INFORMATIONAL MEMORANDUM

TO: Transportation and Infrastructure Services Committee

FROM: Pete Mayer, Public Works Director
BY: Adib Altallal, Utilities Engineer

CC: Mayor Thomas McLeod

DATE: **January 24, 2025**

SUBJECT: Surface Water Fund – Tukwila Urban Center Conveyance Inspections

Project No. 91241203 - Design Contract

ISSUE

Approve design contract with PACE to provide design services for the Tukwila Urban Center Conveyance Inspections in the amount of \$71,808.00.

BACKGROUND

The network of storm pipes in the core retail area of Tukwila has not been inspected in the last several decades. Because there have been no inspections, pipe conditions are unknown and rehabilitation, repair, and replacement needs are therefore unknown. It is likely that a significant amount of sediment exists within the storm network in that area. Several stormwater pipes have been selected as higher priority because of the large pipe sizes and more significant impact should a pipe fail.

DISCUSSION

Blockage of stormwater system may lead to flooding and water quality degradation. Pipes have not been cleaned or inspected since installation. O&M inspects and maintains pipes, catch basins and other assets as part of normal operations. This project will require participation by O&M but will largely relieve ongoing O&M burden. In order to assess the pipe conditions, the storm drain pipes will be cleaned and the sediment will be disposed of. Then the pipe interior will be inspected using a remote-control camera. The inspection will be recorded. Rehabilitation, repair, and replacement needs will then be known and prioritized.

FINANCIAL IMPACT

PACE's design fee will be fully funded by the surface water fund.

Consultant Fee 2025 Design Budget

PACE Design Contract \$71,808.00 \$200,000.00

RECOMMENDATION

The Mayor is being asked to approve the design contract with PACE in the amount of \$71,808.00 for the Tukwila Urban Center Conveyance Inspections and consider this item on the Consent Agenda at the February 3, 2025 Regular Council Meeting

Attachments: CIP Sheet - Tukwila Urban Center Conveyance Inspections

PACE Design Contract PACE Scope & Fee

CITY OF TUKWILA 2025-2030 CAPITAL IMPROVEMENT PROGRAM

CITY OF TUKWILA CAPITAL PROJECT SUMMARY 2025 to 2030

| | | | | <u> </u> | | | | | |
|--------------------------|--|------------------------------|---------|----------|--------------|---------------|---------------------|---------------|-------------|
| PROJECT: | Tukw | ila Urba | an Cent | er Conv | eyance/ | Inspec | tions | Project# | 91241203 |
| Project Manager | Mike Pe | rfetti | | | | Departm | nent | Surface V | Vater |
| DESCRIPTION: | The network of storm pipes in the core retail area of Tukwila has not been inspected in the last several decades. Because there have been no inspections, pipe condition is unknown and rehabilitation, repair, and replacement needs are therefore unknown. It is likely that a significant amount of sediment exists within the storm network in that area. Several stormwater pipes have been selected as higher priority because of the large pipe sizes and more significant impact should a pipe fail. The selected area includes 1)Andover Park E from S. 180th Street to Minkler Boulevard, 2) 36" pipe from Minkler Boulevard to Azteca Restaurant, 3) Andover Park West from Tukwila Parkway to S 180th Street, 4) Minkler Boulevard from Southcenter Parkway to ditches at Andover Park West, and 5) Minkler Boulevard to Industry Drive. | | | | | | | | |
| JUSTIFICATION: | | of stormwat r inspected s | | | ooding and v | vater quality | <i>i</i> degradatio | on. Pipes hav | /e not been |
| STATUS: | Prioritize project given the length of time its been identified. Internal discussions in 2024 to set up for work in 2025. | | | | | | | | |
| MAINTENANCE IMPACT: | O&M inspects and maintains pipes, catch basins and other assets as part of normal operations. This project will require participation by O&M but will largely relieve ongoing O&M burden. | | | | | | | | |
| COMMENT: | In order to assess the pipe conditions, the storm drain pipes will be cleaned and the sediment will be disposed of. Then the pipe interior will be inspected using a remote-control camera. The inspection will be recorded. Rehabilitation, repair, and replacement needs will then be known and prioritized. | | | | | | | | |
| FINANCIAL (in thousands) | | 2025 | 2026 | 2027 | 2028 | 2029 | 2030 | Beyond | TOTAL |
| Project Costs | .a+\ | ¢ 15 | ¢ 15 | ¢ | ¢ | ¢ | ¢ | ¢ | \$ 30 |

| FINANCIAL (in thousands) | 2 | 025 | : | 2026 | | 2027 | 2 | 2028 | 2 | 029 | 2 | 030 | Ве | yond | 1 | OTAL |
|--------------------------------|----|-----|----|------|----|------|----|------|----|-----|----|-----|----|------|----|------|
| | | | | | | | | | | | | | | | | |
| Project Costs | | | | | | | | | | | | | | | | |
| Project Mgmt (Staff Time/Cost) | \$ | 15 | \$ | 15 | \$ | - | \$ | - | \$ | - | \$ | - | \$ | - | \$ | 30 |
| Design | \$ | 200 | \$ | 390 | \$ | - | \$ | - | \$ | - | \$ | - | \$ | - | \$ | 590 |
| Construction Mgmt. | \$ | 20 | \$ | 20 | \$ | - | \$ | - | \$ | - | \$ | - | \$ | - | \$ | 40 |
| Construction | \$ | 200 | \$ | - | \$ | - | \$ | - | \$ | - | \$ | - | \$ | - | \$ | 200 |
| Contingency | \$ | 10 | \$ | 10 | \$ | - | \$ | - | \$ | - | \$ | - | \$ | - | \$ | 20 |
| Total Project Costs | \$ | 445 | \$ | 435 | \$ | _ | \$ | | \$ | _ | \$ | _ | \$ | | \$ | 880 |
| | Ť | | 7 | | Ť | | Ť | | 7 | | 7 | | 7 | | _ | |
| Project Funding | | | | | | | | | | | | | | | | |
| Utility Revenues | \$ | 445 | \$ | 435 | \$ | - | \$ | - | \$ | - | \$ | - | \$ | - | \$ | 880 |
| Total Project Funding | \$ | 445 | \$ | 435 | \$ | - | \$ | - | \$ | - | \$ | - | \$ | - | \$ | 880 |
| | | | | | | | | | | | | | | | | |

Contract Number:



PROFESSIONAL SERVICES AGREEMENT

(Includes consultants, architects, engineers, accountants, and other professional services)

THIS AGREEMENT is entered into between the City of Tukwila, Washington, hereinafter referred to as "the City", and **PACE Engineers**, hereinafter referred to as "the Consultant", in consideration of the mutual benefits, terms, and conditions hereinafter specified.

- 1. <u>Project Designation</u>. The Consultant is retained by the City to perform design services in connection with the project titled **Tukwila Urban Center Conveyance Inspections**.
- 2. **Scope of Services.** The Consultant agrees to perform the services, identified on Exhibit "A" attached hereto, including the provision of all labor, materials, equipment and supplies.
- 3. <u>Duration of Agreement; Time for Performance</u>. This Agreement shall be in full force and effect for a period commencing upon execution and ending 31 December 2025, unless sooner terminated under the provisions hereinafter specified. Work under this Agreement shall commence upon written notice by the City to the Consultant to proceed. The Consultant shall perform all services and provide all work product required pursuant to this Agreement no later than 31 December 2025 unless an extension of such time is granted in writing by the City.
- 4. **Payment.** The Consultant shall be paid by the City for completed work and for services rendered under this Agreement as follows:
 - A. Payment for the work provided by the Consultant shall be made as provided on Exhibit "B" attached hereto, provided that the total amount of payment to the Consultant shall not exceed \$71,808.00 without express written modification of the Agreement signed by the City.
 - B. The Consultant may submit vouchers to the City once per month during the progress of the work for partial payment for that portion of the project completed to date. Such vouchers will be checked by the City and, upon approval thereof, payment shall be made to the Consultant in the amount approved.
 - C. Final payment of any balance due the Consultant of the total contract price earned will be made promptly upon its ascertainment and verification by the City after the completion of the work under this Agreement and its acceptance by the City.
 - D. Payment as provided in this section shall be full compensation for work performed, services rendered, and for all materials, supplies, equipment and incidentals necessary to complete the work.
 - E. The Consultant's records and accounts pertaining to this Agreement are to be kept available for inspection by representatives of the City and the state of Washington for a period of three (3) years after final payments. Copies shall be made available upon request.

- 5. Ownership and Use of Documents. All documents, drawings, specifications and other materials produced by the Consultant in connection with the services rendered under this Agreement shall be the property of the City whether the project for which they are made is executed or not. The Consultant shall be permitted to retain copies, including reproducible copies, of drawings and specifications for information, reference and use in connection with the Consultant's endeavors. The Consultant shall not be responsible for any use of the said documents, drawings, specifications or other materials by the City on any project other than the project specified in this Agreement.
- 6. <u>Compliance with Laws</u>. The Consultant shall, in performing the services contemplated by this Agreement, faithfully observe and comply with all federal, state, and local laws, ordinances and regulations, applicable to the services rendered under this Agreement.
- 7. <u>Indemnification</u>. The Consultant shall defend, indemnify and hold the City, its officers, officials, employees and volunteers harmless from any and all claims, injuries, damages, losses or suits including attorney fees, arising out of or resulting from the acts, errors or omissions of the Consultant in performance of this Agreement, except for injuries and damages caused by the sole negligence of the City.
 - Should a court of competent jurisdiction determine that this Agreement is subject to RCW 4.24.115, then, in the event of liability for damages arising out of bodily injury to persons or damages to property caused by or resulting from the concurrent negligence of the Consultant and the City, its officers, officials, employees, and volunteers, the Consultant's liability hereunder shall be only to the extent of the Consultant's negligence. It is further specifically and expressly understood that the indemnification provided herein constitutes the Consultant's waiver of immunity under Industrial Insurance, Title 51 RCW, solely for the purposes of this indemnification. This waiver has been mutually negotiated by the parties. The provisions of this section shall survive the expiration or termination of this Agreement.
- 8. Insurance. The Consultant shall procure and maintain for the duration of the Agreement, insurance against claims for injuries to persons or damage to property which may arise from or in connection with the performance of the work hereunder by the Consultant, its agents, representatives, or employees. Consultant's maintenance of insurance as required by the agreement shall not be construed to limit the liability of the Consultant to the coverage provided by such insurance, or otherwise limit the City's recourse to any remedy available at law or in equity.
 - A. **Minimum Amounts and Scope of Insurance.** Consultant shall obtain insurance of the types and with the limits described below:
 - Automobile Liability insurance with a minimum combined single limit for bodily injury and property damage of \$1,000,000 per accident. Automobile Liability insurance shall cover all owned, non-owned, hired and leased vehicles. Coverage shall be written on Insurance Services Office (ISO) form CA 00 01 or a substitute form providing equivalent liability coverage. If necessary, the policy shall be endorsed to provide contractual liability coverage.
 - 2. Commercial General Liability insurance with limits no less than \$2,000,000 each occurrence, \$2,000,000 general aggregate. Commercial General Liability insurance shall be at least as broad as ISO occurrence form CG 00 01 and shall cover liability arising from premises, operations, stop-gap independent contractors and personal injury and advertising injury. The City shall be named as an additional insured under the Consultant's Commercial General Liability insurance policy with respect to the work performed for the City using an additional insured endorsement at least as broad as ISO endorsement form CG 20 26.
 - 3. <u>Workers' Compensation</u> coverage as required by the Industrial Insurance laws of the State of Washington.

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- 4. <u>Professional Liability</u> with limits no less than \$2,000,000 per claim and \$2,000,000 policy aggregate limit. Professional Liability insurance shall be appropriate to the Consultant's profession.
- B. Public Entity Full Availability of Contractor Limits. If the Contractor maintains higher insurance limits than the minimums shown above, the Public Entity shall be insured for the full available limits of Commercial General and Excess or Umbrella liability maintained by the Contractor, irrespective of whether such limits maintained by the Contractor are greater than those required by this Contract or whether any certificate of insurance furnished to the Public Entity evidences limits of liability lower than those maintained by the Contractor.
- C. **Other Insurance Provision.** The Consultant's Automobile Liability and Commercial General Liability insurance policies are to contain, or be endorsed to contain that they shall be primary insurance with respect to the City. Any Insurance, self-insurance, or insurance pool coverage maintained by the City shall be excess of the Consultant's insurance and shall not be contributed or combined with it.
- D. **Acceptability of Insurers.** Insurance is to be placed with insurers with a current A.M. Best rating of not less than A:VII.
- E. **Verification of Coverage.** Consultant shall furnish the City with original certificates and a copy of the amendatory endorsements, including but not necessarily limited to the additional insured endorsement, evidencing the insurance requirements of the Contractor before commencement of the work. Upon request by the City, the Consultant shall furnish certified copies of all required insurance policies, including endorsements, required in this Agreement and evidence of all subcontractors' coverage.
- F. **Notice of Cancellation.** The Consultant shall provide the City with written notice of any policy cancellation, within two business days of their receipt of such notice.
- G. Failure to Maintain Insurance. Failure on the part of the Consultant to maintain the insurance as required shall constitute a material breach of contract, upon which the City may, after giving five business days notice to the Consultant to correct the breach, immediately terminate the contract or, at its discretion, procure or renew such insurance and pay any and all premiums in connection therewith, with any sums so expended to be repaid to the City on demand, or at the sole discretion of the City, offset against funds due the Consultant from the City.
- 9. <u>Independent Contractor</u>. The Consultant and the City agree that the Consultant is an independent contractor with respect to the services provided pursuant to this Agreement. Nothing in this Agreement shall be considered to create the relationship of employer and employee between the parties hereto. Neither the Consultant nor any employee of the Consultant shall be entitled to any benefits accorded City employees by virtue of the services provided under this Agreement. The City shall not be responsible for withholding or otherwise deducting federal income tax or social security or for contributing to the state industrial insurance program, otherwise assuming the duties of an employer with respect to the Consultant, or any employee of the Consultant.
- 10. Covenant Against Contingent Fees. The Consultant warrants that he has not employed or retained any company or person, other than a bonafide employee working solely for the Consultant, to solicit or secure this contract, and that he has not paid or agreed to pay any company or person, other than a bonafide employee working solely for the Consultant, any fee, commission, percentage, brokerage fee, gifts, or any other consideration contingent upon or resulting from the award or making of this contract. For breach or violation of this warrant, the City shall have the right to annul this contract without liability, or in its discretion to deduct from the contract price or consideration, or otherwise recover, the full amount of such fee, commission, percentage, brokerage fee, gift, or contingent fee.

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- 11. <u>Discrimination Prohibited</u>. Contractor, with regard to the work performed by it under this Agreement, will not discriminate on the grounds of race, religion, creed, color, national origin, age, veteran status, sex, sexual orientation, gender identity, marital status, political affiliation, the presence of any disability, or any other protected class status under state or federal law, in the selection and retention of employees or procurement of materials or supplies.
- 12. **Assignment**. The Consultant shall not sublet or assign any of the services covered by this Agreement without the express written consent of the City.
- 13. **Non-Waiver.** Waiver by the City of any provision of this Agreement or any time limitation provided for in this Agreement shall not constitute a waiver of any other provision.

14. Termination.

- A. The City reserves the right to terminate this Agreement at any time by giving ten (10) days written notice to the Consultant.
- B. In the event of the death of a member, partner or officer of the Consultant, or any of its supervisory personnel assigned to the project, the surviving members of the Consultant hereby agree to complete the work under the terms of this Agreement, if requested to do so by the City. This section shall not be a bar to renegotiations of this Agreement between surviving members of the Consultant and the City, if the City so chooses.
- 15. Applicable Law; Venue; Attorney's Fees. This Agreement shall be subject to, and the Consultant shall at all times comply with, all applicable federal, state and local laws, regulations, and rules, including the provisions of the City of Tukwila Municipal Code and ordinances of the City of Tukwila. In the event any suit, arbitration, or other proceeding is instituted to enforce any term of this Agreement, the parties specifically understand and agree that venue shall be properly laid in King County, Washington. The prevailing party in any such action shall be entitled to its attorney's fees and costs of suit. Venue for any action arising from or related to this Agreement shall be exclusively in King County Superior Court.
- 16. **Severability and Survival.** If any term, condition or provision of this Agreement is declared void or unenforceable or limited in its application or effect, such event shall not affect any other provisions hereof and all other provisions shall remain fully enforceable. The provisions of this Agreement, which by their sense and context are reasonably intended to survive the completion, expiration or cancellation of this Agreement, shall survive termination of this Agreement.
- 17. **Notices.** Notices to the City of Tukwila shall be sent to the following address:

City Clerk
City of Tukwila
6200 Southcenter Boulevard
Tukwila, WA 98188

Notices to Consultant shall be sent to the following address:

| 11255 Kirkland Way, Suite 300 | _ |
|-------------------------------|---|
| Kirkland, WA 98033 | |
| Attn: Ken Nilsen | _ |

18. Entire Agreement; Modification. This Agreement, together with attachments or addenda, represents the entire and integrated Agreement between the City and the Consultant and supersedes all prior negotiations, representations, or agreements written or oral. No amendment or modification of this Agreement shall be of any force or effect unless it is in writing and signed by the parties.

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| CITY OF TUKWILA | PACE ENGINEERS: |
|-----------------------------|--------------------------------|
| Thomas McLeod, Mayor | Ву: |
| | Printed Name: Kenneth H Nilsen |
| ATTEST/AUTHENTICATED: | Title: President |
| Andy Youn, City Clerk | |
| APPROVED AS TO FORM: | |
| Office of the City Attorney | |

DATED this ______ day of _______, 2024.

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SCOPE OF WORK

CITY OF TUKWILA STORMWATER INVESTIGATION/ASSESSMENT FOR PIPE DEFICIENCY REAPAIR/REPLACEMENT

PROJECT UNDERSTANDING

The City of Tukwila (City) has requested a proposal for engineering services to prepare bid documents for the cleaning and video-inspection of specific portions of the City's stormwater system, as well as reviewing the video inspections and developing a report of recommendations for the City to repair/replace any deficiencies that are observed. The City has indicated that approximately 17,000 linear feet of stormwater conveyance system is to be cleaned, inspected and analyzed.

SCOPE OF WORK

This Scope of Work is intended to provide a summary of the scope and costs associated for the peer review services for the project listed above, at the request of the City.

Task 1 - PROJECT MANAGEMENT

PACE will be responsible for conducting ongoing management/administration of the consultant team in accordance with the provisions of the Agreement. Ongoing management will include completion of professional services in a timely manner and within the Agreement budget.

PACE will maintain regular contact and coordination with the City Project Manager in accordance with the provisions of the Agreement. The PACE Project Manager will be responsible for:

- Maintaining regular contact with the City and designated project management team staff through telephone conversations and e-mails
- Maintaining open access to project information by the City.
- It is PACE's intent to maintain open communication with the City at all levels of the PACE project team. Therefore, the City Project Manager may contact team members as needed.

PACE will prepare and provide monthly status/progress reports with invoices, itemized by task, to the City, describing work performed by the PACE project team during the current reporting period. The progress reports will be prepared in a format approved by the City Project Manager.

PROJECT MANGEMENT RESERVE

In an effort to facilitate and expedite any changes to the scope, PACE may request that funds be reallocated from the Project Management Reserve to a task associated with a scope variance (additional work). The City provide direction through email to document any formal requests.

Assumptions

- 1. City staff will lead and attend any City Council or committee meetings. PACE will provide materials for said meetings, but its presence will not be required.
- 2. PACE will attend up to four (4) virtual progress meetings throughout the project at the following milestones
 - a. Review of the draft bidding documents.
 - b. Upon completion of the certified bid tabulation and recommendation of project award.
 - c. Review of the draft stormwater system analysis report.
 - d. Review of the final stormwater system analysis report.
- 3. A general summary of activities performed by PACE including meetings held during the reporting period will be included in the monthly status/progress report.

Deliverables

- 1. Meeting agendas and meeting summaries in electronic form (PDF format). One (1) electronic copy for each meeting.
- 2. Monthly status/progress reports and monthly invoices in electronic form (PDF format).

Task 2 – DEVELOPMENT OF BIDDING DOCUMENTS/BIDDING SUPPORT

PACE will create bidding documents so the City may procure a contractor to perform cleaning and videoed inspection of the portions of the system as requested by the City. PACE will provide a project manual that includes the following:

- 1. Section 1-Instruction to Bidders
- 2. Section 2-Contract Proposal Documentation Including a Proposal, Bid Schedule, Bid Bond Form, Statement of Bidder's Qualifications, Proposed Subcontractors, Non-Collusion Declaration, and Certificate of Compliance with Wage Payment Statutes.
- 3. Section 3-Contract Agreement Including the Agreement, Contract Bond and Certificate as To Corporate Principal.
- 4. Section 4-Special Provisions
- 5. Section 5-Appendicies Including Prevailing Wage Rates and A Figure That Provides The Location Of The Portions Of The Stormwater System To Be Cleaned/Video Inspected.

PACE will also provide bidding support services to the City under this task. Specifically included in this effort will include:

 PACE will review the bids received for completeness and accuracy in order to provide a Certified Bid Tabulation to the City.



2. PACE will review the apparent low bidder based on the certified bid tabulation to ensure that the contractor meets all applicable state, federal, and local requirements for project award and will provide a letter of Recommendation of Project Award to the City.

Assumptions

- 1. As the project is expected to be under the \$350,000 threshold, the City will procure the contractor through the small works roster method. The Municipal Research and Services Center (MRSC) contractor database will be utilized to obtain contact information for contractors that are listed that are qualified to perform the work. As such PACE will not be required to coordinate with any publications to fulfill advertisement requirements typical the traditional design-bid-build process. PACE also will not be required to coordinate with any physical or online plan holders services.
- 2. No design drawings will be produced for this task. The bid package will consist of a project manual with the elements listed above included.
- 3. The figure that is to be provided as an appendix in the project manual will be graphical in nature only. It will be produced based on GIS information provided by the City.
- 4. It is not anticipated that PACE will attend a formal bid opening. If PACE is to attend a bid opening it will be billed on a time and expense basis.

Deliverables

- 1. PACE will provide a draft project manual in electronic form (PDF format) for two reviews to be performed by the City prior to distribution for contractor procurement.
- 2. PACE will provide a project manual in electronic form (PDF format) based on the City's review initial review comments for distribution for contractor procurement.
- Certified Bid Tabulation in electronic form, within 2 days. (PDF format).
- 4. Recommendation of Project Award in electronic form (PDF format).

Task 3 - Contract Administration

PACE will provide administration of the CCTV contract. It is anticipated that the following tasks will be included in this task:

- 1. Facilitating and attendance at a pre-construction conference.
- 2. Reviewing requests for information (RFI's) from the contractor.
- 3. Reviewing traffic control plans submitted by the contractor.
- 4. Coordination of data transfer.
- 5. Processing of progress payments



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6. Facilitating project closeout.

Assumptions

- 1. For budgeting purposes, the number of RFI's anticipated is ten (10). If there are RFI's more than this estimate, it will require an additional services agreement (ASA) or will be billed on a time and expenses basis.
- 2. For budgeting purposes, the number of traffic control plans that are to be submitted is three (3). If there are additional traffic control plans more than this estimate, it will require an additional services agreement (ASA) or will be billed on a time and expenses basis.
- 3. The data transfer will be coordinated through the PACE sharepoint site. The City's project manager will have access to the site to obtain all data provided by the contractor
- 4. For budgeting purposes, the number of progress payments for processing is three (3). If there are additional progress payments above this estimate, it will require an additional services agreement (ASA) or will be billed on a time and expenses basis.

Deliverables

- PACE will provide a draft of the preconstruction conference agenda in electronic format for comment by the City. After any comments received from the City PACE will finalize the agenda and it will be distributed at the preconstruction conference in either paper copy or electronic format.
- 2. PACE will provide responses to up to 10 (ten) RFI's in electronic format to the contractor.
- 3. PACE will provide responses to up to 3 (three) traffic control plans in electronic format to the contractor.
- 4. PACE will provide up to 3 (three) progress payments in electronic form (PDF format) to the City for processing
- PACE will provide a completion of public works project and file with the Department of Revenue, Labor and Industry, and Employment Security upon completion of the project and receipt of the contractor's affidavit with Labor and Industry.

Task 4 – Inspection Review and Recommendation of Repair/Replacement

PACE will perform a review of the contractor provided video inspections of the stormwater system. As part of the review any anomalies in the pipes will be noted and classified per the Pipeline Assessment Certification Program's (PACP) anomaly code referencing system. PACE will use



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these observations and information to develop a report that proposes repair/replacement for all anomalies observed in the video of the system.

The City has expressed an interest in using a company that analyzes the video inspection by utilizing artificial intelligence (AI). This task includes coordination with the chosen company and a comparison between the AI results and the results from PACE to determine the accuracy of the AI inspection results. PACE will note the comparison in the report provided to the City and provide an analysis of the accuracy of the AI findings vs. the traditional visual inspection.

Included in this task is preparation of a presentation that is to be given at an industry event such as an American Public Works Association (or similar organization) conference. The presentation will highlight the results found in the comparison between the AI results and the traditional CCTV inspection.

Assumptions

- As the exact condition of the pipes is unknown, for budgeting purposes the number of anomalies in the system that are anticipated to be addressed is 340 (approximately 1 anomaly for every 50 feet of pipe inspected). Effort expended to analyze/provide recommendations for anomalies in excess of this estimate will require an additional services agreement (ASA) or will be billed on a time and expenses basis.
- 2. As the existing surface conditions above the pipe locations are not to be topographically surveyed, the recommendations for pipe repair/replacement will strictly be driven by the video inspection itself rather than any surface restoration efforts/requirements.
- The report will include recommendations for pipe repair/replacement and will not include any analysis of existing drainage structures such as catch basins, storm drain manholes, flow splitters, water quality/detention facilities ect.
- 4. No design drawings will be produced for this task. The report will include a map that is graphical in nature that shows the location of all anomalies analyzed.
- 5. PACE will coordinate with the company that is to provide the AI analysis of the CCTV inspection. However, this company will not be a PACE subconsultant.
- 6. For budgeting purposes, it is anticipated that approximately 5,000 LF of stormwater conveyance piping will be analyzed by the company providing the AI analysis. Any additional pipe that was analyzed by said company that requires a comparison between results will require an ASA or will be billed on a time and material basis.
- 7. It is assumed that PACE will prepare the presentation for inclusion at an industry event or conference. The presentation will be in PowerPoint format and will consist of 20-40 slides that highlight the project and its results.



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8. PACE will not be reimbursed for attendance at said industry event or conference.

Deliverables

- 1. PACE will provide a draft pipe assessment report in electronic form (PDF format) for one review to be performed by the City.
- 2. PACE will provide a final pipe assessment report in electronic form (PDF format) based on the City's review initial review comments.
- 3. PACE will provide the City with a database in GIS that includes all data of each of the anomalies analyzed.
- 4. PACE will provide a final presentation in PowerPoint format.





PACE Engineers

Project Budget Worksheet - 2024

| Project Name | | Tukwila St | tormwater Syste | em Assessment | | Location: | | | | Prepared By: | | JF | | | |
|--|--------------|-----------------------|-------------------------|--------------------------|--------------------|-------------------------------|-------------------------------|-------------|--|--------------|----------|----|-----------|------------|--------------|
| Project #: | | | | Billing Group #: | | | Task #: | | | _ | Date: | | 9/24/2024 | | |
| | • | | • | | | - | Labor Hours by Cla | ssification | | | | | | | İ |
| | Labor | | | | | | _ | | | | | | | | |
| Staff Type # (See Labor Rates Table) | Code | 10 | 13 | 18 | 67 | 118 | 4 | | | | | | | | |
| Staff Type Hourly Rate | | \$272 | \$222 | \$136 | \$194 | \$151 | \$10,000 | | | | | | | | |
| Staff Name (optional) | 1-1- | Data start | C- Di | In Englanding | 0010 | Co. Doole at Ad | Door in and Management | | | | | | | | |
| D 1 17 1 TH | Job Title | Principal Engineer | Sr. Project Engineer | Jr. Engineering Staff | Sr. GIS Analyst | Sr. Project Ad ministrator | Project Management Reserve | | | | | | | Hour Total | 5 II T. I |
| Drawing/Task Title | Title | _ | Engineer | Stati | Anatyst | ministrator | Reserve | | | <u> </u> | <u> </u> | | | | Dollar Total |
| Task 1-Project Management | | 20 | | | | | | | | | <u> </u> | - | | 20.0 | \$5,440.00 |
| Project Management Reserve | | | | | | | 1 | | | | | | | 1.0 | \$10,000.00 |
| Task 2-Development of Bidding Documents/Bidding Support | | 8 | 16 | | 4 | 16 | | | | | | | | 44.0 | \$8,920.00 |
| Task 3-Contract Administration | | 4 | 16 | 16 | | | | | | | | | | 36.0 | \$6,816.00 |
| Task 4-Inspection Review and Recommendation of Repair/Replacement | | 20 | 24 | 170 | 8 | 32 | | | | | | | | 254.0 | \$40,272.00 |
| | | | | | | | | | | | | | | | |
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| | | | | | | | | | | | | | | | |
| Hours Total | | 52.0 | 56.0 | 186.0 | 12.0 | 48.0 | 1.0 | | | | | | | 355.0 | |
| Labor Total | | \$14,144 | \$12,432 | \$25,296 | \$2,328 | \$7,248 | \$10,000 | | | | | | | 000.0 | \$71,448.00 |

| Expenses | Reimbursable | | | |
|---|--------------|----------|----------|--|
| | rate/unit | Quantity | Cost | |
| Project Administration (enter estimated months) | \$60.00 | 6 | \$360.00 | |
| Postage/Courier | | | | |
| Printing Costs | | | | |
| Photo/Video | | | | |
| Mileage/Travel/Per Diem | | | | |
| Miscellaneous | | | | |
| | Total | | \$360.00 | |

| Subconsultants | | |
|------------------------|-------|-----|
| Utility Locate | | |
| Mechanical Engineer | | |
| Electrical Engineer | | |
| Geotechnical Engineer | | |
| I & C Engineer | | |
| Subconsultant Subtotal | | |
| Markup | | 15% |
| | Total | |

| PACE Billed Labor Total | \$71,448.00 |
|-------------------------|-------------|
| Reimbursable Expenses | \$360.00 |
| Subconsultants | |
| Total Project Budget | \$71,808.00 |