



Alan Jones, PE
Senior License Engineer
Washoe County Community Services
9th and Wells
Reno, NV 89503

August 11th 2020

Re: Proposal – Hidden Valley Expansion Area Phase 2 Improvements Permitting and Design Services

Dear Mr. Jones,

SB Engineering (SB) appreciates this opportunity to provide engineering services to Washoe County Community Services (WCCS). In general, as we understand it you are requesting professional consulting services for the permitting and design of the Hidden Valley Phase 2 transmission mains and reclaim storage tank addition. The basis of the permitting and design services needed is taken from the “Hidden Valley Phase 2 Design Report – Hidden Valley Phase 2 Main Extension and Hidden Valley Tank Planning and Design Criteria”, SB Engineering dated August 2020.

SB Engineering anticipates the following major task:

Task 1 – Transmission Pipeline Permitting

- Work within the Alexander Lake Road and Veterans Right of Way (ROW) will require excavation and encroachment permits. SB shall submit plans to Washoe County and City of Reno/RTC to solicit comments and permit conditions to include in the design and construction contract.
- The Steamboat Creek Crossing is anticipated to require the following permits:
 - United States Army Corp of Engineers (USACE) Nationwide Permit.
 - Nevada Department of Environmental Protection (NDEP) 401 Water Quality Certification.
 - NDEP Working in Waterways Application.
 - NDEP Dewatering Application

For the Steamboat Creek Crossing permitting SB has engaged Debra Lemke with NCE. SB shall provide plans and exhibits to support these permit applications as well as complete the NDEP dewatering plan and corresponding permit application. Refer to Appendix A for NCE proposal and related assumptions. It is assumed if mercury contaminated soils are encountered the soil mitigation plan utilized for Veteran’s Parkway can be obtained and updated/incorporated into this Contract.

- Once the proposed transmission main leaves the Veterans Parkway right of way it will traverse land owned by the Bureau of Land Management (BLM). From preliminary discussions with John Kalb (ph: 775-885-6033) this pipeline will be deemed a Categorical Exclusion (CX) due to crossing pre-disturbed land. No archeological and/or cultural studies/updates are anticipated at this time. SB shall complete and submit the SF-299 application for the right of way grant needed for the pipeline. This

application will include the provisions for the future main extension to East Hidden Valley Drive for the proposed service to the Hidden Valley Golf Course. Legal descriptions needed for the right of way grant will be prepared by Summit Engineering per the pipeline plan routing provided by SB. SB anticipates two meetings with BLM staff, while prior to submitting the SF-299 application as well as the final right of way grant, they will be routed to WC for review and approval.

- Once the pipeline leaves BLM property it will travers 650-feet of private land prior to entering the Washoe County Parks property. SB shall work with WC Community Services and Parks Staff to determine the preferred pipeline routing needed as well as any permitting conditions needed to included in the construction contract for the pipeline.

Task 2 – Reclaim Storage Tank Permitting

The proposed reclaim tank addition is anticipated to require the following permits/approvals:

- Washoe County Parks: The proposed tank site is located within the Hidden Valley Regional Park that is owned/maintained by Washoe County Parks. Washoe County Parks approval of the proposed tank addition and access road is needed. SB will work with WC Community Services staff to obtain WC Parks approval. To facilitate this effort SB will engage Christy Corporation (Christy) to provide the needed grading plan and permitting exhibits needed. It is anticipated photographic simulations of the proposed tank installation may be needed, prior to completing these it is recommended to evaluate the benefit and potential drawbacks at that time. For this task it is assumed WC Community Service staff will take the lead on negotiating terms and obtaining the approval of the tank site. Christy/SB shall support WC staff with exhibits and design plans, while it is assumed two meetings with WC Parks staff shall be needed.
- A Washoe County Special Use Permit will be required due to both steep hillside development and grading volumes. To complete this task SB will engage Christy Corporation to complete the entitlement package and application processing. Refer to Appendix B for Christy's proposal. SB's role in the SUP process will be minimal, this task is primarily going to be completed by Christy.
- Due to the volume of cut and fills needed a Washoe County grading permit will be required. SB shall work with Christy to complete and submit this application.
- Washoe County Building Permit: The tank improvement plans will require Washoe County Building Department approval prior to construction. SB shall coordinate with subconsultants and WC staff as needed to complete the Permit Plan set, which shall include electrical items.
 - Note: The tank shall require monitoring equipment that dictates either utility or solar power be provided. Once the final tank site is determined SB shall investigate the availability of line power to the site and related cost.
- Stormwater Construction Permit: The disturbed land will exceed one acre therefore a notice of intent (NOI) shall be filed with NDEP. SB shall prepare the best management



practices “BMP” plans and revegetation plans needed to be implemented during and post construction.

- Washoe County AQMD Dust Control Permit: Due to the land area exceeding one acre a Washoe County dust control permit is required. SB shall work with Christy to complete the plans and application needed and obtain this permit to be included in the construction Contract.

Task 3 – Transmission Pipeline Topographic Survey

The transmission pipeline design will require a field topographic survey be completed to supplement the 2-foot contours provided by Washoe County. As with the BLM permit the topographic survey will include the extension to East Hidden Valley Drive to service the Hidden Valley Golf Course. The approximate length from the connection to the Hidden Valley Phase 1 main to the Washoe County Parks parcel is 7,000-feet, while the extension to East hidden Valley Drive is an additional 1,500-feet. The total length of the topographic survey to be completed is approximately 8,500-feet with an assumed width of 60-feet. The topographic survey does not include any work on the Washoe County Parks parcel, this topographic survey (which includes the tank site) is assumed to be completed by others and provided by Washoe County to SB. For the completion of the pipeline topographic survey SB has engaged Summit Engineering (Summit), refer to Appendix C for Summit’s proposal and related assumptions.

Task 4 – Transmission Pipeline Boundary Survey

Once the transmission pipeline exits the Veterans Parkway right of way public and/or private utility easements will be required until it enters the Washoe County Parks parcel. The proposed pipeline will parallel an existing potable water main within an existing BLM right of way grant. The BLM right of way grant for the potable water main is exclusive, so WC will be required to obtain a new right of way grant for the proposed reclaim transmission main. Once an approved alignment and BLM permit is obtained Summit Engineering shall complete any legal descriptions needed. Summit Engineering will also conduct the boundary and pre-existing easement research from the Veterans Parkway right of way to the Washoe County Parks parcel boundary. SB/Summit shall work with WC staff to facilitate acquiring the private utility easements needed within Desert Way and Hidden Highlands Drive as well as the 30-foot wide by 650-foot long easement across APN 016-840-11. It is anticipated SB/Summit shall provide exhibits and legal descriptions as required, but easement solicitation letters/correspondence will be completed by WC staff. It is also assumed any property appraisals needed for the valuation of easements will be provided by WC to SB/Summit. For the completion of the pipeline topographic survey SB has engaged Summit Engineering, refer to Appendix C for Summit’s proposal and related assumptions.

Task 5 Transmission Pipeline and Tank Site Geotechnical Investigation

SB will engage Newfields to complete the geotechnical investigations needed. It is worth noting a geohazard review of the unnamed quaternary fault in the vicinity of the tank site will



be investigated in another contract Newfields has with WC. The location of this fault is critical in finalizing the tank location and will be completed prior to the geotechnical investigations needed. Newfields scope of work is anticipated to include the following:

- Two geophysical surveys of the tank site.
- Field investigations of surface soils at five locations along the pipeline alignment as well as one at the final tank site.
 - Newfields under another contract with WC is investigating soil characteristics on the WC Parks property and to the extent possible this data will be referred to for the transmission pipeline construction.
- Laboratory testing of the soil samples obtained from the field investigations above.
- Completion of the final geotechnical report with recommended foundation, seismic and constructability recommendations.

Please refer to Appendix D for Newfield's proposal and related assumptions.

Task 6 Transmission Pipeline Design

SB anticipates approximately 5,100-feet of 20-inch and 5,530-feet of 24-inch transmission main pipelines will be needed between the connection to the Hidden Valley phase 1 main and the final tank site location. SB anticipates twenty-four (24) plan and pipeline profile sheets will be required, which will be designed with the topographic survey completed in Task 3. SB currently anticipates utilizing ductile iron pipe (DIP) with bonded joints. Pending the results of the geotechnical investigation it is not anticipated cathodic protection (CP) will be provided at this time. Due to the criticality of the transmission pipeline providing bonded joints is recommended to allow for CP addition at a later time with minimal cost. SB shall coordinate the transmission pipeline design and details with permitting, lands and Washoe County requirements. As required written specifications will be completed for inclusion in the construction contract.

Task 7 Reclaim Storage Tank Design

It is currently envisioned either a single 1.4 million gallon (mgal) prestressed concrete tank or two 0.70 mgal welded steel tanks shall be constructed. As part of Task 2 the final tank type and site location will be determined. Pending the outcome of Task 2, SB shall complete the tank layout and geometry needed to meet the hydraulic and performance criteria needed. Tank plan, sections and details shall be completed to allow for the completion of structural design by Contractor. SB shall develop the performance specifications needed in accordance with industry standards to include in the contract documents for construction.

Task 8 Reclaim Storage Tank Site Layout and Yard Pipe Design

In coordination with the grading and drainage plans to be completed by Christy SB shall complete the design for the tank site layout and yard piping. It is anticipated a single 1.4 million gallon (mgal) prestressed concrete tank with an internal partition will be selected, but the final tank type/number will be determined in Task 2. For either tank type/number



selected, SB shall design the yard piping to minimize tank short circuiting while allowing either tank or cell to be in-service with the other off-line. Due to seismic design considerations SB envisions flex-tend type connections to be utilized at all tank to pipeline connections. Large check and/or control valve installations shall be located within pre-cast and/or cast in-place concrete vaults. The structural design of any pre-cast concrete vaults that may be needed will not be completed by SB, but would be completed by the Contractor per a SB generated performance specification. Included in this task SB shall provide all fence, gate and concrete flatwork details. As required written specifications will be completed for inclusion in the construction contract.

Task 9 Tank Site and Access Road Grading and Drainage Design

The anticipated tank site will require substantial grading due to steep hillside slopes. SB has engaged Christy to complete the tank grading and drainage plans needed. Included in this task is the layout and grading of the proposed tank and access road with an assumed length of 2,000 linear feet (LF). The tank site grading and drainage design will be completed per Washoe County standards. As required, written specifications will be completed for earthwork (temporary and final), subgrade preparation, drainage and surface improvements for inclusion into the construction contract. Included in this task Christy shall prepare and submit the dust control permit needed for construction to Washoe County Air Quality as well as a separate grading permit application outside of the building permit application. Refer to Appendix B for Christy's proposal and related assumptions.

Task 10 Project Administration, Bid Assistance, and Final Conformed Documents

It is SB's understanding that project management during design/bid and overall coordination with Washoe County and design partners is to be included in this scope. SB anticipates 5 meetings will be needed with Washoe County staff and/or design team consultants to coordinate the transmission pipeline and tank permitting and design parameters. SB anticipates two meetings will be needed with the assigned Washoe County Inspector/construction management partner to facilitate constructability and testing requirements. Included in this task SB, shall work with WC purchasing to develop the bid documents, including conformed plans and specifications. SB shall complete an engineer's estimate of probable construction cost. SB shall develop and manage the overall project schedule as needed provide updates. Included in this task Christy has budgeted time to provide bidding support.

The anticipated cost by task is as follows:

Task	Cost
Task 1 – Veterans Right of Way Permitting (SB)	\$1,400
Task 1 – Steamboat Creek Permitting (NCE)	\$32,960
Task 1 – Steamboat Creek Dewatering Plan/Permit (SB)	\$7,420
Task 1 – BLM Pipeline Permitting(SB/Summit)	\$4,200
Task 1 – WC Parks Pipeline Permitting (SB)	\$2,100



Task 2 – WC Parks Tank Permitting (SB/Christy)	\$5,950
Task	Cost
Task 2 – WC Tank SUP (Christy)	\$22,275
Task 2 – WC Building Permit (SB)	\$2,500
Task 2 – SWPPP/BMP Tank Site Plan (SB)	\$3,500
Task 3 – Transmission Pipeline Topographic Survey (Summit)	\$12,265
Task 4 - Transmission Pipeline Boundary Survey (Summit)	\$12,485
Task 5 – Transmission Pipeline/Tank Geotech (Newfield)	\$19,160
Task 6 – Transmission Pipeline Design/Specifications (SB)	\$24,780
Task 7 – Reclaim Storage Tank Design/Specifications (SB)	\$7,000
Task 8 - Reclaim Storage Tank Site Layout/Yard Pipe Design (SB)	\$11,200
Task 9 – Reclaim Storage Tank Site Grading/Drainage Design (Christy)	\$14,850
Task 10 – Project Administration and Bid Documents (SB/Christy)	\$11,870
Total Anticipated Cost =	\$199,915

The above task will be completed on time and materials basis per the attached fee schedule (refer to subconsultants in Appendices) not to exceed without prior written authorization from Washoe County, except SB's subconsultant markup will be ten percent not standard 15 percent. Due to a few unknowns associated with the various task SB and subconsultants reserves the right to move budget between task if deemed appropriate. Not included in the above are permitting and utility application fees assumed to be paid for by Washoe County at time of application. Also not included are easement and land acquisition cost.

Due to the unknowns associated the effort needed at this time construction support services are not included in the above task. It is anticipated once the final pipeline and tank construction plans are completed proposals for construction support services can be provided at that time if desired by WC. Also, electrical engineering services are not included in the above task. The electrical power supply and control strategy will be finalized during the completion of the tank design. Once a defined scope can be provided SB shall work with WC to solicit the design services of an electrical engineer, and if warranted a cost amendment to this proposal shall be submitted.

Deliverables are anticipated to be the following:

- Permit application submittals for WC review prior to submission to the respective agency in question.
- Transmission pipeline 30 and 70 percent design plans.
- Transmission pipeline 90 and 100 percent design plans and specifications.
- Reclaim tank configuration, site layout, yard piping, grading and drainage 30 percent and 70 percent design plans.
- Reclaim tank configuration, site layout, yard piping, grading and drainage 90 percent and 100 percent design plans and specifications.
- Conformed plans and specifications for the transmission pipelines and reclaim tank addition.



SB and the subconsultants included in this proposal greatly appreciate the opportunity to be of service and if there are any questions or comments please do not hesitate to contact me.

Sincere Regards,

A handwritten signature in blue ink, appearing to read 'Scott Benedict', written over a light blue rectangular background.

Scott Benedict, PE
Principal Engineer

Proposal Accepted by: _____
(Signature)

Printed Name: _____ Date: _____



Appendix A NCE Proposal



August 10, 2020

Mr. Scott Benedict, P.E.
SB Engineering
586 Citadel Way
Reno, NV 89503

RE: Scope of Work for Hidden Valley Phase 2 Water Main Extension and Tank Project - Steamboat Creek Permit Applications

Dear Mr. Benedict:

NCE appreciates the opportunity to submit this scope of work for the preparation of environmental permit applications associated with Hidden Valley water main extension and tank project, located in Reno, Nevada. NCE understands that the water line is proposed to cross under Steamboat Creek, a federal and state of Nevada jurisdictional water. Due to these proposed temporary impacts, both federal and state permit approvals will be necessary and must be obtained prior to construction.

Based on our research of the project and regulations, NCE believes a US Army Corps of Engineers (USACE) Nationwide Permit (NWP) 12 Utility Line Activities (NWP 12) maybe the most applicable. However, in mid-April the USACE stopped issuing NWP 12's due to the Keystone XL oil sands pipeline court issue. Due to this, an NWP 33 Temporary Construction, Access, and Dewatering (NWP 33) may be suitable for this project. In addition, a Nevada Division of Environmental Protection (NDEP) 401 Water Quality Certification (Section 401), a NDEP Temporary Working in Waterways (WiW) Permit, and a NDEP Dewatering Permit will also be required because of the proposed impacts to Steamboat Creek.

To support SB Engineering with federal and state permit approvals, NCE is proposed the following scope of work:

Task 1 – USACE NWP Application

NCE's initial steps will be to discuss the status of NWP 12's and 33's with the USACE Reno District to solidify the most applicable/preferred NWP for this project, and NCE will determine the amount of aquatic resources (Steamboat Creek) that are proposed for impact. NCE will visit the site to record Steamboat Creek's Ordinary High Water Mark (OHWM) and present to SB Engineering the proposed impact amounts. Once this information is known, NCE will prepare either an NWP 12 or 33 application.

NCE understands that the water line will be installed under Steamboat Creek which will result in no permanent impacts; however, temporary impacts to Steamboat Creek are anticipated. Based

Reno, NV

1885 S. Arlington Ave., Suite 111
Reno, NV 89509
(775) 329-4955

on this, the NWP 12 will not require a Pre-Construction Notification (PCN). Additionally, the NWP 33 does not require a PCN. The basis for these assumptions is that the project meets the General and Regional Conditions of the USACE's NWP program.

The following background research, field visits, and internal memos will be completed to confirm the project can meet the General and Regional Conditions of the USACE's NWP program:

- Special Status Species database search, field survey, and memo;
- Cultural resources database search, field survey, and memo; and
- Determine the OHWM of Steamboat Creek field survey and memo.

The NWP 12 or 33 application will be completed, but not submitted to the USACE, assuming the project meets the NWP conditions.

NCE will prepare and submit a cover letter to the USACE with a project description and informing them the project complies with a non-reporting NWP, so a PCN will not be submitted to the USACE.

Fee: \$13,750

Deliverables

- Draft and Final NWP 12 Permit Application submitted via email in PDF format to SB Engineering and Washoe County. Submittal will include:
 - Special Status Species Memo
 - Cultural Resources Memo
 - Steamboat Creek OHWM Memo
- Cover Letter to USACE, SB Engineering, and Washoe County submitted via email in PDF format

Assumptions

- The project qualifies for a Non-Reporting NWP 12 or NWP 33 and can meet all USACE NWP General and Regional Conditions
- SB Engineering will prepare and provide to NCE the 65% Design for Steamboat Creek crossing so NCE can begin the NWP permit application
- The extent and nature of the proposed project will not change following 65% design
- No cultural resources or special status species will be impacted by proposed improvements

Task 2 – NDEP Section 401 Water Quality Certification

NCE will prepare a Section 401 application for submittal to the NDEP. NCE will prepare and email the Section 401 draft permit application to SB Engineering and Washoe County for review and comment. NCE will then incorporate appropriate comments on the draft application and prepare

the final permit application and submit to NDEP. NCE will follow-up with the NDEP in the event NDEP has any questions or additional needs.

Fee: \$5,390

Deliverables

- Draft Section 401 application submitted to SB Engineering and Washoe County via email in PDF format
- Final Section 401 to the NDEP, SB Engineering, and Washoe County via email in PDF format

Assumptions

- The extent and nature of the proposed project will not change following 65% design and permit submittal
- If the NDEP requests additional information, NCE will be able to complete the NDEP request within two (2) billable hours
- This scope does not include permit monitoring or reporting

Task 3 – NDEP Working in Waterway Application

NCE will prepare a WiW permit application for submittal to NDEP. NCE will prepare and email the WiW draft permit application to SB Engineering and Washoe County for review and comment. NCE will then incorporate appropriate comments on the draft application and prepare the final permit application.

The final WiW permit application will be submitted online through NDEP's permit portal. Typically, the NDEP permit applications are too large for a complete online portal submittal; due to this, NCE will also email the WiW permit application to NDEP with the permit portal number contained in a cover letter and the \$250 application fee. The \$250 WiW application fee is included in the cost estimate.

Fee: \$5,825

Deliverables

- Draft WiW Permit Application to SB Engineering and Washoe County submitted via email in PDF format
- Final WiW Permit Application submitted online to NDEP
- Final WiW Permit Application to the NDEP, SB Engineering, and Washoe County submitted via email in PDF format

Assumptions

- The extent and nature of the proposed project will not change following 65% design and permit submittal

- If the NDEP requests additional information, NCE will be able to complete the NDEP request within two (2) billable hours
- This scope does not include permit monitoring or reporting

Task 4 On-Call Environmental Services

NCE will be available for on-call environmental services, which may include but are not limited to attending client, team, or agency meetings, and reviewing anticipated deadlines, project schedule and milestones, and/or lines of communication. Under this task, NCE will contact Nevada Department of Wildlife as needed.

NCE will conduct the above activities and others as requested by SB Engineering and/or Washoe County. If the estimated fee is depleted, NCE will coordinate with SB Engineering to secure additional funding as needed.

Fee: \$5,000

ESTIMATED FEE

NCE will work on a time and materials basis in accordance with our Standard Services Agreement and attached 2020 Schedule of Charges. A contract amount of **\$29,965** will not be exceeded without authorization from SB Engineering.

We appreciate the opportunity to provide these services to SB Engineering and look forward to working with you on this project. If you have any questions or additional needs, please call Debra Lemke at (775) 329-4955.

Respectfully,
NCE



Kevin Senn
Principal



Debra Lemke, PWS, CPESC
Senior Scientist

**SCHEDULE OF CHARGES 2020****PROFESSIONAL SERVICES**

Principal.....	\$265/hour
Associate	\$215/hour
Senior	\$185/hour
Project.....	\$160/hour
Staff.....	\$140/hour

TECHNICAL SERVICES

Senior Construction Manager*	\$140/(\$165-PW)/hour
Senior Designer	\$150/hour
CADD Designer	\$130/hour
Senior Technician*	\$125/(\$150-PW)/hour
Construction Inspector*	\$125/(\$150-PW)/hour
CAD Technician	\$115/hour
Senior Field Scientist	\$120/hour
Field Scientist	\$100/hour
Project Administrator	\$105/hour
Field/Engineering Technician*	\$100/(\$125-PW)hour
Technical Editor	\$95/hour
Clerical	\$85/hour

CONTRACT LABOR

From time to time, NCE retains outside professional and technical labor on a temporary basis to meet peak workload demands. Such contract labor will be charged at regular Schedule charges.

LITIGATION SUPPORT

Engineer/Scientist	\$300/hour
Court Appearances & Depositions	\$500/hour

EQUIPMENT

Plotter Usage.....	(separate fee schedule)
Truck	\$100/day
Automobile.....	IRS Standard Mileage Rate+15%
Falling Weight Deflectometer Testing	\$3,500/Day
Coring	\$4,500/Day
Environmental Equipment.....	(separate fee schedule)

OUTSIDE SERVICES

Rental of equipment not ordinarily furnished by NCE and all other costs such as special printing, photographic work, travel by common carrier, subsistence, subcontractors, etc.cost + 15%

**COMMUNICATION/
REPRODUCTION**

In-house costs for long-distance telephone, faxing, postage, printing and copying

project labor charges x 5%

TERMS

Billings are payable upon presentation and are past due 30 days from invoice date. A finance charge of 1.5% per month, or the maximum amount allowable by law, will be charged on past-due accounts. NCE makes no warranty, either expressed or implied, as to its findings, recommendations, specifications, or professional advice except that they are prepared and issued in accordance with generally accepted professional practice.

*A surcharge of \$25/hour applied for technicians and construction inspectors to comply with Prevailing Wage (PW) per requirements of California Department of Industrial Relations.



Appendix B
Christy Corporation Proposal



August 11, 2020

Scott Benedict, P.E.
SB Engineering
586 Citadel Way
Reno, Nevada 89503

RE: Proposal for Professional Services – Hidden Valley Reclaimed Water Tank

Dear Scott,

Christy Corporation, LTD (CC) is pleased to have this opportunity to present our proposal for professional planning and engineering services for the above-described project. Specifically, the scope of work would include the preparation and processing of a Special Use Permit to allow for a new water tank located in the Hidden Valley area of Washoe County and grading and drainage construction drawings for the tank site and +/-2,000 linear feet of access road.

Below is our proposed scope of work.

Scope of Work

Task:

1. Pre-Application Meetings	\$1,000 T&M
Prior to submitting a formal Special Use Permit request, CC will meet with Washoe County Parks and Recreation and Washoe County staff to identify any key issues or concerns they may have. Identifying any key issues upfront will allow us to address these in the entitlement package and help prevent processing delays.	
2. Exhibits and Support Services	\$3,500 T&M
CC will prepare photo simulations of the proposed tank in the post development condition as requested. The photo sims will provide a visual representation of the tank based on proposed grading, location, tank size, etc. and can be used in the SUP application as well as in presentations to the Citizens Advisory Board, surrounding property owners, municipal agencies, and Board of Adjustment. Anticipate \$1,000+/- per photo simulation. CC will prepare additional miscellaneous exhibits as requested for agency use or public meetings.	

3. Entitlement Package	\$5,000 T&M
CC will prepare a comprehensive entitlement package to accompany the Special Use Permit request. This will include a project description, project rationale/justification, analysis of Washoe County Master Plan and Southeast Truckee Meadows Area Plan, policies, required exhibits, County application forms, etc.	
4. Tank Site and Access Road Grading and Drainage Plans – 70% Design	\$12,500 T&M
CC will advance the development of the preliminary improvement plans previously developed for a partially buried concrete tank for the Special Use Permit application.	
Plans will meet the requirements of the County for a Special Use Permit and will consist of the following:	
<ul style="list-style-type: none">• Proposed overall preliminary site plan showing the full property with boundaries, easements, and the proposed project.• Grading and drainage plan specific to the tank site and access road.• Quantities of excavation, fill, and disturbed areas.• Two site cross sections identifying existing and proposed grading.	
Under this task, grading and drainage plans for the tank site and approximately 2,000 linear feet of access road will be prepared to approximately 70% design development for review by Washoe County.	
Note, no landscaping or irrigation plans are proposed at this time. It is anticipated that disturbed areas will be revegetated and preliminary revegetation notes will be incorporated into the plans. Should landscaping be requested by Washoe County or required by the Special Use Permit, CC can obtain a Landscape Architect to provide services.	
5. Special Use Permit Application Processing	\$1,500 T&M
CC will represent the project at all required public meetings and hearings. The following are anticipated:	
<ul style="list-style-type: none">• Washoe County Agency Review Meeting/Responses to Issues• South Truckee Meadows Citizens Advisory Board Meeting• Washoe County Board of Adjustment Hearing	
6. Tank Site and Access Road Grading and Drainage Plans – Construction Documents	\$10,500 T&M
CC will continue the development of the 70% design drawings to 100% construction documents for permitting and bidding. Construction drawings will include grading and drainage plans for the tank site and +/- 2,000 linear feet of access road to the tank. CC will provide written grading specifications for the project. CC will prepare and submit a dust control permit application to Washoe County Air Quality Management District. CC anticipates a	

separate grading permit submittal to Washoe County in addition to the building permit for the tank.

7. Meetings and Coordination**\$3,000 T&M**

For permitting and entitlements, if needed based on neighborhood concerns, staff comments, etc. CC will attend any additional meetings, as requested by SB Engineering. This includes individual neighbor meetings, meetings with elected officials, etc.

CC will also attend coordination meetings with local agencies and coordinate with the project team as required or requested.

8. Bid Assistance**\$1,500 T&M**

CC will attend the pre-bid meeting and provide requested support during bidding including response to RFIs and issuance of Bid Addendums.

9. Reimbursables**\$250 T&M**

Direct expense items such as mileage, printing, copying, material fees, etc. will be billed on a time and materials basis. Time and materials tasks shall not be exceeded without written client authorization

Special Conditions, Items needed and Exclusions:

1. This proposal is valid for 30 days from the date above.
2. A preliminary title report with documents for all exceptions shall be provided by the client. Easements from the title report will be plotted on the site plan for the use permit application.
3. Client is responsible for all reimbursable expenses (mileage, printing, copying, application binding) incurred.
4. Client shall provide signed County affidavit forms and filing fees.
5. All invoices due and payable 30 days from the date they are sent.
6. Schedule: CC will coordinate a schedule start date to complete the work upon execution of this proposal.
7. Reference the attached 2020 Fee Schedule for work to be performed on a time and materials basis. All work is proposed to be performed by time and materials. Task budgets shall not be exceeded without written client authorization.
8. Structural engineering, landscape architecture, geotechnical engineering, and surveying /mapping are excluded from this scope. Topography with 1' contours to be provided by others. Geotechnical report and recommendations to be provided by others.
9. Construction services are excluded from this scope. A separate construction services proposal will be prepared at the time of project bidding.

We appreciate the opportunity to work with you. Should you have any questions or require additional information, please do not hesitate to contact me.

Sincerely,
Christy Corporation, LTD

IN AGREEMENT WITH THE ABOVE TERMS:



Douglas Buck
Engineering Manager

By: _____

Title: _____

FEE SCHEDULE
EFFECTIVE JANUARY 1, 2020

CLASSIFICATION	STANDARD RATE
PRINCIPAL ENGINEER	\$210
SENIOR ENGINEER	\$190
SENIOR PLANNER	\$180
PROFESSIONAL LAND SURVEYOR	\$125 - \$155
PROJECT ENGINEER / SENIOR DESIGNER	\$125 - \$155
STAFF DESIGNER / STAFF PLANNER / CAD TECHNICIAN	\$105 - \$130
ADMINISTRATIVE ASSISTANT / PROJECT COORDINATOR	\$110
MATERIALS & DIRECT CHARGES	COST PLUS 10%
OVERTIME WORK	RATE PLUS 50%
PRINTS 24x36 – BLACK & WHITE	\$2.50 PER SHEET
PRINTS 30x42 – BLACK & WHITE	\$3.50 PER SHEET
PRINTS 24x36 – COLOR	\$3.50 PER SHEET
PRINTS 30x42 – COLOR	\$4.50 PER SHEET
AUTO MILEAGE WILL BE CHARGED AT THE IRS STANDARD RATE	.57 CENTS PER MILE

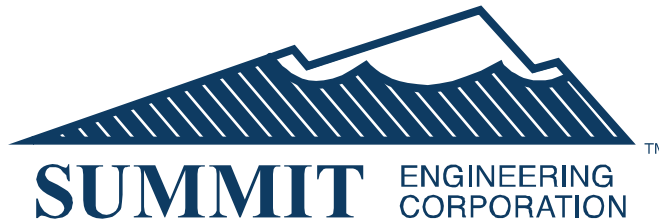
FEE SCHEDULE SUBJECT TO CHANGE JANUARY 1, 2021



ENGINEERING || LAND DEVELOPMENT || CONSTRUCTION
1000 Kiley Parkway
Sparks, Nevada 89436
(775) 502-8552



Appendix C
Summit Engineering Proposal



August 11, 2020

EXHIBIT "A"

SB Engineering
Attn: Scott Benedict, P.E., Principal/Owner
775-223-0922
scott@sbcivilengineering.com

Re: Surveying Estimate for Hidden Valley Phase 2, Washoe County, NV

Mr. Benedict:

Summit Engineering is pleased to submit this proposal to provide surveying services for APN 016-840-11, 021-270-01,09,10,11,12,19,33,34,42,43, and the easterly limits of 44, located in Washoe County, Nevada.

Boundary Retracement & Topographic Surveying.....T&M Estimate \$22,500

Summit's survey department anticipates the following scope of work required for this task:

- Conduct boundary research of recorded maps and deeds within Sections 34 & 35, T19N, R20E, MDM, of the subject parcels along the proposed waterline alignment. Compute initial search coordinates for boundary monuments to be located.
- Using the researched maps and BLM's Master Title Plat, easements and rights-of-ways will be plotted. If a title report is supplied, exception documents will also be analyzed.
- Conduct a field boundary retracement survey of the subject parcels. Final boundary determination will be made. Ownerships will be labeled along with contact information.
- Conduct a field topographic survey, 60' in width, of the alignment (approximate 8,500' long). This data will include the required surface utilities and their inverts. Data will be reduced to topographic map with 2' contours generated and blended into the existing 2019 2' contours that Washoe County has supplied.
- An AutoCAD basemap will be prepared that is suitable for final design purposes.
- Above scope to be completed within 5 weeks of authorization to proceed.
- Includes the preparation of metes & bounds legal descriptions with graphical displays for incorporation in grant of waterline easement documents and/or BLM right-of-way application purposes. Legals and displays will be completed within 2 weeks of authorization to proceed and receipt of final design easement limits.

We look forward to working with you on this project. If you have any questions or need any additional information, please contact me at 775-787-4316 or ryan@summitnv.com. Sincerely,

A handwritten signature in blue ink, appearing to read "Ryan Cook", is placed over the typed name and title.

Ryan Cook, PLS, WRS, CFedS
VP and Surveying Department Manager
SUMMIT ENGINEERING CORPORATION

5405 Mae Anne Avenue • Reno, Nevada 89523 • (775) 747-8550 FAX (775) 747-8559
1150 Lamoille Highway • Elko, Nevada 89801 • (775) 738-8058 FAX (775) 738-8267



EXHIBIT "B"
2020 FEE SCHEDULE
ENGINEERING, PLANNING, SURVEYING AND GEOTECHNICAL
January 1, 2020 to December 31, 2020

<u>PROFESSIONAL AND TECHNICAL STAFF</u>	<u>HOURLY RATES</u>
Principal Engineer	215.00
Principal Planner	215.00
Executive Vice President.....	200.00
Vice President - Engineering	150.00
Vice President - Surveying	140.00
Professional Engineer	100.00 - 140.00
Professional Land Surveyor	100.00 - 130.00
GIS Specialist.....	85.00
Water Rights Surveyor	130.00
Civil Staff Designer	80.00 - 110.00
Planner	130.00
Assistant Planner.....	90.00
Engineering Intern	65.00 - 75.00
Geotech Intern.....	65.00 - 75.00
Laboratory Manager	110.00
Certified Environmental Manager	140.00
Health & Safety Manager	85.00
Chief Photogrammetrist.....	140.00
Photogrammetrist	110.00
Surveying Technician	75.00 - 95.00
Project Assistant/Clerical	60.00 - 70.00
Deposition Testimony/Expert Trial Witness.....	300.00 - 500.00
Crew Supervisor	100.00
1-Man Survey Crew.....	110.00
2-Man Survey Crew.....	155.00
3-Man Survey Crew.....	210.00
1-Man Survey Crew Prevailing Wage	quoted per job
2-Man Survey Crew Prevailing Wage	quoted per job
3-Man Survey Crew Prevailing Wage	quoted per job
ICC 1704 Inspector.....	90.00 - 125.00
Engineering Inspector.....	95.00 - 110.00
Materials Tech.....	95.00
Soils Inspector/Tester Prevailing Wage.....	quoted per job



EXHIBIT "B"
2020 FEE SCHEDULE
PRINTING & COPYING
January 1, 2020 to December 31, 2020

Small Formats	B&W	Color
8.5"x11"	\$0.11	\$0.40
8.5"x14"	\$0.15	\$0.50
11"x17"	\$0.19	\$0.55

Large Formats	B&W	Color
Cost per sf	\$0.40	\$1.50
18"x24"	\$1.20	\$4.50
22"x34"	\$2.08	\$7.80
24"x36"	\$2.40	\$9.00
30"x42"	\$3.60	\$13.50
36"x42"	\$4.20	\$15.75
36"x48"	\$4.80	\$18.00
36"x60"	\$6.00	\$22.50

****IF SIZE IS NOT LISTED**

Measure the height and width of page in inches; multiply height and width and divide by 144;
multiply result by the appropriate \$ per sf based on B&W or Color.

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Appendix D Newfields Proposal

July 30, 2020
Proposal No. 20PR-035

SB Engineering
586 Citadel Way
Reno, Nevada 89503

Attention: Scott Benedict, P.E.
Principal/Owner

RE: Geotechnical Investigation
Hidden Valley Phase 2 Main Extension and Reclaimed Water Storage Tank(s)
Reno, Nevada

References: *Hidden Valley Phase 2 Design Report – Hidden Valley Phase 2 Main Extension and Hidden Valley Tank Planning and Design Criteria, Technical Memorandum*, SB Engineering, July 1, 2020.

Quaternary Fault and Fold Database of the United States, USGS,
https://earthquake.usgs.gov/cfusion/qfault/show_report_AB-archive.cfm, accessed
July 24, 2020.

1. INTRODUCTION

NewFields is pleased to provide SB Engineering this proposal for a geotechnical investigation for the referenced project. The results of the investigation will be used in the design of the Hidden Valley Phase 2 Main Extension and Reclaimed Water Storage Tank(s) in Washoe County, Nevada.

The project includes construction of:

- approximately 5,150 feet of 20-inch main extending from Alexander Lake Road and Veterans Parkway to the intersection of Hidden Highlands Drive and Desert Way;
- approximately 3,075 feet of 24-inch main extending from the intersection of Hidden Highlands Drive and Desert Way northeast to Washoe County property (APN 051-330-01);
- approximately 830 feet or 2,650 feet of 24-inch main routed across Washoe County property to either Tank Site 1 or Tanks Site 2, respectively;
- two 0.7 million gallon welded steel reclaimed water storage tanks or one 1.4 million gallon prestressed concrete reclaimed water storage tank.

Conceptual layouts by Christy Corporation provided in the *Planning and Design Criteria Technical Memorandum* (SB Engineering, 2020) indicate earthworks will require cuts of 30 to 40 feet for construction of the reclaimed water storage tank(s) at Tank Site 2. It has been assumed that similar cuts would be required for Tank Site 1.



THIS TASK NOT INCLUDED
GETTING COMPLETED WITH
OTHER WORK IN AREA

2. SCOPE OF SERVICES

Our proposed scope of services is based on our phone conversations. The scope of services has been separated into three tasks and a geotechnical report, detailed in the following sections. We have assumed that SB Engineering in conjunction with Washoe County Community Services Department (County) will secure the necessary permission, permits and access to the site prior to mobilization of equipment.

2.1 Task 1 – Geohazards Review

A north striking unnamed quaternary fault is mapped along the Virginia Range above Hidden Valley (USGS, 2020). In Task 1, we will review geologic maps, literature, and air photos relevant to the site as available at the Nevada Bureau of Mines and Geology (NBMG) and perform a site reconnaissance to look for signs of slope instability and potential fault related surface expressions, such as offsets and scarps relevant to the proposed tank sites.

2.2 Task 2 – Geophysical Surveys

In Task 2, we propose to perform two geophysical surveys at the select tank site. Seismic refraction will be used to approximate the depth to bedrock and determine seismic velocities for assessing rippability. ReMi surveys will also be performed along the same array in order to determine seismic Site Class based on IBC $V_s(100)$ velocity.

For estimating purposes, we have budgeted one working day (8-hour day) for two staff members to complete the geophysical surveys.

2.3 Task 3 – Field Investigation and Laboratory Testing

In Task 3, we propose to classify the near surface soils by excavating and logging test pits along pipeline alignment at five locations and at either Tank Site 1 or Tank Site 2 (pending selection). Test pits will be excavated using a track-mounted excavator to 12 feet below ground surface or until practical refusal. A NewFields engineer will visually log the soil conditions exposed in the test pits and collect bulk samples for laboratory testing. Soils will be classified in general accordance with ASTM D-2488, *Standard Recommended Practice for Description of Soils (Visual Manual Procedure)*.

All test pit locations will be surveyed using a hand held GPS device and cleared for underground utilities through USA North 811. Test pits locations will be backfilled on a daily basis with excavated materials and tracked in-place.

For estimating purposes, we have budgeted 4 hours to meet and coordinate field activities with the County Community Services Department, Regional Parks and Open Space, and one working



day (10-hour day) to complete the test pit excavations. Our cost estimate includes opening and closing the horse fence that runs just below Tank Site 1 and Tank Site 2 for access.

2.3.1 Laboratory Testing

Laboratory testing will be performed to assess the physical properties of the soil samples collected in the field. The laboratory testing program is anticipated to consist of the following tests:

- (6) Moisture Contents per ASTM D2216;
- (6) Sieve Analysis per ASTM D422;
- (6) Atterberg Limits per ASTM D4318;
- (2) Corrosivity Suite Tests:
 - pH per
 - Sulfate per
 - Resistivity per
 - Chloride per

2.4 Geotechnical Report

Based on the results of our field exploration and laboratory testing, a final geotechnical investigation report will be prepared summarizing our findings. The geotechnical report will include the following:

- Description of soil and groundwater conditions encountered along the pipeline alignment and at either Tank Site 1 or Tank Site 2;
- Geohazards and fault locations based on our findings and presented on a site plan, with recommendations for offsets and/or additional explorations, such as fault trenching, if warranted;
- Tank foundation design recommendations, including soil bearing values, resistance to lateral loads, dynamic shear modulus, shear wave velocity, and estimated settlements, and International Building Code (IBC) seismic site class and coefficients for use in structural design;
- Earthwork recommendations, including site preparation, reuse of existing near surface soils as structural or non-structural fill, and a discussion of remedial earthwork recommendations, if warranted;
- An assessment of rippability at the tank site based on shear velocity measurements and Caterpillar Ripper Performance charts;
- Potential for site soils to corrode steel, or to adversely react with concrete.



The geotechnical report will include a site plan showing the location of the explorations, test pit logs, and geophysical survey and laboratory test results.

3. ESTIMATED FEES

Estimated fees for the geotechnical exploration program tasks are presented in the following table.

Task	Description	Estimated Fees
Task 1	Geohazards Review	\$1,725
Task 2	Geophysical Surveys	\$4,470
Task 3	Field Investigation	\$5,530
	Laboratory Testing	\$1,865
	Analysis and Report Preparation	\$5,550
Estimated Project Total		\$19,140

\$17,415

The estimated fees are based on the anticipated project scope and laboratory testing programs presented above. Additional charges, which might arise from changes in the project details and scope of services, will be made on the basis of our 2020 Unit Rates (attached).

4. SCHEDULE

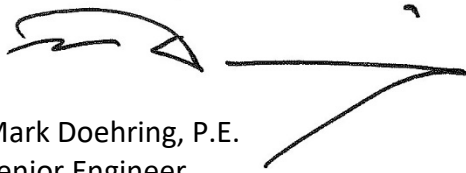
NewFields is prepared to begin work on this project within one week of receiving a notice to proceed. The completion of the project will largely depend on the availability of an excavator. Once the field activities are completed, we anticipate submitting a draft geotechnical report within four weeks.



5. CLOSURE

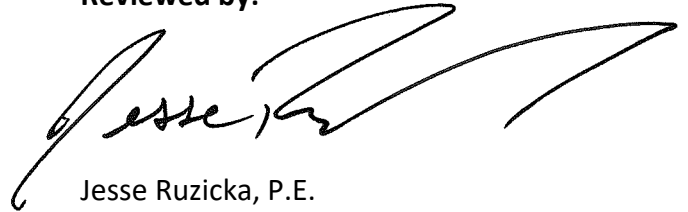
Should you have any questions concerning this proposal, we welcome the opportunity to discuss them with you. Thank you for your consideration of our firm for the services required for this project.

NewFields



Mark Doehring, P.E.
Senior Engineer

Reviewed by:



Jesse Ruzicka, P.E.
Senior Engineer

MD/JR/ng

Attachments: 2020 Fee Schedule

Addressee: (via e-mail)

S:\Proposals\2020\Reno\20PR-035 Hidden Valley Pipeline and Tanks\01-Proposal\20PR-035 SB Engineering proposal.docx

2020 Fee Schedule

NEWFIELDS 2020 RATES (CONFIDENTIAL)

Labor Categories and Rates

Staff Categories	Hourly Rates (\$US)	Staff Categories	Hourly Rates (\$US)
Specialty Consultant ¹	Quote upon Request	Staff Engineer/Scientist II	\$135.00
Principal Engineer/Scientist II	\$220.00	Staff Engineer/Scientist I	\$130.00
Principal Engineer/Scientist I/Project Director	\$215.00	Engineer/Scientist II	\$125.00
Sr. Project Manager II/Associate	\$210.00	Engineer/Scientist I	\$120.00
Sr. Project Manager I	\$205.00	Special Inspector	\$110.00 - \$140.00
Project Manager II	\$200.00	Field/Lab/CAD Manager	\$135.00
Project Manager I	\$195.00	Technical Writer	\$120.00
Sr. Engineer/Scientist IV	\$190.00	Senior Technician III	\$115.00
Sr. Engineer/Scientist III	\$185.00	Senior Technician II	\$110.00
Sr. Engineer/Scientist II	\$180.00	Senior Technician I	\$100.00
Sr. Engineer/Scientist I	\$170.00	Technician III	\$90.00
Project Engineer /Scientist III	\$160.00	Technician II	\$85.00
Project Engineer /Scientist II	\$150.00	Technician I	\$75.00
Project Engineer/Scientist I/Cost Estimator	\$145.00	Office Manager	\$90.00
		Administrator	\$70.00

Reimbursable Expenses

Expense Category	Recoverable Cost	Notes
Airfares	Cost + 10%	<p>1. The Specialty Consulting rate applies to senior staff that are not leveraged significantly with junior staff (i.e. high level reviews, secondment to clients or extended site visits). The rate is dependent on specific staff member and assignment type.</p> <p>2. Daily vehicle charge will be applicable to vehicles furnished on-site over 4 hours per day. The rate is also good for one-way travel distance up to 50 miles.</p> <p>3. IRS mileage rate will be charged in addition to daily rate for one-way travel distance in excess of 50 miles.</p> <p>4. Other Direct Costs (ODC's) include postage, express mail, printing, plotting, computer and software use, telephone use and general office and safety supplies.</p> <p>5. Outside services can include equipment, personnel, and services that support NewFields project work.</p> <p>6. Standard rates are negotiable depending on project location, duration, staff requirements and scope of the work.</p>
Lodging	Cost + 10%	
Rental Vehicle/Parking/Transportation	Cost + 10%	
Daily Vehicle Rental ^{2,3}	\$130/day	
Mileage ³	Prevailing IRS Rate	
Per Diem	Quote upon Request	
Meals	Cost + 10%	
Labor Based ODC ⁴	\$10/hour	
Outside Services ⁵	Cost + 15%	