction Program, developed a cost assessment tool to plan for meeting Statewide Trash Amendments

requirements for Contra Costa County, and prepared multiple comment letters on the Statewide Trash Amendments.



Ms. Yin is a Project Scientist II and will perform as a Task Lead. She has a B.S. in Ecology and Evolutionary Biology and a Master of Environmental Management with a concentration in Ecotoxicology and Environmental Health and an emphasis on water resources management. Her unique qualifications, combined with her understanding of policy and public health, have provided significant value on LWA projects involving water quality service areas, including data analysis, reporting, and pollution prevention; stormwater regulatory assistance and regulatory compliance; and watershed management. Ms. Yin has led or participated in trash compliance efforts throughout California, including the development of full capture system approaches (Track 1), non-structural and programmatic approaches (Track 2), trash monitoring programs, and cost estimates. Most recently, she leveraged her extensive experience in *geospatial analysis and data visualization* to support the team with the *assessment of trash control options for Napa County* and led the development of a *Statewide Trash Amendments compliance strategy for the City of San Diego, the County of San Joaquin, and other municipalities throughout California*.

ELIZABETH YIN**Task Lead/ Project Staff****(760) 730-9446****Responsibilities:**

- Coordinate needs for tasks and participate in meetings
- Lead and coordinate support staff
- Oversee all task activities performed by support staff