<u>MEMORANDUM</u>

TO: Board of Trustees

THROUGH: Indra Winquest

District General Manager

FROM: Brad Underwood, PE

Director of Public Works

SUBJECT: Approve a professional services agreement to develop the

Utility Infrastructure Masterplan, Project: 2097DI2202 – Fund: Utilities; Division: Shared; Vendor: Farr West Engineering, in the amount of \$409,000, plus approximately 10% contingency

STRATEGIC

PLAN REFERENCE: Long Range Principle #5 – Assets and Infrastructure

DATE: October 12, 2022

I. <u>RECOMMENDATION</u>

That the Board of Trustees make a motion to:

- 1. Approve a professional services agreement develop the Utility Infrastructure Masterplan, Project: 2097DI2202 Fund: Utilities; Division: Shared; Vendor: Farr West Engineering, in the amount of \$409,000, plus approximately 10% contingency.
- 2. Authorize \$39,621 in contingency to allow for unforeseen work that is beneficial for completion of the Utility Infrastructure Masterplan and authorize Staff to expend up to this amount if needed.

II. <u>BACKGROUND</u>

Public Works Staff identified a need for a complete Utility Infrastructure Masterplan to provide an in-depth review of all water, wastewater and SCADA infrastructure conditions and provide a road map for 20 year capital improvement planning. The consultant will perform a risk and condition assessment of the District's facilities, meet with operations and engineering staff, perform hydraulic water and sewer modeling, and prepare the District's Utility Infrastructure

October 12, 2022

Masterplan for the Water and Sewer systems. The proposed scope of work is included herein as Attachment A.

The RFP required responses to include three components to the Utility Infrastructure Masterplan as follows: Water, Sewer, and SCADA systems. However, after receiving the cost proposal from Farr West including all three components in the scope of work, it exceeded the amount available in the Capital Project budget Attachment B. The full cost of the SCADA portion of the Masterplan is approximately \$154,000, which would greatly exceed the project budget. Therefore, Staff worked with the consultant to eliminate the SCADA system portion of the Utility Infrastructure Masterplan to stay within budget. This change also provides funds for Staff time to be charged to the project. By making this change in scope, the District will receive the desired outcome for the Water and Sewer systems Utility Infrastructure Masterplans.

Public Works Staff intends to budget for the SCADA system component of the Utility Infrastructure Masterplan in the FY23/24 CIP.

In accordance with Board Policy 3.1.0., 0.15 Consent Calendar, this item is included on the Consent Calendar as it is routine business of the District and within the currently approved District Budget.

III. BID RESULTS

On June 24, 2022, Staff advertised a Request for Proposals on Planet Bids and Tahoe Daily Tribune for professional services. Two qualified engineering firms, Farr West Engineering and Carollo Engineers, submitted responsive proposals on August 17, 2022. Based on review of the submitted project scopes of work, project team, experience and references, Staff has determined that Farr West Engineering is the most qualified firm for this project, and recommends award of the work to them.

The project has an anticipated start date of October 15, 2022 and work is to be substantially complete by November 2023.

IV. FINANCIAL IMPACT AND BUDGET

The 2022/2023 Capital Improvement Program Budget under shared utilities, the Utility Masterplan (Project CIP2097DI2202 – see Attachment B, data sheet) includes a budget of \$500,000 in the FY22/23. PW Staff has provided a redlined version of the modified budget data sheet to include internal staff time of \$51,000

Review, discuss, and approve a professional services agreement with Farr West Engineering to develop the Utility Infrastructure Masterplan (CIP2097DI2202), in the amount of \$409,000.

and the development of the Masterplan of \$449,000 (which includes the recommended contingency).

V. **ALTERNATIVES**

Supplement the existing CIP project budget with fund balance from the Utility Fund in the approximate amount of \$160,000 to cover the cost for the SCADA system component of the Utility Infrastructure Masterplan, which includes funds for the prime consultant markup and Staff time. This action would allow for the completion of all three components.

VI. STRATEGIC PLAN REFERENCE(S)

Long Range Principle 5 – Assets and Infrastructure – The District will practice perpetual asset renewal, replacement, and improvement to provide safe and superior long term utility services and recreation venues, facilities and services.

- Maintain, renew, expand, and enhance District infrastructure to meet the capacity needs and desires of the community for future generations.
- Maintain, procure, and construct District assets to ensure safe and accessible operations for the public and the District's workforce.

VII. **BUSINESS IMPACT**

This item is not a "rule" within the meaning of Nevada Revised Statutes, Chapter 237, and does not require a Business Impact Statement.

INCLINE VILLAGE GENERAL IMPROVEMENT DISTRICT PROFESSIONAL SERVICES AGREEMENT

1. PARTIES AND DATE.

This Agreement is made and entered into this 20th day of September 2022, by and between the Incline Village General Improvement District, a Nevada general improvement district ("District") and **FARR WEST ENGINEERING**, a Nevada Corporation, with its principal place of business at 5510 Longley Lane in Reno, Nevada ("Consultant"). The District and Consultant are sometimes individually referred to as "Party" and collectively as "Parties."

2. RECITALS.

- 2.1 <u>District</u>. District is a general improvement district organized under the laws of the State of Nevada, with power to contract for services necessary to achieve its purpose.
- 2.2 <u>Consultant</u>. Consultant desires to perform and assume responsibility for the provision of certain professional engineering services required by the District on the terms and conditions set forth in this Agreement. Consultant represents that it is experienced in providing engineering services to public clients, is licensed in the State of Nevada, and is familiar with the plans of District.
- 2.3 <u>Project</u>. District desires to engage Consultant to render professional services for the District's Utility Master Plan Water and Wastewater ("Project").

TERMS.

3.1 Scope of Services and Term.

- 3.1.1 General Scope of Services. Consultant promises and agrees to furnish to the District, all labor, materials, tools, equipment, services, and incidental and customary work necessary to fully and adequately supply professional consulting services in connection with the development of a comprehensive Water and Wastewater Utility Masterplan ("Services"). The types of services to be provided are more particularly described in Exhibit A attached hereto and incorporated herein by reference. All Services shall be subject to, and performed in accordance with this Agreement, the exhibits attached hereto and incorporated herein by reference, and all applicable local, state and federal laws, rules and regulations. As described in Section 3.3, the District shall pay for such services in accordance with the Schedule of Charges set forth in Exhibit A.
- 3.1.2 <u>Term.</u> The term of this Agreement shall be from <u>October 2022 to November 2023</u>, unless earlier terminated as provided herein. The Parties may, by mutual, written consent, extend the term of this Agreement if necessary to complete the Project.

3.2 Responsibilities of Consultant.

3.2.1 <u>Control and Payment of Subordinates; Independent Contractor</u>. The Services shall be performed by Consultant or under its supervision. Consultant will determine the means,

methods and details of performing the Services subject to the requirements of this Agreement and such directions and amendments from District as herein provided. The District retains Consultant on an independent contractor basis and not as an employee. No employee or agent of Consultant shall become an employee of District. Any additional personnel performing the Services under this Agreement on behalf of Consultant shall also not be employees of the District and shall at all times be under Consultant's exclusive direction and control. Consultant shall pay all wages, salaries, and other amounts due such personnel in connection with their performance of Services under this Agreement and as required by law. Consultant shall be responsible for all reports and obligations respecting such additional personnel, including, but not limited to: social security taxes, income tax withholding, unemployment insurance, disability insurance, and workers' compensation insurance.

- 3.2.2 <u>Schedule of Services</u>. Consultant shall perform its services in a prompt and timely manner within the term of this Agreement and shall commence performance upon receipt of written notice from the District to proceed ("Notice to Proceed") The Notice to Proceed shall set forth the date of commencement of work.
- 3.2.3 <u>Conformance to Applicable Requirements</u>. All work prepared by Consultant shall be subject to the District's approval.
- 3.2.4 <u>Substitution of Key Personnel</u>. Consultant has represented to the District that certain key personnel will perform and coordinate the Services under this Agreement. Should one or more of such personnel become unavailable, Consultant may substitute other personnel of at least equal competence subject to the District's written approval. In the event that the District and Consultant cannot agree as to the substitution of key personnel, the District shall be entitled to terminate this Agreement for convenience. As discussed below, any personnel who fail or refuse to perform the Services in a manner acceptable to the District, or who are determined by the District to be uncooperative, incompetent, a threat to the adequate or timely completion of the Project or a threat to the safety of persons or property, shall be promptly removed from the Project by the Consultant at the request of the District. The key personnel for performance of this Agreement are as follows: Lucas Tipton.
- 3.2.5 <u>District's Representative</u>. The District hereby designates Engineering Manager Kate Nelson or her designee, to act as its representative for the performance of this Agreement ("District's Representative"). The District's Representative shall have the power to act on behalf of the District for all purposes under this Contract. Consultant shall not accept direction or orders from any person other than the District's Representative or her designee.
- 3.2.6 Consultant's Representative. Consultant hereby designates Lucas Tipton or his designee, to act as its representative for the performance of this Agreement ("Consultant's Representative"). Consultant's Representative shall have full authority to represent and act on behalf of the Consultant for all purposes under this Agreement. The Consultant's Representative shall supervise and direct the Services, using his best skill and attention, and shall be responsible for all means, methods, techniques, sequences and procedures and for the satisfactory coordination of all portions of the Services under this Agreement.
- 3.2.7 <u>Coordination of Services</u>. Consultant agrees to work closely with the District staff in the performance of Services and shall be available to the District's staff, consultants and other staff at all reasonable times.

- 3.2.8 Standard of Care; Performance of Employees. Consultant shall perform all Services under this Agreement in a skillful and competent manner, consistent with the standards generally recognized as being employed by professionals in the same discipline in the State of Nevada. Consultant represents and maintains that it is skilled in the professional calling necessary to perform the Services. Consultant warrants that all employees and subcontractors shall have sufficient skill and experience to perform the Services assigned to them. Finally, Consultant represents that it, its employees and subcontractors have all licenses, permits, qualifications and approvals of whatever nature that are legally required to perform the Services, including a Washoe County Business License, and that such licenses and approvals shall be maintained throughout the term of this Agreement. As provided for in the indemnification provisions of this Agreement, Consultant shall perform, at its own cost and expense and without reimbursement from the District, any services necessary to correct errors or omissions which are caused by the Consultant's failure to comply with the standard of care provided for herein. Any employee of the Consultant or its sub-consultants who is determined by the District to be uncooperative, incompetent, a threat to the adequate or timely completion of the Project, a threat to the safety of persons or property, or any employee who fails or refuses to perform the Services in a manner acceptable to the District, shall be promptly removed from the Project by the Consultant and shall not be re-employed to perform any of the Services or to work on the Project.
- 3.2.9 <u>Laws and Regulations</u>. Consultant shall keep itself fully informed of and in compliance with all applicable local, state and federal laws, rules and regulations in any manner affecting the performance of the Project or the Services, and shall give all notices required by law. If required, Consultant shall assist District, as requested, in obtaining and maintaining all permits required of Consultant by federal, state and local regulatory agencies. Consultant shall be liable for all violations of local, state and federal laws, rules and regulations in connection with the Project and the Services. If the Consultant performs any work knowing it to be contrary to such laws, rules and regulations and without giving written notice to the District, Consultant shall be solely responsible for all costs arising therefrom. Consultant shall defend, indemnify and hold the District, its officials, directors, officers, employees and agents free and harmless, pursuant to the indemnification provisions of this Agreement, from any claim or liability arising out of any failure or alleged failure to comply with such laws, rules or regulations.

3.2.10 Insurance.

- 3.2.10.1 <u>Time for Compliance</u>. Consultant shall not commence the Services under this Agreement until it has provided evidence satisfactory to the District that it has secured all insurance required under this section. In addition, Consultant shall not allow any subcontractor to commence work on any subcontract until it has provided evidence satisfactory to the District that the subcontractor has secured all insurance required under this section.
- 3.2.10.2 Minimum Requirements. Consultant shall, at its expense, procure and maintain for the duration of the Agreement insurance meeting the requirements set forth herein. Consultant shall also require all of its subcontractors to procure and maintain the same insurance for the duration of the Agreement. Such insurance shall meet at least the following minimum levels of coverage:
 - (A) <u>Minimum Limits of Insurance</u>. Consultant shall maintain limits no less than: (1) General Liability: A minimum of \$2,000,000 per occurrence for bodily injury, personal injury and property damage. If Commercial General Liability Insurance

or other form with general aggregate limit is used, either the general aggregate limit shall apply separately to this Agreement/location or the general aggregate limit shall be twice the required occurrence limit; (2) *Automobile Liability:* A minimum of \$1,000,000 combined single limit (each accident) for bodily injury and property damage; and (3) *Industrial Insurance:* Workers' Compensation limits as required by the Labor Code of the State of Nevada. Employer's Liability limits of \$1,000,000 per accident for bodily injury or disease; and (4) *Professional Liability/Errors and Omissions:* Consultant shall procure and maintain, and require its sub-consultants to procure and maintain, for a period of five (5) years following completion of the Services, professional liability/errors and omissions liability insurance appropriate to their profession. Such insurance shall be in an amount not less than \$1,000,000 per claim, and shall be endorsed to include contractual liability. "Covered Professional Services" as designated in the Professional Liability/Errors and Omissions policy must specifically include work performed under this Agreement.

Requirements of specific coverage or limits contained in this section are not intended as a limitation on coverage, limits, or other requirement, or a waiver of any coverage normally provided by any insurance. Any available coverage shall be provided to the parties required to be named as additional insured pursuant to this Agreement. Defense costs shall be payable in addition to the limits.

- 3.2.10.3 <u>Insurance Endorsements</u>. The insurance policies shall contain the following provisions, or Consultant shall provide endorsements on forms supplied or approved by the District to add the following provisions to the insurance policies:
 - (A) Commercial General Liability. The commercial general liability policy shall be endorsed to provide the following: (1) the District, its directors, officials, officers, employees, and agents shall be covered as additional insureds; (2) the insurance coverage shall be primary insurance as respects the District, its directors, officials, officers, employees, and agents, or if excess, shall stand in an unbroken chain of coverage excess of the Consultant's scheduled underlying coverage. Any insurance or self-insurance maintained by the District, its directors, officials, officers, employees, and agents shall be excess of the Consultant's insurance and shall not be called upon to contribute with it in any way; and (3) the insurance coverage shall contain or be endorsed to provide waiver of subrogation in favor of the District, its directors, officials, officers, employees, and agents or shall specifically allow Consultant to waive its right of recovery prior to a loss. Consultant hereby waives its own right of recovery against District, and shall require similar written express waivers and insurance clauses from each of its subconsultants.
 - (B) Automobile Liability. The automobile liability policy shall be endorsed to provide the following: (1) the District, its directors, officials, officers, employees, and agents shall be covered as additional insureds with respect to the ownership, operation, maintenance, use, loading or unloading of any auto owned, leased, hired or borrowed by the Consultant or for which the Consultant is responsible; (2) the insurance coverage shall be primary insurance as respects the District, its directors, officials, officers, employees, and agents, or if excess, shall stand in an unbroken chain of coverage excess of the Consultant's scheduled underlying coverage. Any insurance or self-insurance maintained by the District, its directors, officials, officers, employees, and agents shall be excess of the Consultant's insurance and shall not be called upon to contribute with it in any way; and (3) the

insurance coverage shall contain or be endorsed to provide waiver of subrogation in favor of the District, its directors, officials, officers, employees, and agents or shall specifically allow Consultant to waive its right of recovery prior to a loss. Consultant hereby waives its own right of recovery against District, and shall require similar written express waivers and insurance clauses from each of its subconsultants.

- (C) <u>Industrial (Workers' Compensation and Employers Liability) Insurance</u>. The insurer shall agree to waive all rights of subrogation against the District, its directors, officials, officers, employees, and agents for losses paid under the terms of the insurance policy which arise from work performed by the Consultant.
- (D) All Coverages. Each insurance policy required by this Agreement shall be endorsed to state that: (A) coverage shall not be suspended, voided, reduced or canceled except after thirty (30) days prior written notice by certified mail, return receipt requested, has been given to the District; and (B) any failure to comply with reporting or other provisions of the policies, including breaches of warranties, shall not affect coverage provided to the District, its directors, officials, officers, employees, and agents.
- 3.2.10.4 <u>Separation of Insureds; No Special Limitations</u>. All insurance required by this Section shall contain standard separation of insureds provisions. In addition, such insurance shall not contain any special limitations on the scope of protection afforded to the District, its directors, officials, officers, employees, agents and volunteers.
- 3.2.10.5 <u>Deductibles and Self-Insurance Retentions</u>. Any deductibles or self-insured retentions must be declared to and approved by the District. Consultant shall guarantee that, at the option of the District, either: (1) the insurer shall reduce or eliminate such deductibles or self-insured retentions as respects the District, its directors, officials, officers, employees, agents and volunteers; or (2) the Consultant shall procure a bond guaranteeing payment of losses and related investigation costs, claims and administrative and defense expenses.
- 3.2.10.6 <u>Acceptability of Insurers</u>. Insurance is to be placed with insurers duly licensed or authorized to do business in the state of Nevada and with an "A.M. Best" rating of not less than A-V. The District in no way warrants that the above-required minimum insurer rating is sufficient to protect the Consultant from potential insurer insolvency.
- 3.2.10.7 Verification of Coverage. Consultant shall furnish the District with original certificates of insurance and endorsements effecting coverage required by this Agreement on forms satisfactory to the District. The certificates and endorsements for each insurance policy shall be signed by a person authorized by that insurer to bind coverage on its behalf, and shall be on forms provided by the District if requested. All certificates and endorsements must be received and approved by the District before work commences. The District reserves the right to require complete, certified copies of all required insurance policies, at any time.
- 3.2.10.8 <u>Subconsultants</u>. Consultant shall not allow any subcontractors or subconsultants to commence work on any subcontract until they have provided evidence satisfactory to the District that they have secured all insurance required under this section. Policies of commercial general liability insurance provided by such subcontractors or subconsultants shall be endorsed to name the District as an additional insured using ISO form CG 20 38

- 04 13 or an endorsement providing the exact same coverage. If requested by Consultant, District may approve different scopes or minimum limits of insurance for particular subcontractors or subconsultants.
- 3.2.10.9 Compliance with Coverage Requirements. If at any time during the life of the Agreement, any policy of insurance required under this Agreement does not comply with these specifications or is canceled and not replaced, District has the right but not the duty to obtain the insurance it deems necessary and any premium paid by District will be promptly reimbursed by Consultant or District will withhold amounts sufficient to pay premium from Consultant payments. In the alternative, District may terminate this Agreement for cause.
- 3.2.11 <u>Safety</u>. Consultant shall execute and maintain its work so as to avoid injury or damage to any person or property. In carrying out its Services, the Consultant shall at all times be in compliance with all applicable local, state and federal laws, rules and regulations, and shall exercise all necessary precautions for the safety of employees appropriate to the nature of the work and the conditions under which the work is to be performed.

3.3 Fees and Payments.

- 3.3.1 Compensation. Consultant shall receive compensation, including authorized reimbursements, for all Services rendered under this Agreement in accordance with the Schedule of Charges set forth in Exhibit A, attached hereto and incorporated herein by reference. The total compensation to be provided under this Agreement shall not exceed Four Hundred Nine Thousand Dollars (\$409,000.00) without written approval of District's Director of Public Works. Extra Work may be authorized, as described below; and if authorized, said Extra Work will be compensated at the rates and manner set forth in this Agreement.
- 3.3.2 Payment of Compensation. Consultant shall submit to District a monthly itemized invoice which indicates work completed and hours of Services rendered by Consultant. The invoice shall describe the amount of Services and supplies provided since the initial commencement date of Services under this Agreement, and since the start of the subsequent billing periods, through the date of the invoice. Invoices shall be sent to invoices@ivgid.org, with a copy to rlr@ivgid.org. Consultant shall include a Project Task Tracking Sheet with each invoice submitted. District shall, within thirty (30) days of receiving such invoice and Project Task Tracking Sheet, review the invoice and pay all approved charges thereon.
- 3.3.3 <u>Reimbursement for Expenses</u>. Consultant shall not be reimbursed for any expenses unless authorized under Exhibit A, or otherwise in writing by the District.
- 3.3.4 Extra Work. At any time during the term of this Agreement, the District may request that Consultant perform Extra Work. As used herein, "Extra Work" means any work which is determined by the District to be necessary for the proper completion of the Project, but which the Parties did not reasonably anticipate would be necessary at the execution of this Agreement. Consultant shall not perform, nor be compensated for, Extra Work without written authorization from the District's Representative. Where Extra Work is deemed merited by the District, an amendment to the Agreement shall be prepared by the District and executed by both Parties before performance of such Extra Work, or the District will not be required to pay for the changes in the scope of work. Such amendment shall include the change in fee and/or time schedule associated with the Extra Work.

Amendments for Extra Work shall not render ineffective or invalidate unaffected portions of this Agreement.

3.4 Accounting Records.

3.4.1 <u>Maintenance and Inspection</u>. Consultant shall maintain accurate and complete books, documents, accounting records and other records pertaining to the Services for six (6) years (or longer as required by applicable law) from the date of final payment under this Agreement. Consultant shall make such records available to the District for inspection, audit, examination, reproduction, and copying at Consultant's offices at all reasonable times. However, if requested, Consultant shall furnish copies of said records at its expense to the District, within seven (7) business days of the request.

3.5 General Provisions.

- 3.5.1 Termination of Agreement.
- 3.5.1.1 Grounds for Termination. The District may, by written notice to Consultant, terminate the whole or any part of this Agreement at any time and without cause by giving written notice to Consultant of such termination, and specifying the effective date thereof, at least seven (7) days before the effective date of such termination. Upon termination, Consultant shall be compensated only for those services which have been adequately rendered to the District, and Consultant shall be entitled to no further compensation. Consultant may not terminate this Agreement except for cause. Consultant shall not be entitled to payment for unperformed Services, and shall not be entitled to damages or compensation for termination of this Agreement by District except for the amounts authorized herein.
- 3.5.1.2 Effect of Termination. If this Agreement is terminated as provided herein, the District may require Consultant to provide all finished or unfinished Documents and Data (defined below) and other information of any kind prepared by Consultant in connection with the performance of Services under this Agreement. Consultant shall be required to provide such documents and other information within fifteen (15) days of the request.
- 3.5.1.3 <u>Additional Services</u>. In the event this Agreement is terminated in whole or in part as provided herein, the District may procure, upon such terms and in such manner as it may determine appropriate, services similar to those terminated.
- 3.5.2 <u>Delivery of Notices</u>. All notices permitted or required under this Agreement shall be given to the respective Parties at the following address, or at such other address as the respective parties may provide in writing for this purpose:

District

Incline Village General Improvement District 893 Southwood Blvd. Incline Village, NV 89451 Attn: Kate Nelson, P.E.

Consultant

Farr West Engineering 5510 Longley Lane Reno, Nevada 89511 Attn: Lucas Tipton

Such notice shall be deemed made when personally delivered or when mailed, forty-eight (48) hours after deposit in the U.S. Mail, first class postage prepaid and addressed to the Party at its applicable address. Actual notice shall be deemed adequate notice on the date actual notice occurred, regardless of the method of service.

- 3.5.3 Ownership of Materials and Confidentiality.
- 3.5.3.1 <u>Documents & Data</u>. All source code, reports, programs, manuals, disks, tapes, and any other material prepared by or worked upon by Consultant for the Services shall be the exclusive property of the District, and the District shall have the right to obtain from Consultant and to hold in District's name copyrights, trademark registrations, patents, or whatever protection Consultant may appropriate to the subject matter. Consultant shall provide District with all assistance reasonably required to perfect the rights in this subsection.
- 3.5.3.2 Confidentiality. All ideas, memoranda, specifications, plans, procedures, drawings, descriptions, computer program data, input record data, written information, and other Documents and Data either created by or provided to Consultant in connection with the performance of this Agreement shall be held confidential by Consultant. Such materials shall not, without the prior written consent of the District, be used by Consultant for any purposes other than the performance of the Services. Nor shall such materials be disclosed to any person or entity not connected with the performance of the Services or the Project. Nothing furnished to Consultant which is otherwise known to Consultant or is generally known, or has become known, to the related industry shall be deemed confidential. Consultant shall not use the District'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 or other similar medium without the prior written consent of the District.
- 3.5.4 <u>Cooperation; Further Acts.</u> The Parties shall fully cooperate with one another, and shall take any additional acts or sign any additional documents as may be necessary, appropriate or convenient to attain the purposes of this Agreement.
- 3.5.5 <u>Attorney's Fees</u>. If either Party commences an action against the other Party, either legal, administrative or otherwise, arising out of or in connection with this Agreement, the prevailing party in such litigation shall be entitled to have and recover from the losing party reasonable attorney's fees and all other costs of such action.
- 3.5.6 Indemnification. To the fullest extent permitted by law, Consultant shall defend, indemnify and hold the District, its officials, officers, employees, , and agents free and harmless from any and all claims, demands, causes of action, costs, expenses, liability, loss, damage or injury, in law or equity, to property or persons, including wrongful death, in any manner arising out of, pertaining to, or relating to any negligence or willful misconduct of Consultant, its officials, officers, employees, agents, consultants, and contractors arising out of or in connection with the performance of the Services, the Project, or this Agreement, including without limitation the payment of all consequential damages, expert witness fees, and attorney's fees and other related costs and expenses. Consultant shall defend, at Consultant's own cost, expense and risk, any and all such aforesaid suits, actions or other legal proceedings of every kind that may be brought or instituted against District, its directors, officials, officers, employees, or agents. Consultant shall pay and satisfy any judgment, award or decree that may be rendered against District or its directors, officials, officers, employees, or agents, in any such suit, action or other legal proceeding. Consultant shall reimburse District and its directors, officials, officers, employees, agents, and/or volunteers, for any and all legal expenses and costs incurred by each of them in connection therewith or in enforcing the indemnity herein provided, including correction of errors and omissions. Consultant's obligation to indemnify shall not

- be restricted to insurance proceeds, if any, received by the District, its directors, officials, officers, employees, agents or volunteers.
- 3.5.6.1 <u>Design Professional</u>. To the extent required by NRS 338.155, Consultant's obligation to defend, indemnify, and hold District, its officials, officers, employees, and agents free and harmless shall not include any liability, damage, loss, claim, action or proceeding caused by the negligence, errors, omissions, recklessness or intentional misconduct of the employees, officers or agents of the District. Moreover, Consultant's obligation to defend, indemnify, and hold District, its officials, officers, employees, , and agents free and harmless from any liability, damage, loss, claim, action or proceeding caused by the negligence, errors, omissions, recklessness or intentional misconduct of the Consultant or the employees or agents of the Consultant which are based upon or arising out of the professional services of the Consultant. If the Consultant is adjudicated to be liable by a trier of fact, the trier of fact shall award reasonable attorney's fees and costs to be paid to the District, as reimbursement for the attorney's fees and costs incurred by the District in defending the action, by the Consultant in an amount which is proportionate to the liability of the Consultant. This Section shall only apply to the extent required by NRS 338.155 and shall not otherwise limit Consultant's obligation to defend, indemnify and hold the District harmless as required under Section 3.5.6.
- 3.5.7 <u>Entire Agreement</u>. This Agreement contains the entire Agreement of the Parties with respect to the subject matter hereof, and supersedes all prior negotiations, understandings or agreements. This Agreement may only be modified by a writing signed by both Parties.
- 3.5.8 <u>Governing Law</u>. This Agreement shall be governed by the laws of the State of Nevada. Venue shall be in Washoe County.
- 3.5.9 Time of Essence. Time is of the essence for each and every provision of this Agreement.
- 3.5.10 <u>District's Right to Employ Other Consultants</u>. The District reserves right to employ other consultants in connection with this Project.
- 3.5.11 <u>Successors and Assigns</u>. This Agreement shall be binding on and shall inure to the benefit of the successors in interest, executors, administrators and assigns of each Party.
- 3.5.12 <u>Assignment or Transfer</u>. Consultant shall not assign, hypothecate, or transfer, either directly or by operation of law, this Agreement or any interest herein without the prior written consent of the District. Any attempt to do so shall be null and void, and any assignees, hypothecates or transferees shall acquire no right or interest by reason of such attempted assignment, hypothecation or transfer.
- 3.5.13 <u>Subcontracting</u>. Consultant shall not subcontract any portion of the work required by this Agreement, except as expressly stated herein, without prior written approval of District. Subcontracts, if any, shall contain a provision making them subject to all provisions stipulated in this Agreement.
- 3.5.14 Construction; References; Captions. Since the Parties or their agents have participated fully in the preparation of this Agreement, the language of this Agreement shall be construed simply, according to its fair meaning, and not strictly for or against any Party. Any term referencing time, days or period for performance shall be deemed calendar days and not work days. All references to Consultant include all personnel, employees, agents, and subcontractors of Consultant, except as otherwise specified in this Agreement. All

- references to the District include its officials, officers, employees, agents, and volunteers except as otherwise specified in this Agreement. The captions of the various articles and paragraphs are for convenience and ease of reference only, and do not define, limit, augment, or describe the scope, content, or intent of this Agreement.
- 3.5.15 <u>Amendment; Modification</u>. No supplement, modification, or amendment of this Agreement shall be binding unless executed in writing and signed by both Parties.
- 3.5.16 <u>Waiver</u>. No waiver of any default shall constitute a waiver of any other default or breach, whether of the same or other covenant or condition. No waiver, benefit, privilege, or service voluntarily given or performed by a Party shall give the other Party any contractual rights by custom, estoppel, or otherwise.
- 3.5.17 <u>No Third Party Beneficiaries</u>. There are no intended third party beneficiaries of any right or obligation assumed by the Parties.
- 3.5.18 <u>Invalidity; Severability</u>. If any portion of this Agreement is declared invalid, illegal, or otherwise unenforceable by a court of competent jurisdiction, the remaining provisions shall continue in full force and effect.
- 3.5.22 <u>Authority to Enter Agreement.</u> Consultant has all requisite power and authority to conduct its business and to execute, deliver, and perform the Agreement. Each Party warrants that the individuals who have signed this Agreement have the legal power, right, and authority to make this Agreement and bind each respective Party.
- 3.5.23 <u>Counterparts</u>. This Agreement may be signed in counterparts, each of which shall constitute an original.
- 3.5.24 <u>Limitation of Liability</u>. The District does not and will not waive and expressly reserves all available defenses and limitations contained in Chapter 41 of the Nevada Revised Statutes. Contract liability of both parties shall not be subject to punitive damages.
- 3.5.25 <u>Non-Appropriations</u>. The District may terminate this Agreement, effective immediately upon receipt of written notice on any date specified if for any reason the District's funding source is not appropriated or is withdrawn, limited, or impaired.
- 3.5.26 Compliance with Laws. Consultant shall keep itself fully informed of and in compliance with all local, state and federal laws, rules and regulations in any manner affecting the performance of the Project or the Services. Consultant shall not discriminate against any person on the grounds of race, color, creed, religion, sex, sexual orientation, gender identity or gender expression, age, disability, national origin or any other status protected under any applicable law. Consultant is not currently engaged in, and during the duration of the Agreement shall not engage in, a Boycott of Israel. The term "Boycott of Israel" has the meaning ascribed to that term in NRS 332.065. Consultant shall be responsible for all fines, penalties, and repayment of any State of Nevada or federal funds (including those that the District pays, becomes liable to pay, or becomes liable to repay) that may arise as a direct result of the Consultant's non-compliance with this subsection.
- 3.5.27 <u>Prohibited Interests</u>. Consultant maintains and warrants that it has not employed nor retained any company or person, other than a bona fide employee working solely for Consultant, to solicit or secure this Agreement. Further, Consultant warrants that it has not paid nor has it agreed to pay any company or person, other than a bona fide employee

working solely for Consultant, any fee, commission, percentage, brokerage fee, gift or other consideration contingent upon or resulting from the award or making of this Agreement. For breach or violation of this warranty, District shall have the right to rescind this Agreement without liability. For the term of this Agreement, no member, officer or employee of District, during the term of his or her service with District, shall have any direct interest in this Agreement, or obtain any present or anticipated material benefit arising therefrom.

OWNER: INCLINE VILLAGE G. I. D. Agreed to:	CONTRACTOR: FARR WEST ENGINEERING Agreed to:
Ву:	Ву:
Brad B. Underwood, P. E. Director of Public Works	Signature of Authorized Agent
	Print or Type Name and Title
Date	- Date
Reviewed as to Form:	
Joshua Nelson District General Counsel	If Contractor is a corporation, attach evidence of authority to sign.
 Date	-

SCOPE OF WORK

Incline Village General Improvement District Water and Sewer System Master Plan

INTRODUCTION

To provide a comprehensive utility Master Plan (Plan) for the Water and Sewer systems operated and maintained by the Incline Village General Improvement District (IVGID). The Plan will assess all current system assets and identify future upgrades or repairs to support capital improvement project planning and budgeting. The assets studied will include, but may not be limited to:

<u>Water:</u> distribution system, booster pump stations, storage reservoirs, water intake, and surface water disinfection facility.

<u>Sewer:</u> gravity collection system, lift stations, water resource recovery facility, and effluent export infrastructure.

The phase and task breakdown for the project is designated as follows:

Design Services

- Task 1 Project Management
- Task 2 Preliminary Activities
- Task 3 Risk and Condition Assessment
- Task 4 Hydraulic Modeling
- Task 5 − 50% Master Plan
- Task 6 90% Master Plan
- Task 7 Final Master Plan
- Task 8 Subconsultants

DESIGN SERVICES

Task 1 – Project Management

Objective

To plan, organize, direct, control, and communicate all relevant activities set forth in this Scope of Work within the approved budget and schedule.

Approach

Farr West will routinely review project progress and communicate project status on a regular basis. Communication will be through email and telephone, and at project coordination meetings with IVGID and Farr West staff. This task will include the following activities:

A-1

- Project administration includes scheduling maintenance, cost control, monthly invoicing, filing, resource allocation, subconsultant management, and routine communications.
- Conducting a project kick-off meeting with Farr West and IVGID staff.
- Team coordination, including conference calls and internal meetings.
- Monitoring changes to the scope, budget, or schedule and developing change management strategies with IVGID.

Deliverables

The following deliverables will be submitted under this task:

- Project schedule.
- Monthly status reports.

Assumptions

The following assumptions apply:

- Farr West project manager will hold monthly calls with IVGID project manager to review project schedule, budget, and overall project progress. 30 minutes per month has been allocated for these calls.
- Monthly reports will be provided with timely invoices.
- Project-related issues will be identified, communicated, and resolved.

Task 2 – Preliminary Activities

Objective

Conduct activities related to inspections and data collection so that work on subsequent tasks can commence.

Approach

The following approach applies:

- Site Visit 1 Coordinate and attend a site visit of all water distribution and sewer collection system facilities with IVGID staff.
- Site Visit 2 Coordinate and attend a site visit of all water and sewer treatment facilities and the effluent export infrastructure with IVGID staff.
- Prepare and issue a formal letter requesting all data to be provided by IVGID required to complete the Utility Master Plan.
- Conduct field surveying activities to collect any spatial or elevation data which is missing or requires confirmation from key utility facilities.

Deliverables

The following will be delivered under this task:

- Site visit meeting minutes
- Data request letter (.pdf)
- Field survey data (.dwg and .gdb format)

Assumptions

The following assumptions apply:

- Farr West staff will attend Site Visit 1 and will tour all water booster pump stations, storage tank facilities, and sewer pump stations.
- Farr West and DOWL staff will attend Site Visit 2 and will tour the water treatment facility, water resource recovery facility, and significant effluent export system facilities.
- Site visits will be conducted approximately one week apart and will require up to six (6) hours of IVGID staff time per visit.
- Multiple IVGID operations staff may need to attend each site visit.
- IVGID shall provide all data in an editable, digital format (word, excel, csv, etc.), if feasible.
- Farr West has budgeted for approximately 150 assets (sewer or water) to be surveyed.
- All subconsultant services provided as part of these activities will be invoiced under Task 8.

Task 3 – Condition Assessment

Objective

Develop a comprehensive condition and risk assessment outlining the water and sewer infrastructure to supplement the capital replacement planning and budget forecasting.

Approach

Exhibit A – Scope of Work

This task will include the following activities:

- Collection/Distribution Systems Condition Assessment
 - > Collect and perform a quality control review of the PACP scoring of the sewer main CCTV provided by IVGID. Collect operator input on pipe and manhole conditions based on resource allocation to assets.
 - > Collect operation and maintenance, and financial obligation data from IVGID regarding its efforts allocated to the water infrastructure.
 - > Utilize the provided PACP pipe segment scoring for sewer, received water utility input, and infrastructure age/diameter/material to develop GIS mapping. Mapping will consist of multiple figures to present project area, structural and O&M scoring (as available and provided by IVGID).
 - > Prepare condition scoring parameters specifically to the findings.

- Collection/Distribution System Risk Assessment
 - > Develop consequence and likelihood categories and weighting factors based on Farr West recommendations and IVGID input.
 - > Assemble consequence and likelihood scoring.
 - > Utilize the final risk scoring to develop GIS mapping to support the risk assessment.
 - > Prepare a draft technical memorandum and deliver to IVGID for review and comment.
 - > Incorporate draft technical memorandum comments and prepare a final technical memorandum.
- Water Treatment / Disinfection Facility (WTP): Condition assessment of this facility will include the following:
 - > Review of Last Three Years of Flows, Raw Water Quality and Treated Water Quality Data
 - Based on actual data available from SCADA, Excel or other tabular format data provided by IVGID, develop summary tables and charts for influent average daily flow, peak daily flow, pH, turbidity, and other influent testing parameters.
 - > Facility Capacity Review: Compare recent historical flows to rated plant flow/treatment capacity.
 - > Future Regulatory Outlook: Based on current treated water quality requirements and input from regulatory agency, provide assessment of future regulatory concerns and possible implications upon current treatment facility capabilities. We anticipate this effort will be limited to communications with the regulating authority and discussions with the agency as to any foreseeable drivers warranting future improvements in the treatment process performance.
 - > Updated Process Flow Diagram: Review and update the facility process flow diagram to reflect the current unit processes and flow regime.
 - > Unit Process Functional Objective Narrative and Key Design Criteria: Provide a summary of the unit process operational objectives and key design and performance criteria.
 - > Inventory of Unit Processes (structures and equipment): Inventory each unit process to capture the equipment description, manufacturer, model, horsepower, voltage, rated flows and capacity, etc., and document condition, noted performance and operational issues, and structural conditions, as applicable.
 - > Identification of Notable Deficiencies and Needed Improvements: As compared to established functional description and design criteria, observation of physical conditions and reported history of operation, identify the noted current or pending deficiencies and/or needs for improvements for each unit process.
 - > Structural: Structural condition assessments will be based on observations from foot at the time of site visits. No structural analysis, destructive testing, dewatering, confined space entry or inspections requiring fall protection equipment is anticipated.
- Water Resource Recovery Facility (WRRF): Condition assessment of this facility will include the following:
 - > Review the Last Three Years of Influent Flows and Loads and Effluent Water Quality Data:
 - Based on actual data available from SCADA, Excel or other tabular format data provided by IVGID, develop summary tables and charts for influent average daily flow, peak daily flow, max monthly flow, BOD, TSS, Ammonia, and other influent testing parameters.

IVGID September 2022

- Based on actual data available, develop summary tables and charts for effluent average daily flow, peak daily flow, max monthly flow, BOD, TSS, Ammonia, and other effluent testing parameters.
- > Facility Capacity Review: Compare recent historical flows to rated plant flow and organic treatment capacity.
- Discharge Permit Requirements, Future Regulatory Outlook: Based on current discharge permit and input from regulatory agency, provide assessment of future regulatory concerns and possible permit changes and implications upon current treatment facility capabilities. We anticipate this effort will be limited to communications with the discharge permit issuing authority and discussions with the agency as to any foreseeable drivers warranting future improvements in the treatment process performance.
- > Updated Process Flow Diagram: Review and update the facility process flow diagram to reflect the current unit processes and flow regimes.
- > Unit Process Functional Objective Narrative and Key Design Criteria: Provide a summary of the unit process operational objectives and key design and performance criteria, as compared to existing system and recent performance and challenges.
- Inventory of Unit Processes (structures and equipment): Inventory each unit process to capture the equipment description, manufacturer, model, horsepower, voltage, rated flows and capacity, etc., and document condition, noted performance and operational issues, and structural conditions, as applicable.
- > Identification of Notable Deficiencies and Needed Improvements: As compared to established functional description and design criteria, observation of physical conditions and reported history of operation, identify the noted current or pending deficiencies and/or needs for improvements for each unit process.
- > Structural: Structural condition assessments will be based on observations from foot at the time of site visits. No structural analysis, destructive testing, dewatering, confined space entry or inspections requiring fall protection equipment is anticipated.

Deliverables

The following deliverables will be submitted under this task:

- Water Distribution, Sewer Collection System, WTP, and WRRF Condition Assessment Technical Memorandums – Draft (.pdf copy)
- Water Distribution, Sewer System, WTP, and WRRF Condition Assessment Technical Memorandums Final (.pdf copy)

Assumptions

The following assumptions apply:

- IVGID to provide:
 - > NASSCO PACP scoring information of sewer linear infrastructure.
 - > Condition perspectives from operations and maintenance for sewer and water infrastructure.
- Technical memorandum shall include
 - Condition assessment of water and sewer system.

IVGID Water and Sewer System Master Plan Exhibit A – Scope of Work

- Risk assessment of water and sewer system.
- Recommendations for further data collection and subsequent phased efforts.
- > Summary of rehabilitation technologies.
- > Identify cost estimating for the various technologies.
- > Proposed rehabilitation methods for sewer infrastructure assessed within this scope of work.

Exclusions

- > Field inspections/testing nor condition scoring of water or sewer infrastructure.
- > Assessments of non-linear infrastructure.
- Assessments of each segment of pipe, structure, nor asset. Condition and Risk assessments will include a higher-level generalization of data and IVGID provided information to consolidate focus of system.
- A risk analysis (including asset risk scoring) will not be provided for the Water Resource Recovery Facility or for the Water Treatment/Disinfection Facility.

Task 4 – Hydraulic Modeling

Objective

Build a representative hydraulic model for the water distribution and sewer collection systems so that estimates of system capacity and/or system deficiencies can be made.

Approach

This task will include the following activities:

- Review all system data provided by IVGID.
- Construct a sewer collection system hydraulic model using InfoSWMM® by Innovyze® from IVGID's existing geodatabase.
- Construct a water distribution system hydraulic model using InfoWater PRO® by Innovyze® from IVGID's existing geodatabase.
- Configure water demand scenarios (i.e. ADD, MDD, MDD+Fire, PHD) within the model. Farr West will create extended period simulations (EPS) for the ADD and MDD scenarios. Steady state simulations will be built for all scenarios.
- Calculate and allocate a 24-hour estimate of system-wide sewer flows.
- Calibrate water model to available SCADA and system monitoring data provided by IVGID (e.g., NTFPD fire hydrant testing records). Farr West will review operational and monitoring data, identify discrete time steps for calibration, compare modeled pressures and fire flows with field pressures and fire flows, identify portions of the model that do not represent existing field conditions, and adjust model parameters (e.g. C values for pipes).
- Calibrate sewer model to available flow records at sewer pump stations and/or the water resource recovery facility. The model will be calibrated to match daily flow totals to within 5 percent of actual records. No calibration to flow depth or flow velocity will be performed.
- Perform a capacity assessment on the sewer interceptors modeled. Remaining capacity shall be expressed in number of equivalent dwelling units (EDU) remaining.

Deliverables

The following deliverables will be submitted under this task:

- Water System Hydraulic Model (.aprx and .iwdb)
- Sewer System Hydraulic Model (.mxd and .isdb)

Assumptions

The following assumptions apply:

- Additional fire hydrant flow testing or sewer flow data collection will not be conducted as part of this scope of work.
- A calculation of inflow and infiltration (I/I) contributions to sewer flows is not provided under this scope of work.
- Separate ADWF volume and diurnal curve patterns for residential, industrial, and commercial use areas will not be prepared.
- Current customer database including APN, address and connection type (i.e. commercial, industrial) will be provided by IVGID.
- Farr West will allocate water demands and sewer loads based on the distance from asset (i.e. manhole, pipe) to the centroid of the customers parcel. Actual point of connection may vary from the hydraulic model.
- Farr West will evaluate remaining capacity against County criteria of 0.75 d/D. Farr West will use Manning's formula to determine the flow capacity at 0.75 d/D and evaluate against hydraulic model results for each flow scenario. Conversion of the difference between these two values into a number of EDUs will be the convention for presenting remaining capacity.
- In order to determine pipe invert elevations, Farr West will utilize the following data in order of priority: survey data provided as part of this SOW, GIS data, previous project survey data, field manhole dip information, and record drawings provided by IVGID.
- Pipe material and pipe age data is accurately presented in the existing utility GIS.
- The water system hydraulic model will include a scenario that evaluates the hydraulic impacts and infrastructure improvements needed to incorporate Crystal Bay water intake as an emergency connection.

Task 5 – 50% Master Plan

Objective

To prepare a draft Utility Master Plan for IVGID to review and issue comments.

Approach

This task will include the following activities:

- Prepare a draft master plan for the water distribution and sewer collection systems owned and maintained by IVGID.
- Water Treatment Plant and WRRF: The proposed extent and focus of the Master Planning for the water treatment plant and water resource recovery facility includes the following:

IVGID Water and Sewer System Master Plan Exhibit A – Scope of Work September 2022

- Provide a summary and general prioritization of the deficiencies noted in the respective facility condition assessments.
- > Provide a list of capital improvements recommended to address the noted deficiencies for completion within the next 1 to 10 years. Those improvements related to repair and replacement of existing equipment will include Class 5 Opinion of Probable Cost (OPC) for equipment, materials, and labor for completion of the improvements.
- More significant capital improvement needs and 11-20 year improvement recommendations will include a single conceptual solution and associated OPC. The conceptual solution will include a general description of the site, structure and mechanical requirements and the operations and maintenance requirements. No detailed alternatives analysis of multiple options will be included with detailed descriptions and alternatives costs at this proposed level of master planning. As appropriate, these larger capital improvements will include recommendations for more detailed evaluation that would include detailed alternatives evaluation of available processes, solutions, and equipment applications to facilitate IVGID selection of a preferred option and an implementation and funding plan.
- Conduct a one and one half (1.5) hour virtual meeting prior to delivering the 50% draft Master Plan to discuss the analysis and key findings presented in the Master Plan.
- Conduct a two-hour (2) workshop at the IVGID facility to review the District's comments on the draft Master Plan(s)

Deliverables

The following deliverables will be submitted under this task:

- Water System Master Plan Draft (.pdf copy)
- Sewer System Master Plan Draft (.pdf copy)

Assumptions

The following assumptions apply:

- The proposed table of contents for the Water System Master Plan is:
 - > Executive Summary
 - > Introduction
 - ➤ Chapter 1: Current and Future Water Demands
 - ➤ Chapter 2: Condition Assessment and Risk Analysis
 - ➤ Chapter 3: Distribution System Overview and Capacity Analysis
 - ➤ Chapter 4: Water Treatment Facility
 - ➤ Chapter 5: Capital Improvement Program
- The proposed table of contents for the Sewer System Master Plan is:
 - > Executive Summary
 - > Introduction
 - ➤ Chapter 1: Current and Future Sewer Flows
 - ➤ Chapter 2: Condition Assessment and Risk Analysis
 - ➤ Chapter 3: Collection System Overview and Capacity Analysis
 - ➤ Chapter 4: Water Resource Recovery Facility
 - ➤ Chapter 5: Effluent Export System
 - > Chapter 6: Capital Improvement Program

IVGID

- The master plan will evaluate the operational impacts and infrastructure improvements needed to incorporate Crystal Bay water intake as an emergency connection.
- The CIP will contain class 5 opinions of probable cost according to AACE international methodology.
- 50% draft workshop will be held at IVGID offices and will last approximately two (2) hours.
- All subconsultant services provided as part of these activities will be invoiced under Task 8.

Task 6 – 90% Master Plan

Objective

Update the draft Utility Master Plan based on 50% review comments and issue to IVGID for a subsequent review.

Approach

This task will include the following activities:

- Update the draft master plan for the water and sewer system infrastructure based on the 50% comments.
- Conduct a one-hour virtual meeting prior to delivering the 90% draft Master Plan to discuss the updated information and findings of the Master Plan.
- Conduct a two-hour workshop at the IVGID facility to review the District's comments on the 90% Master Plan(s)

Deliverables

The following deliverables will be submitted under this task:

- Comment resolution letter
- Water System Master Plan Draft (1 bound + 1 .pdf copy)
- Sewer System Master Plan Draft (1 bound + 1 .pdf copy)

Assumptions

The following assumptions apply:

- The proposed table of contents for all plans will be the same as for the 50% Master Plan.
- The CIP will contain class 5 opinions of probable cost according to AACE international methodology.
- The 90% draft workshop will be held at IVGID offices and will last approximately two (2) hours.
- All subconsultant services provided as part of these activities will be invoiced under Task 8.

Task 7 - Final Master Plan

Objective

Update the draft Utility Master Plan based on 90% review comments and issue to IVGID for adoption.

Approach

This task will include the following activities:

- Update the draft master plan for the water and sewer system infrastructure based on the 90% comments.
- Conduct a one-hour workshop at the IVGID facility to discuss the outline for the presentation to the Board of Trustees.
- Conduct two additional one-hour virtual meetings to rehearse the Board of Trustees presentation.

Deliverables

The following deliverables will be submitted under this task:

- Comment resolution letter
- Water System Master Plan Final (5 bound + 1 .pdf copy)
- Sewer System Master Plan Final (5 bound + 1 .pdf copy)
- PowerPoint presentation Draft
- PowerPoint presentation Final

Assumptions

The following assumptions apply:

- The proposed table of contents for all plans will be the same as for the previous Master Plan drafts.
- The CIP will contain class 5 opinions of probable cost according to AACE international methodology.
- The draft Board of Trustees presentation workshop will be held at IVGID offices and will last approximately one (1) hour.
- The Board of Trustees presentation will be held in person and will last approximately one (1) hour.
- All subconsultant services provided as part of these activities will be invoiced under Task 8.

Task 8 – Subconsultants

Objective

To provide professional services related to the Water Treatment Facility and the Water Resource Recovery Facility analysis.

Approach

This task will include the following activities:

• Services detailed in tasks 2, 3, 5, 6, and 7 provided by DOWL.

Water and Sewer System Master Plan

September 2022

• Farr West services associated with subconsultant coordination.

Deliverables

All deliverables by subconsultants will be provided as part of tasks 2, 3, 5, 6, and 7.

Assumptions

The following assumptions apply:

- Subconsultant staff will attend one or both site visits in person.
- Subconsultant staff will attend all other workshops and meetings via a virtual platform (i.e., Teams)

SCHEDULE

Notice to Proceed:	October 12, 2022
Kickoff Meeting:	November 9, 2022
Site Visit 1:	November 16, 2022
Site Visit 2:	November 30, 2022
50% Master Plan Deliverable:	June 16, 2023
50% Master Plan Workshop:	July 7, 2023
90% Master Plan Deliverable:	August 23, 2023
90% Master Plan Workshop:	September 13, 2023
Final Master Plan Deliverable:	October 11, 2023
Board of Trustees Presentation:	November 8, 2023

BUDGET

Task 1	Project Management	\$13,000
Task 2	Preliminary Activities	\$38,000
Task 3	Risk + Condition Assessment	\$72,000
Task 4	Hydraulic Modeling	\$52,000
Task 5	50% Master Plan	\$45,000
Task 6	90% Master Plan	\$17,000
Task 7	Final Master Plan	\$20,000
Task 8	Subconsultants	\$152,000
	TOTAL:	\$409,000

ENGINEER'S RATE SCHEDULE

Title	Hourly Rate	Title	Hourly Rate
Principal Engineer	\$189	Project Coordinator	\$105
Senior Engineer II	\$182	Project Assistant I	\$80
Senior Engineer	\$170	Admin IV	\$110
Engineer IV	\$150	Admin III	\$95
Engineer III	\$140	Admin II	\$85
Engineer II	\$130	Admin I	\$75
Engineer I	\$120	Intern	\$50
Engineer in Training II	\$108	GIS Analyst II	\$150
Engineer in Training I	\$100	GIS Analyst I	\$125
Senior Electrical Engineer	\$170	GIS Specialist	\$110
Electrical Engineer III	\$150	GIS Technician II	\$100
Electrical Engineer II	\$140	GIS Technician I	\$90
Electrical Engineer I	\$130	Water Resource Specialist	\$150
Electrical and Control	\$125	Water Rights Specialist II	\$140
Engineer in Training			
Electrical Engineer in Training II	\$120	Water Rights Specialist I	\$115
Electrical Engineer in Training I	\$110	Water Rights Technician III	\$100
Senior Hydrogeologist	\$176	Water Rights Technician II	\$90
Hydrogeologist II	\$125	Water Rights Technician I	\$80
Hydrogeologist I	\$110	Regulatory & Env. Specialist	\$110
Construction Inspector III	\$125	Professional Surveyor II	\$155
Construction Inspector II	\$120	Professional Surveyor I	\$145
Construction Inspector I	\$110	Senior Survey Technician	\$135
Designer III	\$130	Survey Technician III	\$125
Designer II	\$115	Survey Technician II	\$115
Designer I	\$115	Survey Technician I	\$100
Proposal Specialist	\$85	1 Man Survey Crew	\$160
		2 Man Survey Crew	\$270

Other Fees and Charges:

- 1. All direct project expenses, including subconsultants, will be billed at actual cost plus 15%.
- 2. An overtime surcharge of 25% will be applied to the hourly rates of non-salaried employees for authorized overtime work.
- 3. Different survey and construction inspection labor rates will apply on prevailing wage projects. Rates for prevailing wage projects will be provided on a case by case basis.



Project Summary

Project Number: 2097DI2202

Title: Utility Infrastructure Masterplan

Project Type: J - Capital Improvement - Expense

Division: 97 - Public Works Shared

Budget Year: 202

Finance Options:

Asset Type: DI - Distribution Infrastructure

Active: Yes

Project Description

Preparation of a complete Utility Infrastructure Masterplan to include water and sewer treatment, distribution and collection. Plan will investigate conditions of facilities, infrastructure, SCADA Systems, mechanical and electrical systems and provide recommendations for repair/replacement over the next 20-year period.

Project Internal Staff

Engineering Department, Utility Superintendent, Utility Maintenance Specialist

Project Justification

There has not been a total Utility Infrastructure Masterplan completed for IVGID for some time. A full investigation of the complete condition of the system is good practice to ensure the reliability of all systems.

systems.							
Forecast							
Budget Year		Total Expense	Total Revenue	Difference			
2023							
Consultant Services		475,000	0	475,000	Consultant Services	\$409,000	
Internal Staff	_	25,000	0	25,000	Contingency	\$ 39,621	
Ye	ear Total	500,000	0	500,000	Internal Staff Year Total	\$ 51,379 \$500,000	
	_	500,000	0	500,000	Teal Total	\$300,000	
Year Identified	Sta	rt Date	Est. Completi	on Date	Manager		Project Partne
2022	Jul 1	1, 2022	Jun 30, 2	024 Nov. 2023	Engineering Manager		