## MEMORANDUM

TO: Board of Trustees

THROUGH: Indra Winquest

District General Manager

**FROM:** Brad Underwood, P.E.

Director of Public Works

**SUBJECT:** Review, discuss, and possibly authorize a Professional

Services Agreement for the Effluent Pond Lining Project – 2599SS2010 – Fund: Utility; Division: Sewer; Vendor: Jacobs Engineering, Inc. in the amount of \$36,000 for the Effluent Pond Lining Final Design Project - Phase I Pond Lining Alternative Analysis Design Professional Services.

**DATE:** June 1, 2021

## I. RECOMMENDATION

That the Board of Trustees moves to:

- 1. Review, Discuss, and Possibly Authorize a Professional Services Agreement for the Effluent Pond Lining Project 2599SS2010 Fund: Utility; Division: Sewer; Vendor: Jacobs Engineering, Inc. in the amount of \$36,000 for the Effluent Pond Lining Final Design Project Phase I Pond Lining Alternative Analysis Design Professional Services.
- Authorize Staff to execute the contract documents.

## II. BACKGROUND

At the May 12, 2021 IVGID Board of Trustees Meeting, the Board authorized Staff to solicit an updated phased proposal from Jacobs Engineering for the Effluent Pond Lining Project 2599SS2010 (Attachment A to the Short Form Agreement).

The Incline Village General Improvement District (IVGID or District) operates a wastewater collection, treatment, and effluent export system that serves the communities of Incline Village and Crystal Bay, Nevada and the Nevada State

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Review, Discuss, and Possibly Authorize a Professional Services Agreement for the Effluent Pond Lining Project – 2599SS2010 – Fund: Utility; Division: Sewer; Vendor: Jacobs Engineering, Inc. in the amount of \$36,000 for the Effluent Pond Lining Final Design Project – Phase I Pond Lining Alternative Analysis Design Professional Services.

Parks (Sand Harbor, Spooner and Memorial Point) located at Lake Tahoe. A component of this operation is the 2.4 million gallon effluent storage basin located adjacent to the wastewater resource recovery facility (WRRF). This storage basin was designed to provide automated and passive back-up effluent storage in the event the Plant's 500,000 gallon effluent storage tank fills to capacity. As a condition of the District's current operating permit with the Nevada Department of Environmental Protection (NDEP), the District is no longer allowed to utilize the effluent storage basin for storage because it is unlined. This significantly hampers the District's ability to conduct planned maintenance of the effluent export system and puts the District at risk of a discharge of effluent to the waters of Lake Tahoe in the event of a significant emergency.

By lining the storage basin, it will allow for effluent storage during emergency situations and planned effluent pipeline repair and replacement construction projects. The lining may also eliminate the need to re-treat this effluent through the Plant, speeding recovery from the incident. Depending on the time of year and associated influent flows at the Plant, this final effluent storage basin can provide between 1.6 and 3.2 days of storage.

The following work has been completed to begin implementation of the Effluent Storage Basin improvements:

- Expansion of the access road around the wastewater treatment plant to improve ingress/egress to allow construction of improvements to the Effluent Storage Basin. This work included the purchase of an adjacent parcel.
- In September 2018, Jacobs prepared the Water Resource Recovery Facility Effluent Storage Alternative Analysis Memorandum.
- Granite Construction, CMAR Contractor, has reviewed Jacobs Alternative Analysis Memorandum, provided the District a Findings Memorandum and recommended that the District contract with Jacobs to proceed with Phase 1 – Pond Lining Alternative Analysis design professional services.

Phase 1 – Pond Lining Alternative Analysis Design scope of work will include Jacobs assessing previously identified alternates to the pond lining to include review of current products, technologies, and construction methodologies. Jacobs will collaborate with IVGID and the Granite Construction to identify additional alternates that may be appropriate to study (if any). Jacob's will provide a lifecycle

Review, Discuss, and Possibly Authorize a Professional Services Agreement for the Effluent Pond Lining Project – 2599SS2010 – Fund: Utility; Division: Sewer; Vendor: Jacobs Engineering, Inc. in the amount of \$36,000 for the Effluent Pond Lining Final Design Project – Phase I Pond Lining Alternative Analysis Design Professional Services.

analysis and will prepare a draft and final document outlining the pros and cons of the initial cost investment, the ongoing maintenance requirements, lifecycle analysis, and recommended best value alternative for IVGID.

Staff has requested that Jacobs provide their design services in Phases and provide a detailed description of personnel and associated hours (Attachment B). Phase II will be comprised of preparing preliminary and final design documents as well as providing support during the bidding of the project. Phase III is anticipated to cover engineering services during construction. The Board of Trustees will be presented the Phased design contracts for approval as the project progresses. Phase I services will be complete within 12 weeks once the Notice to Proceed is issued to Jacobs.

Staff continues to pursue funding from US Army Corps of Engineers under Section 595 and anticipate the final determination in Fall 2021.

This memorandum has been placed on the Consent Calendar because it does not include changes to user rates or taxes, adoption or amendment of ordinances, or any other action which is subject to a public hearing.

## III. BID RESULTS

This item is not subject to competitive bidding within the meaning of Nevada Revised Statute (NRS) 332.115 as described in subsection (b) Professional Services.

Additionally, per NRS 625.530, selection of a professional engineer or registered architect to perform work on public works projects (where the complete project costs exceed \$35,000) is to be made solely on the basis of the competence and qualifications of the engineer or architect and not on the basis of competitive fees.

Jacobs Engineering successfully completed the pre-analysis phase and has already developed thorough knowledge of the need and intended scope of this project.

## IV. FINANCIAL IMPACT AND BUDGET

At the January 29, 2020 IVGID Board of Trustees Meeting, the Board directed Staff to establish a separate CIP project for the Effluent Export Pond Lining Project –

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Review, Discuss, and Possibly Authorize a Professional Services Agreement for the Effluent Pond Lining Project – 2599SS2010 – Fund: Utility; Division: Sewer; Vendor: Jacobs Engineering, Inc. in the amount of \$36,000 for the Effluent Pond Lining Final Design Project – Phase I Pond Lining Alternative Analysis Design Professional Services.

2599SS2010; however, specific funds were not allocated to the Export Pond Lining Project at that time. All costs associated with the Effluent Pond Lining Project have been expensed through the Effluent Export Pipeline Project #2524SS1010. Staff is requesting that a total of \$36,000 from the 2019/2020 CIP budget under the Effluent Export Project (see attached data sheet – Attachment B). This is similar to how Granite, CMAR Contractor, has been compensated for work associated with the Pond Lining Project during the 2019/2020 timeframe. Beginning with the 2021/2022 CIP budget, funds will be allocated to the Effluent Pond Lining Project 2599SS2010.

Engineering Staff time will also be billed to the project to manage the design and bidding phase of the project.

## V. <u>ALTERNATIVES</u>

None proposed.

## VI. 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.

## Attachments:

A – Short Form Agreement (Jacob's Proposal Attached)

B - 2524SS1010 CIP Data Sheet

# SHORT FORM AGREEMENT between INCLINE VILLAGE GENERAL IMPROVEMENT DISTRICT and JACOBS ENGINEERING GROUP, INC. for PROFESSIONAL SERVICES

This Agreement is made as of date between INCLINE VILLAGE GENERAL IMPROVEMENT DISTRICT (IVGID), hereinafter referred to as "Owner," and JACOBS ENGINEERING GROUP, INC., hereinafter referred to as "Consultant." Owner intends to complete the Project(s) as described in Attachment A, Consultant's Scope of Work and Proposed Work Schedule, and as amended from time to time, hereinafter referred to as the "Project."

#### 1.0 BASIC SERVICES

The Consultant shall perform the following tasks and additional services as may be included from time to time by Additional Services Addendums (ASAs) to this Agreement in accordance with Paragraph 4.2, Additional Services:

Pond lining analysis engineering services, as described in Attachment A, Consultant's proposal dated May 20, 2021, as "Phase 1 – Pond Lining Alternative Analysis" for Owner's effluent export storage pond, located on Sweetwater Road.

All documentation, drawings, reports and invoices submitted for this project will include IVGID Purchase Order Number TBD.

## 2.0 OWNER'S RESPONSIBILITIES

Owner shall do the following in a timely manner so as not to delay the services of Consultant:

- 2.1 Designate in writing a person to act as Owner's representative with respect to services to be rendered under this Agreement. Such person shall have complete authority to transmit instructions, receive information, and interpret and define Owner's policies and decisions with respect to Consultant's services for the Project.
- 2.2 Assist Consultant by placing at Consultant's disposal existing data, plans, reports and other information known to, in possession of, or under control of Owner which are relevant to the execution of Consultant's duties on the Project. Also, provide all criteria and full information as to Owner's requirements for the Project, including design criteria, objectives and constraints, space, capacity and performance requirements, flexibility and expandability, and any budgetary limitations.

## 3.0 PERIODS OF SERVICE

- 3.1 General. The provisions of Section 3 and the various rates of compensation for Consultant's services provided for elsewhere in this Agreement have been agreed to in anticipation of the orderly and continuous progress of the Project through completion of the Services contained herein. Consultant's obligation to render services hereunder will extend for a period which may reasonably be required for the performance of Consultant's services and required extensions thereto. If specific periods of time for rendering services are set forth or specific dates by which services are to be completed are provided and if such dates are exceeded through no fault of Consultant, all rates, measures, and amounts of compensation provided herein shall be subject to equitable adjustment pursuant to Section 5.9.
- 3.2 Consultant agrees to exercise diligence in the performance of its services consistent with the agreed upon Schedule as indicated in Attachment A, subject to the exercise of the generally accepted standard of care for performance of services.

## 4.0 PAYMENT TO CONSULTANT

## 4.1 Methods of Payment for Services and Expenses of Consultant

## **Compensation Terms Defined**

"Reimbursable Expenses" shall mean the actual expenses incurred directly or indirectly in connection with the Project, including, but not limited to subconsultants or subconsultant costs, transportation and subsistence incidental thereto, obtaining bids or proposals from Consultant(s), toll telephone calls, express mail and telegrams, reproduction of Reports, Drawings, Specifications, Bidding Documents, and similar Project-related items in addition to those required under Section 1. In addition, Reimbursable Expenses will also include expenses incurred for main frame computer time and other highly specialized equipment, including photographic production.

<u>Basis and Amount of Compensation for Basic Services.</u> Compensation shall be as indicated in Attachment A, with a total amount of <u>Thirty-Six Thousand Dollars</u> (\$36,000.00), to be billed on a time and materials basis, as indicated in Attachment A. In no event shall compensation for any Activity identified in Attachment A exceed the amount set forth in the attachment.

## 4.2 Basis and Amount of Compensation for Additional Services

Compensation for additional services shall be on the basis agreed upon at the time of request for additional services. The estimated amount of additional services will be determined at the time the additional services are requested.

## 4.3 Intervals of Payments

Payments to Consultant for Basic and Additional Services rendered and Reimbursable Expenses incurred shall be made once every month by Owner. Consultant's invoices will be submitted once every month and will be based upon total services completed at the time of billing. Owner shall make prompt payments in response to Consultant's invoices. Invoices shall be sent to <a href="mailto:invoices@ivgid.org">invoices@ivgid.org</a> with a copy sent to <a href="mailto:RLR@ivgid.org">RLR@ivgid.org</a>.

## 4.4 Other Provisions Concerning Payments

If Owner fails to make any payment due Consultant for services and expenses within 30 days after receipt of Consultant's statement, the amounts due Consultant will be increased at the rate of one percent (1%) per month from date of Owner's receipt of invoice.

If the Project is suspended or abandoned in whole or in part for more than 90 days, Consultant shall be compensated for all services performed prior to receipt of written notice from the Owner of such suspension or abandonment, together with Reimbursable Expenses then due.

If any items in any invoices submitted by Consultant are disputed by Owner for any reason, including the lack of supporting documentation, Owner may temporarily delete the disputed item and pay the remaining amount of the invoice. Owner shall promptly notify Consultant of the dispute and request clarification and/or remedial action. After any dispute has been settled, Consultant shall include the disputed item on a subsequent regularly scheduled invoice or on a special invoice.

### 5.0 GENERAL CONSIDERATIONS

## 5.1 Termination

This Agreement may be terminated in writing by either party in the event of substantial failure by the other party to fulfill its obligations under this Agreement through no fault of the terminating party. However, no termination for default may be initiated unless the other party is given a ten (10) calendar day cure period after written notice (delivery by certified mail, return receipt requested) of intent to terminate.

This Agreement may be terminated in writing (delivered by certified mail, return receipt requested) by Owner for its convenience.

Upon any termination, Consultant shall (1) promptly discontinue all Services affected (unless a termination notice from Owner directs otherwise); and (2) deliver or otherwise make available to Owner upon full payment for services rendered to the date of termination, all documents, data, drawings, specifications, reports, estimates, summaries, and such other information and materials as may have been accumulated by Consultant in performing this Agreement, whether such materials are completed or in process. All payments due Consultant at termination shall be made by Owner.

## 5.2 Ownership of Documents

The original documents, plans, electronic files, studies or reports prepared under this Agreement, for which the Owner pays compensation to the Consultant, except for working notes and internal documents, shall become and remain the property of the Owner, and upon payment of said compensation, shall be surrendered to the Owner upon the completion of the Work under this Agreement or on the completion of specific phases of the Work, if requested by the Owner. All deliverables in Attachment A shall be provided to Owner regardless of whether requested by Owner. The Consultant may retain copies of said work in their files, but such work shall not be released to any other party or reused by the Consultant without the express written consent of the Owner. Reuse of any of these drawings, specifications or other work products of the Consultant by the Owner for other than the specific project covered in this Agreement without the written permission of the Consultant shall be at the Owner's risk, provided that the Consultant shall not be liable for any claims or damages arising out of such unauthorized reuse by the Owner or by other's actions through the Owner.

## 5.3 Professional Liability Insurance

Consultant shall maintain professional liability insurance for protection against claims arising out of performance of services under this Agreement caused by negligent acts, errors, or omissions for which "PROFESSIONAL SERVICES" is legally liable for a period of five (5) years thereafter, if available and reasonably affordable. The professional liability policy shall provide a minimum coverage of \$1,000,000. Consultant shall maintain the existing retroactive date on all future policies with the same insurance company and attempt to do so if Consultant changes insurance companies. In the event that Consultant goes out of business during the instant period, Consultant shall purchase, at the request of Owner, an extended reporting period.

Should Consultant's normal professional liability coverage be less than the minimum required amount, Consultant may purchase project insurance or obtain a rider on his normal policy in an amount sufficient to bring Consultant's coverage up to minimum requirements.

## 5.4 Controlling Law

This Agreement is to be governed by and construed in accordance with the Laws of the State of Nevada.

## 5.5 Successors and Assigns

The parties hereby bind their respective partners, successors, executors, administrators, legal representatives, and, to the extent permitted by this Section 5.5, their assigns, to the terms, conditions, and covenants of this Agreement.

Neither Owner nor Consultant shall assign, sublet, or transfer any rights under or interest in this Agreement (including, but without limitation, monies that may become due or monies that are due) without the written consent of the other, except to the extent that any assignment, subletting or transfer is mandated by law or the effect of this limitation may be restricted by law.

Unless specifically stated to the contrary in any written consent to an assignment, no assignment will release or discharge the assignor from any duty or responsibility under this Agreement. Nothing contained in this paragraph shall prevent Consultant from employing such independent professional associates, subconsultants, and consultants as Consultant may deem appropriate to assist in the performance of Services.

Except as may be expressly stated otherwise in this Agreement, nothing under this Agreement shall be construed to give any rights or benefits in this Agreement to anyone other than Owner and Consultant, and all duties and responsibilities undertaken pursuant to this Agreement will be for the sole and exclusive benefit of Owner and Consultant and not for the benefit of any other party.

## 5.6 Dispute Resolution

This Agreement to engage in alternate dispute resolution ("ADR") pursuant to NRS 338.150 and any other Agreement or consent to engage in ADR entered into in accordance herewith as provided in this Section 5.6 will be specifically enforceable under the prevailing Nevada law in the Second Judicial District Court of the State of Nevada in and for the County of Washoe. Any dispute arising under this contract will be sent to mediation. Any mediation shall occur in Incline Village, Washoe County, Nevada. The mediation shall be conducted through the American Arbitration Association (AAA) and be governed by the AAA's Mediation Procedures.

The mediator is authorized to conduct separate or ex parte meetings and other communications with the parties and/or their representatives, before, during and after any scheduled mediation conference. Such communications may be conducted via telephone, in writing, via email, online, in person or otherwise.

Owner and Consultant are encouraged to exchange all documents pertinent to the relief requested. The mediator may request the exchange of memorandum on all pertinent issues. The mediator does not have the authority to impose a settlement on the parties but such mediator will attempt to help Owner and Consultant reach a satisfactory resolution of their dispute. Subject to the discretion of the mediator, the mediator may make oral or written recommendations for settlement to a party privately, or if the parties agree, to all parties jointly.

Owner and Consultant shall participate in the mediation process in good faith. The mediation process shall be concluded within sixty (60) days of a mediator being assigned.

In the event of a complete settlement of all or some issues in dispute is not achieved within the scheduled mediation session(s), the mediator may continue to communicate with the parties, for a period of time, in an ongoing effort to facilitate a complete settlement. Any settlement agreed upon during mediation shall become binding if within thirty (30) days after the date that any settlement agreement is signed, either the Owner or Consultant fails to object or withdraw from the agreement. If mediation shall be unsuccessful, either Owner or Consultant may then initiate judicial proceedings by filing suit. Owner and Consultant will share the cost of mediation equally unless agreed otherwise.

## 5.7 Equal Employment and Non-Discrimination

In connection with the Services under this Agreement, Consultant agrees to comply with the applicable provisions of State and Federal Equal Opportunity statutes and regulations.

## 5.8 Indemnification and Legal Fees

Consultant agrees to defend, indemnify and hold harmless the public body, and the employees, officers and agents of Owner from any liabilities, damages, losses, claims, actions or proceedings, including, without limitation, reasonable attorneys' fees and costs, to the extent that such liabilities, damages, losses, claims, actions or proceedings are caused by the negligence, errors, omissions, recklessness or intentional misconduct of the Consultant or the employees or agents of Consultant in the breach of performance of the contract. If the insurer by which the Consultant is insured against professional liability does not so defend Owner and the employees, officers and agents of Owner and 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 Owner by the Consultant in an amount which is proportionate to the liability of the design Consultant. As used in this section, "agents" means those persons who are directly involved in and acting on behalf of Owner or Consultant, as applicable, in furtherance of the contract or the public work to which the contract pertains.

As respects all acts or omissions which do not arise directly out of the performance of professional services, including but not limited to those acts or omissions normally covered by general and automobile liability insurance, Consultant agrees to indemnify, defend (at Owner's option), and hold harmless Owner, its officers, agents, employees, and volunteers from and against any and all claims, demands, defense costs, or liability arising out of any acts or omissions of Consultant (or Sub-contractor, if any) while acting under the terms of this Agreement; excepting those which arise out of the negligence, errors, omissions, recklessness or intentional misconduct of the employees, officers or agents of Owner.

The obligations of each indemnifying party hereunder shall not be construed to negate, abridge, or otherwise reduce any other right or obligation of indemnity which would otherwise exist as to any party or person described in this section. The indemnification shall not be diminished or limited in any way to the total limits of insurance required in this contract or otherwise available to the indemnifying party. If the liability is asserted by an employee of an indemnifying party, the indemnification herein is not limited to damages, compensation or benefits payable by or for the indemnifying party under worker's compensation acts, disability benefit acts or other employee benefit acts. Each indemnifying party shall be permitted to participate, if it chooses, in the defense of any action claiming liability, even if the indemnified party is indemnified hereunder. Either party may set off any of its rights under this subsection against any consideration it provides under this agreement. The obligations to indemnify and save harmless herein survive the expiration or termination of this Agreement.

The prevailing party in any litigation between Owner and Consultant regarding this Agreement shall be entitled to recover its reasonable attorneys' fees and costs. The hourly rate for such fees shall not exceed the rate paid by Owner.

## 5.9 Changes and Modifications

The parties agree that no change or modification to this Agreement, or any attachments hereto, shall have any force or effect unless approved by both parties in a written amendment to this Agreement. Such amendment shall be authorized and signed in the same manner as this Agreement.

#### 5.10 Licenses

Consultant shall have a Washoe County business license, and all appropriate Consultant's licenses and certifications for the services to be performed.

## 5.11 Severability

In the event any provision of this Agreement shall be held invalid and unenforceable, the remaining provisions shall be valid and binding upon the parties.

#### 5.12 Waiver

One or more waivers by either party of any provision, term, condition, or covenant shall not be construed by the other party as a waiver of a subsequent breach of the same by the other party.

## 5.13 Extent of Agreement

This Agreement, including all Attachments, and any and all amendments, modifications, and supplements duly executed by the parties in accordance with this Agreement, govern and supersede any and all inconsistent or contradictory terms, prior oral or written representations or understandings, conditions, or provisions set forth in any purchase orders, requisition, request for proposal, authorization of services, notice to proceed, or other form or document issued by Owner with respect to the Project or Consultant's services.

**IN WITNESS WHEREOF**, the parties hereto have set their hands the day and date of the year first set forth above.

OWNER: INCLINE VILLAGE G. I. D. Agreed to:	CONTRACTOR: JACOBS ENGINEERING GROUP 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					
Owner's address for giving notice: INCLINE VILLAGE G. I. D. 893 Southwood Boulevard Incline Village, Nevada 89451 775-832-1267- Engineering Division	Contractor's address for giving notice:  Jacobs Engineering Group  50 West Liberty St., Ste. 205  Reno, Nevada 89501				

# **Jacobs**

## Incline Village General Improvement District Effluent Pond Lining Final Design

May 20, 2021



# Incline Village General Improvement District Effluent Pond Lining Final Design

This is an agreement for professional services between Jacobs Engineering Group Inc. (Jacobs or Engineer) and Incline Village General Improvement District (IVGID or Owner).

## **Background and Project Need**

IVGID owns and operates an existing effluent pond adjacent to the Water Resource Reclamation Facility (WRRF) that is occasionally utilized to temporarily store plant effluent for brief durations. The existing basin has a storage capacity of approximately 2 million gallons (MG) and is presently unlined. Lining of the pond will allow IVGID to actively reincorporate the pond into their wastewater treatment and effluent management practices and comply with current regulations. Additionally, it is likely the effluent pond will be intermittently utilized during required construction improvements to IVGID's effluent export pipeline.

IVGID has selected Granite Construction as the construction manager at-risk (CMAR) to construct the effluent pond lining. Recommendations presented in an associated Findings Memorandum prepared by Granite Construction are being presented for consideration by the IVGID Board on May 12, 2021.

## Scope of Professional Services

Engineer will provide the professional engineering services in the three phases:

- Phase 1 Pond lining alternative analysis
- Phase 2 Preliminary and final design
- Phase 3 Engineering services during construction.

This Agreement authorizes time and material services for Phase 1 only. Draft services for Phases 2 and 3 are presented herein for planning purposes but are subject to revisions resulting from Phase 1 findings including criteria verification and the selected best value pond lining alternate. It is anticipated the scope and budget for Phases 2 and 3 will be authorized by future IVGID Board action. Engineer shall not perform unauthorized services without written approval by IVGID.

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## Phase 1 – Pond Lining Analysis

Engineer will assess previously identified alternates to the pond lining to include review of current products, technologies, and construction methodologies. Engineer will collaborate with IVGID and the CMAR (Granite Construction) to identify additional alternates that may be appropriate to study (if any). Engineer will provide a lifecycle analysis and will prepare a draft and final document outlining the pros and cons of the initial cost investment, the ongoing maintenance requirements, lifecycle analysis, and recommended best value alternative for IVGID. Specific tasks and assumptions are presented below.

- Engineer will participate in a partnering meeting to establish the Team environment and work plan. It is assumed that two Jacobs team members will attend the partnering meeting in-person at IVGID. Additional staff can participate remotely, as needed.
- Engineer will work with IVGID to establish and confirm general project criteria.
   Criteria considerations include confirmation of the minimum effluent storage volume, spoil decant facility requirements, maintenance access, effluent hydraulics associated with the pond, and pond lining design life.
- Engineer will perform a single-day site visit conducted by two team members to
  evaluate existing conditions and collect measurements pertaining to this project. It is
  anticipated that supplemental survey and a geotechnical test pit will be required but
  that survey, the test pit, onsite observations, and the associated documentation of
  findings will be performed in Phase 2.
- Engineer will update opinions of probable construction cost for HDPE and shotcrete
  lining alternatives. Lifecycle analysis of each pond lining alternate will be informed
  by construction cost estimates provided by Granite. Engineer will coordinate
  candidate pond lining requirements with Granite. Engineer will include anticipated
  ongoing maintenance costs in the analysis based on industry information and input
  from IVGID and Granite.
- The pond lining analysis will outline the pros and cons of the initial cost investment, the ongoing maintenance requirements, lifecycle analysis, and recommended best value alternative for IVGID.

## **Deliverables**

Engineer will prepare and submit the following deliverables:

- Draft pond lining analysis
- Final pond lining analysis

## Schedule

Phase 1 notice to proceed (NTP) is anticipated in June 2021 and the period of performance will extend 12 weeks after NTP. The Phase 1 work plan and project delivery schedule will be developed at the partnering meeting with IVGID and Granite.

## Budget

Phase 1 time and materials budgetary amount of \$36,000 is hereby established for services in this Agreement. Engineer will make reasonable efforts to complete the work within the

noted budgets and will keep Owner informed of progress toward that end so that the budgets or work effort can be adjusted if found necessary. Engineer will give prompt notice to Owner whenever Engineer observes or becomes aware of any significant development that affects the scope or timing of Engineer's services.

Task	Budget
Project Initiation and Partnering Meeting	\$6,500
Project Criteria	\$7,500
Pond Lining Analysis	\$18,500
Project Management and Quality Control	\$3,500
Total	\$36,000

## Phase 2 - Preliminary and Final Design

Engineer will perform preliminary and final design services and will prepare plans and specifications. Additionally, Engineer will collaborate with IVGID and Granite to obtain permits for this project. Preliminary and Final Design scope are defined in the sections below.

## **Preliminary Design**

Engineer will perform preliminary design to establish design criteria and to define required construction improvements associated with the best value pond liner resulting from Phase 1. Specific tasks and assumptions are presented below.

- Engineer will prepare for and participate in up to three meetings with permitting agencies to collaborate on achieving success in the permitting process.
- Engineer will prepare design figures and provide relevant engineering descriptions to assist with permit applications.
- Electrical requirements will be confirmed. It is presently assumed that an open bucket in the existing motor control center room will be used for electrical components.
- Mechanical and pumping improvements will be verified. There may be the need to replace or upgrade an effluent pump.
- Civil engineering and grading requirements will be developed commensurate with the best value alternate selected in Phase 1.
- Engineer will summarize key design criteria for each discipline in a design criteria memorandum
- Engineer will prepare 30% design drawings and a list of technical specifications
- IVGID and Granite will have two weeks to review and provide input on the 30% design drawings and then a Team workshop will be held to discuss and adjudicate the comments
- Granite will be involved in throughout the design process for constructability review and value engineering

## **Deliverables**

Engineer will prepare and submit the following:

- Design criteria memorandum
- 30% design drawings including a list of technical specifications
- Draft and Final permit applications

#### Schedule

A schedule has not yet been determined and will be informed by recommendations from Phase 1. However, it is anticipated that the general period of performance for Phase 2 Preliminary Design will be October 2021 through January 2022.

## **Budget**

A budget has not yet been developed and will be informed by results from Phase 1.

## Final Design

Engineer will prepare final design plans and specifications for pond lining and associated project improvements defined in Phase 1 and preliminary engineering. Plans and specifications will be signed and sealed by professional engineers licensed in the State of Nevada.

Engineer will prepare a set of 90% design drawings and specifications and a final set of Contract Documents. A preliminary list of drawings is presented below.

- Cover
- Abbreviations
- General Civil
- General Structural
- General Mechanical
- General Electrical
- Overall Site Plan and Survey Control
- Civil Pond Area Plan 1
- Civil Pond Area Plan 2
- Civil Pond Sections 1
- Civil Pond Sections 2
- Civil Details 1
- Civil Details 2

- Pond Lining Plan
- Pond Lining Sections 1
- Pond Lining Sections 2
- Pond Lining Details 1
- Pond Lining Details 2
- Pond Lining Details 3
- Mechanical Pump Station Plan
- Mechanical Pump Station Section
- Electrical Site Plan
- Electrical Single Line/Panel
- Standard Details 1
- Standard Details 2
- Standard Details 3

## **Deliverables**

Engineer will prepare and submit the following:

- 90% design drawings and technical specifications submitted electronically in PDF format
- Contract Documents comprising final (100%) design drawings and specifications submitted electronically in PDF format

### Schedule

A schedule has not yet been determined and will be informed by Phase 1 and Preliminary Engineering. However, it is anticipated that the general period of performance for Phase 2 Final Design will be January 2022 through May 2022.

## **Budget**

A budget has not yet been developed and will be informed by results from Phase 1.

## Phase 3 – Engineering Services During Construction

Engineer will continue Team collaboration and provide professional services during the construction phase. It is assumed that construction management will be provided by others. Engineering services during construction will include assistance with construction administration including the following activities:

- Participation in biweekly construction progress meetings
- Review and responses to up to 20 shop drawing submittals
- Review and responses to up to 15 requests for information or clarification (RFIs)
- Periodic site visits to observe and document pond lining construction activities.
   Budget includes two 2-day site visits.
- CMAR will provide red-line markups representing as-constructed conditions.
   Engineer will prepare record drawings upon construction completion.

#### Deliverables

Engineer will prepare and submit the following:

- Responses to shop drawing submittals and RFIs
- Record drawings submitted electronically in PDF format

### **Schedule**

A schedule has not yet been determined and will be informed by Phase 1, Preliminary Design, and Final Design. However, it is anticipated that the general period of performance for Phase 3 will be May 2022 through December 2022.

## Budget

A budget has not yet been developed and will be informed by results from Phase 1, Preliminary Design, and Final Design.

## Compensation

Compensation by IVGID to Engineer will be as follows:

## Cost Reimbursable Per Diem (Time and Expense)

For services defined in this Task Order, at the Per Diem Rates referenced below, plus Direct Expenses, plus a service charge of 10 percent of Direct Expenses and 10 percent of

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subcontracts and outside services, plus applicable sales, use, value added, business transfer, gross receipts, or other similar taxes.

## Per Diem Rates

Per Diem Rates are those hourly rates charged for work performed on the Project by Engineer's employees of the indicated classifications. These rates are subject to revision for other projects and annual calendar year adjustments; include all allowances for salary, overheads, and fees; but do not include allowances for Direct Expenses, subcontracts, and outside services.

## **Direct Expenses**

Direct Expenses are those necessary costs and charges incurred for the Project including, but not limited to: (1) the direct costs of transportation, meals and lodging, mail, and supplies; (2) Engineer's current standard rate charges for reproduction services; and (3) Engineer's standard project charges for special health and safety requirements of OSHA.

## Renegotiation of Compensation

The estimate is based on the assumptions listed in this Agreement and timely completion of the Project. Engineer is not obligated to incur costs beyond the indicated budgets, as may be adjusted, and Owner is not obligated to pay Engineer beyond these limits. If the Project progresses under different conditions than the assumptions listed in this Agreement or if project timing deviates from the assumed schedule for causes beyond Engineer's control, Engineer reserves the right to request renegotiation of those portions of the fee affected by the time change.

It is agreed that the Engineer cannot be responsible for delays occasioned by factors beyond Engineer's control, or factors which would not reasonably have been foreseen at the time this Agreement was executed.

## Invoicing

Amount invoiced each month will be based on time and expenses expended to date. Invoices shall be accompanied by a listing of charges that make up the invoice total, including employee names, billing rates, and hours of project staff, plus direct expenses.

## Exhibit A Jacobs Per Diem Rate

## 2021 Per Diem Rate Schedule Professionals and Technicians\* Hourly Billing Rates

Classification	Rate				
Principal Project Manager	\$235				
Sr. Technologist*/Sr. Project Manager	\$219				
Engineer Specialist*/Project Manager	\$195				
Project Engineer*	\$178				
Associate Engineer*	\$153				
Staff Engineer 2*	\$129				
Staff Engineer 1*	\$111				
Engineering/Environmental Tech 5	\$154				
Engineering/Environmental Tech 4	\$135				
Engineering/Environmental Tech 3	\$109				
Engineering/Environmental Tech 2	\$91				
Engineering/Environmental Tech 1	\$85				
Office/Clerical/Accounting	\$78				

## Notes:

- 1. A markup of 10% will be applied to all other Direct Costs and Expenses.
- 2. An additional premium of 25% will be added to the above rates for Expert Witness and Testimonial Services
- 3. Rate Schedule subject to annual revision to reflect current rates.

<sup>\*</sup>Includes engineering, consulting, planner, and scientist disciplines

# Incline Village General Improvement District Effluent Pond Lining Final Design - Phase 1 Jacobs Level of Effort

May 20, 2021

										Estimate	nd.	Estimated		
									Estimated				ı	Budget
			Ног	ırs by Posit	ion				Labor Hours			Expenses		ubtotal
		***************************************												
	Lining/	Civil	CAD					Admin./						
•	Geotech.		_	Structural	Mech.									
Kellogg	Twede	Howard	Minor	Troyan	Wang	Isbell	Cavalleri	Dore						
\$178	\$195	\$178	\$109	\$178	\$129	\$219	\$178	\$78						
						,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,		_						
14	14	4						2	34	\$ 6,0	90	\$ 410	\$	6,500
12	12	8		4	4			4	44	\$ 7,	140	\$ 60	\$	7,500
24	24	16	4	12	8		12	8	108	\$ 18,	164	\$ 336	\$	18,500
12		*****				ε	;		18	\$ 3,	450	\$ 50	\$	3,500
				45				1.0		ć 25		¢ orc		36,000
	\$178 14 12 24 12	PM/Civil Engineer Ashley Kellogg Twede \$178 \$195  14 14 12 12 24 24 12	PM/Civil Engineer Engineer Designer Ashley Kellogg Twede Howard  \$178 \$195 \$178  14 14 4  12 12 8  24 24 16	Homeon Position Posit	PM/Civil Geotech. Engineer Designer Technician Engineer Kellogg Twede Howard Minor Troyan  \$178 \$195 \$178 \$109 \$178  14 14 4 12 12 8 4 24 24 16 4 12	PM/Civil Engineer Engineer Engineer Religineer     Engineer Designer Designer Technician     Structural Engineer Engineer Engineer     Mech. Engineer Engineer       Ashley Kellogg     Mark Travis Howard     Jesse Minor     Sean Troyan     James Wang       \$178     \$195     \$178     \$109     \$178     \$129       14     14     4     4     4     4     4     4       24     24     16     4     12     8       12	Lining/ Civil CAD PM/Civil Geotech. Engineer Design Structural Engineer Engineer Design Structural Engineer Engineer Control Ashley Mark Travis Jesse Sean James Brett Kellogg Twede Howard Minor Troyan Wang Isbell \$178 \$195 \$178 \$109 \$178 \$129 \$219  14 14 4  12 12 8 4 4  24 24 16 4 12 8	Civil   CAD   Design   Structural   Mech.   Quality   Cost	Lining/ Civil CAD Fingineer Design Structural Mech. Quality Cost Doc. Engineer Engineer Design Structural Engineer Control Estimating Processing Sean James Brett Nick Diana (Cavalleri Dore)  \$\frac{1}{3}\text{178} \text{ \$195} \text{ \$\$178} \text{ \$\$109}  \$\$\$\$\$\$\$\$\$\$\$\$\$\$\$\$\$\$\$\$\$\$\$\$\$\$\$\$\$\$\$\$\$\$\$\$	Lining/ Geotech. Engineer Design Structural Mech. Quality Cost Doc. Engineer Engineer Designer Technician Engineer Engineer Control Estimating Processing  Ashley Mark Travis Jesse Sean James Brett Nick Diana Isbell Cavalleri Dore  \$178 \$195 \$178 \$109 \$178 \$129 \$219 \$178 \$78   14 14 4	Hours by Position  Lining/ Civil CAD Fingineer Engineer Designer Technician Engineer Religineer Fingineer Religineer Structural Mech. Quality Cost Doc.  Religineer Engineer Designer Technician Engineer Engineer Control Estimating Processing  Ashley Mark Travis Jesse Sean James Brett Nick Diana Kellogg Twede Howard Minor Troyan Wang Isbell Cavalleri Dore  \$178 \$195 \$178 \$109 \$178 \$129 \$219 \$178 \$78  14 14 4		Civil   Civi	February   February



## **Project Summary**

Project Number: 2524SS1010

Title:

Effluent Pipeline Project

Project Type:

B - Major Projects - Existing Facilities

Division:

24 - Transmission 2021

Budget Year:

Finance Option: Asset Type:

SS - Sewer System

Active:

Yes

#### **Project Description**

The Effluent Pipeline Project will be a multi-year pipe replacement project. The immediate priority is to replace all of the remaining Segment 3 pipeline (12,385 linear feet) and to make immediate repairs to the Segment 2 pipeline (17,314 linear feet) to extend its life and avoid future leaks. The project timeline is to accomplish this over multiple construction seasons. TRPA and NDOT permits typically prohibit SR 28 traffic control delays from July 1 to September 5. This limits construction to May, June and Sept 6 to Oct 15. The replacement of Segment 3 would occur over two construction seasons. Replacing segment 2 would require 3 construction seasons. Replacing segment 3 construction phase.

#### **Project Internal Staff**

The engineering division will support this project. Outside consultants will be used for design and management. The project will be publicly advertised in accordance with NRS 338.

#### Project Justification

The District currently owns, operates and maintains a 21-mile pipeline that exports treated wastewater effluent out of the Lake Tahoe Basin. This pipeline was installed in 1970 as part of the regional effort to protect Lake Tahoe's water quality by requiring all wastewater effluent to be exported out of the basin. Within the Tahoe Basin, this pipe is divided into three segments. Segment 1 is the low-pressure supply pipe to the pump station near Sand Harbor. Segment 2 is the welded steel high-pressure discharge pipe exiting the pump station. Segment 3 is the remaining low pressure jointed steel transmission pipeline within the Tahoe Basin running south to Spooner Summit. Segment 4 is the pipe that carries the effluent down the east side of the Carson Range from Spooner Summit to Hwy 395. Segment 5 is the pipeline that extends from HWY 395 to the bank of the Carson River. Segment 6 is the pipeline from the Carson River that delivers the effluent to the IVGID Wetlands Disposal Facility and was installed in 1983. A condition assessment completed on Segments 2 and 3 confirmed pipe deficiencies.

Forecast			
Budget Year	Total Expense	Total Revenue	Difference
2021			
Internal Services	100,000	0	100,000
Project Design and Construction Costs	1,900,000	0	1,900,000
Year Tota	2,000,000	0	2,000,000
2022			
Internal Services	100,000	0	100,000
Project Design and Construction Costs	1,900,000	0	1,900,000
Year Tota	2,000,000	0	2,000,000
2023			
Internal Services	100,000	0	100,000
Project Design and Construction Costs	1,900,000	0	1,900,000
Year Total	2,000,000	0	2,000,000
2024			
Internal Services	100,000	0	100,000
Project Design and Construction Costs	1,900,000	0	1,900,000
Year Total	2,000,000	0	2,000,000
2025			
Internal Services	100,000	0	100,000
Project Design and Construction Costs	1,900,000	0	1,900,000
Year Total	2,000,000	0	2,000,000
	10,000,000	0	10,000,000
Year Identified St	art Date	Est. Completi	on Date

1	2012	Jul 1, 2020	Jun 30, 2025	Engineering Manager	