

**SOLICITATION DOCUMENTS & SPECIFICATIONS
FOR**

**LOGGING ROAD STORMWATER
DECANT FACILITY
STATELINE
DOUGLAS COUNTY, NEVADA**

**BY
NEVADA TAHOE CONSERVATION DISTRICT
400 DORLA COURT
ZEPHYR COVE, NEVADA 89448**

(775) 586-1610

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NOTICE TO CONTRACTORS

1. Proposals will be received in the Office of the Nevada Tahoe Conservation District (NTCD) at 400 Dorla Court, Zephyr Cove, Nevada, or via email to mkelly@ntcd.org until **3:00 P.M. on APRIL 26, 2021** for the **“LOGGING ROAD STORMWATER DECANT FACILITY, STATELINE, DOUGLAS COUNTY, NEVADA”**. Sealed proposals will be opened virtually at 4:00 PM on the same day in the NTCD Conference Room. An online meeting link will be posted on ntcd.org 24 hours prior to the bid opening. The NTCD Board of Supervisors will consider award of the contract at a subsequently scheduled meeting on April 29th, 2021.
2. To assure consideration, all proposals shall be made on the blank form of proposal attached to these Specifications. If submitting a proposal by mail, electronic copies of the forms may be requested.
3. No proposal will be considered unless accompanied by a cashier’s check, certified check, or bid bond in an amount equal to five percent (5%) of the base bid, made payable to Nevada Tahoe Conservation District as provided for in the General Conditions. The Engineer’s Estimate for the Project is between \$400,000 and \$500,000.
4. Project Contract Documents may be obtained at no cost at Nevada Tahoe Conservation District at 400 Dorla Court, Zephyr Cove, Nevada 89448 or electronically via email.
5. Following receipt of written notification of contract award, the contractor shall execute and return the Agreement within ten (10) calendar days. The contract work shall be commenced upon receiving the NOTICE TO PROCEED. The Notice to Proceed will be issued by the NTCD after execution of the contract.
6. Contracts for work under this proposal will obligate the Contractor and subcontractors not to discriminate in employment practices pursuant to NRS 338.125. If the contract sum is \$100,000 or more, the Contractor must pay the prevailing wage rates pursuant to NRS Chapter 338, copies of which are available at the office of the Nevada State Labor Commission.
7. The Contractor shall visit the project site and familiarize himself with the scope of the Project PRIOR TO SUBMITTING A BID. If the Contractor finds any errors, omissions, or discrepancies in the plans or specifications, he shall notify the Engineer immediately. An optional pre-bid meeting will be held at 10 AM on April 20, 2021 at the project site on Logging Road Lane.
8. No grading may be performed outside the period between October 15 and May 1 without written permission from the TRPA.
9. The Nevada Tahoe Conservation District reserves the right to accept the lowest responsible bid for the project, to reject any or all bids, or to waive any informalities or irregularities in the bid process. Bids must remain valid for a period of 30 days following the bid opening. Award of the bid is subject to the availability of funds.

SCOPE OF WORK

1. **WORK UNDER THIS CONTRACT:** includes but is not limited to, all material, labor, tools, expendable equipment, utility and transportation service, traffic control, signage, and all other incidental items necessary to perform and complete, in a workmanlike manner, the work described within and required for:
 - Construction special technical provisions as prepared by Nevada Tahoe Conservation District (NTCD).
 - Construction of Logging Road Stormwater Decant Facility (refer to plans prepared by NTCD) including, but not limited to:
 1. Excavation and grading.
 2. Paving of access road and dry stockpile areas, with installation of permanent best management practices.
 3. Construction of concrete decant bays and wash pad.
 4. Installation of sand-oil separator.
 5. Installation of sewer main extension and sewer lateral to decant facility.
 6. Installation of watermain extension, water service lateral, fire hydrant and yard hydrants.
 7. Installation of electrical conduits and 2 light poles.
 8. Construction of stormwater detention basin.
 9. Provide temporary erosion control.
 10. Haul any extra material to approved disposal site.
 11. Repair all existing site improvements damaged during the course of the work.
 12. Work must be completed by October 15, 2021 unless written approval from NTCD and TRPA is obtained by the Contractor.
2. **CONFORM WITH THE FOLLOWING SCHEDULE:** Work may begin no earlier than May 3, 2021 in order to assure the site is dry and all permits are in place. Work must be completed by October 15, 2021 unless written approval is given by NTCD and TRPA. Construction shall be completed within forty-five (45) working days from the date the Contractor is issued the Notice to Proceed. If the construction schedule cannot be completed within the scheduled time due to circumstances beyond the Contractor's control, the construction schedule can be extended through a revised schedule established at the discretion of Nevada Tahoe Conservation District and retention shall be held until construction work is completed.
3. **PERMITS AND LICENSES:** NTCD will provide the Tahoe Regional Planning Agency (TRPA), Nevada Department Environmental Protection (NDEP), and Douglas County permits. The Contractor shall obtain any other permits and licenses required to complete this work. The Contractor shall procure and maintain, at his expense, all licenses, insurance policies, etc. as may be necessary to comply with Federal, State or local laws in the performance of the work.
4. **UTILITIES:** The project will entail the connection to, and extension of existing sewer and water mains. After the termination of the existing sewer and water mains there are no known utilities in the project site and general locations of existing known utilities adjacent to the project site are shown on the plans. However, it is the contractor's responsibility to verify the utility locations and contact the engineer if any discrepancies are found between the plans and what is verified in the field. Coordinate with the Engineer and utilize call before you dig, underground services prior to any work on site.

5. **HISTORIC LANDFILL:** The project is located on the site of a historic county dump that has been sealed and has had fill placed above it. It is not anticipated that this landfill will be disrupted with the maximum excavation depth of 5 feet. However, if the sealed landfill is reached during construction, excavation is to be immediately halted and the engineer is to be contacted immediately.
6. **BID IRREGULARITIES:** The NTCD reserves the right to reject any or all bids and to withhold award for up to thirty (30) days. If there are minor irregularities or informalities in any bid or in the bidding process, the NTCD reserves the right to waive provisions of the specifications relating to said minor irregularities of informalities.

INSTRUCTIONS TO BIDDERS

Proposals, to be entitled for consideration, must be made in accordance with the following instructions:

1. Proposals will be received in the Office of the Nevada Tahoe Conservation District (NTCD) at 400 Dorla Court, Zephyr Cove, Nevada, or via email to mkelly@ntcd.org until **3:00 P.M. on April 26, 2021** for the **“LOGGING ROAD STORMWATER DECANT FACILITY PROJECT, STATELINE, DOUGLAS COUNTY, NEVADA”**. Sealed proposals will be opened virtually at 4:00 PM on the same day in the NTCD Conference Room. An online meeting link will be posted on ntcd.org 24 hours prior to the bid opening. The NTCD Board of Supervisors will consider award of the contract at a subsequently scheduled meeting on April 29th, 2021.
2. Proposals shall not contain any recapitulation of the work to be done. No oral, telegraphic or telephonic proposals or modifications will be considered.
3. Bids will be accepted only on the complete project as outlined in the Scope of Work. No partial bids will be accepted.
4. Bidder shall visit the site and know all requirements of work within these specifications to his/her satisfaction before submitting a bid. An optional pre-bid meeting will be held at 10 AM on April 20, 2021 at the project site on Logging Road Lane.
5. Should a bidder find discrepancies in, or omissions from, the drawings or documents, or should he be in doubt as to their meaning, he should at once notify NTCD, who will send a written instruction to all bidders. Neither NTCD nor the Engineer will be responsible for any oral instructions.
6. Any written instructions, bulletins or drawings issued to bidders by NTCD or Engineer during the course of bidding shall be covered in the proposal, and in closing a contract, they will become a part thereof.
7. The Agreement Form attached hereto will be used in executing a contract for this work.
8. No proposal will be considered unless accompanied by cashier's check, certified check, or bid bond in an amount equal to five percent (5%) of the base bid, made payable to the Nevada Tahoe Conservation District as provided in the General Conditions. The Engineer's Estimate for the Project is between \$400,000 and \$500,000.
9. Following receipt of written notification of contract award, the contractor shall execute and return the Agreement within ten (10) calendar days. The Notice to Proceed will be issued by NTCD after execution of the contract and confirm the date by which work under the contract must commence. Construction shall be completed within forty-five (45) working days from the date the Contractor is issued the Notice to Proceed. All project work shall be completed by October 15, 2021.
10. Should the Contractor fail or refuse to complete the work within the stipulated time, including any authorized extensions of time, there shall be deducted from the monies due him, not as a penalty but as liquidated damages, FIVE HUNDRED DOLLARS (\$500.00) for each day required to complete the work in addition to the period of time hereinbefore set forth.
11. Bidders attention is directed to the Insurance Specifications attached as Exhibit "A". The successful bidder shall be required to comply with such provisions.
12. NTCD reserves the right to reject any or all bids and to withhold award for up to thirty (30) days. If there are minor irregularities or informalities in any bid or in the bidding process, NTCD reserves the right to waive provisions of the Specifications relating to said minor irregularities or informalities.

13. Contracts for work under this proposal will obligate the Contractor and subcontractors not to discriminate in employment practices pursuant to NRS 338.125. If the contract sum is \$100,000 or more, the Contractor must pay the prevailing wage rates pursuant to NRS Chapter 338, copies of which are available at the office of the Nevada State Labor Commission.
14. Award of the contract will be made to the best value bid considering lowest cost, similar successful project work, and responsiveness of bidder as determined by the NTCD in compliance with the bid documents and which, in the NTCD's sole judgment, best meet the NTCD's needs and complies with NRS 338.
15. Pursuant NRS 338.143 a person or firm who files a notice of protest regarding the award of a public works contract is required to post with NTCD a security in the form of; a bond, or certificate of deposit containing an acknowledgement by a qualified financial institution that a sum of money has been received. The security shall be equal to the lesser of twenty five percent of the value of the protester's bid or \$250,000. The security is required to be posted at the time of the filing of the written notice of protest.
16. The bidder's attention is directed to NRS 338.147. All bidders who would like to claim preferential bidder status should read the "Preferential Bidder Status" form and submit required documents with the Bid Proposal and Schedule. **A copy of a valid Nevada State Contractor's Board, Interim Certificate of Eligibility shall be submitted with the bid proposal.** It is the intent of NTCD to enact the provisions of NRS 338 in regards to preferential bidder status only in the event that a 5% preference is utilized in the determination of the low bidder.
17. Each Contractor, subcontractor and other person who provides labor, equipment, materials, supplies or services for the public work must comply with the requirements of all applicable state and local laws, including without limitation, any applicable licensing requirements and requirements for the payment of sales and use taxes on equipment, materials and supplies provided for the public work.

BID PROPOSAL

NEVADA TAHOE CONSERVATION DISTRICT
400 Dorla Court
Zephyr Cove, Nevada 89448

Gentlemen:

I (we) hereby submit my (our) proposal for the **“LOGGING ROAD STORMWATER DECANT FACILITY”**.

In compliance with your published Notice to Contractors, the undersigned as bidder declares that he has carefully examined the location of the proposed work and the Plans and Specifications, including the Special Technical Provisions and the Standard Specifications for Public Works; therefore, together with addenda numbered _____ through _____, and I (we) propose and agree that if this proposal is accepted, I (we) will contract with the Nevada Tahoe Conservation District (NTCD) to provide all necessary labor, machinery, tools, apparatus, and other means of construction, and do all the work and furnish all the materials required to complete construction of the project, in a satisfactory manner at the prices stated in the bid proposal.

Construction shall be in strict conformity with the 100% Design Plans, Special Technical Provisions, Specifications, and contract documents prepared therefore, which hereby are made a part of this proposal.

The bidder proposes and agrees to contract with NTCD to furnish and perform all of the described work, including subsidiary obligations as defined in said contract documents and specifications and to complete the work in the manner and within the time limits set forth in the Contract Documents.

The bidder understands that the following quantities are approximate, only being given as a basis for the comparison of Proposals; and that NTCD does not expressly or by implication agree that the actual amount of work will correspond therewith but reserves the right to increase or decrease the amount of work as may be deemed necessary or advisable by the Engineer.

BID SCHEDULE

LOGGING ROAD STORMWATER DECANT FACILITY

Logging Road Stormwater Decant Facility construction bid items. All items not covered by in the Plans, Special Provisions, and Special Technical Provisions but are necessary for completion of the project are incidentals to the listed Bid Items.

Item No.	Quantity	Unit	Item Description	Includes	Unit Price	Amount
1	1	LS	Mobilization and Demobilization	Mobilization and demobilization of contractor's forces and equipment, cleaning up staging areas		
2	1	LS	Water Pollution Control (Temporary BMPs)	Labor and materials to install and maintain temporary BMPs per plan including sediment logs, construction limit fencing, filter fencing, covering soil piles, dust control. Labor and materials to remove these items at the end of the project.		
3	600	CY	Earthwork (includes basin)	Labor, equipment, and incidentals to complete the excavation, backfill, grading, off haul, and disposal necessary to achieve the sub-grades on the plans for the decant facility and the associated treatment basin. This does not include earthwork required for installing sub-surface utilities or the rock lined channel.		
4	5	EA	SSMH	Labor, materials, equipment, and incidentals to complete the installation of the proposed 48" sanitary sewer manholes and connections to the associated pipes. Includes excavation, subgrade preparation, manhole installation, backfill and compaction.		
5	106	LF	12" SDR35 Sewer Pipe	Labor, materials, equipment, and incidentals to complete the installation of the proposed sewer pipe. Includes trenching, subgrade preparation, pipe installation and connections, backfill and compaction.		
6	270	LF	6" SDR35 Sewer Pipe	Labor, materials, equipment, and incidentals to complete the installation of the proposed sewer pipe. Includes trenching, subgrade preparation, pipe installation and connections, backfill and compaction.		
7	292	LF	8" C900 Water Pipe	Labor, materials, equipment, and incidentals to complete the installation of the proposed C900 water pipe. Includes trenching, subgrade preparation, pipe installation, pipe connections and fittings, backfill, compaction, and testing if required by water utility.		

Item No.	Quantity	Unit	Item Description	Includes	Unit Price	Amount
8	80	LF	1" CTS Water Service	Labor, materials, equipment, and incidentals to complete the installation of the proposed water service. Includes trenching, subgrade preparation, pipe installation, pipe connections and fittings, backfill, compaction, and testing if required by water utility.		
9	3	EA	Water Valves	Labor, materials, equipment, and incidentals to complete the installation of the proposed water valves. Includes excavation, subgrade preparation, valve installation, pipe connections, backfill, compaction, and testing, if required by water utility.		
10	1	EA	Fire Hydrant	Labor, materials, equipment, and incidentals to complete the installation of the proposed fire hydrant, valve, and 6" C900 pipe (10 LF). Includes excavation, subgrade preparation, installation of 10 LF of 6" C900 lateral and valve, hydrant installation, pipe connections, backfill, compaction, and testing if required by water utility.		
11	2	EA	Yard Hydrant	Labor, materials, equipment, and incidentals to complete the installation of the proposed 1" yard hydrants. Includes excavation, subgrade preparation, yard hydrant installation, bollard installation, pipe connections, backfill, and compaction. Concrete work is included in the cost of the concrete item and not this item.		
12	575	LF	Electrical Conduit	Labor, materials, equipment, and incidentals to complete the installation of the proposed electrical conduit in a shared trench with the sewer main. Includes trenching, subgrade preparation, conduit installation and connections, backfill and compaction.		
13	3	EA	Electrical Box	Labor, materials, equipment, and incidentals to complete the installation of the proposed electrical boxes. Includes excavation, subgrade preparation, box installation and conduit connections, backfill and compaction.		
14	2	EA	Light	Labor, materials, equipment, and incidentals to complete the installation of the proposed overhead lights. Includes excavation, subgrade preparation, light pole installation, electricity connections, backfill and compaction.		

Item No.	Quantity	Unit	Item Description	Includes	Unit Price	Amount
16	1	EA	Installation of Jensen Sand Oil Separator	Labor, equipment, and incidentals to complete the installation of the proposed sand oil separator and connections to the associated pipes. Includes excavation, subgrade preparation, installation to correct grades, backfill and compaction. NTCD will provide the sand oil separator from Jensen delivered to the site.		
17	160	CY	Concrete Bays and Pads	Labor, equipment, materials, and incidentals to complete the installation of the proposed concrete work including the walls, floor, footings, and wash pad. Includes forming, rebar placement, concrete pours, finish work, proper concrete disposal per TRPA regulation, and removal of forms and other excess materials from the site.		
18	1	EA	Drainage Inlet (Type 2B)	Labor, equipment, and incidentals to complete the installation of the proposed drainage inlet within the concrete wash pad and connections to the associated pipes. Includes excavation, subgrade preparation, DI installation, backfill and compaction. NTCD will provide the drainage inlet from Jensen delivered to the site.		
19	1	EA	Valve Control Box/Meter for Sewer	Labor, equipment, and incidentals to complete the installation of the proposed sewer control box and meter and connections to the associated pipes. Includes excavation, subgrade preparation, box installation, meter and shutoff valve connections, backfill and compaction. NTCD will provide the utility box from Jensen and the valve, meter, and appurtenances delivered to the site.		
20	2	EA	Manual Control Gates	Labor, equipment, and incidentals to complete the installation of the proposed manual control gates within the concrete wall and connected to the 12" SDR35 pipes. Includes installation at correct elevation, connection to the pipes, securing for concrete pour, and final inspection or operation. NTCD will provide the manual control gates delivered to the site.		

Item No.	Quantity	Unit	Item Description	Includes	Unit Price	Amount
21	10,650	SF	AC Pavement (includes subgrade)	Labor, equipment, materials, and incidentals to complete the AC paving including the subgrade. Includes aggregate base and asphalt delivered to site, subgrade preparation, and AC pavement installation per Douglas County standard (3" depth).		
23	1	EA	Beehive Grate Sediment Trap	Labor, materials, equipment, and incidentals to complete the installation of the proposed beehive sediment trap within the rock lined channel and connections to the associated pipe. Includes excavation, subgrade preparation, DI installation, backfill and compaction.		
24	16	LF	8" CMP and Rock Dissipater	Labor, materials, equipment, and incidentals to complete the installation of the proposed CMP and associated rock dissipater. Includes trenching, subgrade preparation, pipe installation, backfill, compaction, and rock dissipater outlet (3'x3').		
25	370	LF	Rock Channel	Labor, equipment, materials, and incidentals to complete the rock channel. Includes rock gradations and filter fabric shown on plans delivered to site, subgrade preparation, and installation of rock channel and filter fabric.		

BID TOTAL (in numerals) _____

BID TOTAL (in words) _____

BID SUMMARY

LOGGING ROAD STORMWATER DECANT FACILITY PROJECT

TOTAL BASE BID: \$ _____

The unit prices above shall be the basis of determining the amount paid for the completed project including any increased or decreased quantities authorized by the Engineer.

If the undersigned be notified of the acceptance of his proposal, he agrees to execute the Agreement within ten (10) calendar days for the work covered in his proposal for the above stated prices as full compensation for furnishing all materials and labor, and doing all of the work, in strict accordance with the contract documents, to the satisfaction of the Engineer.

The undersigned further agrees to commence the work within the time stated in the Notice to Proceed and to complete the work specified within the time stated in the Agreement.

The undersigned states that he has a thorough understanding of the conditions embodied in the contract documents and specifications.

Name of Firm _____

By _____

Address _____

Phone _____

Fax _____

Email _____

Nevada Contractor's License

No. _____

Date _____

WITNESS

PREFERENTIAL BIDDER STATUS

NRS 338.147 and NRS 338.1389 provides that a contractor who has been found to be a responsible contractor and who provides proof to, and receives an Interim Certificate of Eligibility from, the Nevada State Contractor's Board that certifies the payment of:

- (1) The sales and use taxes imposed pursuant to Chapter 372, 374 and 377 of NRS on materials used for construction in the State of Nevada of not less than \$5,000 for each consecutive 12-month period for 60 months immediately preceding the submission of his bid;
- (2) The motor vehicle privilege tax imposed pursuant to Chapter 371 of NRS on the vehicles used in the operation of the general contractor's business in the State of Nevada of not less than \$5,000 for each consecutive 12-month period for 60 months immediately preceding the submission of his bid; or
- (3) Any combination of such sales and use taxes and motor vehicle privilege tax, or
- (4) Acquired, by inheritance, gift, or transfer through a stock option plan for employees, all the assets and liabilities of a viable, operating construction firm that possesses a:
 - a) License as a general contractor pursuant to the provisions of Chapter 624 of the NRS; and
 - b) Interim Certificate of Eligibility to receive a preference in bidding on public works

shall be deemed to have submitted a better bid than a competing contractor who has been certified to have made payment of those taxes if the amount of his bid is not more than 5% higher than the amount bid by the competing contractor.

Contractors who desire to claim this preference, must submit to NTCD with the bid, a copy of a valid Nevada State Contractor's Board Interim Certificate of Eligibility and the Preferential Bidder Status Affidavit provided on the following page.

PREFERENTIAL BIDDER STATUS
AFFIDAVIT

I, _____, on behalf of the Prime Contractor, _____, swear and affirm that in order to be in compliance with NRS 338 and be eligible to receive a preference in bidding on **Logging Road Stormwater Decant Facility**, certify that the following requirement will be adhered to, documented and attained on completion of the contract. Upon submission of this affidavit on behalf of _____, I recognize and accept that failure to comply with any requirements is a material breach of the contract and entitles the Awarding Body to damages. In addition the Contractor may lose its certification for a preference in bidding for 5 years and/or its ability to bid on any contracts for public works for one year pursuant to NRS 338:

1. The Contractor shall ensure at least 50 percent of the workers possess a Nevada driver's license or identification card;
2. The Contractor shall ensure all of the non-apportioned vehicles primarily used on this project are registered in Nevada;
3. The Contractor shall ensure at least 25 percent of the materials used on this project are purchased in Nevada and;
4. The Contractor shall ensure payroll records related to this project are maintained and available within the State of Nevada.

By: _____

Title: _____

Signature: _____

Date: _____

Signed and sworn to (or affirmed) before me on this _____ day of _____, 20_____,
by _____ (name of person making statement).

State of _____)

)ss.

County of _____)

Notary Signature

BID BOND

KNOW ALL MEN BY THESE PRESENTS, that we, the undersigned, _____
_____, as Principal, and _____

(legal description and address of Surety)

authorized to do business of Surety in the State of Nevada, as Surety, are held and firmly bound unto Nevada Tahoe Conservation District, as NTCD, in the sum of _____ Dollars (\$_____), (which is not less than 5% of the contract price) for the payment of which, well and truly to be made, we hereby jointly and severally bind ourselves, our heirs, executors, and administrators, successors, and assigns.

Signed this ____ day of _____, 2021.

The conditions of the above obligation is such that whereas the Principal has submitted to NTCD, a certain bid, attached hereto and hereby made a part hereof, to enter into a Contract in writing for the **“LOGGING ROAD STORMWATER DECANT FACILITY”**.

Now, therefore, if said bid shall be rejected, or in the alternative, if said bid shall be accepted and the Principal shall execute and deliver a Contract in the form of contract attached hereto (properly completed in accordance with said Bid) and shall furnish a Bond for his Faithful Performance of said Contract, and a Bond for the payment of all persons performing labor or furnishing materials in connection therewith, and shall provide and comply with the insurance requirements, and shall in all other respects perform the agreement created by the acceptance of said bid, then this obligation shall be void.

Otherwise, the same shall remain in force and effect, and the sum herein specified paid over to the NTCD, it being expressly understood and agreed that the liability of the Surety for any and all claims hereunder shall, in no event, exceed the amount of this obligation as herein stated.

The Surety, for value received, hereby stipulates and agrees that the obligations of said Surety and its bond shall be in no way impaired or affected by an extension of the time within which the NTCD may accept such bid; and said Surety does hereby waive notice of such extension.

In Witness whereof, the Principal and the Surety have hereunto set their hands and seals, and such of them as are corporations have caused their corporate seals to be hereto affixed and these presents to be signed by their officers, the day and year first set forth above.

Principal

(Seal)

By

Surety

(Seal)

By

BID BOND (continued)

STATE OF NEVADA)
) SS:
COUNTY OF DOUGLAS)

On this _____ day of _____, 2021, personally appeared before me, a Notary Public,
_____, who acknowledged to me that he/she was the Principal
authorized to sign the foregoing Bid Bond.

NOTARY PUBLIC

STATE OF NEVADA)
) SS:
COUNTY OF DOUGLAS)

On this _____ day of _____, 2021, personally appeared before me, a Notary Public,
_____, who acknowledged to me that he/she was the Surety authorized
to sign the foregoing Bid Bond.

NOTARY PUBLIC

Surety's Licensed Nevada Agent:

Company Name

Address

Telephone

By: _____
(Note: Signature to be Notarized)

Type: _____

Bond No. _____

Subscribed and sworn to before me this _____ day of _____, 2021.

Notary Public

GENERAL CONTRACTOR

(Firm Name)

(Nevada Contractors License #)

(Name of Officer) is authorized to bid and to enter into this Contract for the above listed firm.

The firm is: (check one)

____ a corporation ____ a partnership ____ sole proprietorship

Principal Officers:

Name

Title

Signature

_____	_____	_____
_____	_____	_____
_____	_____	_____
_____	_____	_____

Owners Not Listed Above:

_____	_____	_____
_____	_____	_____
_____	_____	_____
_____	_____	_____
_____	_____	_____
_____	_____	_____

I _____ (Name of Officer) certify that the above lists includes all officers, owners and financial partners of the above mentioned firm corporate structures to the best of my knowledge.

Signature and Title of Officer

FIVE PERCENT LIST OF RESPONSIBLE TRADES

**PURSUANT TO NRS 338 PRIME CONTRACTORS MUST LIST THE WORK THEY INTEND ON
COMPLETING THAT MEETS THE REQUIREMENTS OF 5% ON THIS FORM**

List below the name, address and contractor's license number for each company by trade who will provide labor or a portion of the work on this project for which the company will be paid an amount exceeding five percent (5%) of the prime contractor's total bid. (Attach additional sheets if necessary.)

Trade (type of work)	Name/Address	License No.
1. _____	_____ _____ _____	_____
2. _____	_____ _____ _____	_____
3. _____	_____ _____ _____	_____
4. _____	_____ _____ _____	_____
5. _____	_____ _____ _____	_____

Note: Within 2 hours after bid opening, the bidders who submitted the three lowest bids must submit a list of the name and contractor's license number of each contractor who will provide labor or a portion of the work on the project for which he will be paid an amount exceeding one percent (1%) of the contractor's total bid or \$50,000, whichever is greater. A bidder who fails to submit the lists as required herein within the time prescribed herein shall be deemed not responsive. The bidder is hereby notified that the prime contractor must include his name on the list required by NRS 338.141(3) if he is to perform any of the work that is required to be listed. The prime contractor's bid will be deemed not responsive for failure to comply with this statutory requirement.

A bidder whose bid is accepted may not substitute subcontractors named in the bid or listed within 2 hours after bid opening, except as provided in NRS 338.141

TWO HOUR ONE PERCENT LIST OF RESPONSIBLE TRADES

**PURSUANT TO NRS 338 PRIME CONTRACTORS MUST LIST THE WORK THEY INTEND ON
COMPLETING THAT MEETS THE REQUIREMENTS OF 1% ON THIS FORM**

List below the name, address and contractor's license number for each company by trade who will provide labor or a portion of the work on this project for which the company will be paid an amount exceeding one percent (1%) of the prime contractor's total bid. (Attach additional sheets if necessary.)

Trade (type of work)	Name/Address	License No.
1. _____	_____	_____

2. _____	_____	_____

3. _____	_____	_____

4. _____	_____	_____

5. _____	_____	_____

Note: Within 2 hours after bid opening, the bidders who submitted the three lowest bids must submit a list of the name and contractor's license number of each contractor who will provide labor or a portion of the work on the project for which he will be paid an amount exceeding one percent (1%) of the prime contractor's total bid or \$50,000, whichever is greater. A bidder who fails to submit the lists as required herein within the time prescribed herein shall be deemed not responsive. The bidder is hereby notified that the prime contractor must include his name on the list required by NRS 338.141(3) if he is to perform any of the work that is required to be listed. The prime contractor's bid will be deemed not responsive for failure to comply with this statutory requirement.

A bidder whose bid is accepted may not substitute subcontractors named in the bid or listed within 2 hours after bid opening, except as provided in NRS 338.141.

Nevada Tahoe Conservation District, FAX (775) 586-1612

AFFIDAVIT OF NONCOLLUSION

State of _____)
County of _____) SS

I, _____ (Name of party signing this affidavit and the Proposal Form),
_____ (title), under penalty of perjury, being duly sworn, depose and
say: That _____ (name of person, firm, association, or corporation) has
not, either directly or indirectly, entered into agreement, participated in any collusion, or otherwise taken any action in
restraint of free competitive bidding in connection with this Contract.

Signature

Title

SUBSCRIBED AND SWORN to before me
this _____ day of _____, _____.

NOTARY PUBLIC

**CERTIFICATION OF BIDDER, PROPOSED CONTRACTOR OR
SUBCONTRACTOR REGARDING DEBARMENT, SUSPENSION,
INELIGIBILITY OR VOLUNTARY EXCLUSION**

The undersigned bidder, proposed contractor or subcontractor certifies, to the best of his knowledge and belief, that:

- 1. Neither it nor its principals are presently debarred, suspended, proposed for debarment, declared ineligible or voluntarily excluded from participation in this contract by any Federal department, agency or program.
- 2. Neither it nor its principles are presently debarred, suspended, proposed for debarment, declared ineligible or voluntarily excluded from participation in public works contracts by the Nevada Labor Commissioner.
- 3. Where either the bidder or subcontractor is unable to certify to any of the above statements, the bidder or subcontractor shall attach an explanation as to why a certification cannot be submitted.

Name of Bidder, Proposed Contractor or Subcontractor

Name and Title of Authorized Representative

Signature

Date

**CERTIFICATION OF BIDDER REGARDING PENALTIES FOR
NONCOMPLIANCE WITH NEVADA PREVAILING WAGE REQUIREMENTS**

The undersigned bidder, proposed contractor or subcontractor certifies that:

1. This contract is for a public work as set forth in Nevada Revised Statutes Chapter 338.
2. A contractor engaged on public works shall forfeit, as a penalty to the public body on behalf of which the contract has been made and awarded to the contractor, not less than \$20 nor more than \$50 for each calendar day or portion thereof that each workman employed on the public work:
 - a) Is paid less than the designated rate for any work done under the contract, by the contractor or any subcontractor under him;
 - b) Is not reported accurately to the public body awarding the contract as required pursuant to NRS 338.070.
3. If a penalty is imposed pursuant to this section, the costs of the proceeding, including investigative costs and attorney's fees, may be recovered by the Labor Commissioner.

Name of Bidder

Name and Title of Authorized Representative

Signature

Date

QUALIFICATION OF BIDDER CERTIFICATE

The undersigned bidder, proposed contractor or subcontractor certifies, that they are qualified to do the water quality improvement project and associated revegetation as described in Section 102 CONTRACTOR QUALIFICATIONS of the Special Provisions prepared by NTCD and submitted all qualification as stated in 102.01 Description together with the bid document.

Contractor Qualifications _____

Name of Bidder, Proposed Contractor or Subcontractor

Name and Title of Authorized Representative

Signature

Date

AGREEMENT FORM

THIS AGREEMENT, made and entered into this _____ day of _____, 2021, by and between the NEVADA TAHOE CONSERVATION DISTRICT, a political subdivision of the State of Nevada, acting through its Board of Supervisors, hereinafter called the "NTCD" and _____,

General Contractor, Nevada State License No. _____, hereinafter called the "Contractor".

W I T N E S E T H :

That the NTCD and the Contractor, for the consideration hereinafter named, agree as follows:

Article 1. Scope of Work. The Contractor shall furnish all of the materials and perform all of the work described in the Specifications entitled "**LOGGING ROAD STORMWATER DECANT FACILITY, STATELINE, DOUGLAS COUNTY, NEVADA**" prepared by the Nevada Tahoe Conservation District, and shall do everything required by this Agreement and the Specifications.

Article 2. Time of Completion. The work to be performed under this Agreement shall be completed within forty-five (45) working days from the date the Contractor is issued the Notice to Proceed.

The date specified in the Notice to Proceed shall be the effective date of this Agreement.

Should the Contractor fail or refuse to complete the work within the stipulated timeframe, including any authorized extensions of time, there shall be deducted from the monies due him, not as a penalty, but as liquidated damages, FIVE HUNDRED DOLLARS and NO CENTS (\$500.00) for each work day required to complete the work in addition to the period of time hereinbefore set forth.

In the event that the NTCD has failed to appropriate or budget funds for the purposes specified in this agreement, or that NTCD has been required (in its sole judgment) to amend previous appropriations or budgeted amounts to eliminate or reduce funding for the purposes in this agreement, this agreement shall be terminated without penalty, charge or sanction.

Article 3. Contract Time Extensions. All claims for extensions of time shall be made in writing to the Engineer within seven (7) calendar days after the beginning of the delay; otherwise, they will be disallowed.

If the Contractor is delayed at any time in the progress of the work by any act or neglect of the NTCD or the Engineer, or by any employee of either, or by any separate contractor disputes, fire, unusual weather conditions, unusual delay in transportation, or by unavoidable casualties, the contract time may be extended by change order for such reasonable time as the NTCD may determine.

It is further expressly understood and agreed that the Contractor shall not be entitled to any damages or compensation, or be reimbursed for any losses, on account of any delay resulting from any of the aforesaid causes or any other cause regardless of whether the delay is foreseeable or not, except that the NTCD agrees to compensate the Contractor for any damage resulting from any affirmative, willful act in bad faith performed by the NTCD or its employees which unreasonably interferes with the Contractor's ability to perform the work.

An extension of contract time for a delay will be allowed only in the case that a normal working day is lost. A normal working day is defined as any day, except weekends and holidays, during which the Contractor can work for at least four hours. Delays will not be allowed for non-working days (e.g., weekends and holidays). Claims by the Contractor for delays will not be allowed on account of failure to furnish information, until 14 days after a request for information is submitted by the Contractor, and then not unless such claim is reasonable.

Extensions of contract time shall not be allowed for the following types of delays:

1. Delays which could have been avoided by the exercise of care, prudence, foresight, and diligence on the part of the Contractor.
2. Delays in the execution of parts of the work, which may in themselves be unavoidable, but do not prevent or delay prosecution of other parts of the work, or the completion of the whole work within the time specified.

3. Delays arising from interruptions occurring during the prosecution of the work on account of reasonable interference of other contractors employed by the NTCD, which do not prevent the completion of the whole work within the contract time.

Article 4. Progress Payments. If acceptable progress has been made, the NTCD shall, once each month, make an estimate of the total amount of work completed to date and the monetary value thereof and make a partial payment on the Contract.

The NTCD shall retain ten percent (10%) of such estimated value of the work done as part security for the fulfillment of the Contract and shall pay monthly to the Contractor, while carrying on the work the balance not retained, after deducting there from all previous payments.

The amount withheld as provided herein shall be retained for a period of thirty (30) days from the date of the Notice of Completion.

NTCD shall pay to Contractor, at the end of each quarter this Agreement is in effect, interest for the quarter on the amount withheld at a rate to be determined by NTCD in accordance with State law. If the amount due the Contractor pursuant to this provision for any quarter is less than Five Hundred Dollars (\$500.00), the NTCD may withhold the interest until: (1) the end of a subsequent quarter after which the amount of interest due is Five Hundred Dollars (\$500.00) or more; (2) the end of the fourth consecutive quarter for which no interest has been paid to the Contractor; or (3) final payment is due under the Agreement or State law; whichever occurs first. Contractor shall pay the subcontractors progress payments and pay interest on amounts retained from said progress payments in accordance with the provisions of State law.

Article 5. Acceptance and Final Payment. As soon as practical, following the completion of the work, the Contractor shall make a request by letter to the NTCD for a final inspection and acceptance of the work; if, in the NTCD's opinion, all provisions of the Construction Specifications and Agreement have been satisfied, the NTCD will cause a Notice of Completion to be filed with the Douglas County Recorder.

At the expiration of thirty (30) days following the filing of the Notice of Completion or use or occupancy of the public work by the NTCD, final payment shall be made as follows:

After deducting all previous payments from the total value of the work, the remaining balance shall be paid unless any of the following conditions exist to allow withholding of payment: (a) claims, liens or outstanding debt have been filed against the Contractor or against the work because of Contractor or its agents; (b) claims or demands by NTCD including those involving: disputes about the Contract, Contractor or subcontractor compliance with applicable codes and laws, the work, time or liquidated damages; (c) amounts required by law to be retained by the NTCD. Contractor shall submit proof satisfactory to the NTCD that all payrolls, materials, bills, and other indebtedness relating to the work performed, have been paid before final payment is made.

Article 6. The Contract Sum. The NTCD shall pay the Contractor, as full compensation for furnishing all materials and labor and doing all the work in strict accordance with the Construction Specifications and to the satisfaction of the Engineer the amount set forth in the contract documents. This sum is to be paid in the manner and under the conditions here in before specified.

Article 7. The Contract Documents. The following is an enumeration of all of the Contract Documents making up the Agreement (also herein and throughout the Contract Documents referred to as Contract), which are by this reference hereby incorporated into this Agreement and they are as fully a part of the Agreement as if hereto attached or herein repeated:

- Notice to Contractors
- Scope of Work
- Instructions to Bidders
- Bid Proposal
- Bid Schedule
- Bid Summary
- Preferential Bidder Status
- General Contractor Information Form
- Five Percent List of Responsible Trades
- Two Hour One Percent List of Responsible Trades
- Affidavit of Non-Collusion

- Certification of Bidder, Proposed Contractor or Subcontractor Regarding Debarment, Suspension, Ineligibility or Voluntary Exclusion
- Certification of Bidder Regarding Penalties for Noncompliance with Nevada Prevailing Wage Requirements
- Agreement Form
- Special Provisions to the Standard Specifications for Public Works Construction, 2016, or latest edition
- General Provisions of the Standard Specifications for Public Works Construction, 2016, or latest edition
- 100% Engineer Stamped Design Plan Set for the **Logging Road Stormwater Decant Facility Project**
- Exhibit A – Construction/Indemnification and Insurance Specifications
- Exhibit B – Special Technical Provisions by NTCD
- Exhibit C – Project Permits
- Addenda
- Change Orders
- Construction Change Directives
- Any amendments made hereto

In the event of any conflict between any of the Contract Documents, this contract shall be governed in accordance with the following order:

- a) This Agreement
- b) Plan Set Drawings
- c) Special Technical Provisions by NTCD
- d) Standard Specifications

Article 8. Nondiscrimination. In accordance with NRS 338.125, in connection with the performance of work under this Agreement, the Contractor agrees not to discriminate against any employee or applicant for employment because of race, creed, color, national origin, sex, sexual orientation or age, including, without limitation, with regard to employment, upgrading, demotion or transfer, recruitment or recruitment advertising, layoff or termination, rates of pay or other forms of compensation, and selection for training including, without limitation, apprenticeship. The Contractor further agrees to insert this provision in all subcontracts hereunder, except subcontracts for standard commercial supplies or raw materials. Any violation of this article constitutes a material breach of the Contract.

Article 9. Veteran's Preference. As provided in NRS 338.130, Contractor agrees as follows:

1. When persons are employed in the performance of this contract or in the construction of this public work, employment preference will be given, the qualifications of the applicants otherwise being equal:

(a) First: To persons who:

- (1) Have been honorably discharged from the Army, Navy, Air Force, Marine Corps or Coast Guard of the United States, a reserve component thereof or the National Guard; and
- (2) Are citizens of the State of Nevada.

(b) Second: To other citizens of the State of Nevada.

NOTICE TO CONTRACTORS:

If the provisions of NRS 338.130 (dealing with Preferential Employment in Construction of Public Works) are not complied with by the contractor engaged on the public work, THE CONTRACT IS VOID, and any failure or refusal to comply with any of the provisions of this section renders any such contract void. All boards, commissions, officers, agents and employees having the power to enter into contracts for the expenditure of public money on public works such as this contract shall file in the Office of the Labor Commissioner the names and addresses of all contractors holding contracts with the public body, and upon the letting of new contracts, the names and addresses of such new contractors must likewise be filed with the Labor Commissioner. Upon the demand of the Labor Commissioner, contractor shall furnish a list of the names and addresses of all subcontractors employed by the contractor engaged on a public work. Subject to the exceptions contained in NRS 338.130, no money may be paid out of the treasury of NTCD to any person employed on any work mentioned in this section unless there has been compliance with the provisions of this section. Any contractor engaged on a public work or any other person who violates any of the provisions of this section is guilty of a misdemeanor.

Article 10. Prevailing Wage Rates. In the event that the Contract sum as listed above exceeds One Hundred Thousand Dollars (\$100,000.00) or more due to a change order, Contractor agrees that it shall pay the prevailing wage rates in effect at the time of the bid to the persons who are entitled to such wages as determined by the regulations of the labor commissioner. This applies to the entire contract period. Further, and in accordance with NRS 338.060, Contractor shall forfeit as a penalty to the NTCD, Twenty to Fifty Dollars (\$20.00 - \$50.00) for each worker employed for each calendar day or portion thereof that such worker is paid less than the designated rate for any work done under the Agreement by him or any subcontractor under him. The exact amount of the penalty is determined by the labor commissioner's regulations. In addition, Contractor shall keep accurate records showing the name, occupation and actual per diem wages and benefits paid to each worker employed by him in connection with this project. The records shall be open to inspection by the NTCD, its officers and agents at all reasonable hours. No provision of this Contract shall be construed to excuse any duty either Party has under the prevailing wage laws of Nevada. (NRS 338.010 et.seq.)

Article 11. Indemnification/Insurance. NTCD has established specific indemnification and insurance requirements for agreements/contracts with contractors to help assure that reasonable insurance coverage is maintained. Indemnification and hold harmless clauses are intended to assure that contractors accept and are able to pay for the loss of liability related to their activities. Exhibit A, pages 1-5, is included by reference. All conditions and requirements identified in this exhibit shall apply to any work completed under this Agreement.

Article 12. Alternative Dispute Resolution. NRS 338.150 requires that a method of alternate dispute resolution be utilized to resolve any disputes that arise between the public body and the contractor engaged on a public work before initiation of a judicial action. The parties agree to submit any dispute that arises under this contract to a mutually agreeable alternative dispute resolution method prior to the initiation of a judicial proceeding. In addition, it is further agreed that neither party is entitled to an award of attorney's fees from the opposing party as a result of the outcome of an alternative dispute resolution method or a judicial proceeding even if the party is considered to be a prevailing party.

Article 13. Termination. In addition to the other provisions of this Agreement, NTCD has the right to terminate the Agreement without cause at any time upon giving the Contractor seven (7) days notice in writing. In the event the Agreement is terminated by NTCD in accordance with this provision, NTCD agrees to pay Contractor for all work satisfactorily completed and for materials installed prior to the date of termination.

Article 14. Laws and Compliance with Laws. This Contract is governed by and shall be interpreted under the laws of the State of Nevada. The Contractor and his agents including subcontractors, employees and persons who provide labor, equipment, materials, supplies or services for the work shall comply with the requirements of all applicable state and local laws, including, without limitation, any applicable licensing requirements and the requirements for the payment of sales and use taxes on equipment, materials and supplies provided for the work. In addition, the parties to this contract agree and stipulate that the venue for any dispute arising under this Agreement will be in a court of competent jurisdiction in Douglas County, Nevada.

IN WITNESS WHEREOF, the parties hereto have executed this Agreement the day and year first above written.

NEVADA TAHOE CONSERVATION DISTRICT, by:

Cary Sarnoff, Chairman
NEVADA TAHOE CONSERVATION DISTRICT

On this _____ day of _____, 2021, before the undersigned, a Notary Public in and for the County of Douglas, State of Nevada, personally appeared before me _____, as Chairman of the Nevada Tahoe Conservation District Board of Supervisors, whose name is subscribed to the above

agreement, and who acknowledged to me that he executed the same freely and voluntarily and for the uses and purposes therein mentioned.

NOTARY PUBLIC

CONTRACTOR

On this _____ day of _____, 2021, before the undersigned, a Notary Public in and for the County of Douglas, State of Nevada, personally appeared before me _____, General Contractor, whose name is subscribed to the above agreement, and who acknowledged to me that he executed the same freely and voluntarily and for the uses and purposes therein mentioned.

NOTARY PUBLIC

Exhibit A

CONSTRUCTION/INDEMNIFICATION AND INSURANCE SPECIFICATIONS FOR LOGGING ROAD STORMWATER DECANT FACILITY

INTRODUCTION

NTCD has established specific indemnification, insurance, and safety requirements for public works construction contracts to help assure that reasonable insurance coverage is purchased and safe working conditions are maintained. Indemnification and hold harmless clauses are intended to assure that CONTRACTOR accepts and is able to pay for the loss or liability related to its activities.

BIDDERS' ATTENTION IS DIRECTED TO THE INSURANCE REQUIREMENTS BELOW. IT IS HIGHLY RECOMMENDED THAT BIDDERS CONFER WITH THEIR RESPECTIVE INSURANCE CARRIERS OR BROKERS TO DETERMINE IN ADVANCE OF BID SUBMISSION THE AVAILABILITY OF INSURANCE CERTIFICATES AND ENDORSEMENTS AS PRESCRIBED AND PROVIDED HEREIN. IF ANY APPARENT LOW BIDDER FAILS TO COMPLY STRICTLY WITH THE INSURANCE REQUIREMENTS, THAT BIDDER MAY BE DISQUALIFIED FROM AWARD OF THE CONTRACT.

INDEMNIFICATION AGREEMENT

CONTRACTOR agrees to hold harmless, indemnify, and defend NTCD, its officers, agents, employees, and volunteers from any loss or liability, financial or otherwise resulting from any claim, demand, suit, action, or cause of action based on bodily injury including death or property damage, including damage to CONTRACTOR'S property or injury to CONTRACTOR'S employee, caused by any action, either direct or passive, the omission, failure to act, or negligence on the part of CONTRACTOR, its employees, agents, representatives, or Subcontractors arising out of the performance of work under this Agreement by CONTRACTOR, or by others under the direction or supervision of CONTRACTOR.

CONTRACTOR must either defend NTCD or, upon determination that the work performed by CONTRACTOR was negligent in any manner or that CONTRACTOR failed to perform any duty set forth in this Agreement, pay NTCD'S costs related to the investigation and defense of any claim, demand, action, or cause of action.

If NTCD's personnel are involved in defending such actions, CONTRACTOR shall reimburse NTCD for the time spent by such personnel at the actual cost incurred by NTCD for such services.

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

GENERAL REQUIREMENTS

CONTRACTOR shall purchase Industrial Insurance, General Liability, Automobile Liability, Property Insurance and Professional Insurance as described below. The cost of such insurance shall be included in the CONTRACTOR'S bid.

INDUSTRIAL INSURANCE

It is understood and agreed that there shall be no Industrial Insurance coverage provided for CONTRACTOR or any Subcontractor by NTCD. CONTRACTOR agrees, as a precondition to the performance of any work under this Agreement and as a precondition to any obligation of the NTCD to make any payment under this Agreement to provide NTCD with a certificate issued by an insurer in accordance with NRS 616B.627 and with certificates of an insurer showing coverage pursuant to NRS 617.210 for CONTRACTOR and all subcontractors.

If CONTRACTOR or Subcontractor is unlicensed and 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 616B.627(2).

It is further understood and agreed by and between NTCD and CONTRACTOR that CONTRACTOR shall procure, pay for, and maintain the above mentioned industrial insurance coverage at CONTRACTOR'S sole cost and expense.

Should CONTRACTOR be self-funded for Industrial Insurance, CONTRACTOR shall so notify NTCD in writing prior to the signing of this Agreement. NTCD reserves the right to approve said retentions, and may request additional documentation, financial or otherwise, for review prior to the signing of this Agreement.

MINIMUM LIMITS OF INSURANCE

CONTRACTOR shall maintain limits no less than:

1. General Liability: \$1,000,000 combined single limit per occurrence 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 each project or location.
2. Automobile Liability: \$1,000,000 combined single limit per accident for bodily injury and property damage covering "Any Auto". No aggregate limits may apply.
3. Professional Errors and Omissions as required by Risk Manager, \$0.

The General Contractor shall provide, at its sole cost and expense, maintaining during the entire term of this Agreement, a policy of commercial general liability insurance naming NEVADA TAHOE CONSERVATION DISTRICT, DOUGLAS COUNTY, and the NEVADA DEPARTMENT OF TRANSPORTATION as an additional insured covering the premises (including the land, equipment, controls and other facilities) insuring against the risks of death, bodily injury, property damage and personal injury liability arising out of or in connection with the use of the roads on the Premises, including roads used for traffic diversion purposes in connection with the Project, for the purposes authorized by this Agreement. Such insurance shall provide not less than the following limits: One Million Dollars (\$1,000,000.00) with respect to bodily injury or death to any one person; Two Million Dollars (\$2,000,000.00) with respect to bodily injury or death arising out of any one (1) occurrence; and One Million Dollars (\$1,000,000.00) with respect to property damage or other loss arising out of any one (1) occurrence. The insurance required under this Agreement shall (a) be issued by insurance companies authorized to do business in the State of Nevada, with classification of at least A and a financial rating of XI or better as rated in the most current issue of "Best's Key Rating Guide," and (b) contain an endorsement requiring thirty (30) days' written notice from the insurance company to all additional insureds before cancellation or change in the coverage, scope, or amount of the policy.

DEDUCTIBLES AND SELF-INSURED RETENTIONS

Any deductibles or self-insured retentions must be declared to and approved by the NTCD. NTCD 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 NTCD prior to the change taking effect.

OTHER INSURANCE PROVISIONS

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

1. General Liability and Automobile Liability Coverages

- a. NTCD, its officers, agents, employees, and volunteers are to be included as insureds as respects damages and defense arising from: activities performed by or on behalf of CONTRACTOR, including the insured's general supervision of CONTRACTOR; products and completed operations of CONTRACTOR; premises owned, occupied, or used by CONTRACTOR; or automobiles owned, leased, hired, or borrowed by the CONTRACTOR. The coverage shall contain no special limitations on the scope of protection afforded to the additional insureds nor shall the rights of the additional insureds be affected by the insured's duties after an accident or loss.
- b. CONTRACTOR'S insurance coverage shall be primary insurance as respects NTCD, its officers, agents, employees, and volunteers. Any insurance or self-insurance maintained by NTCD, its officers, employees, or volunteers shall be excess of CONTRACTOR'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 NTCD, its officers, agents, employees, or volunteers.
- d. CONTRACTOR'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. CONTRACTOR'S insurance shall issue a Waiver of Subrogation endorsement.

2. Property Coverages

CONTRACTOR shall provide builders risk insurance on an "All Risk" basis on a policy form satisfactory to NTCD. The limit of coverage will be the amount necessary to cover the bid value of any structures in the Contract or other value determined by NTCD. CONTRACTOR shall provide boiler and machinery insurance coverage or other forms of property insurance as appropriate for the project. If the project is in a flood plain, NTCD reserves the right to require flood coverage at CONTRACTOR'S expense. Losses paid under any property insurance policy or policies shall be paid directly to NTCD by the insurer(s).

3. All Coverages

Each insurance policy required by this clause shall be endorsed to state that coverage shall not be suspended, voided, canceled, or non-renewed by either CONTRACTOR or by the insurer, reduced in coverage or in limits except after thirty (30) days' prior written notice by certified mail, return receipt requested, has been given to NTCD 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. NTCD, with the approval of the Risk Manager, may accept coverage with carriers having lower Best's ratings upon review of financial information concerning CONTRACTOR and insurance carrier. NTCD reserves the right to require that CONTRACTOR'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

CONTRACTOR shall furnish NTCD 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. **All certificates and endorsements are to be addressed to the NTCD and be received and approved by NTCD before work commences.** NTCD reserves the right to require complete certified copies of all required insurance policies at any time.

SUBCONTRACTORS

CONTRACTOR shall include all Subcontractors as insureds under its policies or shall furnish separate certificates and endorsements for each Subcontractor. All coverages for Subcontractors shall be subject to all of the requirements stated herein.

MISCELLANEOUS CONDITIONS

1. CONTRACTOR shall be responsible for and remedy all damage or loss to any property, including property of NTCD, caused in whole or in part by CONTRACTOR, any Subcontractor, or anyone employed, directed, or supervised by CONTRACTOR.
2. Nothing herein contained shall be construed as limiting in any way the extent to which CONTRACTOR may be held responsible for payment of damages to persons or property resulting from its operations or the operations of any Subcontractors under it.
3. In addition to any other remedies NTCD may have if CONTRACTOR fails to provide or maintain any insurance policies or policy endorsements to the extent and within the time herein required, NTCD may, at its sole option:
 - a. Purchase such insurance to cover any risk for which NTCD may be liable through the operations of CONTRACTOR under this Agreement and deduct or retain the amount of the premiums for such insurance from any sums due under the Agreement;
 - b. Order CONTRACTOR to stop work under this Agreement and/or withhold any payments which become due CONTRACTOR here under until CONTRACTOR demonstrates compliance with the requirements hereof; or,
 - c. Terminate the Agreement.

SAFETY PROGRAM

CONTRACTOR shall be responsible for initiating, maintaining, and supervising all safety precautions and programs in connection with the work.

CONTRACTOR shall take all necessary precautions for the safety of, and shall provide all necessary protection to prevent damage, injury, or loss to:

1. All employees on the work site and all other persons who may be affected thereby.
2. All the work, materials, and equipment to be incorporated therein, whether in storage on or off the site.
3. Other property at the site or adjacent thereto, including trees, shrubs, lawns, walks, pavements, roadways, structures, and utilities not designated for removal, relocation, or replacement in the course of construction.

CONTRACTOR shall comply with all applicable laws, ordinances, rules, regulations, and others of any public authority having jurisdiction for the safety of persons or property or to protect them from damage, injury, or loss. He shall erect and maintain, as required by existing conditions and progress on the work, all necessary safeguards for safety and protection, including posting danger signs, other warnings against hazards, promulgating safety regulations, and notifying owners and users of adjacent utilities. CONTRACTOR shall comply with OSHA'S Hazard Communication Standards.

CONTRACTOR shall designate a responsible member of its organization at the site whose duty shall be the prevention of accidents. This person shall be CONTRACTOR'S superintendent unless otherwise designated in writing by CONTRACTOR to the Owner and the Engineer.

Exhibit A

SPECIAL TECHNICAL PROVISIONS

SPECIAL TECHNICAL PROVISIONS

FOR

LOGGING ROAD STORMWATER DECANT FACILITY

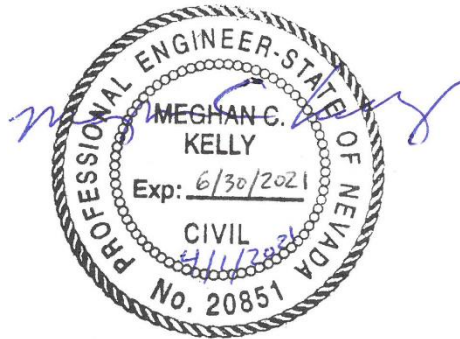
NEVADA TAHOE CONSERVATION DISTRICT

DOUGLAS COUNTY, NEVADA

FOR USE WITH:

Standard Specifications, as referred to in these Special Technical Provisions, are the Standard Specifications for Public Works Construction – Douglas County “Orange Book,” current edition. These Special Technical Provisions are supplemental to the Standard Specifications.

PREPARED BY:



**Nevada Tahoe Conservation District
400 Dorla Court
Box 915
Zephyr Cove, NV 89448**

**Meghan Kelly, P.E.
NV P.E. #: CE 020851**

Date: April 2021

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SECTION 100 – GENERAL

101.01 Description

The work described herein shall conform to the Contract Documents, Project Plans, Standard Specifications, these Special Technical Provisions, and Project Permits. Standard Specifications, as referred to in these Special Technical Provisions, are the Standard Specifications for Public Works Construction – Douglas County “Orange Book,” current edition. These Special Technical Provisions are supplemental to the Standard Specifications.

In case of conflict between the Standard Specifications and these Special Technical Provisions, the Special Technical Provisions shall govern, take precedence over, and be used in lieu of such conflicting portions.

SECTION 102 – CONTRACTOR QUALIFICATIONS

102.01 Description

In addition to any bidder qualifications noted elsewhere in the Contract Documents, Project Plans, Standard Specifications, and these Special Technical Provisions, each bidder shall attach sufficient documentation to the bid forms to clearly demonstrate his/her ability to meet the minimum experience qualifications stated in this section. The following items shall be included in the bid submittal:

1. Project descriptions of similar projects to the Logging Road Stormwater Decant Facility including:
 - a. Location of projects
 - b. Dates project was initiated and completed by the Contractor
 - c. Description of project, including size of project area
 - d. Total contract costs
 - e. Client/agency contact in responsible charge (owner of the work)
2. Other references demonstrating Contractor qualifications on similar projects. These references shall only include regulatory, funding and/or local agency representatives or licensed Professional Engineers working on similar projects within the Lake Tahoe Basin.
3. Contractor’s license number, classification, & status.

The above items shall clearly demonstrate the Contractor’s qualifications to perform the work associated with the Logging Road Stormwater Decant Facility and past similar experience on other projects. The experience to be demonstrated above is required to meet the following minimum requirements:

- A. The Contractor is required to have successfully performed a minimum of one (1) project, within the past five (5) years, which included work components of a similar scope and nature as to that which is indicated herein consisting of minimum project total costs of \$250,000 and contract times exceeding 15 days.

Failure of the Contractor to submit the information required or to demonstrate experience as required in this section shall warrant the Contractor’s bid submittal incomplete. The determination of whether the Contractor meets the qualifications is at the sole discretion of the Nevada Tahoe Conservation District.

102.02 Measurement and Payment

There will be no compensation for providing required bid documents and support materials for a complete bid package for this project. Incomplete bid packages or bid packages received after the submittal deadline will not be considered.

SECTION 110 – ORDER OF WORK

110.01 Description

The construction of this project shall conform to the Contract Documents, Plans, Standard Specifications, and these Special Technical Provisions. Prior to commencing work, the Contractor shall submit to the Engineer a sequence and schedule of work for review and acceptance in accordance with the Standard Specifications and these Special Technical Provisions. The schedule shall include all work necessary for a full and complete project as shown on the 100% Design Plans and described in these Special Technical Provisions.

The project requires coordination with several different public entities (Douglas County, Nevada Department of Transportation, the Nevada Tahoe Conservation District, Nevada Division of Environmental Protection (NDEP), Kingsbury General Improvement District (KGID), and the Tahoe Regional Planning Agency (TRPA)). The Nevada Tahoe Conservation District will assist the contractor in coordinating with all entities, public and private. The Contractor shall be solely responsible for coordinating with all contractors working in the area whether listed in these Special Technical Provisions or not.

The order of work shall be as follows:

1. Verification of all underground utilities within the project area.
2. Installation of all temporary erosion control measures as shown on the project plans and as approved by the Engineer and Tahoe Regional Planning Agency (TRPA).
3. Sub-surface utility installation including sewer, water, storm drain, and electrical.
4. Earthwork and site preparation for the surface improvements shown on the project plans and as described in these Special Technical Provisions.
5. Construction of the concrete decant bays, concrete wash pad, and surface utilities and lights as shown on the project plans and as described in these Special Technical Provisions.
6. Construction of permanent stormwater BMPs and paved road as shown on the project plans and as described in these Special Technical Provisions.
7. Demobilization from the project site:
 - a. Road sweeping.
 - b. Restoration of staging and access.
 - c. Removal of temporary BMPs with approval of Engineer.
8. Pre-Final site walk with the Engineer, Contractor, Douglas County, and NDOT.
9. Development of project punchlist (by Engineer).
10. Completion of punchlist items.
11. Final site walk with Engineer and Contractor.

The Contractor may submit a revised order of work to the Engineer for review and approval. In the event the Engineer does not accept the Contractor's proposed order of work, the above order of work shall hold for the contract.

The Contractor will be responsible for meeting all the requirements of all the regulations and requirements set forth by TRPA, NDOT, Douglas County, NDEP, and all other permitting and funding agencies. In the event fines are levied by any of these agencies, the Contractor shall be solely responsible for all costs associated with these fines. In the event the project receives a stop work order by any entity, the Contractor will not be granted any additional working days. The working days during which no work is performed will be counted as contract working days, even though the Contractor is unable to work due to the stop work order.

The Contractor shall submit a construction schedule in accordance with the provisions of this section, these Special Technical Provisions and the Standard Specifications for review and approval by the Engineer.

110.02 Measurement and Payment

Full compensation for furnishing all labor, materials, tools, equipment, and incidentals for all work associated with all work involved in provisions of this section, complete in place as shown on the Plans, as specified in the Standard Specifications, these Special Technical Provisions, and as directed by the Engineer, shall be considered as included in prices paid for the various contract items of work involved; no additional compensation will be allowed.

SECTION 120 – PROJECT PERMITS

120.01 Description

This project is located within Douglas County, Nevada and the Lake Tahoe Basin, which is regulated by Douglas County, the Tahoe Regional Planning Agency (TRPA), and the Nevada Division of Environmental Protection (NDEP). Additional, new water, sewer, and power lines will be installed to the site, and permits will be issued by KGID and Nevada Energy.

The contractor will be responsible for all permit requirements upon receipt of the permits for the project and no additional compensation shall be allowed for. The project permit(s) will have specific requirements covering work to be performed under this contract. The Contractor shall meet the permit(s) requirements for grading season restrictions, stormwater discharges, Best Management Practices (BMPs), selection of staging and storage areas, site restoration requirements, water and hydrant testing requirements, and all other agency approval conditions. The Contractor shall note that the project is located near sensitive lands (TRPA Class 1A and 1C – steep erodible soils, groundwater should not be present) and thus special care is required during construction.

In addition to TRPA temporary erosion control and BMP requirements, the Contractor shall be responsible for complying with the Douglas County Site Improvement Permit and other agency requirements and responsibilities as provided in the project permit(s), Contract Documents, Plans, Standard Specifications, and these Special Technical Provisions. **The Contractor is required to pick up a site improvement permit from Douglas County prior to initiating any work on the site. The permit will have no cost to the contractor.**

The Contractor shall maintain a copy of all permit(s) at the construction site and shall make the permit(s) available to operating personnel during construction activities; also upon request these permit(s) must be made available for public inspection.

The Contractor shall maintain a set of stamped plans and special provisions at the construction site and shall make them available to operating personnel during construction activities; also upon request, plans and special provisions must be made available for public inspection.

It shall be the Contractor's responsibility to completely inform him or herself of the conditions of all Project Permit(s) and conduct construction operations accordingly. Any requested change to an agency's permit conditions of approval, proposed by the Contractor, shall be submitted to the Engineer for transmittal to TRPA, NDEP, KGID, NV Energy, or other pertinent agency for their approval. The Contractor shall also be responsible for adhering to the requirements of the TRPA Code of Ordinances relating to this project. Should conflicts arise between the Standard Specifications and the TRPA Code of Ordinances, the TRPA Code of Ordinances shall supersede the Standard Specifications.

The **Contractor is responsible for attending a pre-grading meeting with TRPA coordinated by the Engineer** to allow for review of the project site and determination of the adequacy of temporary erosion control measures and BMPs deployed by the Contractor. The Contractor shall follow the requests of the reviewing environmental agencies as necessary to bring the construction site temporary erosion control devices and BMPs into compliance with the permit(s) requirements, regulations, and other provisions of these Special Technical Provisions. The Contractor shall maintain all temporary erosion control devices and BMPs until all work is complete. and the project site is stabilized per acceptance of the Engineer and all relevant agencies in review of the project site at the "Final Walk Through". The Contractor can remove temporary erosion control devices and BMPs only upon approval by the Engineer to do such.

The Contractor shall comply with all noxious weed requirements per the TRPA and other regulatory agencies. These requirements include but are not limited to the following:

- All tools, equipment and vehicles used for project implementation are required to be weed-free.
- All tools, equipment and vehicles will be cleaned of all attached mud, dirt, and plant parts. This will be done at a vehicle washing station or steam cleaning facility (power or high pressure cleaning) before the equipment and vehicles enter the project area, and before vehicles enter the Lake Tahoe Basin (if they originate from outside the Basin).
- All soil, fill, gravel, rock, mulch, seed, organic matter or other imported materials are required to be weed-free. Use onsite soils, gravel, rock, or organic matter when possible. Otherwise, obtain materials from pits, quarries, nurseries, and other sources that are certified or have been determined to be weed-free by the noxious weed coordinator of the USFS Lake Tahoe Basin Management Unit.
- Minimize the amount of ground and vegetation disturbance in the construction areas. Reestablish vegetation on all disturbed bare ground to minimize weed establishment and infestation.
- When working in known invasive plant infestations or designated weed units, equipment shall be cleaned before moving to other National Forest Service system lands. These areas will be identified in the field prior to the beginning of work.
- Use weed-free mulches, and seed sources. All activities that require seeding or planting must utilize locally collected native seed sources when possible. Plant and seed material should be collected from or near the project area, from within the same watershed, and at a similar elevation when possible. Persistent non-native such as *Phleum pretense* (cultivated timothy), *Dactylis glomerata* (orchard grass), or *Lolium* spp. (ryegrass) will not be used.
- Staging areas for equipment, materials, or crews shall not be sited in weed infested areas.

All trash created during construction must be properly contained (wildlife-proof containers) and removed from the site at the end of each day.

The Contractor shall meet all of the requirements of the project permit(s) as issued by the permitting agencies, and any provisions for rights-of-entries issued by land owners. The Contractor will be responsible for adhering to all requirements of the permit(s), and no additional compensation will be allowed for. The following project permits may be found as appendices to the Contract Documents:

- Tahoe Regional Planning Agency
- Kingsbury General Improvement District – *Connection Permit*
- NV Energy
- Douglas County – *Site Improvement Permit*

Final permitting for the project may not be completed until May 15, 2021 and the Contractor should schedule project work accordingly.

120.02 Measurement and Payment

Full compensation for furnishing all labor, materials, tools, equipment, and incidentals for all work associated with performing all the work involved in provisions of this section, complete in place as shown on the Project Plans, as specified in the Contract Documents, Project Permits(s), Standard Specifications, these Special Technical Provisions, and as directed by the Engineer, shall be considered as included in prices paid for the various contract items of work involved; and no additional compensation will be allowed for.

SECTION 125 – MOBILIZATION & DEMOBILIZATION

125.01 Mobilization

This item shall consist of mobilization of the Contractor's forces which shall include obtaining all bonds, insurance, and permits; purchasing, transportation, setup, staging and storage of equipment and materials; placing a road closed/park closed sign, establishing a field office at the project site; plus furnishing all labor, materials, tools, equipment, and incidentals required for performance and completion of the work as shown on the Project Plans, and specified in the Contract Documents, Project Permit(s), Standard Specifications, these Special Technical Provisions, and as directed by the Engineer. Mobilization shall also include but not be limited to the following items:

- Provide on-site sanitary facilities;
- Post all Occupational Safety and Health Administration (OSHA) required notices;
- Post all prevailing wage requirements;
- Prepare and transmit all submittals as noted on the Plans, and as specified in the Contract Documents, Standard Specifications, and these Special Technical Provisions;
- Wash and clean all tools and equipment prior bringing on site, as specified in the Project Permits, Contract Documents, Standard Specifications, these Special Technical Provisions, and as required by TRPA.

125.02 Staging and Storage Areas

The staging and storage areas as identified on the Project Plans are allowed for use by the Contractor in accordance with the Contract Documents, Project Permit(s), Standard Specifications, and these Special

Technical Provisions. These staging/storage areas are controlled by public entities and shall be maintained at all times in a clean and safe environment. The Contractor's use of the designated staging/storage areas shall be limited to and/or controlled by the time allowances and other restrictions as noted on the Project Plans, Project Permits, rights of entry, and elsewhere in these Special Technical Provisions.

If the Contractor wishes to make use of additional areas, for staging/storage activities, not identified on the Plans, it will be the Contractor's sole responsibility to secure use of these areas with agreements with the individual property owners; and file a copy of said authorization with the Engineer and obtain Tahoe Regional Planning Agency approval. The Contractor shall further be responsible for establishing all necessary and required temporary erosion control protections. The Contractor will be responsible for bearing all costs with securing these areas, and all efforts associated with the approvals, setup, maintenance, decommissioning and restoration, with no additional compensation allowed for.

The Contractor shall be responsible for appropriate security and safety measures at all staging/storage areas to protect property and the public.

The Contractor shall submit one (1) copy of a proposed truck haul route plan, along with the proposed project construction schedule to the Engineer for review and acceptance at least five (5) calendar days prior to the scheduled Pre-Construction Meeting. The Contractor's truck haul route plan shall include, but not be limited to, the following:

- Proposed construction zone;
- Proposed storage areas;
- Location of flaggers (to control truck access, where applicable);
- Construction phasing (including phasing of intersection construction and detours, if any); and,
- Proposed truck route (including the location of other construction projects which impact, or may be impacted by, the proposed haul route.)

All staging/storage areas shall comply with TRPA's requirements for BMPs while storing or stockpiling materials. The Contractor shall be responsible for locating staging/storage areas and will need to install all temporary erosion controls and BMPs and maintain them at all times during construction and until project closeout. The limits of the staging/storage areas shall be reviewed and accepted by the Engineer prior to use. All necessary temporary BMPs shall be installed at the staging/storage areas prior to the TRPA Pre-Grade Meeting and will be inspected during said meeting to ensure proper installation and controls are in place.

At the completion of the work or when no longer required for use, all construction staging/storage areas shall be cleared of all equipment, tools, materials, trash, debris, etc to produce a clean area and returned, as nearly as possible, to the lines and grades which existed prior to construction.

For storage and staging areas in paved areas, the areas shall be swept clean and returned to the existing condition, prior to use. The Engineer will inspect the paved areas, and if damage has occurred, whether by fault of the contractor's operations or not, the contractor will be required to make remedial action, including complete pavement restoration. No additional compensation shall be allowed for any remedial restoration work of paved areas, including complete replacement of the pavement areas.

125.03 Demobilization

Demobilization shall consist of the removal of all materials, equipment, signage, temporary pollution control materials, trash, debris, and all other items imported to or generated on-site as a result of the work completed by the Contractor and his/her operations. The Engineer may require sediment logs or filter fence to remain on site after demobilization until soil is stabilized. If this is the case, NTCD will be responsible for the removal of the sediment logs or filter fencing.

Furthermore, demobilization shall include cleaning the existing drainage inlet at the end of N. Benjamin Drive near the Park entrance as well as the pipe from this drainage inlet. Furthermore, demobilization shall include repairing all pavements, walkways, infrastructure, signage, landscape, trails, or other public or private facilities damaged by construction activities to their pre-construction conditions using comparable materials as accepted and directed by the Engineer. All disturbed areas shall be returned, as nearly as possible, to the lines and grades which existed prior to construction except where modified as part of the work so designated on the Plans. Attention is directed to Section 335, "Cleanup," of the Standard Specifications.

At the conclusion of work, final acceptance of the Project improvements must be in the form of a written "Notice of Completion."

125.05 Record Drawings

The Contractor shall keep accurate records on a set of project black line prints (22 inches x 34 inches) of all additions and deletions to the work and of all changes in location, elevation, and character of the work not otherwise shown or noted on the Project Plans. NTCD will furnish up to six (6) sets of full size black line prints for use at no cost to the Contractor.

Record drawings plans shall be provided to the Engineer for acceptance within one (1) calendar month after project completion as defined by the Engineer. One (1) set of full sized (22x34) hard copy record drawings shall be provided with changes to the original Contract work shown in red color, including revision clouds. All redline changes and details to be shown on the record drawings shall include, but not be limited to, difference in quantities of the original plans vs. actual installation (as appropriate), modifications to the location and elevations of public utility and storm drainage facilities, any utility relocations, any signage or traffic control devices, and any other modifications, additions or adjustments to any other facilities not shown or as modified on the Project Plans.

Record drawings plans shall be signed and dated by the Contractor or the sub-contractor that actually constructed the facility. In addition, company names of the Contractor and sub-contractors shall be added to the Title Sheet of the record drawings.

125.06 Measurement and Payment

Mobilization and Demobilization, including Staging and Storage as described above shall be considered one bid item. Record Drawings, as described above shall be considered as included with Mobilization and Demobilization and no additional compensation shall be allowed for. Mobilization and Demobilization shall be measured on a lump sum basis, completed and accepted by the Engineer as conforming to all the requirements in the complete work.

The contract price paid for Mobilization and Demobilization shall include full compensation for mobilizing the Contractor's forces which shall include but not be limited to: bonds, insurance, permits, record drawings, purchasing, transporting equipment, setup, temporary power source and installation, project signs, establishment of a field office, sanitation facilities, and furnishing all labor, materials,

tools, equipment, and incidentals required for performance and completion of the work; including full compensation for operations required to demobilize the Contractor's forces which shall include but not be limited to: the removal of all equipment, materials, debris, project signs, field office, sanitation facilities, temporary BMPs, tree protection fencing, and project clean-up; for the contract lump sum price bid, as shown on the Plans, in accordance with the Contract Documents, Standard Specifications, these Special Technical Provisions, project permit(s), and to the satisfaction of the Engineer.

Partial payments paid for Mobilization and Demobilization shall be made as follows:

- When 5% of the total original contract amount is earned from other bid items, 50% of the amount bid for mobilization/demobilization will be paid.
- When 10% of the total original contract amount is earned from other bid items, 100% of the amount bid for mobilization will be paid.

Full compensation for conforming to the provisions of this Section, not otherwise provided for, shall be considered as included in prices paid for the various contract items of work involved, and no additional compensation will be allowed.

SECTION 145 – SUBMITTALS

145.01 General

Where required by the Contract Documents, project permit(s), Project Plans, Standard Specifications, elsewhere in these Special Technical Provisions, and/or as indicted herein, the Contractor shall provide submittals, and furnish shop drawings and material certifications to the Engineer for review and acceptance. The required number of submittals, shop drawings and certificates shall be delivered within the specified time frames, including a transmittal letter in conformance with the Contract Documents, Standard Specifications, and these Special Technical Provisions. The transmittal letter at a minimum shall include the following information:

- A. Submittal number and item description
- B. Scheduled date of submittal
- C. Specification section/item number
- D. Supplier and/or manufacturer, plus contact information
- E. Contractor or sub-contractor name and point of contact information

One electronic copy is to be submitted unless specified elsewhere:

Construction Schedule, Traffic Control Plan, and Truck Haul Routes
Submittals & Shop Drawings
Certifications

The Engineer shall inspect and test in accordance with Section 336 of the Standard Specifications to provide final written documentation that the improvements conform to the Plans and Specifications. All samples requested by the Engineer shall be provided by the Contractor at no additional cost to NTCD. The Contractor shall become fully acquainted with Section 336 of the Standard Specifications. The Contractor shall not perform work or use materials without inspection and testing by the Engineer. The Contractor shall notify the Engineering at least 2 hours in advance of any Construction Activity that requires inspection and at least 48 hours in advance of transport of any material that requires testing, and at least 24 hours in advance of any item that requires testing. Unless approved by the Engineer, any

work done or materials used without inspection and testing, due to the lack of notifications by the Contractor, shall be removed and replaced at no additional cost to NTCD. Failure to reject any defective work or materials shall not in any way prevent later rejection when such defect is discovered, and such failure shall not obligate the Engineer to make final Acceptance.

Should the Engineer fail to respond to the notifications, the Contractor may elect to secure inspection and testing by an independent Accredited Laboratory in order to proceed with the work. The results of these services shall be accepted by the Engineer for use in determining the acceptability of the work. The Contractors shall be entitled to compensation for the cost of the services.

The Contractor shall be responsible for any inspection of testing expenses associated with unacceptable work or materials. NTCD reserves the right to deduct these additional costs from money due to the Contractor.

Materials testing per Section 336 will be required for the following:

- AC Pavement
- Concrete (Each Pour)
- Subgrade for Concrete and AC Pavement
- Subgrade for Pipes and Structures
- Potable Water (per KGID)
- Sewer Line (per KGID)
- Electrical (per NV Energy)

NTCD will provide initial materials testing using a third party Accredited Laboratory and inspection of work and material at NTCD's expense, with the exception of testing required by the utilities related to potable water installation, sewer installation, and electrical installation . Any subsequent tests based on failure to meet the standards shall be at the expense of the Contractor.

145.02 Submittals Required

The following items require a submittal, shop drawing, and/or material certification for review and acceptance by the Engineer (this list may not be complete; it is the Contractors responsibility to review and be knowledgeable with all portions of the project permits, Plans, Contract Documents, Standard Specifications, and these Special Technical Provisions for any additional requirements):

- Construction schedule
- Truck Haul Routes
- Manholes, valves, pipes, conduit, fittings, hydrants, canal gates, sand oil separator, drop inlets, and sediment cans and grates
- Equipment list for all equipment to be used, including the following minimum information:
 - Manufacturer and Model
 - Certification for washing/steam cleaning, including date
- Filter fence, sediment coir logs, and other BMP materials
- Construction limit fence
- Aggregates used in the work
- Origin and properties of cobble, boulders, and gravel used in the work

- Aggregate base (AB) - Material testing reports and other data necessary to provide the Engineer with established laboratory values for optimum moisture and maximum dry density, for use of any native soils, imported soils and aggregates requiring density testing
- Asphalt mix design and other bituminous materials used in the work
- Record Drawings

145.03 Measurement and Payment

Full compensation for furnishing all labor, materials, tools, equipment, and incidentals for all work associated with performing all the work involved in provisions of this section, complete in place as shown on the Project Plans, as specified in the Contract Documents, Project Permit(s), Standard Specifications, these Special Technical Provisions, and as directed by the Engineer, shall be considered as included in prices paid for the various contract items of work involved; and no additional compensation will be allowed for.

SECTION 150 –MATERIALS TESTING

150.01 General

The Engineer shall inspect and test in accordance with Section 336 of the Standard Specifications to provide final written documentation that the improvements conform to the Plans and Specifications. All samples requested by the Engineer shall be provided by the Contractor at no additional cost to NTCD. The Contractor shall become fully acquainted with Section 336 of the Standard Specifications. The Contractor shall not perform work or use materials without inspection and testing by the Engineer. The Contractor shall notify the Engineering at least 2 hours in advance of any Construction Activity that requires inspection and at least 48 hours in advance of transport of any material that requires testing, and at least 24 hours in advance of any item that requires testing. Unless approved by the Engineer, any work done or materials used without inspection and testing, due to the lack of notifications by the Contractor, shall be removed and replaced at no additional cost to NTCD. Failure to reject any defective work or materials shall not in any way prevent later rejection when such defect is discovered, and such failure shall not obligate the Engineer to make final Acceptance.

Should the Engineer fail to respond to the notifications, the Contractor may elect to secure inspection and testing by an independent Accredited Laboratory in order to proceed with the work. The results of these services shall be accepted by the Engineer for use in determining the acceptability of the work. The Contractors shall be entitled to compensation for the cost of the services.

The Contractor shall be responsible for any inspection of testing expenses associated with unacceptable work or materials. NTCD reserves the right to deduct these additional costs from money due to the Contractor.

Materials testing per Section 336 will be required for the following:

- AC Pavement
- Concrete (Each Pour)
- Subgrade for Concrete and AC Pavement
- Subgrade for Pipes and Structures
- Potable Water (per KGID)

- Sewer Line (per KGID)
- Electrical (per NV Energy)

NTCD will provide initial materials testing using a third party Accredited Laboratory and inspection of work and material at NTCD's expense, with the exception of testing required by the utilities related to potable water installation, sewer installation, and electrical installation. Additionally, if any import fill is required, the Contractor is responsible for materials testing per Section 205 of these Special Provisions, prior to import to the site.

Any subsequent tests that are necessary based on failure to meet the standards shall be at the expense of the Contractor.

150.02 Measurement and Payment

Full compensation for furnishing all labor, materials, tools, equipment, and incidentals for all work associated with performing all the work involved in provisions of this section, complete in place as shown on the Project Plans, as specified in the Contract Documents, Project Permit(s), Standard Specifications, these Special Technical Provisions, and as directed by the Engineer, shall be considered as included in prices paid for the various contract items of work involved; and no additional compensation will be allowed for.

SECTION 155 – CONSTRUCTION STAKING

155.01 Description

Work under this item shall consist of furnishing all labor, tools, materials, and equipment necessary to complete construction staking in accordance with the Standard Plans and Specifications and these Special Technical Provisions.

NTCD shall furnish one set of stakes and/or marks to establish lines and grades required for the completion of the work as shown on the Plans and as specified in the Standard Specifications and these Special Technical Provisions. The Contractor is responsible for notifying the Engineer at least seven (7) days in advance of when staking is needed. The Contractor will be responsible for any and all additional construction staking necessary for the full and complete construction of the Project. The Contractor shall be solely responsible for maintenance and protection of the survey stakes or marks. Contractor's construction staking will be verified by the Engineer, at the Engineer's discretion.

NTCD shall furnish labor and surveying equipment necessary for staking the Project including the following:

- Control points,
- Disturbance area,
- Limits of grading and grade breaks,
- Pipe alignments and offsets,
- Storm drain, sanitary sewer, electrical, and potable water structure locations and offsets,
- Concrete bay and wash pad corners and offsets, and
- AC Pavement limits.

The contractor shall provide any survey in excess of the aforementioned items.

All stakes and survey markers will be conspicuously marked with flagging tape or paint. The Contractor shall inform the Subcontractors of the importance of the preservation of all survey markers. The Contractor shall be responsible for protecting and maintaining all stakes from destruction. In the event that one or more of the stakes are damaged or destroyed, the Contractor will replace the stakes at the expense of the Contractor.

The Contractor's surveyor will be provided with the northing, easting, and elevation of the control points existing in the field as shown on the Project Plans. Additionally, the Contractor's surveyor will be provided with an electronic copy (ASCI Format) of the control points depicted on the Project Plans to develop the construction staking as stated in these Special Technical Provisions.

If the Contractor's surveyor wishes to develop a different work plan it shall be the Contractor's responsibility to develop such a work plan and present to the Project Engineer for approval.

155.02 Measurement and Payment

Full compensation for furnishing all labor, materials, tools, equipment, and incidentals for all work associated with all work involved in provisions of this section, complete in place as shown on the Plans, as specified in the Standard Specifications, these Special Technical Provisions, and as directed by the Engineer, should be incidental to the other construction items; no additional compensation will be allowed.

SECTION 160 – TEMPORARY EROSION CONTROL

160.01 General

This work shall consist of temporary erosion control measures, devices, and BMPs that may be shown on the Project Plans, and as specified in the Contract Documents, Project Permit(s), Standard Specifications, these Special Technical Provisions, or as directed by the Engineer during the life of the contract. Temporary erosion control measures will also be required at staging/storage areas utilized during project construction. Said work is intended to provide prevention, control, and abatement of water and air pollution within the limits of the project and to minimize damage to the work, adjacent properties and Lake Tahoe, streams, or other bodies of water.

Installation and maintenance of temporary erosion control measures, devices and BMPs shall conform to the requirements as stated within this section, the TRPA permit, and the Nevada Contractors Field Guide for Construction Site BMPs (hard copies are available for purchase from the Truckee Meadows Watershed Committee 775-334-3314, or a free electronic copy "pdf" is available for download from the NDEP website <http://ndep.nv.gov/bwqp/bmp05.htm>).

Temporary Soil Stabilization

The Contractor shall install temporary soil stabilization materials for water pollution control in all disturbed work areas that are considered inactive (i.e. excess of 14 days) or before forecast storm events. Should any temporary erosion control of this nature be required elsewhere as directed by the Engineer and/or regulatory agencies, the Contractor shall install within 48 hours of notification. Where applicable and upon acceptance of the Engineer, the Contractor shall furnish and apply/install temporary mulch, temporary hydraulic mulch, temporary erosion control blankets, or temporary covers in conformance with the Standard Specifications and these Special Provisions. Materials and construction methods shall comply with the Standard Specifications and these Special Provisions.

The Contractor shall maintain a temporary cover on all stockpiles at all times. Whenever a temporary cover is removed to perform other work, the temporary cover shall be replaced and secured within one (1) hour of stopping work.

Compensation for the requirements of this section, not otherwise provided for in a specified bid item, shall be considered included in prices paid for the various contract items of work involved, and no additional compensation will be allowed.

160.02 Construction Limit Fence. Work under this item shall consist of furnishing all labor, tools, equipment, and materials necessary to install, maintain, remove, and dispose of this BMP as required by the Project Plans, Contract Documents, Standard Specifications, these Special Technical Provisions, Project Permit(s), and TRPA Best Management Practices.

The Contractor shall perform all construction activities that are outside the road right-of-way within the construction limits (and/or grading limits) as shown on the Project Plans and staked by the Contractor's surveyor, and as delineated with construction limit fence installed by the Contractor. Where directed by the Engineer and/or shown on the plans, construction limit fence shall be placed around individual trees or groups of trees that are to remain, in accordance with the Tree Protection and Construction Limit Fence depicted on the project plans.

The area within which the Contractor will be allowed to conduct his/her construction operations will be the area within the limits of the construction limit fencing and/or grading limits as shown on the Project Plans. Where located within the immediate vicinity of any trees (or dripline), the width of the work area will be reduced in order to protect the trees. The Contractor shall review each such location to determine what equipment can be used to install the improvements at these locations or if hand work will be necessary. The costs associated with working within these reduced widths shall be included in the unit price bid for the applicable item of work with no additional compensation, therefore.

Contractor's attention is directed to the applicable bid item descriptions in these Special Technical Provisions regarding the type of equipment that can be used in construction on sensitive land areas. Where tree protection fencing cannot be placed at the dripline of the tree, as determined by the Engineer in coordination with TRPA, wood batten (as shown on the Project Plans) with bottom set approximately 3 feet above ground surface shall be strapped to the tree trunk (space between wood batten shall be no more than 6"). The unit price bid for construction limit and tree protection fence shall also apply to this condition (i.e. linear foot measurement of tree circumference where wood batten is attached). Construction limit and tree protection fencing shall be inspected daily and repaired, secured, and/or replaced as necessary to maintain and preserve its intended purpose. All construction limit and tree protection fencing shall remain in place during any construction activities unless directed by the Engineer. Tree protection and construction limit fencing is considered a temporary erosion control measure or BMP.

A fine of \$100 per day will be levied against the Contractor for each day the Contractor delays in responding to the Engineer's request to install new temporary erosion control devices and/or maintain existing temporary erosion control devices, in addition to any other fines levied by any other regulatory agency with no additional compensation allowed for.

160.03 Filter Fence. Work under this item shall consist of furnishing all labor, tools, equipment, and materials necessary to install, maintain, remove, and dispose of this temporary erosion control measure

as required by the Project Plans, Contract Documents, Standard Specifications, these Special Technical Provisions, Project Permit(s), and TRPA Best Management Practices.

Filter (silt) fence shall be manufactured from polyester or polypropylene material. The fabric shall be woven and shall conform to the following:

Test	Test Method	Requirement
Grab Tensile Strength, Newton, (25 millimeter grip, in each direction)	4623	400 min.
Elongation at Break, percent	4632	20 min.
Apparent Opening Size, Micrometers (um)	D 4751	850 min.
Coefficient of Permeability, cm/sec.	D 4491	0.01 min.
Ultraviolet Resistance, percent strength retention	D 4355	90 min.

- Filter fence fabric shall be handled and placed in accordance with the manufacturer's recommendations. The fabric shall be aligned and placed in a wrinkle-free manner.
- When joints are necessary, filter fence fabric shall be spliced together only at a support post, with a minimum twelve (12) inches overlap and securely sealed or stitched. See manufacturer's recommendations. Should the filter fence fabric be damaged, the torn or punctured section shall be repaired by placing a piece of fabric that is large enough to cover the damaged area and to meet the overlap requirement.
- Posts shall be spaced a maximum of ten (10) feet apart at the barrier location or as recommended by the manufacturer if less than ten (10) feet and driven securely into the ground (minimum of 1 foot). The posts and fence shall be angled ten (10) degrees off vertical up-slope for stability.
- A trench shall be excavated approximately four (4) inches wide and six (6) inches deep along the line of posts and upslope from the barrier in accordance with manufacturer's recommendations.
- A wire mesh support fence shall be fastened securely to the upslope side of the posts using heavy duty wire staples at least one (1) inch long, tie wires or hog rings. The wire mesh shall extend into the trench a minimum of two (2) inches and shall not extend more than three (3) feet above the original ground surface.
- The filter fence fabric shall be installed on the upslope side of the wire mesh fence and shall be stapled, wired, or tied to the wire fence and eight (8) inches of the fabric shall be extended into the trench. The fabric shall not extend more than three (3) feet above the original ground surface.
- Filter fence fabric shall not be stapled to existing trees.
- The trench shall be backfilled and the soil compacted over the filter fence fabric.
- For installations on slopes less than 20%, slope lengths of 200 feet or less and around drainage inlets, the Contractor has the option to use fiber rolls in lieu of filter fence.
- Should the filter fence fabric decompose or become ineffective prior to the end of the expected usable life and the barrier is still necessary, the fabric shall be replaced promptly.

Filter fence shall remain in place for the complete duration of the project (all Phases of work) as necessary to conform to the Project Permit(s). All filter fence shall be routinely inspected and maintained at all times and on a continual basis for the duration of the Project and is expected to be in good condition at the time the Notice of Completion is issued. Repair and or replacement of any damaged filter fence, upon discovery or as directed by the Engineer, shall be considered as included in the prices paid for this bid item of work, and no additional compensation will be allowed. At the

conclusion of the project or as directed by the Engineer and TRPA all filter fence shall become the property of the Contractor and be completely removed from the project site and disposed of in conformance with the Contract Documents, Standard Specifications, and these Special Technical Provisions. The Engineer may require sediment logs or filter fence to remain on site after demobilization until soil is stabilized. If this is the case, NTCD will be responsible for the removal of the sediment logs or filter fencing.

Sediment log (fiber roll) may be used in place of filter fence. Filter fencing is considered a temporary erosion control measure or BMP. A fine of \$100 per day will be levied against the Contractor for each day the Contractor delays in responding to the Engineer's request to install new temporary erosion control devices and/or maintain existing temporary erosion control devices, in addition to any other fines levied by any other regulatory agency with no additional compensation allowed for.

160.04 Sediment Log (Coir Log). Work under this item shall consist of furnishing all labor, tools, equipment, and materials necessary to install, maintain, remove, and dispose of this temporary erosion control measure as required by the Project Plans, Contract Documents, Standard Specifications, these Special Technical Provisions, Project Permit(s), and TRPA Best Management Practices. **The Contractor shall submit a material specification for the sediment log, for acceptance of the Engineer, prior to placement in the work.**

Sediment logs shall be provided in standard lengths of 10 or 20 feet long per the size diameter as shown on the Plans, and shall be prefabricated fiber roll logs or wattles filled with a rice straw, wood excelsior fiber, coconut fiber or other similar filler material, and covered with a biodegradable jute, sisal, or coir fiber netting or open weave containment fabric secured tightly at each end. The use of plastic/photodegradable netting shall not be allowed. All materials shall be certified weed free.

Sediment logs with a diameter of 8 to 10 inches shall have a density of at least 1.1 lb/ft, and sediment logs with a diameter of 12-inches shall have a density of at least 3 lb/ft. Its basic purpose is to provide a flexible, lightweight, porous sediment control device demonstrating the ability to conform to terrain details, dissipate water velocity, and capture loose sediment. All fiber rolls shall be properly staked in place, except where its use is intended to be short term (daily operations) or reposition of the fiber roll will occur on a regular basis (i.e. active construction areas, trenching operations and windrows, temporary or active stockpiles, active areas for soil processing/screening operations, spill containment devices, etc.) as determined by the Engineer. In such instances where a fiber roll is not staked, it shall be weighted or secured in place using a sufficient number of gravel bags to control the flow of storm water and capture sediment.

The Contractor shall furnish, install, maintain, and remove when no longer required, all sediment logs per the Manufacturer's directions, as shown on the Project Plans and as directed by the Engineer (where applicable to each Phase of the work), including but not limited to the following general requirements:

- Prior to fiber roll installation; the Contractor shall excavate a concave trench along the contour line, three (3) inches to five (5) inches deep. Soil excavated from the trench shall be placed on the uphill or flow side of the roll to prevent water from undercutting the roll.
- The Contractor shall place the fiber roll in the trench and stake on both sides of the fiber roll within eight (8) inches of each end and then at a maximum spacing of four (4) feet, using one (1) by two (2) inch stakes.

- When more than one fiber roll is placed in a row or check dam, the fiber rolls shall be overlapped in a horizontal configuration to provide a tight joint.

Sediment log shall remain in place, where directed by the Engineer, for the complete duration of the project (all Phases of work) as necessary to conform to the Project Permit(s). All sediment logs shall be routinely inspected and maintained at all times and on a continual basis for the duration of the Project. Repair and or replacement of any damaged sediment log, upon discovery or as directed by the Engineer, shall be considered as included in the prices paid for this bid item of work, and no additional compensation will be allowed. At the conclusion of the contract or where accepted to occur at an earlier date as directed by the Engineer, TRPA and NDEP, all sediment log shall become the property of the Contractor and be completely removed from the project site and disposed of in conformance with the Contract Documents, Standard Specifications, and these Special Technical Provisions. The Engineer may require sediment logs or filter fence to remain on site after demobilization until soil is stabilized. If this is the case, NTCD will be responsible for the removal of the sediment logs or filter fencing.

Any sediment logs required or used in the work on a short term basis that are not permanently staked in place or are anticipated to be moved on a daily or routine basis (such as areas immediately adjacent to trench excavations, temporary stockpiles, active areas for soil processing/screening operations, spill containment devices, etc.) shall be considered as included in prices paid for the various contract items of work involved, and no additional compensation will be allowed.

Sediment logs are considered a temporary erosion control measure or BMP. A fine of \$100 per day will be levied against the Contractor for each day the Contractor delays in responding to the Engineer's request to install new temporary erosion control devices and/or maintain existing temporary erosion control devices, in addition to any other fines levied by any other regulatory agency with no additional compensation allowed for.

160.05 Watering/Dust Control

Work under this item shall consist of furnishing all labor, tools, equipment, and materials necessary to provide construction water for the control of dust generated by the Contractors activities as required by the Project Plans, Contract Documents, Standard Specifications, these Special Technical Provisions, Project Permit(s), and TRPA Best Management Practices.

The Contractor shall be responsible for dust control throughout all phases of construction. All federal, state, regional and local ordinances regarding dust control shall be complied with. The responsibility of obtaining the regulations and requirements and full compliance with such ordinances is solely that of the Contractor.

No chemical additives shall be permitted for any watering/dust controls operations.

If the Contractor desires to use water from fire hydrant(s) during construction, permission for the use of hydrant(s) shall be obtained from the proper agency (Kingsbury General Improvement District, KGID). The Contractor shall use said hydrant(s) in accordance with any rules, regulations, and procedures as established by the agency.

160.06 Sweeping

Work under this item shall consist of furnishing all labor, tools, materials, and equipment necessary to sweep all paved areas within the project site, and streets adjacent to the project site, and dispose of the

swept materials in accordance with the Project Plans, Contract Documents, Standard Specifications, these Special Technical Provisions, Project Permit(s), and TRPA Best Management Practices. Tracking of sediment onto public streets shall be minimized by a combination of road sweeping and use of gravel construction entrance/exit areas designated on the Plans during soil hauling operations, during equipment transporting from one work area to another, and as necessary to keep the streets and other paved areas clear of soil and debris. Tracking control applies to streets within the project area as well streets adjacent to the project area that have the potential to be impacted by tracking from the Contractor's operations.

The Contractor shall provide sweeping equipment that conforms to the following minimum requirements: **The sweeper, provided by the Contractor, shall be a chassis-mounted vehicle capable of vacuuming the roadways such that the swept material is placed into a hopper, from which the swept material can be removed and disposed of. Broom sweepers that are attachments to other equipment are not acceptable sweepers.**

Affected streets shall be swept a minimum of two times daily (e.g. mid-afternoon and at the end of the day) during soil hauling operations, during equipment transporting from one work area to another, and as necessary to keep the streets clear of soil and debris. The swept material shall be disposed of in accordance with the standard specifications, project permits and these Special Technical Provisions.

Sweeping is considered a temporary erosion control measure or BMP. A fine of \$100 per day will be levied against the Contractor for each day the Contractor delays in responding to the Engineer's request to install new temporary erosion control devices and/or maintain existing temporary erosion control devices, in addition to any other fines levied by any other regulatory agency with no additional compensation allowed for.

160.07 Maintenance

The Contractor shall maintain all temporary erosion control measures, devices, and/or BMPs placed in the work, for the duration of the project. Maintenance includes all Manufacturer's recommendations, and includes but is not limited to the following:

- Damage to any temporary erosion control devices and/or BMPs during the course of the project shall be repaired by the Contractor immediately upon discovery and at his expense.
- Temporary erosion control devices and/or BMPs shall be inspected routinely and immediately after each rainfall event and at least daily during prolonged rainfall events. Any required repairs shall be made immediately.
- Construction limit and tree protection fencing shall be inspected daily and repaired, secured, and/or replaced as necessary to maintain and preserve its intended purpose.
- All signage as required for the project shall be routinely inspected and repaired or replaced upon discovery of damage, vandalism, and/or missing parts.
- Should the filter fence fabric decompose or become ineffective prior to the end of the expected usable life and the barrier is still necessary, the fabric shall be replaced promptly.
- Should a sediment log decompose or become ineffective prior to the end of the expected usable life and the barrier is still necessary, the sediment log shall be replaced promptly.
- Any single or group of gravel bag(s) shall be replaced when the bag material is ruptured or when the yarn has failed, allowing the bag contents to spill out.
- Any stakes and/or rope used to secure a sediment log in place shall be routinely inspected and repaired as necessary if found to be loose or ineffective.

- Sediment deposits and other debris shall be removed when they reach approximately one-half the height of the sediment barrier (or as recommended by the Manufacturer) and disposed of in a manner acceptable to the Engineer, NDEP, and TRPA.
- Any sediment deposits remaining in place after the temporary erosion control measure and/or BMPs is no longer required shall be removed and disposed of in a manner acceptable to the Engineer, NDEP, and TRPA.

160.08 Measurement and Payment. Temporary BMPs including construction limit fencing, filter fence/sediment rolls, dust control, and sweeping shall be measured as a lump sum bid price for “Water Pollution Control.” Payment for Water Pollution Control shall be made at the contract lump sum bid price which shall be deemed full compensation for all labor, materials, equipment and incidentals necessary to complete and maintain the work as specified and making any required modifications due to field conditions.

Full compensation for conforming to the provisions of this Section, not otherwise provided for, shall be considered as included in prices paid for the various contract items of work involved, and no additional compensation will be allowed.

SECTION 180 – EXISTING UTILITIES AND UNDERGROUND FACILITIES

180.01 General

The Contractor shall inform him or herself of the exact location of all conduits, ducts, cables, pipe systems, or other above ground and/or underground facilities and shall protect all utilities encountered in the process of construction. The Contractor shall contact Underground Service Alert (USA) at least 48 hours prior to any construction activity. Any damages to above or underground facilities shall be immediately repaired by the Contractor at his own expense, except for damage to utilities, in which case the Contractor shall immediately notify the proper Utility Company. Unless cleared by the Utility Company, the Contractor shall be responsible for reimbursing said Utility Company for any and all work required to repair or replace damaged utility facilities with no additional compensation allowed for.

The Contractor shall not begin excavation work within the immediate vicinity of any known sanitary sewer force main or potable water main prior to contacting Kingsbury General Improvement District (KGID) at least five (5) working days in advance.

180.02 Potholing of Existing Utilities

The Contractor shall be responsible for verifying the location of all existing underground facilities within the project area, which may have potential to conflict with the location of proposed improvements, as shown on the Project Plans and as indicated by USA markings. Actual field conditions and locations can vary considerably from those shown on the Project Plans; therefore the Engineer and/or Owner cannot, and does not, assume responsibility for the existence or location of any underground structures such as, but not limited to, pipelines, laterals, conduits, valves, meters, vaults, manholes, junction boxes, and other components of a typical utility, drainage, or irrigation system. The Contractor shall be responsible for contacting all utilities, agencies and/or public and private owners to verify such information prior to and during construction of any of the proposed improvements.

The Contractor shall notify the Engineer in advance of all potholing activities. Any delays that may result from failure of the Contractor to locate and/or pothole a potential utility conflict shall be at the

Contractor's expense. Any costs incurred due to relocations, shutoff, startup, or any other costs related to utility relocations due to the construction of the project, not otherwise provided for in a specific Contract item, shall be the responsibility of the Contractor.

All potholing, as identified in the paragraph above, shall be performed by the Contractor and considered as included in prices paid for the various Contract items of work involved and no additional compensation will be allowed for.

If any existing utilities that are not shown by USA or on the Plans as indicated to be relocated by others are found to be in conflict with the proposed location of the improvements shown on the Plans, the Contractor shall contact the Engineer. The Engineer will either provide the Contractor with new grades/elevations to eliminate such conflicts or shall contact the utility agency to arrange for relocation of the conflicting utility. The Contractor shall coordinate all necessary activities with the utility agency in order to complete or facilitate the subject relocation(s). Such work shall be considered change order work.

180.03 Protect In Place Existing Facilities and Utilities

All utilities that are not to be relocated or removed shall be protected in place from injury or damage. Any damage to underground facilities shall be immediately repaired by the Contractor at his own expense, except for damage to utilities, in which case the Contractor shall immediately notify the proper utility purveyor. Unless cleared by the utility purveyor, the Contractor shall be responsible for reimbursing said utility for any and all work required to repair or replace damaged facilities.

180.04 Measurement and Payment

Full compensation for furnishing all labor, materials, tools, equipment, and incidentals for all work associated with performing all the work involved in provisions of this section, complete in place as shown on the Project Plans, as specified in the Contract Documents, Project Permit(s), Standard Specifications, these Special Technical Provisions, and as directed by the Engineer, shall be considered as included in prices paid for the various contract items of work involved; and no additional compensation will be allowed for.

SECTION 190 – AC PAVEMENT

190.01 Description

Work under this item shall consist of furnishing all labor, tools, equipment, and materials necessary for the complete construction of an asphalt concrete structural pavement. Paving may also be necessary to repair any damages to the existing road. This work shall include excavation, subgrade preparation, and aggregate base course as shown on the Project Plans and in accordance with the Contract Documents, Standard Specifications, Special Technical Provisions, Project Permits, or as directed by the Engineer.

Aggregate base shall be produced from commercial quality aggregates and be Type 2, Class B conforming to Section 200 of the Standard Specifications. Existing asphalt concrete (AC) pavement may be crushed or pulverized and mixed with virgin aggregate or used solely as aggregate base, provided the resulting processed material complies with the requirements of the Standard Specifications where accepted and as directed by the Engineer comply with the requirements of the Standard Specifications for recycled asphalt concrete base. The Contractor is responsible to perform and furnish all material

testing as necessary to ensure compliance with the provisions in the Standard Specifications and these Special Technical Provisions.

The construction including placement, spreading, and compaction of one or more courses of aggregate base on a prepared sub-grade shall be in accordance with Section 200, "Aggregate for Base Courses" of the Standard Specifications.

Asphalt concrete shall be Type 3 (4% Marshal Voids) and shall conform to the provisions of the applicable sections of the Standard Specifications and these Special Technical Provisions. Asphalt concrete shall be placed to the lines, dimensions, and grades shown on the Plans or as directed by the Engineer. Asphalt concrete shall be produced from commercial quality asphalt and aggregates at a central mixing plant and conform to the following requirements:

- A. Asphalt binder (cement) shall be performance graded PG 64-28 NV conforming to section 201 "Bituminous Materials", of the Standard Specifications.
- B. Aggregate shall be Type 3 conforming to Section 201, of the Standard Specifications.
- C. A mix design shall be completed and submitted by the Contractor prior to incorporation in the work.

The Contractor shall make all provisions to saw cut the edges of existing asphalt to expose the full depth of the section and form a clean edge at any transverse joint, for the freshly laid mixture. As directed by the Engineer in the field, a twelve inch (12") "T" cap key-in joint shall be created at all transverse joints with existing asphalt structural sections.

A tack coat of liquid asphalt shall be applied in accordance with the provisions in Section 316, "Tack Coat" of the Standard Specifications, to all contact surfaces of existing pavement, curbing, manholes, and other surfaces as designated by the Engineer prior to any asphalt concrete pavement being placed against them.

190.02 Measurement and Payment

AC Pavement shall be measured on a per square foot basis. Full compensation for furnishing all labor, material, equipment, and incidentals necessary to construct the AC Pavement, including, but not limited to, aggregate base, grading, placement, and incidentals is included the unit price bid for AC Pavement and no additional compensation will be allowed.

SECTION 200 – GRAVEL, COBBLE, ROCK, BOULDER & OTHER AGGREGATES

200.01 General. Work under this item shall consist of furnishing all labor, tools, materials, and equipment necessary to furnish and place gravel, cobble, rock, boulder, sand aggregate, and other aggregates in the work, including but not limited to rock lined channels, gravel mulch, aggregate base courses, bituminous courses, bedding and backfill, and general rip-rap as indicated on the Project Plans, described in these Special Technical Provisions, and directed by the Engineer, in conformance with the Contract Documents, Project Permits, Standard Specifications, and these Special Technical Provisions.

The limits of loose aggregate and aggregate base course placement as indicated on the Project Plans are approximate, and the exact limits of placement shall be determined in the field by the Engineer. All aggregates used in the work for aggregate base courses, bituminous courses, bedding and backfill,

mortar and grout, Portland cement, and general rip-rap shall be in strict conformance with the Standard Specifications, and other applicable provisions found elsewhere in these Special Technical Provisions.

All gravel, rock, and other loose aggregate imported to be used in the work at the site shall be thoroughly washed off site or in a location approved by the engineer so that each material runs clear when water is applied. All stone, aggregate materials, and soils imported to the site shall be from a certified "Weed Free" source approved by the Nevada Department of Agriculture and/or TRPA. If rock from onsite is used, washing will not be required for placement as parking barriers, however, rock for channel should be washed.

All loading, transport, temporary stockpiling, on-site hauling, excavation, preparation of sub-grade, placement, embedment, backfill, compaction, clean-up, and off-haul and disposal of excess materials needed to install all gravel, cobble, rock, boulder, sand aggregate, and other aggregates where incorporated in the work shall be considered as included in the applicable bid item unit price, and no additional compensation will be allowed.

All aggregate materials generated on-site and meeting the quality requirements as stated in Section 200, "Gravel, Cobble, Rock, Boulder & Other Aggregates" of these Special Technical Provisions may be incorporated in the work upon acceptance of the Engineer prior to placement; any such material that is rejected for placement in the work shall be removed and disposed of in conformance with the provisions found elsewhere in these Special Technical Provisions, and the Standard Specifications. Use of said aggregate material in the work shall be considered as included in prices paid for the various contract items of work involved; and no additional compensation will be allowed for.

200.02 Submittals

The Contractor shall submit certificate(s) and other material testing data as necessary to validate the source of the chinking, gravel, cobble, rock, boulder, sand aggregate, and other aggregate materials and its conformance with the Standard Specifications and these Special Technical Provisions. Include all applicable test results for specific gravity, resistance to degradation, absorption, durability index, and soundness (as described elsewhere in these Special Technical Provisions). Samples of loose stone aggregates shall be submitted to the Engineer a minimum of ten (10) working days prior to large-scale delivery to the project site or placement in the work, for review and acceptance of color and material.

All aggregate materials generated on site shall be reviewed and accepted by the Engineer, prior to placement in the work. Visual evaluation of the source, samples, suitable certificates and material testing data sheets, and service records may be used to determine the acceptability of any aggregate materials imported or generated on-site. The Engineer reserves to the right to reject said materials.

200.03 Quality Requirements for Loose Stone Aggregates.

The Contractor shall use stone (i.e. gravel, cobble, rock, boulder, etc.) that is sound and durable against disintegration under conditions to be met in handling and placing, and is hard and tenacious and otherwise of a suitable quality to ensure permanency in the specified kind of work. All applicable stone materials shall meet the requirements stated herein and conform to the following test requirements.

	<u>Requirement</u>	<u>Test Method</u>
Apparent specific gravity, minimum	2.5	ASTM C-127-59
Abrasion, maximum percent	45	ASTM C-535-65
Freeze-thaw loss, maximum percent After 12 cycles	10	AASHTO 103 Procedure A

Stone shall be of such shape to form a stable protection structure for the required section or feature. Flat or elongated shapes will not be accepted unless the thickness of the individual pieces is at least 1/3 of the length. Stones shall be sound, durable, hard, resistant to abrasion and free from laminations, weak cleavage planes, and the undesirable effects of weathering. It shall be of such character that it will not readily disintegrate from the action of air, water, or the typical conditions experienced during handling and placing. All aggregate material shall be clean and free from deleterious impurities, including alkali, earth, clay, refuse, and adherent coatings.

In addition to the requirements of Section 200.07 of the Standard Specifications, riprap stone shall be of such shape to form a stable protection structure for the required section. Stones shall be sound, durable, hard, resistant to abrasion and free from laminations, weak cleavage planes, and the undesirable effects of weathering. It shall be of such character that it will not disintegrate from the action of air, water, or the conditions experienced during handling and placing. Stone shall additionally be of native nature to the Tahoe Basin, of similar color and texture to that found within the Tahoe Basin and in particular the project area, and samples shall be provided to the Engineer for review and approval for use, prior to placement of any stone. All material shall be clean and free from deleterious impurities, including alkali, earth, clay, refuse, and adherent coatings. Visual evaluation of the source, suitable tests and service records may be used to determine the acceptability of the stone. Routine control of gradation will be by visual inspection.

200.04 Placement

Hand and/or mechanical adjustments/placement of the stone materials are expected in order to meet the requirements stated herein. All stone products shall be placed to follow the lines and grades shown on the Project Plans. Prevent the contamination of stone features during excavation, placement, and/or backfill. All stone features shall be blended with adjacent rock areas and grades, by tapering margins, mixing rock color, and keying into and around existing bedrock, rock, soils, and vegetation. Exact elevations and horizontal locations of the stone materials and features as shown on the Project Plans may be slightly adjusted in the field by the Engineer, with no additional compensation allowed for.

200.05 Measurement and Payment

Rock Channel shall be measured on a per linear foot basis based on the centerline of the channel in a point to point measurement. Full compensation for furnishing all labor, material, equipment, and incidentals necessary to construct the Rock Channel, including, but not limited to grading, fabric, placement, chinking, and incidentals is included the unit price bid and no additional compensation will be allowed.

Full compensation for furnishing all labor, materials, tools, equipment, and incidentals for the materials in this section, complete in place as shown on the Plans, as specified in the Standard Specifications, these Special Technical Provisions, and as directed by the Engineer, should be incidental to the other construction items; no additional compensation will be allowed.

SECTION 205 – EARTHWORK

205.01 General

Work under this item shall consist of furnishing all labor, tools, equipment, and materials necessary for sub-surface grading, rough grading, local borrow native soils, import, structural fill, compaction, finish grading, loading, transport, onsite hauling, off-site hauling, temporary stockpile, off-site stockpile, processing/ conditioning, screening, placement, and disposal/salvage of unsuitable or surplus materials, for all the contract work items involved or delineated as excavation, earthwork, or grading as shown on the Project Plans, and as described in the Standard Specifications and these Special Technical Provisions. All excavations, fill, earthwork, and associated grading shall be made true to the lines and grades as shown on the Project Plans, staked by the Contractor, and verified by the Engineer, and shall be so constructed as to avoid removing or loosening any material outside the required slopes and grading limits.

All finished areas with cut and/or fill slopes shall be graded as indicated on the Project Plans, staked in the field, and directed by the Engineer. The Contractor shall employ excavation and/or placement methods that does not disturb or damage other work. Areas that are shown to not have any excavation or grading shall be protected and remain undisturbed to protect the existing soil profile and vegetation cover.

Cobbles and boulders will likely be encountered during grading and can be incorporated in fill areas with the exception of the flat recreation areas. If these oversize particles conform to the description of materials as described in Section 200 of these Special Technical Provisions, they should be set aside for other applications on the project site as accepted and allowed per direction of the Engineer. If buried trash is encountered, it must be off hauled and disposed of properly.

205.02 Miscellaneous and Temporary Grading and Excavation

Work under this item shall consist of providing all labor, tools, materials, and equipment necessary to perform minor excavation, temporary excavation and finish grading as directed by the Engineer. Miscellaneous and temporary excavation and grading includes excavation, grading, fill, compaction, and disposal of excess materials as necessary to construct the project improvements, maintain prevailing grades, and create minor drainage swales to ensure correct flow paths and positive drainage is maintained within the finished project site. In addition, miscellaneous grading and excavation shall include finish/contour grading within the project area to create natural shapes that transition smoothly to adjacent features, grades and slopes and generally provide for a natural appearance, in accordance with the Project Plans, Standard Specifications, these Special Technical Provisions, and as directed by the Engineer. All such miscellaneous excavation and grading, including detailed finish grading as directed by the Engineer in the field to produce a natural finish, shall be considered as included in prices paid for the various contract items of work involved, and no additional compensation will be allowed.

205.03 Local Borrow (Native Fill)

Selected material and other local borrow native earthen material encountered and/or generated on-site in excavation within the project limits may be used as backfill where shown on the Plans, as specified in the Special Technical Provisions, the Standard Specifications, or as directed by the Engineer.

All fill materials used in the work shall be in conformance with the Standard Specifications, these Special

Technical Specifications, and at a minimum shall not exceed optimum moisture content and be free of stones or lumps exceeding 3 inches in greatest dimension, organic matter, or other unsatisfactory material that may restrict compaction requirements. Any screening operations and processing of soils as required for conformance with this section shall be considered as included in prices paid for the various contract items of work involved, and no additional compensation will be allowed.

205.04 Import

Importing of earthwork fill material, if necessary or required to meet the grades and elevations shown on the plans, shall be considered included in the Contractor's bid for the various items of work involved and no additional compensation will be made therefore. Should such imported material be required, the Contractor shall notify the Engineer of the borrow site location at least 72 hours in advance, and provide an adequate sample size (~ 1 cubic foot) so the Engineer can verify the suitability of the material. All imported materials shall be proposed by the Contractor in writing in accordance with the submittal requirements of these Special Provisions and the Standard Specifications. **It is not anticipated that any import will be necessary except for specific aggregates for paving, the sports turf area, and the decomposed granite trail.**

The Contractor shall perform and/or submit all material testing reports and other data as necessary to provide the Engineer with established laboratory values for optimum moisture and maximum dry density, for any imported material requiring density testing.

205.05 Unsuitable Soils, Surplus Earthen Material, and Stockpiles

Unsuitable soils, surplus soils, and other excess earthen materials shall be removed and disposed of in accordance with all local, state, and federal regulations from the project site as a part of this item of work. No unsuitable or surplus material may be disposed of within the rights-of-way or project limits. The Contractor shall make all arrangements for disposal of the materials at off-site locations (including disposal outside of Tahoe basin) and at the Contractor's expense.

All surplus materials generated from the project site during construction operations, including but not limited to, clearing and grubbing, pipe line excavation, basin grading, and site grading shall be off-hauled and salvaged/disposed of outside the project limits and Tahoe basin (unless a specific off-site area is authorized for use by the Engineer and applicable regulatory agencies). Any shortage of material caused by premature disposal of the surplus or salvaged materials, by the Contractor, shall be replaced by him/her and no additional compensation will be allowed for such replacement.

205.06 Measurement and Payment.

"Earthwork" shall be measured on a cubic yard basis, complete in place and accepted by the Engineer as conforming to all the requirements in the complete work. The contractor shall bid based on the sum of the cut and fill quantities provided on the Project Plans. If the contractor disputes the quantities provided on the plans, the contractor shall pay for and provide a survey, at his/her own expense and prepare the necessary figures and calculations to support the claim. Excess quantities will be paid for based on the original unit price bid. Any associated contour grading and other general earthwork movement as required to complete the work shall be considered as included in the unit price.

The prices paid for the items covered under "Earthwork" shall include furnishing all labor, materials, tools, equipment, and incidentals and for doing all the earthwork involved, including but not limited to, excavation, loading, transport, onsite hauling, local borrow, import, screening, conditioning, backfill, rough grading, scarifying, compacting, finish grading, disposal of unsuitable or surplus materials, and

otherwise manipulating the existing ground surface and soils, and placing additional local borrow or import soils as required for the grading and construction of the designated basin and berm for a complete job in place to the lines and grades as shown on the Project Plans, and specified in the Contract Documents, Project Permits, Standard Specifications, these Special Technical Provisions, and as directed by the Engineer, and no additional compensation will be allowed.

SECTION 210 – POTABLE WATER INSTALLATION

210.01 General

Any and all potable water line installations, as required to facilitate construction of the proposed project improvements, shall be coordinated with the Kingsbury General Improvement District (KGID) at least two (2) weeks prior to commencement of work in that area. The Contractor will perform all work as described herein in coordination with KGID and in conformance with the Project Plans, all permits, and these Special Technical Provisions.

Any saw-cutting and removal of existing pavements shall be in conformance with Section 175 “Removal of Existing Improvements” of these Special Technical Provisions.

The Contractor shall be responsible for the installation, construction, and testing of the potable water main as required for completion of the contract work.

Work under this item shall include the extension of the potable water main as shown on the plans. Following construction, the existing potable water system shall be returned to its pre-construction condition, for a sound, complete and fully operational water main and potable water system in conformance with all the requirements of KGID. Any new water main shall not be used without prior acceptance from the Engineer and KGID. KGID valves shall NOT be turned by Contractor. Contractor shall coordinate with KGID to turn valves in their system necessary to complete Project improvements.

210.02 Materials

All materials shall conform to the Standard Specifications except as follows.

A. Pipe:

- (1) Polyvinylchloride (PVC) in accordance with AWWA C900, able to withstand 250 psi, in the size and class shown on the plans
- (2) Lubricant shall be FDA approved for human consumption, non-toxic, ecologically safe, water soluble, etc., and shall be designed to be used for installation of potable water line systems.
- (3) C900 will be restrained thirty feet (30') from fitting on pipe main, and bends with restraining couplers.

B. Fittings:

- (1) Fittings shall be installed in strict accordance with the recommendations for the manufacturer, the Specifications, and AWWA C605.
 - (a) Thrust blocks will be poured at fittings, bends and tees as required by the Project Plans, Special Provisions, and Standard Specifications. Thrust blocks shall be concrete and placed between solid ground and the fitting or appurtenance to be anchored. The thrust blocks shall be placed so that the pipe and fitting joints shall be accessible for repair.
 - (b) All fittings will be wrapped in plastic prior to pouring concrete.

- (2) Service line fittings shall be flared or mechanical compression type.
- (3) Miscellaneous fittings, necessary for service connections, including reducers and adapters, shall be brass construction, Mueller Company, Ford Manufacturing Company, or equal.
- (4) Flange fittings and blind flanges shall be drilled and faced to AWWA Standards. Dimensions of specials shall conform to those stated in the AWWA Standards. Prior to fabrication of specials, the CONTRACTOR shall furnish the ENGINEER shop drawings showing the details of such specials for acceptance.
- (5) Flexible couplings and flange coupling adapters shall be as manufactured by Romac, Rockwell, or accepted equal. All mechanical couplings shall have the longest standard sleeve length. Coupling adapters shall be restrained.
- (6) Romac (slip-on type) reducers will not be allowed.
- (7) Tapping sleeve shall be stainless steel with flange face, and meet required Class rating of connecting pipe.
- (8) All bolts shall be 316 stainless steel.

C. Valves:

- (1) Gate valves larger than two inches (2") shall be modified wedge disc, resilient seat, NRS valves with O-ring seals, similar and equal to Mueller A-2360, and shall open when the stem is rotated counter-clockwise. Unless otherwise shown, valves shall have a two-inch (2") square operating nut. Valves shall conform to AWWA C-509. All valves shall be of the same manufacturer. All valves shall be restrained.
- (a) Valve bodies shall be cast iron ASTM A-126, Class B.
- (b) Joint materials for flanged joints shall consist of full-face one-piece gaskets conforming to AWWA C-207. Bolts and nuts shall conform to AWWA C-207.
- (c) All shaft bearings shall be of the self-lubricating, corrosion resistant, sleeve type.
- (d) All valves shall be hydrostatic and leak tested according to AWWA C-504.
- (e) Operator components shall withstand an input torque of three hundred foot-pounds (300 ft/lbs.) at extreme operator positions without damage, per AWWA C-505.
- (f) Valves two inches (2") and smaller shall be wedge disc, non-rising stem, screwed, all bronze, similar and equal to Crane No. 438.
- (g) Valve boxes shall be provided for all gate valves placed underground, and shall be similar and equal to Christy G5, with a six-inch (6") PVC (SDR 35) pipe extension sleeve. Cover shall be marked "WATER."
- (h) Concrete pillow under valves for support as shown in Project Plans.
- (i) All bolts shall be 316 stainless steel.

D. Meters:

- (1) All water meters to be installed shall be of a type, size, and brand approved by the District.
- (2) The meter shall be compatible with the District's current meter reading system.
- (3) The meter shall be installed in a manner approved by the District, either in a Mueller meter setter pit, or in a properly constructed meter pit or vault, with a metal lid, and with all necessary valves.
- (4) Transmitters for meter reading must be mounted in the lid of the pit, or as approved by the District Inspector.
- (5) Current list of acceptable meters:
 $\frac{3}{4}$ " to 1 $\frac{1}{2}$ " meters:
 - (a) Badger M-series equipped with the Orion Radio Reading system

(b) Badger E-series equipped with the Orion Radio Reading system (fire systems)
2" to 4" meters:

(a) Badger Recordall Compound series meter equipped with the Orion Radio Reading System.

Larger than 4" meters, or smaller high flow applications: Contact KGID for specific meter needs.

E. Miscellaneous Appurtenances:

(1) Location wire shall be Number 10 solid, insulated, AWG copper, soft drawn with connectors wrapped in insulation tape, or copperhead steel core copper wire #10 with snake bite direct bury connectors.

(2) Warning tape shall be blue color, three inches (3") in width, 5 mil thickness, permanently printed "CAUTION: BURIED WATER LINE BELOW."

(3) Valve stem extensions shall be provided where necessary so that the operating nut for any valve is not more than thirty-six inches (36") below the valve box cover.

(4) Magnesium Anode to be five pound (5#) "High Potential" packaged in chemical backfill with ten feet (10') of number twelve (#12) leadwire. Connecting clamp to be CalPico GC or equivalent.

(5) Full circle repair clamp: Single-band stainless steel single lug ductile iron gasket, Grade 60; bolts are low alloy.

210.03 Execution. All materials shall be handled and stored in a manner that will not damage or depreciate the integrity and quality of the material or its coating. Before installation, each article shall be inspected and any damaged material shall be removed from the site. Any damaged coating shall be repaired. The interior and ends of the pipe and appurtenances shall be clean. When it is necessary to cut pipe, such cuts shall be neatly made. All valves and appurtenances shall be thoroughly cleaned before installation and shall be installed in strict accordance with the manufacturer's recommendations. Contractor shall keep As-Built plans to provide to NTCD for submission to KGID upon completion of work. NTCD will map valves and pipes using GPS to provide to KGID. Contractor shall assure NDEP Bureau of Safe Drinking Water (BSDW) approval of the Project has been granted prior to commencing construction.

At all times when laying is not in progress, open ends of pipe shall be closed by temporary water tight plugs or by other approved means. If water is in the trench when work is resumed, the plug shall not be removed until all danger of water entering the pipe has passed.

Water Mains

A. The depth of pipe shall be a minimum of 40 inches, unless indicated otherwise on the plans, from finished surface grade to top of pipe.

B. The minimum separation between the water line and the proposed sewer main shall be 10 feet.

C. All gate valves will be restrained and wrapped in plastic prior to pouring thrust blocks.

D. All joints shall be restrained

Valves and Appurtenances

A. Valves shall be set plumb and inspected in opened and closed positions to ensure that all parts are in working condition.

B. Flanged valves and appurtenances shall be set with no stresses on the flanges. Bolts shall be tightened uniformly around the joints.

C. All underground valves shall be provided with valve boxes.

(1) Valve boxes shall be centered and set plumb over the operating nut of the valves so that they do not transmit shock or stress to the valves. Valve box covers shall be set three-eighths to five-eighths inch (3/8" to 5/8") below the surface of the finished pavement as shown on the plans, or as instructed by the Engineer. Riser pipe shall be cut to the proper length so that the valve box does not ride on the riser pipe when set at grade, and the top of the riser pipe is at least six inches (6") below the top of the box. D. All valves and fittings will be wrapped in plastic prior to pouring concrete.

Testing

A. Scope:

- (1) The CONTRACTOR shall provide all labor, tools, and equipment necessary to perform the required pipeline tests.
- (2) The hydrostatic test shall be completed prior to the chlorination test and then a final flushing of the line shall be done.
- (3) Hydrostatic testing shall comply with AWWA Standards C605 and the Standard Specifications
- (4) Disinfection and testing shall comply with AWWA Standards C651, C652, C653, and C654 and the Standard Specifications.
- (5) Disposal of any water shall comply with NDEP and TRPA.

B. Hydrostatic Tests:

- (1) All appurtenances of the entire main line, including service saddles and corporation stops, shall be installed prior to testing. The pipeline shall be tested at a pressure equal to the class of pipe or 50 psi over working pressure, whichever is greater. The tests shall be made in the presence of the ENGINEER or his representative.
- (2) Before the test, the pipeline shall be completely anchored and backfilled. During the filling of the line with water, precautions shall be taken to prevent air pockets at high points. Water may be allowed to stand in the line for several hours prior to the test. During the test, which shall be conducted for at least sixty (60) minutes, the allowable leakage shall be as computed by the following formula:

$$\frac{L = SD P^{1/2}}{148,000}$$

L = allowable leakage in gallons per hour

S = length of pipe being tested

D = nominal diameter of the pipe in inches

P = test pressure in pounds per square inch gage

If any valved section of pipe shows greater leakage than specified, the CONTRACTOR shall locate and repair the leaks and shall retest that section of line at no additional cost.

C. Disinfection of Completed Mains:

- (1) Before being placed in service, the entire main line shall be chlorinated by the CONTRACTOR. Chlorine shall be applied by the following methods: Liquid chlorine or calcium hypochlorite water mixture, unless KGID approves another method. The chlorinating agent shall be applied at the beginning of each section adjacent to the feeder connection and shall be injected through a corporation stop, hydrant, or other connection ensuring treatment of the entire line. One test point shall be installed per 300 feet of line being tested with no less than two (2) test points for sections of less than 300 feet. Water shall be fed slowly into the line with chlorine applied in

amounts to produce a dosage of 50 parts per million. Portions of the existing mains, which have been connected to a new line or otherwise contaminated by construction, shall be included in the system being sterilized. The solution shall remain in the line for a minimum of 24 hours. A residual of not less than 10 parts per million shall be produced in all parts of the line after the 24-hour period. During the chlorination process, all valves shall be operated. Tablets will NOT be installed in pipe sections during installation. CONTRACTOR to coordinate with KGID for collecting all disinfection testing samples. Frequency and types of samples shall be per AWWA Standards.

D. Final Flushing:

(1) After chlorination, the CONTRACTOR shall flush all the water from the lines at the extremities until the replacement water tests are equal, chemically, in turbidity and bacteriologically to those of the permanent water supply. The treated water shall be discharged into a sanitary sewer manhole.

210.04 Measurement and Payment

“8-inch C900 Water Pipe” shall be measured on a linear foot basis which includes the length of C900 pipe, fittings, and valves installed and as shown on the plans and measured in the field, completed and accepted by the Engineer as conforming to all the requirements in the complete work.

“1 inch CTS Water Service” shall be measured on a linear foot basis which includes the length of C900 pipe, fittings, and valves installed and as shown on the plans and measured in the field, completed and accepted by the Engineer as conforming to all the requirements in the complete work.

“Water Valves” shall be measured on a per each basis which includes the excavation, bedding, valve installation and testing, backfill, finish grading, concrete, and incidentals as shown on the plans and measured in the field, completed and accepted by the Engineer as conforming to all the requirements in the complete work.

“Fire Hydrant” shall be measured on a lump sum basis which includes the 6” lateral pipe, fittings, connections, hydrant and appurtenances, excavation, bedding, installation and testing, backfill, finish grading, concrete, and incidentals as shown on the plans and measured in the field, completed and accepted by the Engineer as conforming to all the requirements in the complete work.

“Yard Hydrants” shall be measured on a per each basis which includes the fittings, connections, yard hydrant and appurtenances, excavation, bedding, installation and testing, backfill, finish grading, concrete, bollards, and incidentals as shown on the plans and measured in the field, completed and accepted by the Engineer as conforming to all the requirements in the complete work.

The contract unit price paid shall include full compensation for furnishing all labor, materials (i.e. pipe, couplings, fittings, valves, concrete, slurry, aggregate base, backfill, etc.), tools, equipment, and incidentals, and for performing all the work involved in the construction of new water main pipe and service, complete in place, including any excavation, diversion and re-routing of the water main lines during construction, bedding, structural backfill, temporary roadway patch, off-haul and disposal of excess materials and waste debris, and performance of conformance testing as shown on the Project Plans, as specified in the Standard Specifications, these Special Technical Provisions, and as directed by the Engineer and utility purveyor: and no additional compensation will be allowed.

SECTION 215 – SANITARY SEWER INSTALLATION

215.01 Description

All sanitary sewer line installation as required to construct the proposed project improvements shall be coordinated with KGID at least four (4) weeks prior to commencement of work in that area. The Contractor will perform all work as described herein in coordination with KGID and in conformance with the Project Plans, the Standard Specifications, and these Special Technical Provisions.

Work under this item shall include the installation of 12" SDR35 Sewer Line and 6" SDR35 Sewer Line as well as connection into the existing sanitary sewer system. The sewer system shall be returned to the proposed condition shown on the Project Plans, for a sound, complete and fully operational sewer main and sanitary sewer system in conformance with all the requirements of KGID.

All construction methods and materials shall conform to the applicable provisions of the KGID standards and the specifications as noted in this section. All fill within the roadway prism shall be structural backfill and/or aggregate base as necessary to conform to the roadway structural section as shown on the Plans and specified in these Special Technical Provisions.

215.02 Materials

All materials shall conform to the Standard Specifications, KGID Standards, and project plans.

215.03 General Specifications for Trenching, Backfilling, and Compacting

Referenced Standards

- American Society for Testing and Materials (ASTM):
 - D1557, The Moisture-Density Relation of Soils Using a 10 LB Rammer and an 18 IN Drop.D1557 is "Modified Proctor."
- "Standard Specifications for Public Works Construction" (Orange Book) adopted by Douglas County, latest edition.
- "Standard Specifications for Road and Bridge Construction," (NDOT) published by Nevada Department of Transportation, latest edition.
- "Kingsbury General Improvement District Standard Details.
- This project is under the jurisdiction of the Tahoe Regional Planning Agency (TRPA), which may limit times of certain construction activities.

Submittals

The Contractor shall submit the following to the Engineer prior to initiation of construction.

1. Submit respective pipe or conduit manufacturer's data regarding methods of installation and general recommendations.
2. Submit sieve analysis reports on all granular materials proposed for use by Contractor, whether imported or on-site material.

Project Conditions

1. Avoid overloading or surcharge a sufficient distance back from edge of excavation to prevent slides or caving.
2. Protect and maintain benchmarks, monuments or other established points and reference points and if disturbed or destroyed, replace items to full satisfaction of Owner and controlling agency.
3. Verify location of existing underground utilities.

Materials

All materials shall conform to the Standard Specifications except as follows.

A. Backfill Material:

- a. 2-sack concrete sand slurry with a non-chloride liquid accelerator.
- b. Class E Backfill per Section 200.03 of Orange Book.

B. Embedment Materials:

- a. Class A Backfill per Section 200.03 of Orange Book.

C. Drainfill Materials:

- a. Number 4 Coarse Aggregate per Section 200.05 of Orange Book.

D. Sewer Meter/Valve

- a. Utility box shall be H-20 rated.
- b. Sewer Meter shall be Badger M3000 Series or equivalent.
- c. Sewer Valve shall be Mueller Resilient Wedge Gate Valve or equivalent.
- d. The gate valve shall be in the off position once installed.

Excavation

Remove and dispose of unsuitable materials at Contractor's expense.

A. Unclassified Excavation:

1. Remove rock excavation, clay, silt, gravel, hard pan, loose shale, and loose stone as directed by Engineer.
2. Previous KGID experience with pipeline installation in the Stateline area has revealed the existence of rock, boulders and large cobble. If rock excavation is required for pipeline installation, including but not limited to overexcavation, jack hammering, drilling and blasting, such rock excavation will be included in the unit price for the pipeline installation and no additional compensation will be considered for this work.

B. Excavation for Appurtenances:

1. Twelve inches (12") (minimum clear distance between outer surface and embankment) or as necessary to provide proper working room.

C. Trench Excavation:

1. Trench through asphalt areas will be opened by means of grinding/zipping asphalt layer or sawcut. Prior to paving, the final six (6) inches on each side of trench will be sawcut to make clean, smooth edge for paving.
2. Areas in pavement that have been disturbed during excavation, for example: Rocks intruding into trench, outside typical trench section, will be sawcut as marked by Engineer. These areas will be removed, excavated to depth required to fill voids, compacted to required density, then place eight (8) inches of aggregate base material compacted to 95% and the required depth of asphalt pavement, placed in two-inch lifts. CONTRACTOR to replace existing thickness of asphalt; minimum depth of asphalt replacement is three inches (3").
3. Excavate trenches by open cut method to depth shown on Drawings and necessary to accommodate work.
4. Observe following trenching criteria:
 - a. Trench size:
 1. Excavate width to accommodate free working space and/or as recommended by the pipe manufacturer.
 2. Maximum trench width at top of pipe or conduit may not exceed outside diameter of utility service by more than the 24-inches.

Preparation of Foundation for Pipe Laying

- A. Over-Excavation
 - 1. Backfill and compact to 95 percent of maximum dry density per ASTM D1557 with embedment material.
- B. Rock Excavation:
 - 1. Excavate minimum of 6 inches below bottom exterior surface of the pipe or conduit.
 - 2. Backfill to grade with embedment material and compact to ninety-five percent (95%) of maximum dry density per ASTM D1557.
 - 3. Form bell holes in trench bottom.
- C. Subgrade Stabilization
 - 1. Stabilize the subgrade when directed by the Engineer.
 - 2. Observe the following requirements when unstable trench bottom materials are encountered.
 - a. Notify Owner when unstable materials are encountered.
 - b. Remove unstable trench bottom caused by Contractor failure to dewater, rainfall, or Contractor operations.
 - c. Replace with compacted embedment material with no additional compensation.

Backfilling Methods

- A. Do not backfill until tests to be performed on system show system is in full compliance to specified requirements.
- B. Pipe Zone Backfill:
 - 1. Comply with the following:
 - a. Place embedment material in lifts not exceeding eight inches (8") (loose thickness) from six inches (6") below to twelve inches (12") above top of pipe or conduit.
 - b. Hand place, shovel slice, and pneumatically tamp all embedment material.
 - c. Observe specific manufacturer's recommendations regarding backfilling and compaction.
 - d. Compact each lift to specified requirements.
 - e. Tamp material around sides of pipe when material is halfway up side of pipe.
- C. Trench Backfill:
 - 1. Perform in accordance with the following:
 - Paved Areas:
 - a. Place 2-sack concrete sand slurry with non-chloride liquid accelerator from top of pipe zone to bottom of existing asphalt thickness or to a minimum of three inches (3"), whichever is greater, OR Class E backfill material at 95% compaction from top of bedding to bottom of existing asphalt thickness plus 8" for aggregate base.
 - b. Observe specific manufacturer's recommendations regarding backfilling and compaction.
 - c. Avoid displacing joints and appurtenances or causing any horizontal or vertical misalignment, separation, or distortion.
 - Non-Paved Areas:
 - a. Place backfill in lift thicknesses capable of being compacted to densities specified.
 - b. Observe specific manufacturer's recommendations regarding backfilling and compaction.
 - c. Avoid displacing joints and appurtenances or causing any horizontal or vertical misalignment, separation, or distortion.
- D. Water flushing for consolidation is not permitted.

Compaction

General:

- A. Place and assure backfill and fill materials to achieve an equal or "higher" degree of compaction than undisturbed materials adjacent to the work.
- B. In no case shall degree of compaction below "Minimum Compaction" specified be accepted.
- C. Compaction Requirements: Unless noted otherwise on Drawings or more stringently by other sections of these Specifications, comply with following trench compaction criteria:

Location	Material	Density
Under roadway surfaces, within street right-of-ways, under structures	Embedment Material	95 percent
	Backfill Material	95 percent
	Aggregate Base	95 percent
All other areas next to walls, piers, columns, and other exterior structural members	Embedment Material	95 percent
	Backfill Material	90 percent

Field Quality Control

A. Testing:

- (1) Costs of initial "Passing" tests paid by NTCD.
- (2) Perform additional tests as directed until compaction meets or exceeds requirements.
- (3) Cost associated with "Failing" tests and "Retests" shall be paid by Contractor.
- (5) Assure Engineer and KGID has immediate access for testing of all soils related work.
- (6) Notify Engineer and KGID at least twenty-four (24) hours prior to testing.
- (7) Ensure excavations are safe for testing personnel.

B. Cleanup

- (1) Blade all shoulder areas disturbed by construction to present a neat and uniform appearance.
- (2) Clean up and dispose of all trash, debris, and excess materials *as work proceeds*. Perform a final clean up after removal of equipment and project is complete.
- (3) Immediately following sawcut of roadway and driveway(s), the pavement shall be cleaned of all sawcut slurry and debris.
- (4) Disturbed areas will be restored to pre-existing or better condition.

215.04 Execution

Preparation

Excavation and backfill shall be in accordance with the Standard Specifications, these Special Technical Provisions, and as specified in the section above including the following additional requirements:

- 1) Runs shall be as close as possible to those shown on Drawings.
- 2) Excavate to required depth.
- 3) Grade to obtain fall required.
- 4) Bottom of trenches shall be hard. Tamp as required.
- 5) Remove debris from trench prior to laying of pipe.

Installation

Installation of PVC Pipe and Fittings shall be in conformance with the Standard Specifications, these Special Technical Provisions and as follows:

- (1) Install in accordance with the manufacturer's recommendations and ASTM D 2321-83a, "Recommended Practice for Underground Installation of Flexible Thermoplastic Sewer Pipe."
- (2) Stabilize unstable trench bottoms.

- (3) Bed pipe true to line and grade with continuous support from a firm base.
 - (a) Bedding depth - 6 inches.
 - (b) Material and compaction to meet ASTM standard noted above.
- (4) Excavate bell holes into bedding material so pipe is uniformly supported along its entire length. Blocking to grade pipe is forbidden.
- (5) Trench width at top of pipe:
 - (a) Minimum - 18 inches or diameter of pipe plus one foot, whichever is greater.
 - (b) Maximum - Outside diameter of pipe plus two feet.
- (6) Piping and joints shall be clean and installed according to Manufacturer's recommendations.
- (7) Do not use backhoe or power equipment to assemble pipe.
- (8) Initial backfill shall be 12 inches above top of pipe with material specified in Section 02221.
- (9) Minimum cover over top of pipe:
 - (a) 36 inches before wheel loading.
 - (b) 48 inches before compaction.
- (10) In accordance with Section 306 of the Standard Specifications.
- (11) In accordance with KGID Requirements.

Acceptance Testing

A. General:

- (1) The Contractor shall perform watertight testing in the presence of the Engineer. The Contractor shall furnish all labor, materials, tools, and equipment required to make the tests. Testing shall be done immediately after cleaning of the pipe.
- (2) All sections of pipe shall be tested. The sewer shall be complete with laterals prior to testing.
- (3) Where leakage is in excess of the specified rate, the sewer shall be uncovered immediately and the amount of leakage reduced by the Contractor to a quantity within the specified rate before the sewer is accepted.
- (4) All testing will be done by air exfiltration, unless determined otherwise by KGID Engineer.
- (5) Any individually detectable leaks in pipes, joints, laterals, stubs, connections, and rod holes shall be repaired regardless of test results with no cost to NTCD.

B. Air Exfiltration Test

- (1) Each section of sewer shall be tested by plugging and bracing all openings in the main sewer line and the upper ends of all connection sewers. Prior to any air pressure testing, all pipe plugs shall be checked with a soap solution to detect any air leakage. If any leaks are found, the air pressure shall be released, the leaks eliminated, and the test procedure started over again.
- (2) The final leakage test of the sewer main line and branching house connection sewers, shall be conducted in the following manner:
 - (a) Air shall be introduced into the pipeline until 4.0 psi gage pressure has been reached, at which time the flow of air shall be reduced and the internal air pressure shall be maintained between 3.5 and 4.0 psi (gage) for at least two (2) minutes to allow the air temperature to come to equilibrium with the temperature of the pipe walls. Pressure in the pipeline shall be constantly monitored by a gage and hose arrangement separate from hose used to introduce air into the line. Pressure in the pipeline shall not be allowed to exceed 5 psi (gage).
 - (b) After the temperature has stabilized and no air leaks at the plugs have been found, the air pressure shall be permitted to drop and, when the internal pressure has reached 3.5 psi (gage), a stop watch or sweep second-hand watch shall be used to determine the time lapse required for the air pressure to drop to 2.5 psi (gage).

(3) The pipe and joints shall be within acceptance limits for leakage defined within Section 336 of the Standard Specifications.

C. Mandrel Test of PVC Sewer Pipe

(1) Following completion of backfill and prior to the placing of permanent pavement, the pipe shall be cleaned and then mandrelled to measure for obstructions (deflections and joint offsets). A standard, commercially manufactured rigid, odd-numbered leg (nine legs minimum) mandrel, having a diameter corresponding to the diameter of pipe being tested in accordance with ASTM D-3034 shall be pulled through the pipe by hand. The minimum length of the circular portion of the mandrel shall be equal to the nominal diameter of the pipe.

(2) A proof ring for verification of the mandrel diameter shall be available at all times during mandrel tests. Rings shall be a standard product of the mandrel manufacturer.

215.05 Measurement and Payment

“12” SDR35 Sewer” shall be measured on a linear foot basis, completed and accepted by the Engineer as conforming to all the requirements in the complete work. The contract unit price paid for “12” SDR Sewer” shall include full compensation for furnishing all labor, materials (i.e. pipe, couplings, fittings, concrete, slurry, aggregate base, backfill, etc.), tools, equipment, and incidentals, and for performing all the work involved in construction of new sewer main, complete in place, including any excavation, bedding, structural backfill, manhole connections, off-haul and disposal of excess materials and waste debris, and performance of conformance testing as shown on the Project Plans, as specified in the Standard Specifications, these Special Technical Provisions, and as directed by the Engineer and utility purveyor; and no additional compensation will be allowed.

“6” SDR35 Sewer” shall be measured on a linear foot basis, completed and accepted by the Engineer as conforming to all the requirements in the complete work. The contract unit price paid for “6” SDR Sewer” shall include full compensation for furnishing all labor, materials (i.e. pipe, couplings, fittings, concrete, slurry, aggregate base, backfill, etc.), tools, equipment, and incidentals, and for performing all the work involved in construction of new sewer main, complete in place, including any excavation, bedding, structural backfill, manhole connections, off-haul and disposal of excess materials and waste debris, and performance of conformance testing as shown on the Project Plans, as specified in the Standard Specifications, these Special Technical Provisions, and as directed by the Engineer and utility purveyor; and no additional compensation will be allowed.

“Valve Control Box/Sewer Meter” shall be measured on a lump sum basis completed and accepted by the Engineer as conforming to all the requirements in the complete work. The contract unit price paid for “Valve Control Box/Sewer Meter” shall include full compensation for furnishing all labor, materials (i.e. utility box, shutoff valve, sewer meter, fittings, concrete, slurry, aggregate base, backfill, etc.), tools, equipment, and incidentals, and for performing all the work involved in construction of the valve control box and sewer meter, complete in place, including any excavation, bedding, structural backfill, pipe connections, off-haul and disposal of excess materials and waste debris, and performance of conformance testing as shown on the Project Plans, as specified in the Standard Specifications, these Special Technical Provisions, and as directed by the Engineer and utility purveyor; and no additional compensation will be allowed.

Full compensation for conforming to the provisions of this Section, not otherwise provided for, shall be considered as included in prices paid for the various contract items of work involved, and no additional compensation will be allowed.

SECTION 220 – ELECTRICAL INSTALLATION

220.01 Description

All underground electrical installations as required to facilitate construction of the proposed project improvements, shall be coordinated with NV Energy at least four (4) weeks prior to commencement of work in that area. Any costs incurred due to installation, shutoff, or any other costs due to the construction of the project shall be the responsibility of the Contractor, not otherwise provided for in a specified bid item of work. Installation of the electrical conduit shall include all connections, including those at the beginning and end, as well as installing and testing the line as required by NV Energy, and installation of electrical utility boxes, and connections to utility boxes and surface improvements. Any saw-cutting and removal of existing pavements shall be in conformance with Section 190 “AC Pavement” of these Special Technical Provisions.

220.02 Measurement and Payment

“Underground Electrical Installation” shall be measured on a linear foot basis which includes the length of underground conduit pipe, fittings, and boxes installed and as shown on the plans and measured in the field, completed and accepted by the Engineer as conforming to all the requirements in the complete work.

The contract unit price paid shall include full compensation for furnishing all labor, materials (i.e. conduit, fittings, boxes, wire, concrete, slurry, aggregate base, backfill, etc.), tools, equipment, and incidentals, and for performing all the work involved in the construction of the electrical conduit and service, complete in place, including any excavation, electrical shutdown during construction, bedding, structural backfill, temporary roadway patch, off-haul and disposal of excess materials and waste debris, and performance of conformance testing as shown on the Project Plans, as specified in the Standard Specifications, these Special Technical Provisions, and as directed by the Engineer and utility purveyor: and no additional compensation will be allowed.

SECTION 225 – OVERHEAD LIGHTS

225.01 Description

Work under this item shall consist of furnishing all labor, tools, equipment, and materials necessary for all the installation of overhead lights as shown on the Project Plans, and as described in the Standard Specifications, and these Special Technical Provisions. Lights must conform to the TRPA Code of Ordinances for illumination and height restrictions.

225.02 Measurement and Payment

“Overhead Lights” shall be measured on a per each basis which includes obtaining the specified lights and poles, excavation, installation, connection to electric, concrete, and disposal of any excess material completed and accepted by the Engineer as conforming to all the requirements in the complete work. The contract unit price paid shall include full compensation for furnishing all labor, materials (i.e. lights, wire, concrete, slurry, aggregate base, backfill, etc.), tools, equipment, and incidentals, and for performing all the work involved in the installation of overhead lights, complete in place, including any excavation, electrical shutdown during construction, bedding, structural backfill, temporary roadway patch, off-haul and disposal of excess materials and waste debris, and performance of conformance testing as shown on the Project Plans, as specified in the Standard Specifications, these Special Technical Provisions, and as directed by the Engineer and utility purveyor: and no additional compensation will be allowed.

SECTION 230 – TRENCH EXCAVATION AND BACKFILL

230.01 General

Work under this item shall consist of furnishing all labor, tools, equipment, and materials necessary for all excavation, trenching, bedding, and backfilling for all the contract work items involved or delineated as trench work as shown on the Project Plans, and as described in the Standard Specifications and these Special Technical Provisions. All excavations shall be made true to the lines and grades as shown on the Project Plans, staked by the Contractor, and verified by the Engineer, and shall be so constructed as to avoid removing or loosening any material outside the required slopes and grading limits. Attention is directed to Section 305, "Trench Excavation and Backfill", of the Standard Specifications.

All excavation, bedding, fill, structural backfill, materials, and compaction associated with the work shall be in accordance with the Project Plans, Contract Documents, Project Permit(s), Standard Specifications, these Special Technical Provisions, and as directed by the Engineer.

Trench excavations shall include the removal and disposal of all water and unsuitable materials of any nature which interfere with completion of the construction work. Removal of ground water to a level below the pipe or structure subgrade shall be accomplished as necessary.

The Contractor shall follow the applicable rules, orders and regulations of the United States Department of Labor Occupational Safety and Health Administration (OSHA - 29 CFR, Part 1926, Subpart P, Excavations) for sloping the sides of excavations, using shoring and bracing, and for using other safety features. When sides of excavations are sloped for safety considerations the Contractor shall provide, for informational purposes, one copy of the design that demonstrates conformity with OSHA regulations to the Engineer. Where support systems, shield systems, or other protective systems are to be used, the Contractor shall submit to the Engineer, design calculations along with detailed drawings that demonstrate conformity with OSHA regulations. Such drawings shall be stamped with a seal and signed by an Engineer who is registered as a Civil Engineer in the State of Nevada.

The Contractor is advised of the possibility of encountering large boulders, rock, and other similar materials while excavating. There shall be no additional compensation or payment made to the Contractor for encountering or excavating such materials.

230.03 Measurement and Payment

Full compensation for furnishing all labor, materials, tools, equipment, and incidentals for all work associated with performing all the work involved in provisions of this section, complete in place as shown on the Project Plans, as specified in the Contract Documents, Project Permits(s), Standard Specifications, these Special Technical Provisions, and as directed by the Engineer, shall be considered as included in prices paid for the various contract items of work involved; and no additional compensation will be allowed for. There shall be no additional compensation for protective systems required by the OSHA regulations.

SECTION 235 – CONCRETE BAYS

235.01 General

Work covered under this specification consists of furnishing all of the labor, materials, tools, and equipment necessary for the construction and installation of the concrete bays in accordance with the Contract Documents, the Standard Specifications, and these Special Technical Provisions, and in conformity with the lines, grades, dimensions, and general design parameters as shown on the Project Plans, and as established and directed by the Engineer.

235.02 Mix Design

A mix design shall be performed and submitted to the Engineer in accordance with Subsections 337.01 “Mix Design” and 337.10 – “General Structural Use Portland Cement Concrete” of the NDOT Standard Specifications to determine the composition of the mixture. Unless otherwise specified, Portland Cement for concrete shall be Type II, low alkali. All concrete mixes shall meet the requirements of Section 337.10.01.01, Portland Cement Concrete Exposed to Freeze-Thaw Cycles of the Standard Specifications. No concrete shall be placed without approval by the Engineer of a mix design.

235.03 Construction

The concrete bays shall be constructed in accordance with the project plans. Concrete disposal shall occur in an approved washout facility. The Contractor is solely responsible for obtaining an approved concrete disposal and washout facility.

235.04 Measurement and Payment

“Concrete Bays” shall be measured on cubic yard of concrete basis, complete in place and accepted by the Engineer as conforming to all the requirements in the complete work. Forming, reinforcing, pouring, proper disposal, mortar, grout, finishing, removal of forms, all equipment, labor, and materials shall be included in the unit price established for concrete structures and masonry construction.

This unit price shall include full compensation for excavation, removal of excavated material, concrete, rebar, framing work and cleanup, associated hardware, backfill, drain rock, pipe connection, and furnishing all labor, materials, tools, equipment, and incidentals for doing all the work involved in installing the concrete bays as shown on the plans, as specified in the Special Provisions, and as directed by the NTCD.

SECTION 240 – STORM DRAIN AND MISCELLANEOUS STRUCTURES

240.01 General

Work covered under this specification consists of furnishing all of the labor, materials, tools, and equipment necessary for the construction and installation of storm drain structures including drainage inlets, sediments traps, manual control gates, and all appurtenances in accordance with the Contract Documents, the Standard Specifications, and these Special Technical Provisions, and in conformity with the lines, grades, dimensions, and general design parameters as shown on the Project Plans, and as established and directed by the Engineer.

240.02 Drainage Inlet (Type 2B)

Work under this item shall consist of furnishing all labor, tools, equipment, and materials, and incidentals necessary for construction of the Type 2B drainage inlet as shown on the plans. Inlets shall be constructed in conformance with section 609 of the NDOT Standard Specifications. Grate elevations shall be fit with the proposed concrete and improvements and as directed by Engineer.

240.03 Beehive Grate Sediment Trap

Work under this item shall consist of furnishing all labor, tools, equipment, and materials, and incidentals necessary for construction of the beehive grate sediment trap as shown on the plans. Sediment trap to be installed per plan and the Standard Specifications. Geotextile shall be non-woven class 1 geotextile and conform to section 731 "Engineering Fabrics" of the NDOT Standard Specifications. Backfill materials including drain rock shall be in conformance with section 704 "Base Aggregates" of the NDOT Standard Specifications.

240.04 Corrugated Metal Pipe

Corrugated Metal Pipe (CMP) shall be 8" and constructed in conformance with section 601 "Pipe Culverts - General" of the NDOT Standard Specifications. Backfill materials shall be in conformance with section 704 "Base Aggregates" of the NDOT Standard Specifications.

240.05 Manual Control Gates

Work under this item shall consist of furnishing all labor, tools, equipment, and materials, and incidentals necessary for installation of the Manual Control Gates on the walls of the concrete bays as shown on the plans. Manual control gates shall be Waterman C-20 Cast Iron Canal Gate with galvanized steel frame or equivalent. Manual control gates shall have a non-rising stainless steel stem installed so that the gate controls clear the top of the concrete wall as shown on the plans. The mount shall have a pipe adapter for the 12" SDR 35 PVC pipe to make a watertight connection. The control shall be a handwheel with a right turn to open. Manual Control gates shall be attached to concrete wall with galvanized or stainless steel fasteners per manufacturer's specifications.

240.06 Manholes

Work under this item shall consist of installation of sanitary sewer manholes as shown on the project plans. Pipe connections and pipe invert elevations shall be confirmed with Engineer prior to installation. Manholes shall conform to section 204 of the Standard Specifications. A minimum difference of 0.1' shall be provided between the inlet and outlet pipe invert elevations in a manhole or drop inlet. A minimum of six inches separation between pipe penetrations in manholes shall be provided. Manholes should be installed to be water tight using "Conseal" or equivalent at each joint and to ensure a proper seating of each riser component. Joints shall also be wrapped with joint wrap, MH-860 or equivalent. Pipe connections shall use A-lok 490 gasket or equivalent.

240.07 Measurement and Payment

"Drainage Inlet (Type 2B)" construction shall be measured and compensated for the unit price established per each structure, completed and accepted by the Engineer as conforming to all the requirements in the complete work. The contract unit price paid for "Drainage Inlet (Type 2B)" shall include full compensation for furnishing all labor, materials, tools, equipment, and incidentals, and for performing all the work involved in constructing the inlet, complete in place, including any excavation, bedding, structural backfill, concrete, roadway paving, off-haul and disposal of excess materials and waste debris, and performance of conformance testing as shown on the Project Plans, as specified in the NDOT Standard Specifications, these Special Technical Provisions, and as directed by the Engineer; and no additional compensation will be allowed.

"Beehive Grate Sediment Trap" construction shall be measured and compensated for the unit price established per each structure, completed and accepted by the Engineer as conforming to all the requirements in the complete work. The contract unit price paid for "Beehive Grate Sediment Trap" shall include full compensation for furnishing all labor, materials, tools, equipment, and incidentals, and for performing all the work involved in constructing the double sediment trap, complete in place,

including any excavation, bedding, structural backfill, concrete, roadway paving, off-haul and disposal of excess materials and waste debris, and performance of conformance testing as shown on the Project Plans, as specified in the NDOT Standard Specifications, these Special Technical Provisions, and as directed by the Engineer; and no additional compensation will be allowed.

“8” CMP and Rock Dissipater” shall be measured on the unit price established per linear foot, completed and accepted by the Engineer as conforming to all the requirements in the complete work. The contract unit price paid for “8” CMP and Rock Dissipater” shall include full compensation for furnishing all labor, materials, tools, equipment, and incidentals, and for performing all the work involved installing 8” RCP, complete in place, including any excavation, bedding, structural backfill, concrete, roadway paving, off-haul and disposal of excess materials and waste debris, and performance of conformance testing as shown on the Project Plans, as specified in the NDOT Standard Specifications, these Special Technical Provisions, and as directed by the Engineer; and no additional compensation will be allowed.

“SSMH” construction shall be measured and compensated for the unit price established per each structure, completed and accepted by the Engineer as conforming to all the requirements in the complete work. The contract unit price paid for “SSMH” shall include full compensation for furnishing all labor, materials, tools, equipment, and incidentals, and for performing all the work involved in constructing the inlet, complete in place, including any excavation, bedding, structural backfill, pipe connections, off-haul and disposal of excess materials and waste debris, and performance of conformance testing as shown on the Project Plans, as specified in the Standard Specifications, these Special Technical Provisions, and as directed by the Engineer; and no additional compensation will be allowed.

This unit prices shall include full compensation for excavation, removal of excavated material, concrete, rebar, frame work, associated hardware, backfill, drain rock, pipe connection, and furnishing all labor, materials, tools, equipment, and incidentals for doing all the work involved in installing the all stormdrain structures as shown on the plans, as specified in the Special Provisions, and as directed by the NTCD. Full compensation for conforming to the provisions of this Section, not otherwise provided for, shall be considered as included in prices paid for the various contract items of work involved, and no additional compensation will be allowed.

Exhibit B

PROJECT PERMITS



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HOURS
Mon. Wed. Thurs. Fri
9 am-12 pm/1 pm-4 pm
Closed Tuesday

New Applications Until 3:00
pm

ATTACHMENT Q

STANDARD CONDITIONS OF APPROVAL FOR GRADING PROJECTS

This handout on the standard conditions that must be met in all projects involving grading is divided into the following three sections:

- I. Pre-Grading Conditions (Pre-activity, where applicable)
- II. Construction/Grading Conditions
- III. General Conditions/Design Standards

Please read all of the conditions carefully to avoid any delays in construction of your project.

NOTE: Your plans have been reviewed and approved as required under Tahoe Regional Planning Agency (TRPA) Rules, Regulations and Ordinances only. TRPA has not reviewed and shall not be responsible for any elements contained in your plans, i.e., structural, electrical, mechanical, etc., which are not required for review under said Rules, Regulations and Ordinances.

I. PRE-GRADING/PRE-ACTIVITY CONDITIONS:

The following conditions must be completely complied with prior to any site disturbance or commencement of activity.

A. Final Construction Plans:

Final construction plans must be submitted to and reviewed by TRPA to determine conformance with the approval. Said plans shall clearly depict the following:

1. Slope stabilization methods to stabilize all existing and proposed cut and fill slopes.
2. Areas to be revegetated, including complete specifications for such revegetation.
3. Fencing for vegetation protection.
4. Temporary and permanent erosion control devices.
5. Utility trenches.
6. Dust control measures.
7. All water quality improvements (BMPs) required in the conditional approval. Drainage facilities shall be designed to be capable of retaining runoff water for a two (2) year, six (6) hour storm.
8. The final plans shall contain equipment specifications necessary to establish compliance with Standard Conditions III. A-F.

B. Securities:

A security shall be posted with the TRPA to insure compliance with all permit conditions. The security shall include an amount equal to 110 percent of the cost of the BMPs and other erosion control and water quality improvements required. For further information on the acceptable types of securities, see Attachment J.

C. Mitigation Fees:

All required air quality, water quality, and excess coverage and offsite coverage mitigation fees shall be paid to TRPA.

D. Temporary BMPs:

The following temporary BMPs are required to be installed onsite prior to any grading activity occurring:

1. Installation of temporary erosion controls.
2. Installation of vegetation protection measures.
3. Installation of construction site boundary fencing.

E. Required Inspection:

An onsite inspection by TRPA staff is required prior to any construction or grading activity occurring. TRPA staff shall determine if the onsite improvements required by Condition II (1), above, have been properly installed. No grading or construction shall be undertaken by the permittee until receipt of TRPA notification that the pre-grading/pre-activity conditions of approval have been satisfied.

F. Required Notices:

The following notices to the TRPA are required prior to any grading or construction occurring on the project site:

1. Notice for Pre-Grading Inspection: The permittee shall notify the TRPA when all onsite improvements required under Condition II(1), above, have been installed so that the required pre-grading inspection may be scheduled.
2. Notice of Commencement of Construction: The permittee shall notify the TRPA at least 48 hours prior to commencement of construction or grading on the project site. Said notice shall include the date when construction will commence.

II. CONSTRUCTION/GRADING CONDITIONS:

The following conditions shall be complied with during the grading and construction phase of the project.

- A. All construction shall be accomplished in strict compliance with the plans approved by TRPA.
- B. The TRPA permit and the final construction drawings bearing the TRPA stamp of approval shall be present on the construction site from the time construction commences to final TRPA site inspection. The permit and plans shall be available for inspection upon request by any TRPA employee. Failure to present the TRPA permit and approved plans may result in the issuance of a Cease and Desist Order by the TRPA.
- C. Whenever possible, utilities shall occupy common trenches to minimize site disturbance.
- D. There shall be no grading or land disturbance performed with respect to the project between October 15 and May 1, except as follows:
 1. The grading or land disturbance is for excavation and backfilling for a volume not in excess of three cubic yards.
 2. The activity is completed within a 48-hour period.
 3. The excavation site is stabilized to prevent erosion.
 4. The pregrade inspection is performed by TRPA staff, and the activity passes the inspection.

5. The grading/project does not represent or involve a series of excavations, which, when viewed as a whole, would exceed the provisions of this Standard Condition of Approval, and Subsection 2.3 of the TRPA Code of Ordinances.

Grading is prohibited any time of the year during periods of precipitation and for the resulting period of time when the site is covered with snow, or is in a saturated, muddy, or unstable condition (pursuant to Subsection 33.3.1.A of the TRPA Code of Ordinances.)

- E. All material obtained from any excavation work that is not contained within foundations, retaining walls, or by other methods approved by TRPA shall be removed from the subject parcel and disposed of at a site approved by TRPA.
- F. Replanting of all exposed surfaces, in accordance with the revegetation and slope stabilization plan, shall be accomplished within the first growing season following disturbance, unless an approved construction/inspection schedule establishes otherwise.
- G. All trees and natural vegetation to remain on the site shall be fenced for protection. Scarring of trees shall be avoided and, if scarred, damaged areas shall be repaired with tree seal.
 1. Fencing specified shall be at least 48 inches high and shall be constructed of metal posts and either orange construction fencing or metal mesh fencing also at least 48 inches high (Section 33.6.1). Job sites with violations of the fencing standards will be required to re-fence the job site with a high gauge metal fencing.
 2. No material or equipment shall enter or be placed in the areas protected by fencing or outside the construction areas without prior approval from TRPA. Fences shall not be moved without prior approval (Section 33.6).
 3. To reduce soil disturbance and damage to vegetation, the area of disturbance during the construction of a structure shall be limited to the area between the footprint of the building and the public road. For the remainder of the site the disturbance areas shall not exceed 12 feet from the footprint of the structure, parking area or cut/fill slope. The approved plans should show the fencing and approved exceptions (Section 36.2).
- H. Soil and construction material shall not be tracked off the construction site. Grading operations shall cease in the event that a danger of violating this condition exists. The site shall be cleaned up and road right-of-way swept clean when necessary.
- I. During grading and construction, environmental protection devices such as erosion control devices, dust control, and vegetation protection barriers shall be maintained.
- J. Loose soil mounds or surfaces shall be protected from wind or water erosion by being appropriately covered when construction is not in active progress or when required by TRPA.
- K. Excavated material shall be stored up and away from the excavated areas to the extent possible. No material shall be stored in any stream zone or wet areas.
- L. Only equipment of a size and type that, under prevailing site conditions, and considering the nature of the work to be performed, will do the least amount of damage to the environment shall be used.
- M. Limit idling time for diesel powered vehicles exceeding 10,000 GVW and self-propelled equipment exceeding 25 hp to no more than 15 minutes in Nevada and 5 minutes in California, or as otherwise required by state or local permits.
- N. Utilize existing power sources (e.g. power poles) or clean-fuel generators rather than temporary diesel power generators wherever feasible.
- O. No washing of vehicles or construction equipment, including cement mixers, shall be permitted anywhere on the subject property unless authorized by TRPA in writing.

- P. No vehicles or heavy equipment shall be allowed in any stream environment zone or wet areas, except as authorized by TRPA.
- Q. Locate construction staging areas as far as feasible from sensitive air pollution receptors (e.g. schools or hospitals).
- R. All construction sites shall be winterized by October 15 to reduce the water quality impacts associated with winter weather as follows:
 - 1. For the sites that will be inactive between October 15 and May 1:
 - (a) Temporary erosion controls shall be installed;
 - (b) Temporary vegetation protection fencing shall be installed;
 - (c) Disturbed areas shall be stabilized;
 - (d) Onsite construction slash and debris shall be cleaned up and removed;
 - (e) Where feasible, mechanical stabilization and drainage improvements shall be installed; and
 - (f) Spoil piles shall be removed from the site.
 - 2. For sites that will be active between October 15 and May 1, in addition to the above requirements:
 - (a) Permanent mechanical erosion control devices shall be installed, including paving of driveway and parking areas; and
 - (b) Parking of vehicles and storage of building materials shall be restricted to paved areas.

III. GENERAL CONDITIONS/DESIGN STANDARDS:

- A. Projects approved by TRPA shall be subject to inspections by TRPA at any reasonable time. The permittee shall be responsible for making the project area accessible for inspection purposes. TRPA shall not be liable for any expense incurred by the permittee as a result of TRPA inspections.
- B. Construction shall be completed in accordance with an approved construction schedule. An extension of a completion schedule for a project may be granted provided the request is made in writing prior to the expiration of the completion schedule, a security is posted to ensure completion or abatement of the project, and TRPA makes either of the following findings:
 - 1. The project was diligently pursued, as defined in Subparagraph 2.2.4.C of the Code of Ordinances, during each building season (May 1 - October 15) since commencement of construction.
 - 2. That events beyond the control of the permittee, which may include engineering problems, labor disputes, natural disasters, or weather problems, have prevented diligent pursuit of the project.
- C. Water conservation appliances and fixtures shall be installed in all new facilities or, when replaced, in existing facilities: low flow flush toilets; low flow showerheads (3 gpm rated maximum flow); faucet aerators; and water-efficient appliances (e.g., washing machines and dishwashers).
- D. Water heaters shall not emit nitrogen oxides greater than 40 nanograms of nitrogen oxide (NO₂) per joule of heat output.
- E. Space heaters shall not emit greater than 40 nanograms of nitrogen oxides (as NO₂) per joule of useful heat delivered to the heated space.

- F. Wood heaters to be installed in the Region shall meet the safety regulations established by applicable city, county, and state codes. Coal shall not be used as a fuel source.
1. Emission Standards: Wood heaters installed in the Region shall not cause emissions of more than 7.5 grams of particulates per hour for noncatalytic wood heaters or 4.1 grams per hour for catalytically equipped wood heaters.
 2. Limitations: Wood heaters shall be sized appropriately for the space they are designed to serve. Multi-residential projects of five or more units, tourist accommodations, commercial, recreation and public service projects shall be limited to one wood heater per project area.
 3. List of Approved Heaters: TRPA shall maintain a list of wood heaters which may be installed in the Region. The list shall include the brand names, model number, description of the model and the name and address of the manufacturer. Wood heaters certified for use in either Colorado or Oregon shall be considered in compliance with 6(a), above.
- G. Construction materials shall be secured to prevent them from rolling, washing, or blowing off the project site. Rehabilitation and clean-up of the site following construction must include removal of all construction waste and debris.
- H. Plant species on the TRPA Recommended Native and Adapted Plant List shall be used for lawns and landscaping.
- I. The following sizes and spacing shall be required for woody plant materials at time of planting:
1. Trees shall be a minimum six feet tall or 1-1/2 inch caliper size or diameter at breast height;
 2. Shrubs shall be a minimum three gallon pot size where upright shrubs have a minimum height of 18 inches and a minimum spread of 18 inches; and spreading shrubs have a minimum spread of 18-24 inches.
 3. Groundcovers shall be a minimum four inch pot size or one gallon container and shall be maximum 24 inches on center spacing.
- J. Plant species not found on the TRPA Recommended Native and Adapted Plant List may be used for landscaping as accent plantings but shall be limited to borders, entryways, flower-beds, and other similar locations to provide accent to the overall native or adapted landscape design.
- K. The following exterior lighting standards shall apply:
1. Exterior lights shall not blink, flash or change intensity. String lights, building or roofline tube lighting, reflective or luminescent wall surfaces are prohibited.
 2. Exterior lighting shall not be attached to trees except for Christmas season.
 3. Parking lot, walkway, and building lights shall be directed downward.
 4. Fixture mounting height shall be appropriate to the purpose. The height shall not exceed the limitations set forth in Chapter 37 of the Code.
 5. Outdoor lighting shall be used for purposes of illumination only, and shall not be designed for, or used as, an advertising display. Illumination for aesthetic or dramatic purposes of any building or surrounding landscape utilizing exterior light fixtures projected above the horizontal is prohibited.
 6. The commercial operation of searchlights for advertising or any other purpose is prohibited. Seasonal lighting displays and lighting for special events which conflict with other provisions of this section may be permitted on a temporary basis.

- L. Any normal construction activities creating noise in excess of the TRPA noise standards shall be considered exempt from said standards provided all such work is conducted between the hours of 8:00 a.m. and 6:30 p.m.
- M. Engine doors shall remain closed during periods of operation except during necessary engine maintenance.
- N. Stationary equipment (e.g. generators or pumps) shall be located as far as feasible from noise-sensitive receptors and residential areas. Stationary equipment near sensitive noise receptors or residential areas shall be equipped with temporary sound barriers.
- O. Sonic pile driving shall be utilized instead of impact pile driving, wherever feasible. Pile driving holes shall be predrilled to the extent feasible subject to design engineer's approval.
- P. Fertilizer use on this property shall be managed to include the appropriate type of fertilizer, rate, and frequency of application to avoid release of excess nutrients and minimize use of fertilizer.
- Q. No trees shall be removed or trimmed without prior TRPA written approval unless otherwise specifically exempted under Chapter 2 of the Code of Ordinances.
- R. The architectural design of this project shall include elements that screen from public view all external mechanical equipment, including refuse enclosures, satellite receiving disks, communication equipment, and utility hardware on roofs, buildings or the ground. Roofs, including mechanical equipment and skylights, shall be constructed of nonglare finishes that minimize reflectivity.
- S. The permittee is responsible for insuring that the project, as built, does not exceed the approved land coverage figures shown on the site plan. The approved land coverage figures shall supersede scaled drawings when discrepancies occur.
- T. The adequacy of all required BMPs as shown on the final construction plans shall be confirmed at the time of the TRPA pre-grading inspection. Any required modifications, as determined by TPRA, shall be incorporated into the project permit at that time.
- U. It is the permittee's obligation to locate all subsurface facilities and/or utilities prior to any grading, dredging or other subsurface activity. The permittee is responsible for contacting the Northern Underground Service Alert (USA, usually known as USA DIGS 1-800-227-2600) prior to commencement of any activity on the site.
- V. This approval is based on the permittee's representation that all plans and information contained in the subject application are true and correct. Should any information or representation submitted in connection with the project application be incorrect or untrue, TRPA may rescind this approval or take other appropriate action.

KGID Construction Policies and Procedures

Plan Review: KGID staff conducts a review of building plans prior to issuing a Connection Permit. In the review, the following things are determined. First, a fixture count is done to calculate, according to the current Uniform Plumbing Code, the correct size lateral and water meter for the building. Also, KGID uses the plans to identify if a backflow prevention device is needed, and if so what type. Lastly, the type of sewer is checked, whether it is a gravity sewer or it will require a lift station.

Water Service: All water lines must be constructed in accordance with the UPC. In addition, as per KGID Water Ordinance 4.6 the water service must be brought into compliance with the determined size, based on the building plans. If the existing water service is of insufficient size, it must be upgraded.

All new construction requires a properly sized water meter that meets KGID's specifications. The meter must be installed in an approved meter set or pit, and any meter reading device must be positioned according to KGID requirements.

Each building must be equipped with at least one valve for the owner's use to shut off the water to the building.

Sewer Service: All sewer lines must be constructed in accordance with the UPC. In addition, as per KGID Sewer Ordinance 4.06 the sewer service must be brought into compliance with UPC. Any necessary changes to the existing line to do so are the responsibility of the owner. These may include adding needed cleanouts, replacing pipe, or any other modifications.

Inspections: The owner or designated person is responsible for calling for the needed inspections. There are two different kinds, a partial and a final. Partial inspections are needed whenever new lines, water or sewer, are laid, but not buried. This includes rough plumbing inspections. The sewer lines need to be pressure tested in accordance with UPC, and the water lines must be pressure tested. There can be more than one partial inspection. The final inspection includes checking all meter equipment (meter pit, remote reader mounting), backfill of all lines, making sure cleanout boxes are to grade and that the cleanouts are equipped with caps or plugs. After the final inspection, the Inspection Deposit will be returned.

I have read and agree to all of the above:_____