AGREEMENT FOR PROFESSIONAL CONSULTING SERVICES

THIS AGREEMENT is entered into between Washoe County, a political subdivision of the State of Nevada ("County") and Brown and Caldwell ("Consultant"), collectively (the "Parties").

WITNESSETH:

WHEREAS, County desires to engage Consultant to render certain consulting services in Support of the "Swan Lake Surface Water Exportation Feasibility Study" (the "Project"); and

WHEREAS, County requires certain professional services in connection with the Project, as described in **Exhibit "A", Scope of Work** (the "Services"); and

WHEREAS, Consultant represents that it is duly qualified, ready, willing and able to provide the Services by virtue of its education, training and experience; and

NOW, THEREFORE, in consideration of the mutual promises contained herein, the Parties agree as follows:

ARTICLE 1 - EFFECTIVE DATE

The effective date of this Agreement shall be July 14, 2020.

CONSULTANT shall begin performance of services as provided herein upon notice to proceed and shall complete all Services identified in Exhibit A, Scope of Work in accordance with the Standard of Care as set forth in Article 5 herein no later than June 30, 2021, unless this Agreement is terminated sooner in accordance with its terms.

ARTICLE 2 - SERVICES TO BE PERFORMED BY CONSULTANT

Consultant agrees to perform and complete all Services identified in Exhibit A, Scope of Work under this Agreement, and any amendment thereto in accordance with the Standard of Care as set forth in Article 5 herein. Consultant shall be responsible for the quality, technical accuracy, completeness and coordination of all reports, information, specifications and other items and services furnished under this Agreement and any amendments hereto. County reserves the right to inspect, comment on, and request revision of, all Services identified in Exhibit A and any amendments thereto performed by Consultant prior to acceptance, and Consultant warrants that such Services shall be fit and sufficient for the purposes expressed in, or reasonably inferred from, this Agreement and any amendments hereto.

Failure to provide major deliverables, including, but not limited to, Services identified in Exhibit A, Scope of Work, shall constitute a material breach of this Agreement unless waived in writing by the County.

ARTICLE 3 - COMPENSATION

3.1 <u>Compensation for Services</u>

For Services defined in Section 1 above, Consultant's compensation shall be determined on a time and material basis, in accordance with the **Fee Schedule described in Exhibit "B"**, which is attached hereto and incorporated by reference as part of the Agreement, and shall not exceed the sum of **\$149,796.00**. Consultant shall satisfy its obligations hereunder without additional cost or expense to County during the term of this Agreement other than the heretofore stated compensation and the

fee schedule described in Exhibit B. The Fee Schedule may be renegotiated at the end of one (1) year upon request by either the County or the Consultant. The actual costs charged for the work by Consultant in accordance with this provision shall be full compensation to Consultant for all Services and duties required by the Scope of Work, including, but not limited to: costs of supplies, facilities and equipment; costs of labor and services of employees, consultants and sub-consultants engaged by Consultant; travel expenses, telephone charges, typing, duplicating, costs of insurance, and all items of general overhead. Consultant shall submit billings on a monthly basis.

3.2 <u>Compensation for Additional Services</u>

If County requests Consultant to perform additional services, other than those required to be performed under Services identified in Exhibit A, Scope of Work, the cost of such additional services shall be determined prior to commencing additional work. All additional services and amount of payment must be authorized in writing by County prior to commencing any work for such services.

3.3 <u>Methods and Times of Payment</u>

Consultant shall submit to County monthly progress invoices indicating the number of hours each employee provided services and other allowed direct expenses. Payment to Consultant for work on the Project shall be made within forty-five (45) days after receipt and approval of Consultant's invoice, said approval not to be unreasonably withheld. Payment by County of invoices or requests for payment shall not constitute acceptance by County of work performed on the Project by Consultant. No penalty shall be imposed upon the County for payment(s) received by Consultant after forty-five days.

3.4 <u>Dispute of Work</u>

County shall notify Consultant in writing within thirty (30) days of receipt of the work, or portion of work, which is not approved. For work, or portions of the work, which are unapproved, the County and Consultant shall develop a mutually acceptable method to resolve the dispute within thirty (30) days of receipt by the Consultant of notice from the County. If the County and Consultant cannot reasonably agree to remedy the dispute of unapproved work within the thirty-day period, the work shall be terminated or suspended per Article 12.

ARTICLE 4 - TIME SCHEDULE FOR COMPLETION

The Services identified in Exhibit A, Scope of Work on the Project shall be diligently performed and be completed no later than June 30, 2021. Consultant shall be granted time extensions for items within the phases of the Project in writing by County if the time schedules cannot be met because of delays beyond Consultant's reasonable control, including, but not limited to, County's failure to furnish information, or to approve or disapprove Consultant's work promptly. Consultant will provide to County a monthly report including a schedule identifying progress or work completed, problems or difficulties being encountered, work to be initiated during the following month and other useful information. This report will be submitted on the first day of each month and will be in a format suitable for submittal to other interested agencies. Consultant's failure to submit promptly the monthly progress report may cause delay in payment from the County.

ARTICLE 5 - STANDARD OF CARE

Consultant shall exercise the same degree of care, skill, and diligence in the performance of the Services as is ordinarily provided under similar circumstances and Consultant shall, at no cost to County, re-perform services which fail to satisfy the foregoing standard of care provided that Consultant is notified in writing by County of the deficiency within six (6) months of performance of the deficient Services. Such re-performed Services may include, but not be limited to, correcting errors and omissions, or any other deficiencies in designs, drawings, specifications and reports. County reserves the right to inspect, comment on, and request revision of, all Services performed by Consultant prior to acceptance, and Consultant warrants that Services shall be fit and sufficient for the purposes expressed in and intended by this Agreement and any amendments thereto. Failure to provide Services or re-performed Services in accordance with the foregoing standard of care shall constitute a material breach of this Agreement unless waived by the County. Review and approvals by County do not relieve Consultant of its responsibilities under this Article. Except as is otherwise provided for in this Article, the re-performance of Services is the Consultant's entire responsibility and the County's exclusive remedy for Services rendered or to be rendered hereunder, and no additional warranties, guarantees or obligations are to be implied.

ARTICLE 6 - LIMITATIONS OF RESPONSIBILITY

Consultant shall not be responsible for construction means, methods, techniques, sequences, procedures, or safety precautions and programs in connection with the Project. In addition, Consultant shall not be responsible for the failure of any other consultant, subcontractor, vendor, or other project participant to fulfill contractual or other responsibilities to County or to comply with federal, state, or local laws, ordinances, regulations, rules, codes, orders, criteria, or standards. Consultant shall notify County of any apparent unsafe conditions, methods or procedures that the Consultant may observe at the project site.

ARTICLE 7 - OPINIONS OF COST AND SCHEDULE

Since Consultant has no control over the cost of labor, materials, equipment or services furnished by others, including over any other consultants', subcontractors', or vendors' methods of determining prices, or over competitive bidding or market conditions, Consultant's cost estimates shall be made on the basis of qualification and experience.

Since Consultant has no control over the resources provided by others to meet contract schedules, Consultant's forecast schedules for completion of Services shall be established based on generally acceptable schedules for and performance standards of similarly situated professionals qualified and experienced to perform the Services. Consultant cannot and does not guarantee that proposals, bids or actual project costs will not vary from its cost estimates or that actual schedules will not vary from its forecast schedules.

ARTICLE 8 - INDEPENDENT CONTRACTOR

Consultant undertakes performance of the Services as an independent contractor, is not entitled to benefits proided to employee s of the County, is solely responsible for federal taxes and social security payments applicable to money received for services herein provided and understands the County will file an IRS Form 1099 for all payments made to Consultant. Consultant shall be wholly responsible for the methods of performance. County shall have no right to supervise the methods used by Consultant. County shall have the right to observe such performance. Consultant shall work closely with County in performing Services under this Agreement

ARTICLE 9 - PERMITS AND LICENSES

Consultant shall procure the permits, certificates, and licenses necessary to allow Consultant to perform the Services. Consultant shall not be responsible for procuring permits, certificates, and licenses required for any construction unless such responsibilities are specifically assigned to Consultant in Exhibit A, Scope of Services.

ARTICLE 10 - COUNTY'S RESPONSIBILITY

County shall provide any information authorized by law in its possession that is requested by Consultant and is necessary to complete the Project. County shall assist Consultant in obtaining access to public and private lands so Consultant can perform the Services. County shall examine all studies, reports, sketches, estimates, specifications, drawings, proposals, and other documents presented by Consultant and shall render decisions pertaining thereto within a reasonable time so as not to delay the work of Consultant.

ARTICLE 11 - REUSE OF DOCUMENTS

All documents, including computer files, drawings, specifications, and computer software, prepared by Consultant pursuant to this Agreement are instruments of service in respect to the Project. They are not intended or represented to be suitable for reuse by County or others on extensions of the Project or on any other project. Any reuse without written verification or adaptation by Consultant for the specific purpose intended will be at County's sole risk and without liability or legal exposure to Consultant; and County shall indemnify and hold harmless Consultant against all claims, damages, losses, and expenses including attorneys' fees arising out of or resulting from such reuse. Any such verification or adaptation will entitle Consultant to further compensation at rates to be agreed upon by County and Consultant.

Copies of all documents, including reports, computer files, drawings, specifications, and computer software, prepared by Consultant pursuant to this agreement will be provided to the County in electronic format accompanied by the appropriate documentation necessary to catalog them in the context of this project.

When transferring data in electronic media format, Consultant makes no representation as to long term compatibility, usability, or readability of documents resulting from the use of software application packages, operating systems, or computer hardware differing from those used by Consultant at the beginning of the Project.

Because the data stored in electronic media format can deteriorate or be modified inadvertently or otherwise without authorization of the data's creator, the party receiving electronic files agrees that it will perform acceptance tests or procedures within 60 days, after which the receiving party shall be deemed to have accepted the data thus transferred. Any errors detected within the 60-day acceptance period will be corrected by the party delivering the electronic files. Consultant shall not be responsible to maintain documents stored in electronic media format after acceptance by County.

ARTICLE 12 - TERMINATION OR EXTENSION OF CONTRACT

Either Party may terminate this Agreement by written notice to the other Party if the other Party is in material breach or default of any provision of this Agreement and does not remedy such breach or default, or provide satisfactory evidence that such default will be expeditiously remedied, within thirty (30) days after being given such notice. In the event of such termination, County shall pay Consultant for all Services satisfactorily performed to the date of termination.

County, in its sole discretion, shall have the right to terminate this Agreement or suspend performance thereof for County's convenience upon written notice to Consultant, and Consultant shall terminate or suspend performance of services within thirty (30) days on a schedule acceptable to County. In the event of termination or suspension for County's convenience, County shall pay Consultant for all Services performed in accordance with the terms of this Agreement.

In the event that the County's governing body fails to appropriate or budget funds for the purposes specified in this Agreement, or that the County's governing body has been required, in its sole judgment, to amend previous appropriations or budgeted amounts to eliminate or reduce funding for the purposes of this Agreement, this Agreement shall be terminated without penalty, charge, or sanction.

ARTICLE 13 - NONDISCLOSURE OF PROPRIETARY INFORMATION

Consultant shall consider all information provided by County to be proprietary unless such information is available from public sources, was known to Consultant prior to the execution of this Agreement, was received by Consultant from a third-party source not under any obligation of confidentiality to the County, or is required by law or ordered to be disclosed in a regulatory or judicial proceeding. Consultant shall not publish or disclose proprietary information for any purpose other than the performance of the Services without the prior written authorization of County or in response to legal process or as required by the regulations of public entities.

ARTICLE 14 - NOTICE

Any notice, demand, or request required by or made pursuant to this Agreement shall be deemed properly made if personally delivered in writing on the date of delivery, or, if deposited in the United States mail, postage prepaid, to the address specified below, three days after the date of mailing:

To County:	To Consultant:
Dave Solario, Director	Roy Johnson, P.E., Director
Washoe County Community Services	Brown and Caldwell
1001 East 9 th Street	1325 Airmotive Way, Suite 215
Reno, NV 89512	Reno, Nevada 89502

Nothing contained in this Article shall be construed to restrict the transmission of routine communications between representatives of Consultant and County.

ARTICLE 15 - UNCONTROLLABLE FORCES

Neither County nor Consultant shall be considered to be in default of this Agreement if delays in or failure of performance shall be due to uncontrollable forces the effect of which, by the exercise of reasonable diligence, the non-performing party could not avoid and is not reasonably foreseeable at the time of entering into this Agreement. The term "uncontrollable forces" shall mean any event which results in the prevention or delay of performance by a party of its obligations under this Agreement and which is beyond the control of the non-performing party. It includes, but is not limited to, fire, flood, earthquakes, storms, lightning, epidemic, war, riot, civil disturbance, sabotage, inability to procure permits, licenses, or authorizations from any state, local, or federal agency or person for any of the supplies, materials, accesses, or services required to be provided by either County or Consultant under this Agreement, strikes, work slowdowns or other labor disturbances, and judicial restraint. Consultant shall be paid for services performed prior to the delay plus related costs incurred attributable to the delay.

Neither Party shall, however, be excused from performance if nonperformance is due to uncontrollable forces which are removable or remediable nor which the non-performing Party could have, with reasonable dispatch removed or remedied. The provisions of this Article shall not be interpreted or construed to require Consultant or County to prevent, settle, or otherwise avoid a strike, work slowdown, or other labor action. The non-performing Party shall upon being prevented or delayed from performance by an uncontrollable force, immediately give written notice to the other Party describing the circumstances and uncontrollable forces preventing continued performance of the obligations of this Agreement.

ARTICLE 16 - GOVERNING LAW-VENUE

Nevada law governs this Agreement and all adversarial proceedings arising out of this Agreement or arising out of planning or constructing the Project outlined in Article 2 – Services to be Performed by Consultant. Venue for all adversarial proceedings arising out of this Agreement or arising out of planning or constructing the Project outlined in Article 2 – Services to be Performed by Consultant shall be in state district court in Washoe County, Nevada.

ARTICLE 17 - MISCELLANEOUS

17.1 <u>Nonwaiver</u>

A waiver by either County or Consultant of any breach of this Agreement shall not be binding upon the waiving Party unless such waiver is in writing. In the event of a written waiver, such a waiver shall not affect the waiving party's rights with respect to any other or further breach.

If any provision of this Agreement is determined to be illegal, invalid, or unenforceable, the provision shall be deleted and the parties shall, if possible, agree on a legal, valid, and enforceable substitute provision that is as similar in effect to the deleted provision as possible. The remaining portion of the Agreement not determined to be illegal, invalid, or unenforceable shall, in any event, remain valid and effective for the term remaining unless the provision found illegal, invalid, or unenforceable goes to the essence of this Agreement.

ARTICLE 18 - INTEGRATION AND MODIFICATION

This Agreement represents the entire and integrated agreement between the Parties and supersedes all prior negotiations, representations, or agreements, either written or oral. This Agreement may be amended only by a written instrument signed by each of the Parties. Unless otherwise specified in writing, if there is any inconsistency between the terms of this Agreement and any other agreement between the Parties, the terms of this Agreement shall control.

In the event of any conflict between the documents that make up this Agreement, the documents will prevail in the following order: the Agreement for Professional Consulting Services Agreement, Insurance Exhibit "C" and then any other agreement / exhibits.

ARTICLE 19 - SUCCESSORS AND ASSIGNS

County and Consultant each binds itself and its directors, officers, partners, successors, executors, administrators, assigns and legal representatives to the other party to this Agreement and to the partners, successors, executors, administrators, assigns, and legal representatives of such other party, in respect to all covenants, agreements, and obligations of this Agreement.

ARTICLE 20 - ASSIGNMENT

Neither County nor Consultant shall assign, sublet, or transfer any rights under or interest in (including, but without limitation, monies that may become due or monies that are due) this Agreement without the written consent of the other, except to the extent that 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 consultants, associates, and subcontractors, as he may deem appropriate to assist him in the performance of the Services hereunder.

ARTICLE 21 - THIRD PARTY RIGHTS

Nothing herein shall be construed to give any rights or benefits to anyone other than County and Consultant.

ARTICLE 22 – INDEMNIFICATION, HOLD HARMLESSAND INSURANCE

Washoe County has established specific indemnification, hold harmless and insurance requirements for agreements/contracts with consultants, engineers, and architects to help assure that reasonable insurance coverage is maintained. Indemnification and hold harmless clauses are intended to assure that consultants accept and are able to pay for the loss or liability related to their activities. **Exhibit " C" Insurance Specifications** is included by reference. All conditions and requirements identified in this exhibit shall be completed prior to the commencement of any work under this Agreement.

ARTICLE 23 – LIMITED LIABILITY

County will not waive and intends to assert available defenses and limitations contained in Chapter 41 of the Nevada Revised Statues. Contract liability of both parties shall not be subject to punitive damages. Actual damages for the County's breach of this Agreement shall never exceed the amount of funds that have been appropriated for payment under this Agreement, but not yet paid, for the fiscal year budget in existence at the time of the breach.

ARTICLE 24 - ORGANIZATION'S CERTIFICATION

Consultant, its principals and agents, to the best of its knowledge and belief:

a) Are not presently debarred, suspended, proposed for debarment, declared ineligible, or voluntarily excluded from covered transactions by any Federal or state department or agency;

Have not within a three year period preceding this Agreement been convicted of or had a b) civil judgment rendered against them for commission of fraud or a criminal offense in connection with obtaining, attempting to obtain, or performing a public (Federal, State, or local) transaction or contract under a public transaction; violation of Federal or State antitrust statutes or commission of embezzlement, theft, forgery, bribery, falsification or destruction of records, making false statements, or receiving stolen property;

Are not presently indicted for or otherwise criminally or civilly charged by a government c) entity (Federal, State, or local) with commission of any of the offenses enumerated in (ii) above;

Have not within a three-year period preceding this Agreement had one or more public d) transactions (Federal, State, or local) terminated for cause or default; and

Understand that a false statement on this certification may be grounds for rejection or e) termination of this Agreement. In addition, under 18 USC Sec. 1001, a false statement may result in a fine of up to \$10,000 or imprisonment for up to 5 years, or both.

IN WITNESS WHEREOF, the parties have executed this Agreement.

WASHOE COUNTY: Dated this ____ day of _____, 2020 CONSULTANT:

Dated this ____ day of _____, 2020

By ______ Roy Johnson, P.E., Director Brown and Caldwell

By _____ Chair, Washoe County Commission



Exhibit A Scope of Work

Washoe County Community Services Department Swan Lake Surface Water Exportation Feasibility

Study April 30, 2020

Project Background

Swan Lake, a natural playa lake located in a closed Hydrographic Basin located in Lemmon Valley, has experienced unprecedented inflow due to stormwater runoff and precipitation over the last three winters and is at historical high water levels. The lake is currently being contained with a system of berms, barriers, and pumps to keep lake water off public roadways and out of residential structures. Washoe County Community Services Department (CSD) is evaluating a number of conceptual mitigation efforts to reduce the water elevation in Swan Lake to avoid continued impacts to the residents in Lemmon Valley and to provide for additional stormwater capacity during winter months. The CSD is requesting the assistance of Brown and Caldwell (BC) in evaluating one alternative consisting of exporting water out of the basin to the northeast towards Warm Springs Valley.

Project Overview

BC understands that the proposed project will consist of evaluating the feasibility of infiltrating Swan Lake water into a natural drainage course north of Swan Lake. If feasible, the ultimate project will consist of installing a pump station and pipeline that would take water from Swan Lake and discharge it to a location out of the basin. This scope of work is being prepared to evaluate one specific discharge option and two pipeline routes for that project. The discharge location being evaluated is approximately seven miles away to the northeast in Hungry Valley. The discharged water is expected to either infiltrate into the ground or potentially run off through the existing creek drainage for some yet to be determined distance.

The scope of work includes various tasks examining alternatives and the effect of the project. After each task is completed, a brief Technical Memorandum (TM) will be prepared and provided to the CSD for review. For tasks 203 through 206, the work will proceed in a step-wise approach with a meeting held with CSD staff to discuss the results of the task, and a decision made as to whether the project should proceed on to the next task. These step-by-step tasks include route evaluation, surface water and stream hydraulics, water quality impacts, and preliminary design criteria for the project. Task 201, covering permitting for the project, will run concurrently with the other tasks in order to identify critical permitting tasks and timelines. This scope of work is limited to a 3-year operation period for the Swan Lake discharge with a preliminary annual design flow of 1,000 acre feet.

BC proposes to complete the work with the following tasks.

Phase 100 Project Management

Task 101 – Project Management

This task will cover managing the overall project including budget, schedule, and quality assurance. Detailed monthly invoices will be prepared to document all work performed, and regular status reports will be provided to the CSD. As part of project management, BC will coordinate with the subconsultants on the project, including contracts, schedules, invoicing, communications, integrating discipline designs and drawings, and deliverables.

Phase 200 Permitting Assistance and Technical Memoranda

BC will prepare several TMs evaluating the following specific topics:

- Permitting
- Water Quantity and Quality
- Pipeline Routing Alternatives
- Channel Study/Surface Water Hydraulic Analysis
- Water Quality Impact Analysis
- Pipeline and Pump Station Design Alternatives

Task 201 – Permitting Assistance

The purpose of this task and TM will be to identify the various permits and approvals anticipated to potentially be required to implement the project. This task will be ongoing during the preparation of the other tasks and will be updated as the project is better delineated. A brief summary of each permit will be included as well as a discussion of the potential effort and time frame for obtaining permit approval. At this time, the following permits are anticipated to possibly be required for the project. Note, this is not an exhaustive list, and additional permits may be identified in the course of the project analysis.

- Washoe County encroachment permit for work within county right-of-way.
- Bureau of Land Management (BLM) right-of-way/pipeline easement application with Plan of Development; likely required based upon a review of the surrounding lands.
- BLM Environmental Assessment. Application for the BLM easement will probably trigger preparation of an Environmental Assessment checklist, and possibly an Environmental Assessment.
- Nevada Department of Environmental Protection water quality discharge permit for discharge of the Swan Lake water to surface waters.
- Air pollution permit for dust disturbance and emissions from any engine-driven pumps.
- Washoe County Special Use Permit.
- Building permit for the pump station.
- Bureau of Indian Affairs right-of-way permit for pipelines on tribal lands.
- United States Army Corps of Engineers permit for crossings or work within jurisdictional creeks.
- State Historical Preservation Office review of any potentially impacted cultural resources.
- Nevada State Engineer water rights permit. (Note: water rights permit assistance is not part of this scope of work)

It is anticipated the permit compliance will be a critical factor in the success of the project. As part of the route analysis, a subconsultant will perform a literature review to identify any anticipated endangered species along the proposed routes and at the pump station sites. The subconsultant will also perform a literature review and field survey to identify any areas that could potentially be determined to be wetlands as delineated by the United States Army Corps of Engineers. If possible, the pipeline routes will be adjusted to avoid any areas of potential concern.

The goal for this task is to prepare a list of permits expected to be required for the project and provide a brief description of the data required to complete the permit application. Also included will be an estimate of the timeline for preparation of the application and obtaining approval for the permit.

It is anticipated that the National Environmental Policy Act assistance work will be performed by Resource Concepts, Inc.

Assumptions:

- Water rights analysis and permitting will be managed by the CSD and is not part of this scope.
- Preparation of the environmental checklist or Environmental Assessment is not included in this task.
- No applications will be made for any permits under this task.
- No cultural resources or historical preservation surveys will be performed at this time.

Deliverable: Draft and final electronic versions of the TM on permits required and time frame for acquisition will be provided in electronic format.

Task 202 – Water Quality and Quantity Assumptions

This TM will summarize the water quantity and quality data to be used as the project design criteria as provided by Washoe County. It is anticipated that the initial design quantity of water to be carried will be 1,000 acre feet annually (AFA) over three years, operating for 300 days per year. This correlates to a design flow rate of approximately 750 gallons per minute on a 24-hour basis.

Assumptions:

- The design water quality to be used in the evaluation of alternatives will be provided by the CSD.
- BC will not perform any hydrologic analyses on the existing Swan Lake drainage basin, reservoir, or lake level analyses, or evaluate what water quantities must be removed to achieve specific Swan Lake water levels. The water quantity that must be transported by the project will be provided by the CSD and is expected to be approximately1,000 acre-feet annually.
- The design life of the water disposal project will be limited to the initial three years.

Deliverable: BC will prepare and provide a TM summarizing the water quality and quantity to be used in the analyses. This TM will be provided electronically in PDF format in both draft and final versions.

Task 203 – Pipeline Routing and Discharge Options

This TM will evaluate the feasibility of two different routes for the export pipeline to the discharge point in Hungry Valley. Both routes will be based on a buried pipeline from Swan Lake to the discharge point. A key part of this task is to identify the proposed discharge point for the pipeline in Hungry Valley. BC will review the Light Detection and Ranging (LIDAR) data and other available sources and identify a proposed discharge location for recommendation to the CSD. BC will then make a physical site visit to the proposed location for confirmation that the proposed location is feasible.

Two locations will be evaluated for the pump station and lake diversion. One pipeline route will be diverted from Swan Lake at assessor's parcel number (APN) parcel 080-671-55, on property owned by North Valleys Investment Group LLC. The second route will be diverted from Swan Lake on parcel 080-671-32, on property owned by Washoe County as part of the Lemmon Valley Wastewater Treatment facility. Both pipeline discharge routes will proceed along Lemmon Drive, Chickadee Drive, and Eagle Canyon Drive to the discharge point in Hungry Valley on Reno Sparks Indian Colony property.

Both of the routes will identify a workable alignment that will minimize impacts to private properties. The APN and owner of any crossed private properties will be provided based on the Washoe County mapping utility.

A recommendation section will be included discussing the advantages of each pipeline route.

A draft TM will be provided to the CSD for review, and a meeting scheduled with CSD staff to discuss the results and determine whether proceeding on to task 204 is justified.

Assumptions

- BC will identify the two routes using Google Earth and the Washoe County mapping utility. The two routes will be based on different diversion locations in Swan Lake but will use the same pipeline route from Lemmon Drive northward. BC will use the mapping utility to generate a list of public and private property owners that the routes will cross. BC will not contact any of the property owners directly.
- The CSD will confirm the sizing of the potential future reuse pipeline.
- No field surveying work will be performed on these routes.

Deliverable: BC will prepare and provide draft and final versions of a TM showing two options for the pipeline routing.

Task 204 – Hungry Valley Channel Study and Surface Water Analysis

The proposed discharge option is based on discharging to a drainage watercourse located in Hungry Valley, a part of the Warm Springs Valley Hydrobasin. One of the issues to be determined is the ultimate fate of the water discharged from Swan Lake into the hydrobasin. In this TM, BC hydrogeologists will evaluate the discharge of Swan Lake water to the ground surface at a location where northeast-flowing natural surface watercourses exist in the Warm Springs hydrobasin. This evaluation will include the following items:

- Determine the natural stream channel course by reviewing CSD provided LIDAR data and a site visit. No field surveying will be performed. The channel examination will be limited to the distance from the discharge point to where the stream channel crosses the Pyramid highway, a distance of approximately 8.5 miles.
- At any locations where the channel crosses through existing culverts, BC staff will visit the location and measure the size of the existing culvert. This will be used to make a determination as to whether the culvert may represent a limitation on the proposed flows. Channel cross sections will be measured at three or four key locations. Additional analysis can be performed in future design phases as required.
- BC will estimate infiltration rates along the channel to develop the bases used in the analysis.
- BC will utilize the LIDAR elevation data to provide ground surface elevations. Based on this data, BC will evaluate the infiltration based on the approximate area within the channel.
- Based upon the proposed discharge point as determined by the routing analysis, and using United States Department of Agriculture soils maps and other limited field and published data, BC will evaluate how far down the drainage watercourse a 1,000 AFA discharge can be expected to travel before it is completely infiltrated into the subsurface.
- If the 1,000 AFA discharge is anticipated to extend past the Pyramid Highway crossing point, an estimate will be provided of the annual discharge that can be discharged without proceeding past the Pyramid Highway.
- If the 1.000 AFA discharge is completely infiltrated before reaching the Pyramid Highway, an estimate will be prepared of the annual quantity that could be discharged and just reach the Pyramid Highway.
- The estimates will be based on year-round operation assuming the system is turned off during storm events. For the purposes of this evaluation, BC will assume a 300 day per year, 24-hour per day operation.

Assumptions

- No analysis will be made of the effects of the Swan Lake discharge to the surface water during storm events. It will be assumed that the Swan Lake discharge will be discontinued during large storm events and abnormally wet winters.
- All data used to support this task will be provided by the CSD or obtained through readily available online resources.
- Preliminary channel location will be determined from LIDAR data with the CSD assistance.
- No geotechnical risk analysis will be performed as part of this scope of work, including erosion risks, road or building destabilization, or other potential geotechnical hazards associated with this project.

A draft TM will be provided to the CSD for review, and a meeting scheduled with CSD staff to discuss the results and determine whether proceeding on to Task 205 is justified. At the meeting the CSD will identify any revisions to the proposed design flow rates for the project.

Deliverable: BC will prepare draft and final versions of a TM evaluating the effects of the Swan Lake discharge to surface watercourses in Hungry Valley up to Pyramid Highway.

Task 205 – Warm Springs/Hungry Valley Water Impact Analysis

The proposed discharge of up to 3,000 acre-feet of Swan Lake water over a three year period to the Warm Springs hydrobasin can be expected to potentially affect groundwater levels and water quality in the basin. In this TM BC hydrogeologists will evaluate the potential impact of the discharge to the creek channel on the RSIC property and its effects on the Warm Springs basin groundwater, including adjacent domestic wells where the well data is available. This evaluation will be limited to the Warm Springs hydrobasin, and no groundwater analysis will be performed on other hydrobasins in the area. Note, this will be a screening level evaluation only and no additional field tests or groundwater level monitoring will be performed.

This TM will include the following tasks:

- Following analysis of the stream effects, the potential effects to the adjoining groundwater will be evaluated. Particular
 attention will be paid to any known potable water sources that might be affected, including the RSIC water supply wells
 or adjacent domestic wells.
- Compile existing well and water quality data, including well ownership, for the Warm Springs Valley in the affected areas.
- Identify and obtain existing groundwater models for the basins, if available, and determine their usefulness in the evaluation of groundwater impacts from the Swan Lake discharge. Simulations of operation scenarios and resulting groundwater impacts are not included in this scope of work.
- Obtain Nevada Department of Water Resources records for water production and consumption data for the Warm Springs hydrobasin.
- Prepare a screening level groundwater model (mass balance mixing model or something similar) for evaluating the impacts to the groundwater quality and quantity.
- Provide a summary analysis of the expected surface and groundwater impacts and provide a recommendation on proposed discharge locations and system operation.
- Identify potential water quality impacts to surface water or springs in the affected area, if any, including changes in total dissolved solids (TDS).
- Identify potentially affected well owners in the Warm Springs hydrobasin and the potential impacts to their water quality and quantity.
- Identify locations where additional groundwater investigations or quality testing should be performed to better document the effects of the project.

Assumptions

• All data used to support this task will be provided by the CSD or obtained through readily available online resources.

Deliverable: BC will prepare draft and final versions of the TM discussing the effect on groundwater quality and quantity of Swan Lake water discharge to the Warm Springs hydrobasin.

A draft TM will be provided to the CSD for review, and a meeting scheduled with CSD staff to discuss the results and determine whether proceeding on to Task 206 is justified.

Task 206 – Pipeline and Pump Station Alternatives

The purpose of this TM is to evaluate the options available for the pump and pipeline materials to be used in the design. This TM will include the following topics:

- Pump types. The pump station could use semi-permanent submersible pumps, self-priming sewage pumps, or
 portable engine-driven sewage pumps. Other types of pumps, such as vertical turbine pumps, may also be feasible. Up
 to five different pump types will be evaluated and a summary matrix provided listing their advantages and
 disadvantages.
- Site options. The pump station must be located where it can draw water from the appropriate depths of the lake. However, much of the lake is surrounded by private property. Two locations for the pump station will be evaluated for their technical feasibility and the availability of access and electric power.
- Pipe materials. The pipeline could be constructed of many different materials; however, due to the potentially corrosive nature of the water, it is anticipated that most likely either polyvinyl chloride (PVC) or high density polyethylene (HDPE) pipe will be most appropriate. Metallic pipelines, such as ductile iron or steel will not be evaluated at this time.
- Building options. Depending upon the type of pump selected it may be desirable to construct a building to house the pumps. The TM will include a discussion for the various pump types and describe the building requirement, if any, to be used with that type of pump. It is anticipated that all of the alternatives will require the construction of some type of wet well structure as part of the lake intake.
- Pipeline design options. Depending upon the point of discharge of the pipeline, there are several design parameters to be determined. These parameters will include the pipeline diameter, pipe material, and pipeline length. This TM will be prepared based upon discharge of 1,000 AFA to the RSIC property and operation of 300 days per year. The merits of installing the pipeline in a shallow bury trench versus a standard deep trench will also be discussed.
- **Recommendations.** BC will evaluate the pump type alternatives and the pipeline material and design alternatives and provide recommendations for the most feasible alternative(s).
- Engineer's Opinion of Probable Cost. After the alternatives have been evaluated and the necessary equipment identified, BC will prepare an opinion of probable cost estimate for the alternative deemed most feasible. This estimate will be prepared to a Class 5 level of accuracy in accordance with the Association for the Advancement of Cost Engineering International criteria (-30 percent to +50 percent accuracy).

Note, this cost estimate will be made for capital improvements only and will not include any analysis of operation and maintenance costs or a present worth analysis.

Construction opinion of probable cost estimates, financial analyses, and feasibility projections are subject to many influences including, but not limited to, price of labor and materials, unknown or latent conditions of existing equipment or structures, and time or quality of performance by third parties. Such influences may not be precisely forecasted and are beyond the control of BC; actual costs incurred may vary substantially from the estimates prepared by BC. BC does not warrant or guarantee the accuracy of construction or development cost estimates.

Deliverable: BC will prepare and provide a draft and final TM, in electronic format, on the pump station and pipeline design alternatives and provide a recommended alternative to be used in the design. Also included will be a cost estimate for the recommended project.

Phase 300 On Call Additional Services

If requested by the CSD, BC will provide appropriate staff to attend meetings with local residents and/or speak at public meetings or provide other additional services not part of this current scope. The selection of the staff required will be discussed with the CSD prior to authorizing the work. If required, BC will be prepared to provide updates on the work to date and respond to questions from the public.

Work under this task will be completed on a time and materials basis as requested by the CSD.

Compensation

BC will perform the scope of work described herein on a time and materials basis for a not-to-exceed fee of \$149,796. BC will not exceed this fee without prior authorization from the CSD. A breakdown of the estimated fee is shown in the table below and will be in accordance with the rate table attached in Exhibit B. Although fees are estimated by task, BC reserves the right to transfer funds between tasks as project developments require, with the exception of the on-call tasks.

Washoe Cty Community Services Dept Swan Lake Pump Station and Pipeline							
Phase	Phase Description	Total Labor Hours	Total Labor Effort	Other Direct Costs	Total Resource Concepts Sub Cost	Total Expense Cost	Total Effort
100	Project Management	104	14,636	0	0	0	14,636
101	Project Management	104	14,636	0	0	0	14,636
200	Permitting & Tech. Memos	668	116,410	0	12,500	12,500	130,160
201	Permitting Assistance	50	9,978	0	12,500	12,500	23,728
202	Water Quality & Quantity TM	14	2,388	0	0	0	2,388
203	Pipeline Routing TM	74	10,854	0	0	0	10,854
204	Channel Study TM	194	33,734	0	0	0	33,734
205	Water Impact TM	224	40,672	0	0	0	40,672
206	Pipeline & PS Alts. TM	112	18,784	0	0	0	18,784
300	On-Call Add. Services	0	0	5,000	0	5,000	5,000
301	On-Call Assist.	0	0	5,000	0	5,000	5,000
	GRAND TOTAL	772	131,046	5,000	12,500	17,500	149,796

Hours and Dollars are rounded to nearest whole number. To display decimals, change the format of the cells.

Schedule

The project is anticipated to be completed on the following milestones following Notice to Proceed (NTP) (all days are calendar days):

- Task 201 Permitting TM: Draft at 120 days after NTP, but work will continue throughout project.
- Task 202 Water Quality TM 14 days after NTP
- Task 203 Pipeline Routing TM: 45 days after NTP
- Task 204 TM Channel Study TM: 60 days after Task 203 approval
- Task 205 TM Water Quality Impacts 45 days after Task 204 approval
- Task 206 TM Pipeline and Pump Station Alts. 30 days after Task 205 approval

Exhibit B

Brown and Caldwell Schedule of Hourly Billing Rates

Level	Engineering	Technical/Scientific	Administrative	Hourly Rate
Α			Office/Support Services I	\$53
В	Drafter Trainee	Field Service Technician I	Word Processor I Office/Support Services II	\$66
С	Assistant Drafter	Field Service Technician II	Word Processor II Office/Support Services III	\$75
D	Drafter Engineering Aide Inspection Aide	Field Service Technician III	Accountant I Word Processor III Office/Support Services IV	\$86
E	Engineer I Senior Drafter Senior Illustrator Inspector I	Geologist/Hydrogeologist I Scientist I Senior Field Service Technician	Accountant II Word Processor IV	\$103
F	Engineer II Inspector II Lead Drafter Lead Illustrator	Geologist/Hydrogeologist II Scientist II	Accountant III Area Business Operations Mgr Technical Writer Word Processing Supervisor	\$123
G	Engineer III Inspector III Senior Designer Supervising Drafter Supervising Illustrator	Geologist/Hydrogeologist III Scientist III	Accountant IV Administrative Manager	\$146
н	Senior Engineer Principal Designer Senior Construction Engineer Senior Engineer	Senior Geologist/Hydrogeologist Senior Scientist	Senior Technical Writer	\$165
I	Principal Engineer Principal Construction Engineer Supervising Designer	Principal Geologist/Hydrogeologist Principal Scientist	Corp.Contract Administrator	\$188
J	Supervising Engineer Supervising Constr. Engineer Supervising Engineer	Supervising Scientist Supervising Geologist/ Hydrogeologist	Assistant Controller	\$196
К	Managing Engineer	Managing Geologist/Hydrogeologist Managing Scientist	Area Bus Ops Mgr IV	\$219
L	Chief Engineer Executive Engineer	Chief Scientist Chief Geologist/Hydrogeologist	Corp Marketing Comm. Mgr.	\$237
M	Vice President			\$254
N	Senior Vice President			\$266
0	President/Executive Vice Presiden	t		\$277
P	Chief Executive Officer			\$304

Exhibit C

INSURANCE, HOLD HARMLESS AND INDEMNIFICATION REQUIREMENTS FOR CONSULTANT PROFESSIONAL SERVICE AGREEMENTS SWAN LAKE WATER EXPORTATION FEASIBILITY STUDY

INDEMNIFICATION

CONSULTANT Liability

As respects acts, errors or omissions in the performance of CONSULTANT services, CONSULTANT agrees to indemnify and hold harmless COUNTY, its officers, agents, employees, and volunteers from and against any and all claims, defense costs, or liability to the extent caused by CONSULTANT'S negligent acts, errors or omissions in the performance of its CONSULTANT services under the terms of this agreement.

CONSULTANT further agrees to defend COUNTY and assume all costs, expenses and liabilities of any nature to which COUNTY may be subjected as a result of any claim, demand, action or cause of action arising out of the negligent acts, errors or omissions of CONSULTANT or its Sub-consultant in the performance of their CONSULTANT services under the Agreement.

General Liability

As respects all acts or omissions which do not arise directly out of the performance of CONSULTANT services, including but not limited to those acts or omissions normally covered by general and automobile liability insurance, CONSULTANT agrees to indemnify, defend (at COUNTY'S option), and hold harmless COUNTY, 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-consultant, if any) while acting under the terms of this agreement; excepting those which arise out of the negligence of COUNTY.

In determining the nature of the claim against COUNTY, the incident underlying the claim shall determine the nature of the claim, notwithstanding the form of the allegations against COUNTY.

GENERAL REQUIREMENTS

COUNTY requires that CONSULTANT purchase Industrial Insurance (Workers' Compensation), General and Auto Liability, and CONSULTANT'S Errors and Omissions Liability Insurance as described below against claims for injuries to persons or damages to property which may arise from or in connection with the performance of the work here under by CONSULTANT, its agents, representatives, employees or Sub-consultants. The cost of all such insurance shall be borne by CONSULTANT.

INDUSTRIAL INSURANCE

It is understood and agreed that there shall be no Industrial Insurance coverage provided for CONSULTANT or any Sub-consultant by COUNTY. CONSULTANT agrees, as a precondition to the performance of any work under this Agreement and as a precondition to any obligation of the COUNTY to make any payment under this Agreement to provide COUNTY with a certificate issued by an insurer in accordance with NRS 616B.627 and NRS 617.210.

If CONSULTANT or Sub-consultant is a sole proprietor, coverage for the sole proprietor must be purchased and evidence of coverage must appear on the Certificate of Insurance. Such requirement may be waived for a sole proprietor who does not use the services of any employees, subcontractors, or independent contractors and completes an Affirmation of Compliance pursuant to NRS 616B627.

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Should CONSULTANT be self-funded for Industrial insurance, CONSULTANT shall so notify COUNTY in writing prior to the signing of any agreement. COUNTY reserves the right to approve said retentions and may request additional documentation, financial or otherwise for review prior to the signing of any agreement.

MINIMUM LIMITS OF INSURANCE

CONSULTANT shall maintain coverage and limits no less than:

- 1. General Liability: <u>\$1,000,000</u> per claim for bodily injury, personal injury and property damage. If Commercial General Liability Insurance or other form with a general aggregate limit is used, the general aggregate limit shall be increased to equal twice the required occurrence limit or revised to apply separately to this project or location.
- 2. Automobile Liability: <u>\$1,000,000</u> combined single limit per claim for bodily injury and property damage. No aggregate limit may apply.
- 3. CONSULTANT Errors and Omissions Liability: <u>\$1,000,000</u> per claim and as an annual aggregate. Premium costs incurred to increase CONSULTANT'S insurance levels to meet minimum contract limits shall be borne by the CONSULTANT at no cost to the COUNTY.

CONSULTANT will maintain CONSULTANT liability insurance during the term of this Agreement and for a period of three (3) years from the date of substantial completion of the project. In the event that CONSULTANT goes out of business during the term of this Agreement or the three (3) year period described above, CONSULTANT shall purchase Extended Reporting Coverage for claims arising out of CONSULTANT'S negligent acts, errors and omissions committed during the term of the CONSULTANT Liability Policy.

Should COUNTY and CONSULTANT agree that higher CONSULTANT Coverage limits are needed warranting a project policy, project coverage shall be purchased and the premium for limits exceeding the above amount shall be borne by COUNTY. COUNTY retains the option to purchase project insurance through CONSULTANT'S insurer or its own source.

DEDUCTIBLES AND SELF-INSURED RETENTIONS

Any deductibles or self-insured retentions must be declared to and approved by the COUNTY Risk Management Division prior to the start of work under this Agreement. COUNTY reserves the right to request additional documentation, financial or otherwise prior to giving its approval of the deductibles and self-insured retention and prior to executing the underlying agreement. Any changes to the deductibles or self-insured retentions made during the term of this Agreement or during the term of any policy must be approved by the COUNTY Risk Manager prior to the change taking effect.

OTHER INSURANCE PROVISIONS

The policies are to contain, or be endorsed to contain, the following provisions:

1. <u>General Liability Coverages</u>

a. COUNTY, its officers, agents, employees and volunteers are to be covered as additional insureds as respects: liability arising out of activities performed by or on behalf of CONSULTANT, including the insured's general supervision of CONSULTANT; products and completed operations of CONSULTANT; or premises owned, occupied or used by CONSULTANT. The coverage shall

contain no special limitations on the scope of protection afforded to the additional insureds, nor shall the rights of the additional insured be affected by the insured's duties after an accident or loss.

b. CONSULTANT'S insurance coverage shall be primary insurance as respects COUNTY, its officers, agents, employees and volunteers. Any insurance or self-insurance maintained by COUNTY, its officers, agents, employees or volunteers shall be excess of CONSULTANT'S insurance and shall not contribute with it in any way.

c. Any failure to comply with reporting provisions of the policies shall not affect coverage provided to COUNTY, its officers, agents, employees or volunteers.

d. CONSULTANT'S insurance shall apply separately to each insured against whom claim is made or suit is brought, except with respect to the limits of the insurer's liability.

e. CONSULTANT'S insurance coverage shall be endorsed to state that coverage shall not be suspended, voided, canceled or non-renewed by either party, reduced in coverage or in limits except after thirty (30) days' prior written notice by certified mail, return receipt requested, has been given to COUNTY except for nonpayment of premium.

ACCEPTABILITY OF INSURERS

Insurance is to be placed with insurers with a Best's rating of no less than A-: VII. COUNTY with the approval of the Risk Manager may accept coverage with carriers having lower Best's ratings upon review of financial information concerning CONSULTANT and insurance carrier. COUNTY reserves the right to require that the CONSULTANT'S insurer be a licensed and admitted insurer in the State of Nevada, or on the Insurance Commissioner's approved but not admitted list.

VERIFICATION OF COVERAGE

CONSULTANT shall furnish COUNTY with certificates of insurance and with original endorsements affecting coverage required by this exhibit. The certificates and endorsements for each insurance policy are to be signed by a person authorized by that insurer to bind coverage on its behalf. The certificates are to be on forms approved by COUNTY. <u>All certificates and endorsements are to be addressed to the specific COUNTY contracting department</u> and be received and approved by COUNTY before work commences. COUNTY reserves the right to require complete, certified copies of all required insurance policies, at any time.

SUB-CONSULTANTS

CONSULTANT shall include all Sub-consultants as insureds under its policies or furnish separate certificates and endorsements for each Sub-consultant. Sub-consultant shall be subject to all of the requirements stated herein.

MISCELLANEOUS CONDITIONS

- 1. CONSULTANT shall be responsible for and remedy all damage or loss to any property, including property of COUNTY, caused in whole or in part by CONSULTANT, any Sub-consultant, or anyone employed, directed or supervised by CONSULTANT.
- 2. Nothing herein contained shall be construed as limiting in any way the extent to which CONSULTANT may be held responsible for payment of damages to persons or property resulting from its operations or the operations of any Sub-consultants under it.

3. In addition to any other remedies COUNTY may have if CONSULTANT fails to provide or maintain any insurance policies or policy endorsements to the extent and within the time herein required, COUNTY may, at its sole option:

a. Order CONSULTANT to stop work under this Agreement and/or withhold any payments which become due CONSULTANT here under until CONSULTANT demonstrates compliance with the requirements hereof;

b. Terminate the Agreement.