SOLICITATION DOCUMENTS & SPECIFICATIONS

FOR

KAHLE WATER QUALITY BASIN IMPROVEMENT PROJECT STATELINE DOUGLAS COUNTY, NEVADA

BY NEVADA TAHOE CONSERVATION DISTRICT 400 DORLA COURT STATELINE, NEVADA 89448

(775) 586-1610

SOLICITATION DOCUMENTS & SPECIFICATIONS FOR KAHLE WATER QUALITY BASIN IMPLEMENTATION PROJECT STATELINE, DOUGLAS COUNTY, NEVADA

INDEX

1.	Notice to Contractors	N-1
2.	Scope of Work	S-1
3.	Instructions to Bidders	I-1 to I-2
4.	Bid Proposal	P-1
5.	Bid Schedule	P-2
6.	Bid Summary	P-3
7.	Preferential Bidder Status	. P-4
8.	Preferential Bidder Status Affidavit	P-5
9.	Bid Bond	P-6 to P-7
10	. General Contractor Form	P-8
11	. Five Percent List of Responsible Trades	P-9
12	. Two Hour One Percent List of Responsible Trades	P-10
13	. Affidavit of Non-Collusion	P-11
14	. Certification of Bidder, Proposed Contractor or Subcontractor Regarding Debarment, Suspension, Ineligibility of Voluntary Exclusion	P-12
15	. Certification of Bidder Regarding Penalties for Noncompliance with Nevada Prevailing Wage Requirements	P-13
16	. Qualification of Bidder Certificate	P-14
17	. Agreement Form	C-1 to C-5
18	. Labor and Material Payment Bond	L-1 to L-2
19	. Performance and Completion Bond	PB-1 to PB-2
20	. Public Works Construction/Indemnification and Insurance Specifications - Exhibit A	IS-1 to IS-4
21	. Special Technical Provisions and Attachments	Exhibit B
22	. Project Permits	Exhibit C

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 4:00 P.M. on April 18, 2018 for the "KAHLE WATER QUALITY BASIN IMPLEMENTATION PROJECT, STATELINE, DOUGLAS COUNTY, NEVADA". Proposals will be internally reviewed and scored by NTCD personnel. The NTCD Board of Supervisors will consider award of the contract at a subsequently scheduled meeting.
- 2. To assure consideration, all proposals shall be made on the blank form of proposal attached to these Specifications. If submitting a proposal by email, 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 bid, made payable to Nevada Tahoe Conservation District as provided for in the General Conditions. The Engineer's Estimate for the Project is between \$1,000,000 and \$1,200,000.
- 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 \$250,000 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.
- 8. No grading may be performed outside the period between October 15 and May 1 without written permission from the TRPA.

SCOPE OF WORK

- 1. <u>WORK UNDER THIS CONTRACT</u>: 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 Kahle Water Quality Basin Implementation Project improvements (refer to plans prepared by NTCD) including, but not limited to:
 - 1. Install stormwater conveyance pipe and manholes,
 - 2. Install wet basin, concrete block forebay, and associated inlets and outlets.
 - 3. Remove and dispose of existing improvements as necessary.
 - 4. Provide temporary erosion control and perform traffic control.
 - 5. Haul any extra material to approved disposal site.
 - 6. Repair all existing site improvements damaged during the course of the work.
 - 7. Work must be completed by September 7, 2018 unless written approval from NTCD is obtained by the Contractor.
 - 2. <u>CONFORM WITH THE FOLLOWING SCHEDULE</u>: Work may begin no earlier than July 16, 2018 in order to assure the site is dry and all permits are in place. Work to remove trees including alders, willows, and aspen, may not occur prior to August 16, 2018 without approval by the United States Forest Service and NTCD. In order for work removing woody vegetation to occur prior to August 16, a qualified biologist must conduct a migratory bird survey 15 days prior to the proposed removal of the trees and no nests can be present in the area. NTCD will retain this qualified biologist at NTCD's expense if the Contractor submits the request to NTCD with 15 days notice. Otherwise, the Contractor should sequence construction to begin work on the basin starting August 16th. Work must be completed by September 7, 2018 unless written approval is given by NTCD. 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. <u>PERMITS AND LICENSES</u>: NTCD will provide the United States Forest Service (USFS), Tahoe Regional Planning Agency (TRPA), Nevada Division of Environmental Protection (NDEP), US Army Corps of Engineers (USACE), 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. <u>UTILITIES</u>: There are known utilities in the project site and general locations of existing known utilities 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. <u>BID IRREGULARITIES</u>: 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:

- 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 4:00 P.M. on April 18, 2018 for the "KAHLE WATER QUALITY BASIN IMPLEMENTATION PROJECT, STATELINE, DOUGLAS COUNTY, NEVADA". Proposals will be internally reviewed and scored by NTCD personnel. The NTCD Board of Supervisors will consider award of the contract at a subsequently scheduled meeting.
- 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 10, 2018 meeting at the Rabe Meadow Trailhead Parking Area on the northwest corner of Kahle Drive and US-50.
- 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 bid, made payable to the Nevada Tahoe Conservation District as provided in the General Conditions. The Engineer's Estimate for the Project is between \$1,000,000 and \$1,200,000.
- 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. The contract work shall commence on or about July 16, 2018. All project work shall be completed by September 7, 2018.
- 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. A Labor & Material Payment Bond and a Performance & Completion Bond, each in an amount equal to one hundred percent (100%) of the total contract sum, shall be provided by the successful contractor in accordance with the forms as shown on Pages L-1 through L-2 and PB-1 through PB-2 herein. Said bonds shall be in favor of "Nevada Tahoe Conservation District, a political subdivision of the State of Nevada".

- 12. Bidders attention is directed to the Insurance Specifications attached as Exhibit "A". The successful bidder shall be required to comply with such provisions.
- 13. 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.
- 14. 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 \$250,000 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.
- 15. 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.
- 16. 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.
- 17. 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.
- 18. 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 "KAHLE WATER QUALITY BASIN IMPLEMENTATION PROJECT".

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 ______, 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

KAHLE WATER QUALITY BASIN IMPLEMENTATION PROJECT

BASE BID: Kahle Water Quality Basin Implementation Project construction per 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	Unit Price	Amount
1	1	LS	Mobilization and Demobilization (10%)		
2	1	LS	Water Pollution Control (Temporary BMPs) (5%)		
3	1	LS	Traffic Control (3%)		
4	1	LS	Dewatering and Diversion		
5	1	LS	Staging and Storage		
6	100	LF	Sediment Rolls, As Directed		
7	1	LS	Weed Control		
8	1	LS	Clearing and Grubbing		
9	5	EA	Tree Removal		
10	150	LF	Temporary Mat Road, as directed		
11	2	EA	Gravel Construction Entrance		
12	400	SF	Overexcavate and Regrade Access Path		
13	1	LS	Protect Utilities in Place		
14	1	LS	Removal of Existing Improvements		
15	435	SF	AC Pavement		
16	4250	SF	Concrete Block Forebay		
17	1	EA	Concrete Cutoff Wall		
18	1	LS	Basin Earthwork		
19	1	LS	Soil Stockpile for USFS		
20	1	LS	Decommission Existing Ditch		
21	1210	LF	36" HDPE Pipe		
22	260	LF	42" RCP		
23	25	LF	36" Equivalent Elliptical Pipe		
24	24 90 LF 6"		6" PVC Pipe		
25	3	EA	Storm Drain Manholes		
26	7	EA	Water Stops		
27	1	EA	Basin Outlet Structure		
28	1	LS	Existing Vault Connection		
29	1	EA	Manual Pond Drain Valve and Box		
30	2500	SF	Rock Spillway/Dissipator		
31	10	LF	Median Curb		
32	10	LF	Type 1 PCC Curb		
33	200	LF	Willow Wattles		
34	1	LS	Gate Relocation		

BID SCHEDULE (continued)

Item No.	Quantity	Unit	Item Description	Unit Price	Amount
35	41300	SF	Revegetation Treatment Type 1		
36	3300	SF	Revegetation Treatment Type 2		
37	12300	SF	Revegetation Treatment Type 3		
38	1	LS	Irrigation		
39	5	EA	Revegetation Warning Signs		

BASE BID TOTAL (in numerals)

BASE BID TOTAL (in words)

BID SUMMARY

KAHLE WATER QUALITY BASIN IMPLEMENATION 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 **Kahle Water Quality Basin Implementation Project**, 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 by (nar	this day of me of person making statement).	, 20,
State of))ss. County of)		
STAMP AND) SEAL	

Notary Signature

BID BOND

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

_____, as Principal, and ______

(legal description and	l address of Surety)	
authorized to do business of Surety in the State of Nevada,	as Surety, are held and firmly b	ound 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 ourselves, our heirs, executors, and administrators, successors,	and truly to be made, we hereby and assigns.	jointly and severally bind

Signed this _____ day of ______, 2018.

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 **"KAHLE WATER QUALITY BASIN IMPLEMENTATION PROJECT"**.

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)	Ву
	Surety
(Seal)	Ву

STATE OF NEVADA)		
) SS: COUNTY OF DOUGLAS)		
On this day of	, 2018, personally a	ppeared before me, a Notary Public,
	,who acknowledged	I 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	, 2018, personally a	ppeared before me, a Notary Public,
to sign the foregoing Bid Bond	, who acknowledged to me	that he/she was the Surety authorized
to sign the foregoing Did Dond.		
	NOTARY PUBLIC	
Surety's Licensed Nevada Agent:		
Company Name		
Address		
Telephone		
By:(Note: Signature to be Notarized)		
Туре:		
Bond No		
Subscribed and sworn to before me this	day of	, 2018.
Notary Public		

GENERAL CONTRACTOR

(Firm Name)		(Nevada Contractors License #)
(Name of Officer) is authorized to hid a	and to enter into this Contract for	r the above listed firm
(Name of Officer) is authorized to bid a	and to enter into this Contract for	The above listed lifth.
The firm is: (check one)		
a corporationa 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			
J			

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			
5			
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)	66
County of)	55
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 eement, participated in any collusion, or otherwise taken any action in 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 _____, 2018, 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".

WITNESETH:

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

<u>Article 1. Scope of Work.</u> The Contractor shall furnish all of the materials and perform all of the work described in the Specifications entitled **"KAHLE WATER QUALITY BASIN IMPLEMENTATION PROJECT, STATELINE, DOUGLAS COUNTY, NEVADA"** prepared by the Nevada Tahoe Conservation District, and shall do everything required by this Agreement and the Specifications.

<u>Article 2. Time of Completion.</u> The work to be performed under this Agreement shall be completed within forty (40) 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.

<u>Article 3. Contract Time Extensions.</u> 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.

<u>Article 4. Progress Payments.</u> 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.

<u>Article 5. Acceptance and Final Payment.</u> 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.

<u>Article 6. The Contract Sum.</u> 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.

<u>Article 7. Performance and Payment Bonds.</u> The Contractor agrees that he will, before this contract becomes effective, furnish the NTCD a Performance and Completion Bond and a Labor and Material Payment Bond, furnished by a company or companies acceptable to the NTCD, each in an amount equal to one hundred percent (100%) of the total contract sum. The Performance and Completion Bond shall be conditioned upon the Contractor's full and faithful performance of the contract in accordance with the plans, specifications and conditions of the contract in accordance with the Contract Documents and this Agreement and further conditioned upon the guarantee of said work for a period of one (1) year from the date the work is completed and accepted by NTCD. The Labor and Material Payment Bond is solely for the protection of claimants supplying labor or materials to the contractor to whom the contract was awarded and shall be conditioned upon the Contractor's obligation to pay for all materials and labor provided on the work. (See NRS 339.025)

<u>Article 8. The Contract Documents.</u> 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:

- o Notice to Contractors
- o Scope of Work
- Instructions to Bidders
- Bid Proposal
- Bid Schedule
- o Bid Summary
- Preferential Bidder Status
- General Contractor Information Form
- o 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, 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
- Labor & Material Payment Bond
- Performance and Completion Bond
- o Special Provisions to the Standard Specifications for Public Works Construction, 2016, or latest edition
- o General Provisions of the Standard Specifications for Public Works Construction, 2016, or latest edition
- o 100% Engineer Stamped Design Plan Set for the Kahle Water Quality Basin Implementation Project
- Exhibit A Construction/Indemnification and Insurance Specifications
- o Exhibit B Special Technical Provisions by NTCD
- Exhibit C Project Permits
- o Addenda
- o Change Orders
- o 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

<u>Article 9. Nondiscrimination.</u> 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 10. 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.

<u>Article 11. Prevailing Wage Rates.</u> In the event that the Contract sum as listed above exceeds Two Hundred and Fifty Thousand Dollars (\$250,000.00) 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.)

<u>Article 12. Indemnification/Insurance.</u> 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.

<u>Article 13. Alternative Dispute Resolution.</u> 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.

<u>Article 14. Termination.</u> 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.

<u>Article 15. Laws and Compliance with Laws.</u> 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:

GLEN SMITH, Chairman NEVADA TAHOE CONSERVATION DISTRICT

On this ______ day of ______, 2018, 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 ______, 2018, 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

LABOR AND MATERIAL PAYMENT BOND FOR PUBLIC WORKS REQUIRED PURSUANT TO NRS CHAPTER 339

KNOW ALL MEN BY THESE PRESENTS: That	
	(Name and Address [or legal description] of Contractor)
as Principal, hereinafter called "Principal", and	

(Legal Designation and Address of Surety)

authorized to do business of surety in the State of Nevada, as Surety, hereinafter called "Surety", are held and firmly bound unto the NEVADA TAHOE CONSERVATION DISTRICT, a political subdivision of the State of Nevada, as Obligee, hereinafter called "NTCD", for the use and benefit of claimants supplying labor or materials to the Principal or to any of the Principal's subcontractors in the prosecution of the work provided for in the Contract referred to below in the amount of ______

Dollars (\$_____) said sum being 100% of the contract amount payable by the NTCD under the terms of the Contract referred to below, for the payment whereof Principal and Surety bind themselves, their heirs, executors, administrators, successors and assigns, jointly and severally, firmly by these presents.

WHEREAS, Principal has by written agreement dated ______, entered into contract with NTCD for "KAHLE WATER QUALITY BASIN IMPLEMENTATION PROJECT, STATELINE, DOUGLAS COUNTY, NEVADA" which contract and its plans and specifications are attached hereto and by reference made a part hereof, as if fully and completely set out in full herein, and is hereinafter referred to as the "Contract".

NOW, THEREFORE, THE CONDITIONS OF THIS OBLIGATION ARE SUCH that, if Principal shall promptly make payment to all claimants as hereinafter defined, for all labor and material used or reasonably required for use in the performance of the Contract, and shall save and hold harmless and indemnify NTCD from and against any and all claims and demands of liens for work performed and materials supplied, then this obligation shall be void; otherwise it shall remain in full force and effect.

THIS BOND is executed for the purpose of complying with the laws of the State of Nevada as contained in Chapter 339 of Nevada Revised Statutes and all acts amendatory thereof and supplemental thereto, and this Bond shall inure to the benefit of any and all persons who perform labor upon or furnish materials to be used in or furnish appliances, teams or power contributing to the work described in said contract, in accordance with provisions of Chapter 339 of Nevada Revised Statutes.

Any suit or action brought on this bond shall be maintained in accordance with provisions as set forth in Chapter 339 of NRS, and all acts amendatory thereof and supplemental to.

Bv:
(Note: Signature to be notarized)
Туре:
Title:
Subscribed and sworn to before me this
day of,
Notary Public
ompany):
,
,

PERFORMANCE AND COMPLETION BOND FOR PUBLIC WORKS REQUIRED PURSUANT TO NRS CHAPTER 339

KNOW ALL MEN BY THESE PRESENTS: That _____

(Name and Address [or legal description] of Contractor)

As Principal, hereinafter called "Principal", and ______

(Legal Designation and Address of Surety)

authorized to do business of surety in the State of Nevada, as Surety, hereinafter called "Surety", are held and firmly bound unto the NEVADA TAHOE CONSERVATION DISTRICT, a political subdivision of the State of Nevada, as Obligee, hereinafter called "NTCD", in the amount of ______

WHEREAS, Principal has by written agreement dated ______, entered into contract with NTCD for **"KAHLE WATER QUALITY BASIN IMPLEMENTATION PROJECT, STATELINE, DOUGLAS COUNTY, NEVADA"** which contract and its plans and specifications are attached hereto and by reference made a part hereof, as if fully and completely set out in full herein, and is hereinafter referred to as the "Contract"; and

WHEREAS, said Principal is required by the Nevada Revised Statutes 339.025, and all acts amendatory thereof and supplemental thereto, to furnish a bond in connection with said Contract guaranteeing the faithful performance thereof; and

WHEREAS, the Principal under the terms of the Contract agrees to replace and/or repair without cost to the NTCD any damage or imperfections due to faulty labor or materials incorporated in said work, including the landscaping, for a period of one (1) year, from and after the date of completion and acceptance by NTCD of the work contracted to be performed.

NOW, THEREFORE, THE CONDITIONS OF THIS OBLIGATION ARE SUCH that, if Principal shall well and truly perform and complete in all its parts of the work described in said Contact within the time and in the manner therein specified and shall, for a period of one (1) year from the date of the work contracted to be performed is completed and accepted by NTCD, replace and repair any and all defects arising in said work, whether resulting from defective material or workmanship, and shall also observe, perform, fulfill, and keep all and every covenant and agreement in said Contract on the part of the Principal to be kept, performed and complied with within the time and manner therein specified and shall truly and fully comply with all guarantees required in said Contract, then this obligation shall become null and void, otherwise it shall remain in full force and effect.

And the said Surety, for value received, hereby stipulates and agrees, if requested to do so by the NTCD, to perform and fully complete the work mentioned and described in said Contract, pursuant to the terms, conditions and covenants thereof, if for any cause, said Principal fails or neglects to so perform and fully complete said work; the said Surety further agrees to commence said work to full completion within twenty (20) days after notice thereof from the NTCD, and to fully complete the same with all due diligence and in accordance with the plans and specifications.

Further, Surety for value received, hereby stipulates and agrees that no prepayment or delay in payment and no change, extension, addition or alteration of the work or any provision of the Contract or in the plans, profiles, detailed drawings, specifications, and no extension of time and no forbearance on the part of the NTCD shall operate to release or exonerate the Surety upon this bond, and consent thereto without notice to or consent by Surety is hereby given, and Surety hereby waives provisions of any law relating thereto. It is expressly agreed and understood that this bond is made and executed contemporaneously with the Contract above mentioned, and in consideration of the covenants and agreements therein made and entered into on the part of the NTCD; and that the due execution and delivery hereof is condition precedent to liability on the part of the NTCD, on said above mentioned Contract. It is further understood and agreed that this bond is made in compliance with NRS 339.025 and all acts amendatory thereof and supplemental thereto; and that all benefits therein set forth inure to the benefits of the NTCD.

IN WITNESS WHEREOF, the above bounden Principal and the above bounden Surety have hereunto set their hands and seal, this ______, ____.

PRINCIPAL:	By:
	(Note: Signature to be Notarized)
	Type
State of Nevada Contractor's License #	Subscribed and sworn to before me this
State of Nevada Contractor's License #	day of
	day 01,
	Notary Public
Surety:	
Name of Surety	_
By:	
(Note: Signature to be Notarized)	
Type:	_
Attorney-in-Fact Amount of Bond Premium (to be filled in by the	e Surety Company):
\$	_
Subscribed and sworn before me this	_day of,
Notary Public	_
Surety's Licensed Nevada Agent:	
Company Name	_
Address	_
Telephone By:	_
(Note: Signature to be Notarized)	
Туре:	_
Bond No	_
Subscribed and sworn to before me this	day of,
Notary Public	_

Exhibit A

CONSTRUCTION/INDEMNIFICATION AND INSURANCE SPECIFICATIONS FOR KAHLE WATER QUALITY BASIN IMPLEMENTATION PROJECT

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: <u>\$1,000,000</u> 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: <u>\$1,000,000</u> 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, <u>\$0</u>.

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, NEVADA DEPARTMENT OF TRANPORTATION, DOUGLAS COUNTY, UNITED STATES FOREST SERVICE and NEVADA DIVISION OF STATE LANDS 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. <u>General Liability and Automobile Liability Coverages</u>

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. <u>Property Coverages</u>

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. <u>All Coverages</u>

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. <u>All certificates and endorsements are to be addressed to</u> <u>the NTCD and be received and approved by NTCD before work commences</u>. 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 B

SPECIAL TECHNICAL PROVISIONS

SPECIAL TECHNICAL PROVISIONS

FOR

KAHLE WATER QUALITY BASIN IMPLEMENTATION 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: March 2018
Contents

SECTION 100 – GENERAL	4
SECTION 102 – CONTRACTOR QUALIFICATIONS	4
SECTION 110 – ORDER OF WORK	5
SECTION 120 – PROJECT PERMITS	6
SECTION 125 – STORM WATER POLLUTION PREVENTION COMPLIANCE	9
SECTION 130 – WEED MANAGEMENT	10
SECTION 135 – MOBILIZATION & DEMOBILIZATION	12
SECTION 140 – STAGING AND STORAGE	14
SECTION 145 – SUBMITTALS	16
SECTION 150 – TRAFFIC CONTROL	17
SECTION 155 – CONSTRUCTION STAKING	21
SECTION 160 – TEMPORARY EROSION CONTROL	22
SECTION 165 – DEWATERING AND/OR DIVERSION	32
SECTION 170 – CLEARING AND GRUBBING AND TREE REMOVAL	35
SECTION 175 – REMOVAL OF EXISTING IMPROVEMENTS	39
SECTION 180 – EXISTING UTILITIES AND UNDERGROUND FACILITIES	41
SECTION 190 – AC PAVEMENT	43
SECTION 195 – TRENCH EXCAVATION AND BACKFILL	44
SECTION 200 – GRAVEL, COBBLE, ROCK, BOULDER & OTHER AGGREGATES	45
SECTION 205 – BASIN EARTHWORK	47
SECTION 210 – DECOMMISSION EXISTING DRAINAGE CHANNEL	52
SECTION 215 – CONCRETE CUTOFF WALL	53
SECTION 220 – STORM DRAIN AND BASIN STRUCTURES	54
SECTION 225 – CONCRETE CURB	57
SECTION 235 – PIPE	57
SECTION 240 – CONCRETE BLOCK FOREBAY	59
SECTION 245 – GATE RELOCATION	62
SECTION 255 – ROCK SPILLWAY	62
SECTION 260 – REVEGETATION	64
Appendix A: Stormwater Pollution Prevention Plan	73

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 Kahle Water Quality Basin Implementation Project including:
 - a. Location of projects
 - b. Dates project was initiated and completed by the Contractor
 - c. Description of size of restoration and any road crossings
 - 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 Kahle Water Quality Basin Implementation Project 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 \$750,000 and contract times exceeding 15 days.
- B. All landscape and revegetation work required as part of this project shall be performed by a licensed Landscape Contractor (C-10 in Nevada). The licensed Landscape Contractor is required to have successfully performed and completed a minimum of one (1) project, within the past five (5) years, which included landscape and revegetation work components of a similar scope and nature as to that which is indicated herein.

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. Please note that no work to remove trees including alders, willows, and aspen, may occur prior to August 16 without approval by the US Forest Service and NTCD. In order for work removing woody vegetation to occur prior to August 16, a qualified biologist must conduct a migratory bird survey 15 days prior to the proposed removal of the trees and no nests can be present in the area. NTCD will retain this qualified biologist at NTCD's expense if the Contractor submits the request to NTCD with 15 days notice. Otherwise, the Contractor should sequence construction to begin work on the basin starting August 16th. All work must be complete at the site by September 30, 2018.

The project requires coordination with several different public entities (Douglas County, the US Forest Service, the Nevada Department of Transportation, the Nevada Tahoe Conservation District, Nevada Division of Environmental Protection (NDEP), and the Tahoe Regional Planning Agency). 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 Temporary Traffic Control Measures.
- 3. Construction of all temporary erosion control measures as shown on the project plans and as approved by the Engineer and Tahoe Regional Planning Agency (TRPA).
- 4. Construction of the storm drain conveyance as shown on the project plans and as described in these Special Technical Provisions.
- 5. Construction of the basin as shown on the project plans and as described in these Special Technical Provisions.
- 6. Restoration of entire project site:
 - a. Restoration/revegetation of all disturbed areas.
 - b. Road sweeping.
 - c. Restoration of staging and access.

- d. Removal of temporary BMPs with approval of Engineer.
- 7. Pre-Final site walk with the Engineer, Contractor, Douglas County, US Forest Service, NDOT, and TRPA.
- 8. Development of project punchlist (by Engineer).
- 9. Completion of punchlist items.
- 10. 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, Douglas County, NDEP, USFS, NDOT, 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). Additionally the project is being funded by the US Forest Service (USFS) and occurs on portions of USFS land and requires the modification of an existing USFS Special Use Permit (SUP).

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, dewatering practices, revegetation and restoration requirements, and all other agency approval conditions. The Contractor shall note that the project is located near sensitive lands (TRPA Stream Environment Zone and US Army Corp of Engineers Wetlands) and thus special care is required during construction.

In addition to TRPA and NDEP stormwater discharge and temporary erosion control and BMP requirements, the Contractor shall be responsible for complying with all Douglas County and US Forest Service permits and other agency requirements and responsibilities as provided in the project permit(s), Contract Documents, Plans, Standard Specifications, these Special Technical Provisions, and the SWPPP. **The Contractor is required to procure a site improvement permit from Douglas County prior to initiating any work on the site.**

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, USFS 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 coordinating the pre-grading meeting with TRPA** 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 coordinate the meeting so that the Contractor, Engineer, TRPA, USFS, Douglas County, and NTCD staff are present. 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, and the SWPPP. 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, TRPA, and USFS to do such. Attention is directed to the revegetation requirements found elsewhere in these Special Technical Provisions.

The Contractor shall comply with all noxious weed requirements per the United States Forest Service (USFS) 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. Salvage topsoil from project area for use in onsite revegetation, unless contaminated with noxious weeds. All activates 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. This requirement is consistent with the USFS Region 5 policy that directs the use of native plant material for revegetation and restoration for maintaining "the overall national goal of conserving the biodiversity, health, productivity, and sustainable use of forest, rangeland, and aquatic ecosystems." Seed mixes should be accepted by the Revegetation Specialist.
- Staging areas for equipment, materials, or crews shall not be sited in weed infested areas.

The project is located adjacent to a sensitive land capability class area (1b SEZ) as classified by the TRPA. Therefore the Contractor will be required to use extreme caution in all activities associated with the project. The Contractor will be required to meet all of the requirements shown on the Plans, as described in the Project Permit(s), these Special Technical Provisions and as stated in the SWPPP. Refueling of equipment shall only be allowed on paved areas and not within the active project work area.

The Contractor is further required to only use "low impact equipment" for this project. No equipment having a ground pressure that will disturb and/or compact the ground (generally ground pressures less than 25 psi) will be allowed off of paved areas, or designated temporary truck haul routes under any circumstance. All equipment on the project site, (off paved areas or designated truck haul routes), shall meet this low pressure requirement. TRPA prefers the use of "rubber track" equipment as low impact equipment and the Contractor is encouraged to use "rubber track" equipment in sensitive land capability areas. The Contractor shall provide detailed information, (manufacture's data brochure, or other product specific materials), to the Engineer for review and acceptance prior to any equipment being mobilized to the project site and placed in the work. 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 SWPPP, and 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
- US Forest Service Special Use Permit
- Nevada Department of Environmental Protection Stormwater General Permit
- Douglas County *Site Improvement Permit*

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, the SWPPP, 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 – STORM WATER POLLUTION PREVENTION COMPLIANCE

125.01 Description

The Contractor shall implement the requirements for erosion control due to storm water and construction related runoff from construction sites as established under Nevada Revised Statutes (NRS) and Nevada Administrative Code (NAC) 445A. It shall be the Contractor's responsibility to provide day-to-day operational control of activities and the implementation of Best Management Practices (BMPs) that are necessary to control and reduce the pollution of Waters of the US from stormwater discharges and other pollutants and runoff associated with construction activities, and to ensure compliance with the requirements of National Pollutant Discharge Elimination System (NPDES) permit coverage. Work shall include, but is not limited to:

- Complete and submit a Notice of Intent (NOI) including any permit and filing fees
- Develop and Implement a Storm Water Pollution Prevention Plan (SWPPP)
- Furnishing all materials
- Implementing all practices and installing, constructing and maintaining all BMPs and temporary and/or permanent control measures for the duration of the project
- Submit a Notice of Termination (NOT) upon completion of the project

For coverage under the NDEP stormwater general permit, an NOI must be submitted no later than fourteen (14) days prior to the start of construction. The Contractor shall complete the NOI form and electronically file it with NDEP on-line at the following website: <u>https://genpermits.ndep.nv.gov/</u> After filing the NOI electronically the applicant must print, sign and submit the confirmation page, including any permit and filing fees, to NDEP by mail to the following address:

Stormwater Coordinator Bureau of Water Pollution Control Nevada Division of Environmental Protection 901 South Stewart Street, Suite 4001 Carson City, NV 89701 Phone: (775) 687-4670

In accordance with NAC 445A.269, NDEP may require a general stormwater permit holder to apply for and obtain an individual permit.

125.02 Storm Water Pollution Prevention Plan

The Storm Water Pollution Prevention Plan (SWPPP) shall include, but is not limited to:

- Project Description
- Stormwater Controls

- Material Storage Areas
- Stabilization Practices
- Erosion and Sediment Controls
- Structural Practices
- Spill Contingency Plan
- Post Construction Stormwater Management
- Non-Storm Water Discharge Maintenance
- Maintenance and Inspection Requirements
- Dewatering and Diversion Requirements
- Watering/Dust Control Requirements
- Sampling and Analysis Plan

The SWPPP will describe and ensure the implementation of practices that will assure compliance with the terms and conditions of all of the project permits in accordance with good Engineering practices and cost effective approaches as outlined in Regional BMP Manuals, TRPA handbook, Nevada Contractors Field Guide for Construction Site BMPs and other related documents.

A draft SWPPP is provided in the appendix of the Contract Documents. This draft plan will provide the Contractor with a basis for the requirements of the project SWPPP. **The Contractor, within ten (10) days after the effective date of the executed Contract, shall acknowledge and certify the project SWPPP.** Any requested revisions to the draft SWPPP (i.e. amendments) shall be submitted to the Engineer for review and acceptance, including applicable permitting agencies prior to any modifications being implemented by the Contractor. Such requested modifications shall be noted in red on the original plan (or other suitable format that is clear). Subcontractors shall also sign (i.e. certify) the SWPPP and must comply with the requirements of all of the project permits under the supervision of the Contractor. Attention is directed to Section 160, "Temporary Erosion Control Measures and BMPs," of these Special Technical Provisions and the applicable Project Plan sheets for Temporary Erosion Control and Dewatering and Diversion operations.

A copy of the Contractor's NOI, SWPPP, and applicable inspection and maintenance records shall be provided to the Engineer at least seven (7) calendar days prior to start of construction and shall be posted at the construction site with other project records; upon request these records, NOI, and SWPPP must also be made available for public inspection.

125.03 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, the SWPPP, 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 130 – WEED MANAGEMENT

130.01 General

This item shall consist of removing noxious and invasive weeds from active construction areas prior to construction and/or avoiding areas of weed infestations.

130.02 Site-Specific Methods

The following noxious (*Carduus nutans*) and invasive weeds have been located on site and shall be treated as specified below:

Scientific Name	Common Name	Treatment
Bromus tectorum	Cheatgrass	For small populations (25 ft ² or less), mow tops with a weed eater before plants set seed. Remove individual stems and dispose of offsite. For larger stands submit a plan to be reviewed and accepted by the RS.
<i>Carduus nutans</i> (Noxious)	Musk thistle	For rosettes, remove plants by digging out the rosette and tap root. Otherwise remove flowering heads before seed set and dispose of offsite.
Cirsium vulgare	Bull thistle	For rosettes, remove plants by digging out the rosette and tap root. Otherwise remove flowering heads before seed set and dispose of offsite.
Desurainia pinnata	Tansy mustard	Mow plants from top to bottom with a sickle bar mower. Leave resultant organic matter in place. Do not allow plants to flower or set seed.
Linaria dalmatica	Dalmatian toadflax	Carefully dig out plants for small populations if the soil is moist and loose enough and remove as much root as possible. Roots break off easily. Dispose of off site. If plants are in seed, carefully bag and cut off the stems before digging up the roots to minimize seed dispersal. Herbicides are not very effective due to waxy leaves.
Potentilla recta	Sulphur cinquefoil	Dig out plants for small populations if the soil is moist and loose enough and remove the majority of the woody root. Dispose of off site. For larger populations use aminopyralid (Milestone). Apply 1 to 1.75 oz ae/A (4 to 7 fl oz/A) to actively growing plants before the bud stage of growth. Do not allow herbicide to drift on to other broad-leaved forbs.
Sysimbrium altissimum	Tumble mustard	Mow plants from top to bottom with a sickle bar mower. Leave resultant organic matter in place. Do not allow plants to flower or set seed.

Verbascum thapsus	Mullein	For rosettes, remove plants by digging out the
		flowering and seed set. Dispose of material offsite.

Additional noxious or invasive species not specifically identified in these Special Provisions shall be identified in the pre-bid walkthrough by the Revegetation Specialist (RS) who must also be a Certified Professional Sediment and Erosion Control (CPESC).

130.03 Measurement and Payment

Weed Management, as described above shall be considered one bid item and shall be measured on a lump sum basis, completed and accepted by the Engineer as conforming to all the requirements in the complete work. Full compensation for furnishing labor, materials, tools, equipment, and incidentals for all work involved in provisions of this section, complete in place as shown on the Project Plans and as specified in the Contract Documents, Project Permits(s), Standard Specifications, and 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 135 – MOBILIZATION & DEMOBILIZATION

135.01 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; 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, the SWPPP, 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.

135.02 Project Sign

Mobilization shall include construction and erection of one project sign. The project sign shall be constructed in accordance with details provided within the Project Plans, and located as directed by the Engineer. The project sign shall be constructed within ten (10) working days after notice to proceed. Maintenance of the project sign is the Contractor's responsibility until the sign is removed by the Contractor at the end of the construction contract. For this project, one (1) project sign will be erected.

135.03 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. Furthermore, demobilization shall include cleaning the existing drainage inlets, sediment caps, pipes, and culverts within the project boundary. Furthermore, demobilization shall include repairing all pavements, walkways, infrastructure, signage, landscape, trails, or other public or private facilities damaged by construction activities to their preconstruction 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."

135.04 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. Release of retention monies will not occur prior to submittal and acceptance of the final record drawings, which shall be a comprehensive set of Record Drawings detailing all aspects of the Project. Two (2) sets 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. Should the Contractor not provide this information to the Engineer in the time specified in this section, or to the acceptance of the Engineer (record drawings do not note all changes to the project) the Engineer will not accept the record drawings, retention shall not be released on the project, the record plans will be returned to the Contractor and the Contractor shall resubmit the record drawings to meet the requirements of this section to the acceptance of the Engineer.

135.05 Measurement and Payment

Mobilization and Demobilization, as described above shall be considered one bid item. Project Sign, as described above shall be considered as included with Mobilization and Demobilization and no additional compensation shall be allowed for. Record Drawings, as described above shall be considered as included with Mobilization and Demobilization and Demobilization and no additional compensation shall be allowed for. Mobilization and no additional compensation shall be allowed for. 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, SWPPP, 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 140 – STAGING AND STORAGE

140.01 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), SWPPP, 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 and updating the Project SWPPP. 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. No staging will be allowed in the Douglas County or NDOT right-of-way.

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

Set-up, use, and restoration of all staging/storage areas requires the Contractor to protect all existing facilities, equipment, vegetation, utilities (above and below ground/grade) and surface features (such as, but not limited to, fences, posts, signs, boulders, landscaping, slopes, etc.) in place. Should the Contractor's operations damage any of these items the Contractor shall replace, in kind, the damaged or destroyed item. The damage or destruction of any item will be determined by the Engineer during the course of construction or at the final punchlist development. In the event the Contractor needs to relocate any item (boulder, fence, etc.) the Contractor shall replace the item to its original location. If the relocated item is damaged, as determined by the Engineer, the Contractor will be required to replace the damaged item with an in-kind replacement. No additional compensation will be allowed for any relocation, or replacement of damaged items, this will be at the sole cost to the Contractor.

The Contractor shall not proceed with any construction until truck haul routes and temporary haul roads have been identified and accepted to the satisfaction of the Engineer, NTCD, and TRPA. The Contractor shall submit four (4) copies of a proposed truck haul route plan, along with the proposed project construction schedule and traffic control plan, to the Engineer for review and acceptance at least seven (7) calendar days prior to the scheduled Pre-Construction Meeting. Any days lost due to the lack of an accepted truck haul plan will be charged against the Contractor's allowable work days. 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 the SWPPP and 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, NTCD, Douglas County, and TRPA 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.

The restored staging/storage areas, if areas exist as an unpaved condition, shall be treated with the final Revegetation Treatment Type as shown on the Plans (if any areas for Staging/Storage are used and not shown on the Revegetation Plans, the Contractor shall treat the area as directed by the Engineer) and as described in these Special Technical Provisions. 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.

140.02 Measurement and Payment

Staging and Storage shall be measured on a lump sum basis, accepted by the Engineer as conforming to all the requirements in the complete work. The contract price paid for Staging and Storage shall include set-up of all staging and storage areas and installation of any applicable temporary erosion control measures and BMPs (except where otherwise paid for) and furnishing all labor, materials, tools, equipment, and incidentals required for performance and completion of the work; including full compensation for operations required to remove and dispose of all materials, clean-up, and restore the site to its pre-construction condition, and re-pave and stripe the parking area as shown on Plans; for the contract lump sum price bid, as shown on the Plans, in accordance with the Contract Documents, Standard Specifications, these Special Technical Provisions, SWPPP, Project Permit(s), and to the satisfaction of the Engineer.

The schedule for payment for Staging and Storage shall be in direct proportion to the percentage of work completed; i.e. if 20% of the project is completed, the Contractor may request payment for 20% of the lump sum total of the bid item for Staging and Storage. Measurement of the percentage of work completed shall be based on the percentage of work billed by the Contractor based on the total dollar amount of the contract bid price. Increases in the total contract price for any reason do not justify an increase in the lump sum price paid for any of the Staging, Storage and Access bid items. The Engineer reserves the right to adjust the partial payment amounts of these said bid items based on any adjustments made to other pay items on the payment request by the Engineer.

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, SWPPP, 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

The number of copies to be submitted will be according to the following, unless specified elsewhere:

Construction Schedule, Traffic Control Plan, and Truck Haul Routes – 4 copies Submittals & Shop Drawings – 4 copies Certifications – 3 copies (conforming certifications will not be retuned)

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, SWPPP, Plans, Contract Documents, Standard Specifications, and these Special Technical Provisions for any additional requirements):

- Construction schedule
- Qualifications of the materials testing firm or personnel to be used
- Traffic Control Plan, and Truck Haul Routes
- SWPPP authorization, revisions, and dewatering plans
- NDEP NOI and NOT
- Equipment list for all equipment to be used, including the following minimum information:
 - Manufacturer and Model
 - Ground pressure rating (in psi)
 - Certification for washing/steam cleaning, including date
- Filter fence, sediment coir logs, and other BMP materials
- Construction limit fence
- Engineered fabrics
- Aggregates used in the work
- Origin and properties of cobble, boulders, and gravel used in the work
- Aggregate base (AB), imported fill, engineered fill, imported topsoil, and bedding materials
- 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
- Storm drain pipe, valves, and fittings
- Shop drawings and installation specifications for structures, including the outlet structure, cutoff walls, and manholes
- Concrete mix design(s), admixtures, and curing agents
- Testing and QA/QC certifications for any precast concrete structures
- Asphalt mix design and other bituminous materials used in the work
- Utility boxes, manholes, grates, and other miscellaneous iron/steel products used in the work
- Loose aggregate samples as specified in Section 200 "Gravel, Cobble, Rock, Boulder & Other
- Aggregates"
- Revegetation items as specified in Section 260 "Revegetation"
- 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, the SWPPP, 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 – TRAFFIC CONTROL

150.01 Traffic Control Plan

Work under this item shall consist of furnishing all labor, tools, materials, and equipment necessary to complete and maintain all traffic control provisions in accordance with the Plans, Contract Documents, Standard Specifications and these Special Technical Provisions, and as directed by the Engineer during the life of the Contract. All traffic control devices and plans shall conform to the latest editions of the Manual on Uniform Traffic Control Devices (MUTCD).

The Contractor shall submit four (4) copies of a proposed traffic control plan, along with the proposed project construction schedule and truck haul route plan, to the Engineer for review and comments at least seven (5) calendar days prior to the scheduled Pre-Construction Meeting.

- The Contractor's traffic control plans shall include, but not be limited to, the following:
- Designated construction site Traffic Control Supervisor (TCS) name and contact information
- Proposed construction zone and existing speed limits
- All construction signing
- Location of flaggers
- Types and location of traffic control devices
- Construction phasing (including phasing of intersection construction and detours, if any)
- Lane crossovers between construction phases
- Special events scheduling
- Detours
- 8 5"x 11" individual access plans for multi-access properties
- Accommodations for pedestrians and bicycles
- Intersection Control Strategy

The Engineer and NTCD personnel will provide written comments and/or corrections to the Traffic Control Plans. If necessary, the Contractor and Engineer will meet to consider the comments and/or corrections to the plan prior to the preconstruction conference to resolve any issue relative to the traffic control plans. Upon resolution of all issues or acceptance of the traffic control plans as submitted, the Engineer shall accept the plans in writing.

Acceptance by the Engineer of the submitted traffic control plans shall in no way relieve the Contractor of the responsibility for safety requirements. Acceptance of the traffic control plans by the Engineer indicates that the plans generally appear to conform to the contract requirements. Such acceptance shall in no way be construed as confirmation of the technical accuracy or adequacy of the contents of the plans and shall not relieve the Contractor of the obligation to institute traffic control measures in full compliance with contract requirements, and which function safely and correctly, and are in conformance with applicable statutes, ordinances, and regulations.

Immediately after set up of new or modified traffic control plans, the Contractor shall have the TCS inspect the controls installed in the field to determine if all required controls have been installed and are operating as intended. The TCS shall submit to the Engineer a written inspection report on the traffic controls conformance with the accepted traffic control plans and contract requirements. If the TCS determines that the traffic controls are not in conformance with the accepted traffic control plans, contract requirements, or determines that the traffic controls are not functioning as intended, the report shall address such deficiencies and make recommendations for changes.

If at any time it is determined that traffic controls have been modified or are not functioning as intended, the Engineer's representative may request Douglas County to evaluate the traffic controls installed by the Contractor. Additionally, if during construction, revisions to the accepted plans are necessary for safety or accommodation to traffic, the Engineer may require such revisions.

Any request by the Contractor to change the traffic control plans shall be submitted in writing at least five (5) working days prior to implementation. Such requests must be accepted in writing by the Engineer prior to implementation. Traffic control plans shall be maintained and must be current with the applicable phase of the work.

150.02 Traffic Control Notification

Upon acceptance of the traffic control plans, and at least 2 working days prior to beginning construction, the Contractor shall notify and submit a copy of the accepted traffic control plans to the Engineer, refuse collection agencies, and appropriate police and fire departments, REMSA, and any other emergency service as directed by the Engineer. Any closure of the Douglas County right-of-way requires a "Road Closure Permit" from Douglas County and the contractor is responsible for obtaining this permit.

150.03 Traffic Control General Requirements

The Contractor shall designate a construction site TCS who shall be responsible for initializing, installing and maintaining all traffic control devices as shown on the traffic control plans, as specified in the MUTCD, applicable Project Plan sheets, and these Special Technical Provisions. The construction TCS shall be under the direct supervision of the construction site Superintendent. The construction TCS shall be available to be contacted by the Engineer's representative 24 hours a day, 7 days a week for the life of this contract, and shall be available to be present on the work site within sixty (60) minutes after notification by the Engineer's representative.

The Contractor shall submit the designated construction TCS's name, ATSSA certification number, and qualifications for the Engineer's acceptance at the preconstruction conference. The construction TCS shall:

- Understand the contract requirements
- Understand the MUTCD requirements
- During a work day, make at least 2 inspections of the condition and position of all traffic control devices in use each day
- Correct all traffic control deficiencies
- Report all corrective actions to maintain and protect traffic through the project
- Review work areas, equipment operation and storage, and material and handling and storage relative to traffic safety
- Furnish weekly written certification to the Engineer that inspections and reviews were conducted and that traffic control devices met or exceeded the contract requirements. Weekly certification shall include daily records of traffic control activities and reviews.

The Contractor shall not proceed with any construction until traffic control plans and the construction TCS have been accepted and the proper traffic control has been provided to the satisfaction of the Engineer. Any days lost due to improper traffic control or lack of a designated construction TCS, will be charged against the Contractor's allowable working days.

The Contractor shall maintain public traffic throughout the project in accordance with the accepted traffic control plan and perform work in a manner that assures the safety and convinces of the public and protect the people and property adjacent to the project site. During the course of construction, the Contractor shall be prepared to provide access through the construction zone for police, fire or emergency vehicles as necessary to reach their destination with a minimum delay.

Unless otherwise accepted by the Engineer, the Contractor shall maintain two-way traffic on all roads in and around the project area at all times for the duration of the project. The Contractor shall make special considerations for local access to and from properties adjacent to the construction zone. All efforts shall be made to minimize the inconveniences to the local residents and business owners. All driveways shall be opened and accessible at the end of a shift.

Traffic control devices shall be removed as soon as they no longer apply to the current construction activities, including daily operations.

150.04 Existing Signs

If existing traffic control device regulatory signage (i.e. stop, yield, speed limit, etc) is removed or damaged due to the Contractor's operations, the Contractor shall notify the appropriate jurisdiction maintenance department and immediately install temporary signs of the same designation as close as possible to the original location.

All existing traffic control devices removed to facilitate construction of the project improvements, shall be salvaged and replaced to its original condition as part of the work. Any materials that are damaged or lost shall be replaced in like kind. All traffic control devices require acceptance of the Engineer.

150.05 Measurement and Payment

"Traffic Control" 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 "Traffic Control" shall include full compensation for preparation and submittal of a traffic control plan, and for furnishing all labor, materials, tools, equipments, and incidentals to perform all the work involved in provisions of this section, including but not limited to temporary construction signs and traffic control devices, flagging, flasher units, barricades, lights, electrical power, resetting of traffic signs and delineators, and all incidentals and materials necessary to provide these items for the duration of construction.

The schedule for payment for "Traffic Control" shall be in direct proportion to the percentage of work completed; i.e. if 20% of the project is completed, the Contractor may request payment for 20% of the lump sum total of the bid item for traffic control. Measurement of the percentage of work completed per each phase shall be based on the percentage of work billed by the Contractor based on the total dollar amount of the contract bid price. Increases in the total contract price for any reason do not justify an increase in the lump sum price paid for any of the traffic control bid items. The Engineer reserves the right to adjust the partial payment amounts of these said bid items based on any adjustments made to other pay items on the payment request by the Engineer.

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 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,
- Limits of grading and grade breaks,
- Stormwater infrastructure locations and offsets,
- Basin berm alignment and offsets,
- Rock dissipator location and offsets,
- Ditch fill extents, and
- Pipe alignment.

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 personnel and any 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 the Project SWPPP, 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.

Attention is directed to Section 125.02, "Storm Water Pollution Prevention Plan," of these Special Technical Provisions. As part of the SWPPP certification and submittal process, **the Contractor shall submit two (2) copies of any proposed revisions to the applicable Project Plan sheets for Temporary Erosion Control and the Dewatering and/or Diversion operations**. No work shall be started until the SWPPP, applicable plan sheets, schedules and methods of operation for temporary pollution control are reviewed and accepted by the Engineer, NTCD, TRPA, and NDEP. The Contractor is reminded that the project is located within the Lake Tahoe Basin and all pollution control measures and clean-up procedures must satisfy the requirements of TRPA, NDEP and the permit(s) issued for the project. During the course of project construction, the Contractor shall cooperate with the Engineer, TRPA, NDEP and other regulatory officials and take immediate action as directed to protect water bodies and sensitive areas, and provide for erosion or other pollution control.

Installation and maintenance of temporary erosion control measures, devices and BMPs shall conform to the requirements as stated within this section, the SWPPP, 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).

As Directed Placement

Due to the nature of the project and expected field direction from the Engineer, NTCD, and permitting agencies, the Contractor shall make provisions to furnish all labor, tools, materials, and equipment as necessary to furnish and place additional temporary erosion control devices in the work (i.e. beyond or in addition to what is designated on the Project Plans or in the Project SWPPP) as directed by the Engineer, in conformance with the Contract Documents, Project Permits, SWPPP, Standard Specifications, and these Special Technical Provisions. Installation, maintenance, removal, and disposal of any additional as directed temporary erosion control device shall be considered as included in the applicable "as directed" bid item unit price, and no additional compensation will be allowed. The installation and location of any as directed temporary erosion control device shall only occur as determined and marked in the field by the Engineer.

The intent of the as directed temporary erosion control device bid items, is to provide the Engineer and Contractor with a means and allowance for additional temporary erosion control devices to be incorporated in the work where modifications to the construction sequence, changing field conditions, temporary stockpiles, and other potential minor unknowns can be adequately addressed in order to maintain compliance with the SWPPP and Project permits.

The Contractor will not be compensated for the installation of any additional "as directed" temporary erosion control devices without prior direction and acceptance of the Engineer.

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 Gravel Construction Entrance/Exit

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, SWPPP, Project Permit(s), and TRPA Best Management Practices.

Work under this item shall consist of clearing and grubbing, excavation, furnishing and placing reinforcement mat, furnishing and placing rock at each entrance/exit access road, maintenance (i.e. removal of large quantities of captured sediment, and/or placement of additional rock during course of construction), removal, disposal of excess materials, and restoration of disturbed area.

Fabric to be used for the reinforcement mat shall be manufactured from polyester, nylon, or polypropylene material, or any combination thereof. Fabric shall be manufactured from virgin, or recycled or a combination of virgin and recycled, polymer materials. No virgin or recycled materials shall contain biodegradable filler materials that can degrade the physical or chemical characteristics of the finished fabric. The fabric shall be a non-woven, needle-punched fabric. The fabric shall be permeable, not act as a wicking agent, and shall conform to the following:

Test	Test Method	Requirement
Weight, grams per square meter	D 3776	135 min.
Grab Tensile Strength, Newton, (25 millimeter grip, in each direction)	D 4623	0.40 min.
Elongation at Break, percent	D 4632	30 min.
Toughness, kilonewtons		26 min.
(percent elongation x grab tensile strength)		
Permittivity, 1/sec.	D 4491	0.5 min.
Ultraviolet Resistance, percent strength retention	D 4355	70 min.

Rocks shall be angular to sub-angular in shape and shall conform to the material quality requirements in Section 200.07, Riprap, of the Standard Specifications for resistance to wear, absorption, apparent specific gravity, and durability. Rocks used for the gravel construction entrance/exit shall conform to the following sizes:

Square Screen Size	Percent Passing
6 inches	100
3 inches	0-20

Each gravel construction entrance/exit shall be of adequate size to prevent the tracking of sediment and materials onto any paved public right-of-way. At a minimum the size of each gravel construction entrance/exit shall be as shown on the Project Plans.

While the gravel construction entrance/exit is in use, pavement shall be cleaned and sediment removed at least once a day and as often as necessary when directed by the Engineer. Soil and sediment or other extraneous material tracked onto existing pavement shall not be allowed to enter any existing or proposed drainage facilities.

In the event the Contractor's operations are causing excessive tracking of materials the Engineer may direct the Contractor to replace the gravel construction entrance/exit, expand the size (area – length and/or width) of the gravel construction entrance/exit, and/or expand the depth of the gravel construction entrance/exit. In the event this is required, the Contractor will not be entitled to any additional payment.

When no longer required as shown on the Project Plans or as determined by the Engineer, each gravel construction entrance/exit shall become the property of the Contractor and be removed and disposed of in conformance with the Contract Documents, Standard Specifications, Project SWPPP, and these Special Technical Provisions. Under no circumstance shall any of the materials used for gravel construction entrance/exit be re-used on the project. All areas disturbed by the placement and use of each gravel construction entrance/exit shall be graded and restored to its pre-existing condition, including any provisions for revegetation found elsewhere in these Special Technical Provisions.

Gravel construction entrance/exit 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 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, SWPPP, 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.

160.04 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, SWPPP, 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) and SWPPP. 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, TRPA and NDEP, 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.

Sediment log (fiber roll) shall not be used in place of filter fence without prior acceptance and written consent of the Engineer. 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.

160.05 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) and SWPPP. 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 revegetation "maintenance and bonding period" 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.

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.

160.06 Drainage Inlet Protection. 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 gravel bag material for drainage inlet protection should be woven polypropylene, polyethylene or polyamide geotextile fabric, with a minimum unit weight of 4 oz/sq/yd, Mullen burst strength exceeding 300 psi (ASTM D3786), and ultraviolet stability exceeding 70% (ASTM D4355). The gravel bag fill material should be 3/8 to 3/4 inch open graded, non-cohesive, porous gravel, and washed clean and free from clay, organic matter and other deleterious materials.

Gravel bags shall remain in place, where directed by the Engineer, as necessary to conform to the Project Permit(s) and SWPPP. All gravel bags 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 gravel bag, upon discovery or as directed by the Engineer, shall be considered as included in the prices paid for the applicable bid item of work, and no additional compensation will be allowed. At the conclusion of the project or where accepted to occur at an earlier date as directed by the Engineer, TRPA and NDEP, all gravel bags 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.

Drainage inlet protection 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 Temporary Concrete Washout Facility. Work under this item shall consist of furnishing all labor, tools, equipment, and materials necessary to construct, maintain and later remove when no longer required, including all waste materials, a temporary concrete washout facility in accordance with the Project Plans, Contract Documents, Standard Specifications, these Special Technical Provisions, Project Permit(s), Project SWPPP and TRPA Best Management Practices.

When a temporary concrete washout facility is no longer required for the work, as determined by the Engineer, all materials including the hardened concrete and liquid residue are considered the property of the Contractor and shall be removed and disposed of in conformance with the provisions found elsewhere in these Special Technical Provisions, and the Standard Specifications.

Ground disturbance, including holes and depressions, caused by the installation and removal of the temporary concrete washout facility shall be backfilled and repaired in conformance with the provisions found elsewhere in these Special Technical Provisions, and the Standard Specifications. Details for an alternative temporary concrete washout facility shall be submitted to the Engineer for acceptance at least seven (7) days prior to installation.

<u>Materials</u>

A. Plastic Liner

Plastic liner shall be single ply, new polyethylene sheeting, a minimum of ½ inch thick, and shall be free of holes, punctures, tears, or other defects that compromise the impermeability of the material. Plastic liner shall not have seams or overlapping joints.

- B. Permeable Material Permeable material shall be as specified in Section 200.03.05, "Class D Backfill" of the Standard Specifications.
- C. Sediment Log

Sediment Log shall be as specified in Section 160 of these Special Technical Provisions.

D. Gravel Bags

Gravel bags shall as specified in Section 160 of these Special Technical Provisions.

E. Stakes

Stakes shall be wood or metal. Wood stakes shall be untreated fir, redwood, cedar, or pine; shall be cut from sound timber; and shall be straight and free from loose or unsound knots and other defects which would render them unfit for the purpose intended. Wood stakes shall be minimum one (1) inch x two (2) inches in size. Metal stakes may be used as an alternative and shall be a minimum 1/2 inch in diameter. Stakes shall be a minimum four (4) feet in length. The tops of the metal stakes shall be bent at a 90-degree angle or capped with an orange or red plastic safety cap that fits snugly to the metal stake. The Contractor shall submit a sample of the metal stake and plastic cap, if used, for the Engineer's acceptance prior to installation.

Installation

The temporary concrete washout facility shall be installed as shown in the Plans and as follows:

- A. The temporary concrete washout facility shall be installed prior to beginning placement of concrete and located a minimum of 50 (fifty) feet away from storm drain inlets, open drainage facilities, and water courses unless determined infeasible by the Engineer. The facility shall be located away from construction traffic or direct access to the staging and storage area.
- B. The temporary concrete washout facility shall be constructed in sufficient size to contain liquid and concrete waste generated by washout operations for concrete wastes. The facility shall be constructed to contain liquid and concrete waste without seepage, spillage, or overflow.
- C. The depressed area or pit shall be covered with a plastic liner in order to protect the underlying soils from contamination.
- D. The plastic liner may be held in place using sediment logs, gravel bags, or berms constructed from compacted native materials.

<u>Maintenance</u>

The temporary concrete washout facility shall be maintained to provide adequate holding capacity with a minimum freeboard of twelve (12) inches. Maintaining the temporary concrete washout facility shall include removing and disposing of hardened concrete and returning the facilities to a functional condition. Hardened concrete materials shall be removed and disposed of in conformance with the

provisions found elsewhere in these Special Technical Provisions, and the Standard Specifications. Holes, rips, and voids in the plastic liner shall be patched and repaired by taping, or the plastic liner shall be replaced. Plastic liner shall be replaced when patches or repairs compromise the impermeability of the material as determined by the Engineer.

The temporary concrete washout facility shall be repaired or replaced on the same day when the damage occurs. Damage to the temporary concrete washout facility resulting from the Contractor's vehicles, equipment, or operations shall be repaired at the Contractor's expense.

160.08 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), Project SWPPP 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.

160.09 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), Project SWPPP 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.

160.10 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 Manufacture'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 Manufacture) and disposed of in a manner acceptable to the Engineer, NDEP, TRPA, and in conformance with the SWPPP.
- 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, TRPA, and in conformance with the SWPPP.

160.11 Measurement and Payment. Temporary BMPs including filter fence, construction limit fence, drainage inlet protection, coir logs, gravel construction entrances, dust control, concrete washout, and sweeping shall be measured as a lump sum bid price for "Temporary Erosion Control." Payment for Temporary BMPs 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.

"Additional Fiber Rolls As Directed by Engineer" shall be measured as per linear foot. Payment for installing additional fiber rolls as directed by engineer shall be made at the contract per linear foot 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 165 – DEWATERING AND/OR DIVERSION

165.01 General

Work under this item shall consist of furnishing all labor, tools, equipment, and materials as necessary to dewater, divert and/or bypass any groundwater or surface waters and to maintain a reasonably dry excavation or general work area for the proper installation, construction, curing, grow-in, maintenance, and completion of any improvements, including revegetation/restoration activities, for a complete job in place as shown on the Project Plans, described in the Special Technical Provisions, the Project SWPPP and Standard Specifications, or as directed by the Engineer.

Dewatering and/or Diversion operations as stated herein, or as directed by the Engineer, are required to be performed at any time and on a continual basis, for the duration of the project and any ensuing maintenance period, as necessary to install, construct, complete and maintain all project improvements.

In general, the Contractor should expect/anticipate that groundwater may be encountered at any time the existing ground is disturbed within the project area, as a majority of the project site is located in an area adjacent to a Stream Environment Zone. Additional, groundwater investigations have shown a seasonally high groundwater depth of 6-9" below the surface at the location of the proposed basin.

The Contractors attention is directed to the "Dewatering and Diversion Plan." All dewatering and/or diversion operations and activities shall be in complete compliance with the Project Plans, Project Permits, SWPPP, the Standard Specifications, these Special Technical Provisions, and other applicable regulatory agency requirements.

The Contractor shall be responsible for the final design, installation, operation, maintenance and removal of any dewatering and/or diversion systems as required for completion of the contract work. The Project Plan sheets and Dewatering and Diversion Plan as provided as part of the Contract Documents provide a basis for, show, and describe dewatering scenarios and minimum requirements. **The Contractor shall submit their own detailed Dewatering and Diversion Plan (including all necessary diagrams/ exhibits) to the Engineer for review and acceptance (by the Engineer, NTCD, TRPA, USFS, and NDEP) prior to commencement of any construction activities that may require dewatering and/or diversion operations.** The proposed Dewatering and Diversion Plan shall be prepared by a licensed Engineer in the state of Nevada, or qualified licensed Contractor (at discretion of the Engineer) that specializes in dewatering, filtration, pumping, and liquid handling operations. Information required to be submitted shall included but is not limited to the following:

- Any Sub-Contractor information and proof of experience
- Qualified operator of the system and equipment
- Access routes, pads, spill containment devices, and locations for equipment
- Sources for power supply and pump operation
- Dewatering/diversion system design performance measures for volume and pumping rates
- Pump equipment description, performance measures and manufacture's data sheets

- Intake and discharge locations, methods, and materials
- Disposal methods and any proposed treatment practices
- Provisions to provide back-up equipment and/or stage on-site
- Emergency plan to accommodate high flow flood events
- Other requirements as stated in the SWPPP

If the Contractor plans to conduct any dewatering and/or diversion operations, he/she shall contact the Engineer for authorization, prior to starting the work at a given location. In the event the Contractor initiates dewatering and/or diversion operations without prior authorization of the Engineer, no payment for that work will be made.

165.02 Dewatering and/or Diversion for Conveyance Construction

Dewatering and/or diversion operations as necessary for, including but not limited to, the construction of the proposed conveyance pipe and manholes shall be as shown on the accepted Contractor's Dewatering and Diversion Plan, and in conformance with the Project Plans, SWPPP and these Special Technical Provisions. Discharge of all captured and/or diverted waters shall be in conformance with the SWPPP and all project permit regulations.

The excavation and general work area shall be sufficiently dry to allow for the proper construction and inspection of the conveyance and manholes as shown on the Project Plans and described in these Special Technical Provisions. The location and depth of sumps and/or well points for pumping of ground water or surface water is at the discretion of the Contractor, but shall be reviewed and accepted by the Engineer prior to initiating the work involved. The dewatering operations shall also be sufficient to produce a stable sub-grade within the excavation or general work area as necessary for access of equipment and personnel to complete the work.

In the event there is a storm event which increases the flow to the site, the Contractor shall make provisions for and have equipment (i.e. pumps, piping, gravel bags, plastic sheeting, temporary dams, etc.) on standby; to provide adequate protection of the work area, avoid flooding and inundation of the excavation, prevent erosion and discharge of sediment or other pollutants, and divert the increase in flows to stabilized downstream areas, away from any active work site(s).

165.03 Dewatering and/or Diversion for Basin Construction

Dewatering and/or diversion operations as necessary for, including but not limited to, the construction of the proposed basin and associated structures, as well as the removal and/or abandonment of the existing structures (described elsewhere in these Special Technical Provisions), shall be as shown on the accepted Contractor's Dewatering and Diversion Plan, and in conformance with the Project Plans, SWPPP and these Special Technical Provisions. Discharge of all captured and/or diverted waters shall be in conformance with the SWPPP and all project permit regulations.

The general work area shall be sufficiently dry to allow for the proper construction and inspection of the proposed basin and associated structures, as well as the removal and/or abandonment of the existing structures, for a complete job in place as shown on the Project Plans and described in these Special Technical Provisions. The location and depth of sumps and/ or well points for pumping of ground water or surface water is at the discretion of the Contractor, but shall be reviewed and accepted by the Engineer prior to initiating the work involved. The dewatering operations shall also be sufficient to produce a stable sub-grade within the excavation(s) or general work area as necessary for access of equipment and personnel to complete the work.

The Dewatering and Diversion operations shall adequately protect the work area(s) from stormwater flows, and prevent erosion and discharge of sediment or pollutants. In the event there is a storm event which increases the flow beyond what can be handled by the Contractor's established operations, the Contractor shall make provisions for and have equipment (i.e. pumps, piping, gravel bags, plastic sheeting, temporary dams, etc.) on standby to either provide additional pumping capacity to handle the additional flow, or provide for a complete gravity flow by-pass system. In addition the Contractor shall make all provisions to provide adequate protection of the active work area(s), avoid flooding and inundation of excavation(s), divert runoff to stabilized downstream areas away from any active work site(s), and reduce and/or prevent erosion and discharge of sediment or other pollutants.

165.04 Dirt Bag Device. 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 'Dirtbag' device, for acceptance of the Engineer, prior to placement in the work.**

Use of any 'Dirtbag' or other similar sediment control filter bag device used in coordination with pumping of sediment laden waters for discharge shall be as shown on the Project Plans and details and conform to the provisions of the Project Permits and SWPPP. The 'Dirtbag' shall be a commercially manufactured nonwoven geotextile fabric bag (polypropylene or equivalent) intended for such use, with a minimum grab tensile strength of 200 psi in any principal direction (ASTM D4632), and permittivity of 0.05 sec (ASTM D4491). For project area soils (source of sediment in waters) with more than 15% by weight passing a No. 200 sieve the fabric shall have an apparent opening size between 50 and 140, and for project area soils (source of sediment in waters) with less than 15% by weight passing a No. 200 sieve the fabric shall have an apparent opening size between 20 and 50. The geotextile fabric material shall contain ultraviolet ray inhibitors and stabilizers to provide an expected usable life comparable to the anticipated construction period; ultraviolet stability shall exceed 70% after 500 hours of exposure (ASTM D4355). The 'Dirtbag' device shall have a fill spout large enough to accommodate a pump four (4) inch discharge hose and attachment straps to secure the hose in place. The Dirtbag' device shall be sized to accommodate the applicable flow rates and prohibit release of the target effluent. Location of any 'Dirtbag' device requires acceptance of the Engineer, equipment access for removal and off-site disposal, and the area shall be stable to prevent erosion. Placement of drain rock, fabric, or other suitable substance to create a stable discharge site is the responsibility of the Contractor. Any 'Dirtbag' device shall be fitted with straps strong enough for lifting and the device removed from the Project site and properly disposed of; cutting open the device and leaving the captured sediment/fines in place is **prohibited**. Removal and off-site disposal may be facilitated by placing the 'Dirtbag' device on pallets, crates, trailer, or some other small mobile device to dismiss the need for lifting the 'Dirtbag' device by straps.

165.05 Measurement and Payment

The "Dewatering/Diversion" bid item shall be measured on a lump sum basis, completed and accepted by the Engineer as conforming to all the requirements in the complete work. Payment for "Dewatering/ Diversion" shall be made at the lump sum price bid, with no additional compensation therefore. The "Dewatering/Diversion" bid item shall be paid in full if any dewatering operations are required and performed as part of the project work, as directed and accepted by the Engineer. No additional compensation will be allowed for if excess ground water or higher than expected creek flows are encountered and dewatering operations beyond what was anticipated by the Contractor is required for proper construction of the project improvements. All dewatering necessary for the proper installation, construction, and maintenance of the project improvements, including revegetation/restoration activities shall be included in this bid item(s). Any dewatering and diversion operations performed during the revegetation "maintenance period" (i.e. after completion and acceptance of all project improvements) shall be considered as included in the "Dewatering/Diversion" bid item.

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 170 – CLEARING AND GRUBBING AND TREE REMOVAL

170.01 Description

This section covers the construction methods involved in all clearing and grubbing, and tree removal operations as shown on the Project Plans, described in the Standard Specifications, these Special Technical Provisions, SWPPP and/or as directed by the Engineer. Work under this item shall consist of furnishing all labor, tools, equipment, and materials as necessary to perform operations, including but not limited to, clearing and grubbing, topsoil salvage, tree removal, stump removal, and disposal of waste and other miscellaneous debris in accordance with the Project Plans, Project Permits, SWPPP, Standard Specifications, these Special Technical Provisions, and as directed by the Engineer.

170.02 Clearing and Grubbing

Clearing and grubbing shall consist of removing all objectionable and unacceptable natural or artificial materials from within the construction area project limits, and disposal of said material off the job site, in order to construct the project in a proper manner, in accordance with the Project Plans, Project Permits, SWPPP, Standard Specifications, these Special Technical Provisions, as directed by the Engineer, and other applicable Local, Regional, State, and Federal requirements. This work includes but is not limited to any earthen material, organic growth, willow and alder clumps, trees and stumps (less than 14-inches diameter at breast height – DBH will be measured at 4.5-ft above the existing ground surface on uphill side of tree), man-made deposits, industrial waste, sludge or landfill, and other materials as designated by the Engineer. Existing structures, to be preserved, shall be protected and restored upon completion of the work.

Clearing and grubbing shall extend to the outer limits of excavation and fill slope lines, except where slopes are to be rounded in which case the areas shall extend to the outside limits of slope rounding. Within the limits of clearing, all stumps and roots 1-1/2 inches in diameter or larger, buried logs, and all other objectionable material shall be removed up to three (3) feet below the existing ground surface or subgrade, whichever is deeper. All existing vegetation, outside the areas to be cleared and grubbed, shall be protected from injury or damage resulting from the Contractor's operations. For typical protection of trees and other vegetation, see the Project Plans and SWPPP.

No live trees or downed logs or wood (equal to or greater than 14-inches diameter) shall be removed from the project site that are not identified and marked by the Engineer. In the event the Contractor removes any live trees or downed logs or wood (equal to or greater than 14-inches diameter) not marked by the Engineer, the Contractor shall be solely responsible for any and all fines and/or penalties levied to the Contractor, Engineer, NTCD, NDSL, or applicable property owners in association with the removal.

For the purposes of this Project, willow, alder, and aspen, unless the aspen is shown on the plans are marked for removal, shall not be considered singular trees as part of the tree removal bid item work. Any willow, alder, or aspen material shall be removed and disposed of within the project limits/areas of disturbance (clearing and grubbing limits as shown on the Project Plans), unless specifically directed to be protected in place of as part of the work. Any removal and disposal of existing willow/alder vegetation shall be considered as part of the clearing and grubbing efforts, and no additional compensation shall be allowed for.

Existing signs, fences and other facilities within the construction limits shall be removed, salvaged, and/or reinstalled as shown on the Project Plans and as directed by the Engineer. If existing traffic control signs are removed (i.e. stop, yield signs) the Contractor shall install temporary signs of the same designation as close as possible to the original position, immediately upon completion of the clearing and grubbing work. Upon completion of the project these temporary signs shall be replaced with permanent signs of the same type and condition as prior to the Contractor's operations on the project site.

Topsoil and Organic Materials

During clearing and grubbing, the Contractor shall salvage and stockpile topsoil for reuse in the project area in accordance with Section 260, "Revegetation," of these Special Technical Provisions. Topsoil shall not be stockpiled for a period greater than two (2) weeks or greater than three (3) feet in height unless accepted by the Revegetation Specialist (RS) and Engineer. Topsoil shall be re-applied within the project area in accordance with Section 260, "Revegetation," of these Special Technical Provisions. All suitable organic materials removed during the clearing and grubbing operation including, but not limited to, pine needles, leaves, duff, trees smaller than six (6) inches DBH, stumps, and suitable roots shall be stockpiled and used for revegetation/restoration treatments. The Contractor shall make allowances for chipping larger organic materials such as trees, suitable roots, branches, and stumps so that these materials can be used for project revegetation/restoration efforts.

The Contractor shall not stockpile any vegetation or other debris generated as a result of the clearing and grubbing or tree removal operations that is not suitable for use in revegetation efforts. All unsuitable vegetation or other debris shall be removed from the job site by the end of each working day.

170.03 Tree Removal

Work under these bid items shall consist of furnishing all labor, tools, equipment and materials necessary for the removal of trees equal to or larger than 14-inches in diameter, measured at an elevation of 4.5-feet above the prevailing existing ground surface on uphill side of tree (a.k.a diameter at breast height - DBH). Trees equal to or larger than 14-inches DBH to be removed are schematically shown on the Project Plans and will be conspicuously marked in the field by the Engineer and TRPA forester (**no tree shall be removed unless marked in the field**). Tree removal shall include the removal of associated stumps and roots necessary for a complete removal of the tree and its appurtenances, and backfilling the remaining hole with native material, as directed by the Engineer.

The quantity (contract value) of trees to be removed, as shown on the Project Plans, may be more or less than the contract amount, as determined by the Engineer. Final quantities may fluctuate based on field conditions and actual construction staking, layout, and grading limits at the time of construction. All trees necessary for removal, as determined by the Engineer and TRPA staff forester, will be identified and conspicuously marked in the field for removal.

Prior to timber removal operations all associated temporary erosion control measures and BMPs, and traffic control must be in place, in accordance with the SWPPP, Project Permit(s), Standard Specifications and these Special Technical Provisions.

Trees shall be felled to minimize disturbance to surrounding facilities, structures, vegetation and traffic flow on roadways. The Contractor shall make all efforts to minimize any damage to trees and/or root systems that are to remain in place. The Contractor shall be liable for damage to utility service lines, fences or other structures.

The Contractor shall set aside specific materials (trees, stumps, slash, etc.) onsite for use and placement in the work and/or revegetation treatments. All such materials, and quantities, will be clearly identified and marked by the Engineer and Revegetation Specialist prior to the start of clearing and grubbing, and tree removal operations. Any applicable trees marked for this application will be included for payment as part of the tree removal bid item(s). Contractor is responsible for complete site cleanup, including slash disposal. No slash may be stored or burned on site. All wood products must be removed from the site prior to resale.

No trees (equal to or greater than 14-inches diameter) shall be removed from the project site that are not identified and marked by the Engineer. In the event the Contractor removes any trees (equal to or greater than 6-inches diameter) not marked by the Engineer, the Contractor shall be solely responsible for any and all fines and/or penalties levied to the Contractor, Engineer, NTCD, NDSL, or applicable property owners in association with the removal.

170.04 Stump Removal

Work under this item shall be considered part of the clearing and grubbing work and shall consist of furnishing all labor, tools, equipment and materials necessary for the removal and disposal of stumps depicted on the project plans, or as directed by the Engineer. Stump removal as described herein will only consist of stumps to be removed that are not directly associated with the removal of a tree (as defined herein - tree removal bid items and prices include the cost of removing the associated stump).

Trees and stumps designated for removal shall be removed to at least three (3) feet below finished grade. Ground trees and stumps intended for use as wood chip mulch shall conform to the requirements of these Special Technical Provisions. Trees and stumps not suited as wood chip mulch or for use in project improvements shall be removed and appropriately disposed of outside the project limits. The Engineer and Revegetation Specialist will determine which trees and stumps are suited for use as wood chip mulch and for use in project improvements. The Contractor shall schedule an inspection of stumps and trees with the Engineer, at least 10 days prior to the Contractor scheduling wood chipping operations, for a determination of what can be used as mulch.

Compensation for the removal of trees and stumps less than six (6) inch diameter and stumps greater than six (6) inch diameter, as necessary for construction of the various items of work as staked by the Engineer, shall be included in the clearing and grubbing bid item and no additional compensation shall be made therefore.

170.05 Work Outside of Stated Limits
The Contractor shall not, and no payment will be made to the Contractor, for clearing and grubbing outside the stated limits as shown on the Project Plans, or as described in these Special Technical Provisions, unless such work is authorized by the Engineer.

170.06 Existing Signs

Existing signs, snow markers and the like within the construction limits, which interfere with the work, shall be removed, salvaged and reinstalled as directed by the Engineer. If existing traffic control regulatory signs are removed (i.e. stop, yield signs, etc.) the Contractor shall install temporary signs of the same designation as close as possible to the original position immediately. Existing mailboxes within the construction limits, which interfere with the work, shall be removed, salvaged and reinstalled as close to the original position as possible after construction in the area is completed. Mail service shall not be interrupted at any time due to construction activities. Any materials that are damaged or lost shall be replaced in like kind of equal or better quality.

170.07 Protection of Plants

Trees and plants that are not to be removed shall be fully protected from injury by the Contractor at his/her expense. Trees shall be removed in such a manner as not to injure standing trees, plants, and improvements which are to be preserved. The Contractor shall remove tree branches under the direction of the Engineer and Revegetation Specialist, in such a manner that the tree will present a balanced appearance.

Scars resulting from the removal of branches shall be treated with a heavy coat of a tree sealant accepted by the Engineer and Revegetation Specialist. Construction limit fence shall be installed around all trees to be protected near excavation limits at the dripline of the tree as shown on the Project Plans. If large roots of protected trees are encountered during excavation activities, work shall cease in this area and the Engineer shall be notified. Work shall commence as directed by the Engineer, Revegetation Specialist, and TRPA.

170.08 Removal and Disposal of Materials

All materials scheduled or specified for removal and disposal shall be removed and hauled from the site at the Contractor's expense, unless otherwise specified, and disposed of outside of the Lake Tahoe Basin in accordance with TRPA ordinances and NAC 444.8565. The construction area shall be left with a neat and finished appearance.

170.09 Measurement and Payment

"Clearing and Grubbing" (including trees under 14-inch DBH) 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 lump sum price for "Clearing and Grubbing" (including trees under 14-inch DBH) shall include furnishing all labor, materials, tools, equipment, and incidentals and for doing all the work involved in the clearing and grubbing of the project site as shown on the plans and as specified in the Project Plans, Contract Documents, Project Permits, SWPPP, Standard Specifications, these Special Technical Provisions, and as directed by the Engineer including the removal and disposal of all the resulting materials from the Tahoe Basin.

"Tree Removal" shall be measured on a per each basis, completed and accepted by the Engineer as conforming to all the requirements in the complete work. The unit price for "Tree Removal" shall include furnishing all labor, materials, tools, equipment, and incidentals and for doing all the work involved in removing each tree and associated stump and chipping and as specified in the Project Plans,

Contract Documents, Project Permits, Standard Specifications, these Special Technical Provisions, and as directed by the Engineer, including the removal and disposal of all the materials not to be used in the project from the Tahoe Basin. Trees not shown or labeled for removal on the project plans shall be considered part of the "Clearing and Grubbing" bid item.

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 175 – REMOVAL OF EXISTING IMPROVEMENTS

175.01 General. Work under this section shall conform to the project permits, Plans, Contract Documents, Standard Specifications, these Special Technical Provisions, SWPPP and TRPA Best Management Practices. The Contractor's attention is directed to Section 301, "Removal of Existing Improvements", of the Standard Specifications.

Work under this section shall consist of the removal and disposal of existing improvements and facilities, which interfere with construction or as required to properly construct the project, as shown on the Project Plans, described in the Standard Specifications, these Special Provisions, and as directed by the Engineer. Any materials removed, including excavated earthen material, in conformance with this section shall become the property of the Contractor and shall be removed and disposed of by the Contractor in accordance with all federal, state, and local ordinances and permit conditions. All materials scheduled or specified for removal shall be removed from the project area and disposed of outside of the Lake Tahoe basin in accordance with TRPA ordinances and NAC 444.8565.

Where any pipes, fittings, valves, drainage inlets, frames and covers, or other devices are removed from any manhole, structure, junction box, joint, valve, fitting, valve, etc. and the remaining facility is to be protected in place; all repairs, seals, plugs, caps, and other modifications as necessary to make the structure or device sound and complete shall be constructed by the Contractor as shown on the Project Plans, and in conformance with the Standard Specifications and these Special Provisions, or as directed by the Engineer. All repairs, plugs, caps and other modifications as noted above shall be considered as included in the prices paid for each associated bid item of work, not otherwise provided for, and no additional compensation shall be allowed for.

175.02 Remove Asphalt/Concrete Pavements and Structures

Work under this section shall include removal of asphalt concrete pavement and other concrete surface improvements as required to properly construct the project, as shown on the Project Plans, described in the Standard Specifications, these Special Technical Provisions, and/or as directed by the Engineer. This includes removal and disposal of any and all asphalt/concrete structural section associated with the removal of any existing facility or installation of all proposed improvements shown on the Project Plans including curb and gutter, sidewalk, parking lot asphalt, associated landscaping, and any other miscellaneous structures. Where no joint exists in the pavement on the line at which pavement is to be removed, a straight, neat cut with a power driven saw shall be made along the line to a minimum depth of 6-inches before removing pavement. If saw cut pavement is damaged prior to paving, it shall be the Contractor's responsibility to re-cut any damaged, broken, or uneven portion prior to paving at his own expense. Under no circumstance shall the Contractor be allowed to "jack-hammer" the existing pavement instead of cutting with a power driven saw.

Any materials removed in conformance with this provision shall become the property of the Contractor and shall be removed and disposed of by the Contractor in conformance with the Standard Specifications and these Special Technical Provisions. AC pavement removed from the work area may NOT be ground up and re-used as base material for roadway reconstruction.

Sawcutting of all roadways required for the proper construction of the Project in accordance with the Project Plans, these Special Technical Provisions, the Project SWPPP, the Project permits and as directed by the engineer shall be included in costs of various other items of work and no additional compensation shall be allowed for.

175.03 Remove Storm Drainage Structures

Work under this section shall include the complete removal and disposal of storm drain pipe, manholes, stand pipes, and associated appurtenances and all incidental work including the backfill, compaction, and restoration of the disturbed area as shown on the Project Plans, described in the Standard Specifications, these Special Technical Provisions, and/or as directed by the Engineer. Any areas where storm drainage structures are removed shall be backfilled, graded, and restored to match the surrounding area, unless otherwise noted on the plans, or directed by the Engineer. The resulting waste materials and debris shall become the property of the Contractor and disposed of by the Contractor in conformance with the Standard Specifications, Project Permits, the SWPPP, and these Special Technical Provisions. Under no circumstances shall any segment of storm drainage pipe designated for removal be abandoned in place, unless otherwise noted on the plans and/or acceptance of the Engineer.

175.04 Remove Existing Fences

Work under this section shall include removal of existing fences as required to properly construct the project, as shown on the Project Plans, described in the Standard Specifications, these Special Technical Provisions, and/or as directed by the Engineer. This includes removal and disposal of any and all fencing including buck and pole and associated fasteners. Any materials removed in conformance with this provision shall become the property of the Contractor and shall be removed and disposed of by the Contractor in conformance with the Standard Specifications and these Special Technical Provisions.

175.05 Backfill and Compaction

All disturbed areas where pipe, structures, surface pavements, and other miscellaneous improvements are removed, shall be restored in like kind to match the pre-existing lines and grades and surrounding adjacent area, unless otherwise noted on the Plans, or as directed by the Engineer. The Contractor is required to backfill and compact excavated trenches to sub-grade using accepted native material and/or local borrow or imported borrow as determined by the Engineer if import is required; replace the sidewalk, landscaping, and other surface improvements as applicable; and/or replace the topsoil and pre-existing landscape features or revegetate the disturbed area. Any native, local borrow, or imported borrow soils used for backfill shall be accepted by the Engineer prior to placement.

Trenches, holes, depressions and pits caused by the removal of existing improvements shall be backfilled with materials equal to or better in quality and to the same thicknesses as the surrounding materials, and in conformance with Section 304, "Unclassified Fill", of the Standard Specifications. **No broken concrete, asphalt concrete, or other debris shall be left in excavated trenches or be included as part of the backfill.** All backfill materials 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. In surfaced areas (i.e. pavement, concrete) that are otherwise to remain undisturbed, the structural section shall be replaced with materials equal to or better in quality and to the same thicknesses as the surrounding materials.

Fill to be placed beneath concrete slabs and all other components subject to structural loading shall conform to the requirements of Section 200.01.09 "Structural Fill" of the Standard Specifications. If a new structure is specified to replace the old structure, unsuitable materials shall be removed as directed by the Engineer. Unless otherwise specified, remaining material and fill material shall be compacted to ninety percent (90%) in ditch and slope areas, and brought up to the bottom grade of aggregate structural section of the new structure, unless otherwise specified on the Project Plans (compaction requirements on the Project Plans shall govern).

Restoration of an area and/or replacement of all other surface improvements in conformance with this section shall be considered as included in the prices paid for each associated bid item removed, except components of the work for which payment is made under separate contract items, and no additional compensation shall be allowed for.

175.06 Measurement and Payment

Full compensation for saw cutting, removal, and disposal of existing asphalt/concrete and associated backfills in conformance with this section and other sections of the Standard Specifications, and these Special Technical Provisions is included in the prices paid for various Contract items of work involved, and no additional compensation will be allowed.

"Remove Existing Improvements" 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 lump sum price for "Remove Existing Improvements" shall include furnishing all labor, materials, tools, equipment, and incidentals and for doing all the work involved in the removal and disposal of the existing asphalt, fencing, storm drain pipe, manholes, including associated surface improvements (asphalt concrete, aggregate base), as shown on the project Plans and as specified in the Standard Specifications, these Special Technical Provisions, and as directed by the Engineer, and no additional compensation shall be allowed for. This work also includes the removal and disposal of all the resulting materials from the Tahoe Basin; and any backfill and compaction of the remnant trench, including aggregate base, for a complete restoration of the area as shown on the Plans, described elsewhere in these Special Technical Provisions, and/or as directed by the Engineer.

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 know sanitary sewer force main or potable water main prior to contacting TDSD (sewer) and Douglas County (water) at least ten(10) working days in advance. Additionally, the Contractor shall not limit access to the existing TDSD pump station at the Foothill Outfall without notifying TDSD 10 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. The existing power poles may need to be braced prior to trenching for the proposed storm drain pipe. 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

"Protect Existing Utilities" 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 lump sum price for "Protect

Existing Utilities" shall include furnishing all labor, materials, tools, equipment, and incidentals and for doing all the work involved in the protection of the existing utilities shown and not shown on the project Plans and as specified in the Standard Specifications, these Special Technical Provisions, and as directed by the Engineer, and no additional compensation shall 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 staging areas. 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 measure 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 195 – TRENCH EXCAVATION AND BACKFILL

195.01 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, 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, SWPPP, 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. Attention is directed to Section 165, "Dewatering and/or Diversion" of these Special Technical Provisions.

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.

195.02 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, the SWPPP, 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 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, channel bed and bank material, in stream structures, boulder sills, rock slope protection, aggregate base courses, bituminous courses, bedding and backfill, mortar and grout, Portland cement, 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 used in the work at the outfalls, including imported and reused rock, 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.

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

Gravel, cobble, rock, and boulder identified for use in the proposed creek channel, in stream structures, and other areas subject to or where it is expected to be exposed to hydraulic conditions (water flow) shall be smooth and rounded in shape, as is typical of river run cobblestone, fieldstone, or that from a former stream deposited source. Angular rock, quarried, split rock, crushed rock or shot rock shall not be used (except where specified or allowed as shown on the Plans). In addition the aforementioned stone materials shall be of a native nature to the Tahoe Basin (i.e. of similar color and texture to that generally found within the Tahoe Basin and in particular the project area Stateline, NV and vicinity). All creek channel toe boulders and other specified boulders used for the in stream structures that are located within and immediately adjacent to the proposed creek channel shall be smooth and rounded in shape as noted above and of a natural earth tone color/hue that blends with the surrounding environment (or generally described as "round and brown"). Attention is directed to the submittal requirements as noted in this section.

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

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 – BASIN EARTHWORK

205.01 General

Work under this item shall consist of furnishing all labor, tools, equipment, and materials necessary for basin excavation, berm construction, local borrow native soils, import, structural fill, salvage topsoil, imported topsoil, amended fill, rough grading, 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. Excavation and fill for the any storm drain pipes is not considered a part of "Basin Earthwork" and is covered in Section 220 "Storm Drain Structures." Attention is directed to Section 303, "Unclassified Excavation" and Section 304, "Unclassified Fill," of the Standard Specifications.

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. The surface - top four to six inches (4"-6") of on-site soils (topsoil) - shall be segregated from the underlying soils and salvaged, stockpiled, disposed of, or reused as designated elsewhere in these Special Technical Provisions as directed by the Engineer. These organic rich surface soils shall not be used in, or blended to incorporate with, the native fill, engineered fill, structural fill or other designated fill material. The Contractors attention is directed to Sections 170.02, "Clearing and Grubbing" and 260, "Revegetation," of these Special Technical Provisions.

Cobbles and boulders will likely be encountered during grading and should not be incorporated within the berm or other fill 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.

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 native, local borrow, or imported borrow soils used for backfill shall be accepted by the Engineer prior to placement**. 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.

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 local borrow native fill requiring density testing. Materials Testing shall be per Standard Specifications.

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. 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 Basin Berm

Backfill, grading, and compaction of the proposed berm shall produce a finished grade surface to the lines and grades as shown on the Project Plans, and all work shall be in conformance with the applicable sections of these Special Technical Provisions, and as directed by the Engineer. Placement of topsoil and associated finish grading, and revegetation treatments shall be as specified elsewhere in these Special Technical Provisions, or as directed by the Engineer.

Earthen materials used for native fill and import fill shall be in conformance with the requirements stated herein. Placement, layering, compaction, and locations of the fill materials to create a distinct soil profile to produce a finished grade surface shall be as shown on the Project Plans, described herein, and as directed by the Engineer.

Site Preparation

All debris, pavement, and concrete shall be removed from the berm site. A stripping depth of 0.2 to 0.3 feet is anticipated. Trees and associated roots greater than one-half inch in diameter shall be removed, where necessary, to a minimum depth of 12 inches below finished grade or in the footprint of the berm. Recycled materials shall not be used within the earthen berm fills. The Contractor shall exercise care during grading to locate and identify any existing buried improvements that require removal and replacement. Aggregate base or bedding sand encountered during the removal of improvements may be sufficiently blended with the native silty sands and stockpiled for re-use provided it meets the requirements for berm fill. The Contractor shall have fill materials, including those generated on site, sampled, tested, and approved by the Geotechnical Engineer prior to placement and compaction.

Grading and Filling

Once the debris and vegetation are removed from areas to receive berm fill, the existing subgrade shall be scarified to a depth of 12" minimum, moisture content within 3 percent of optimum, and compacted to at least 88 percent relative compaction (ASTM D1557). Any soft or wet zones shall be stabilized by methods such as excavation or dewatering prior to final grading. Berm fill materials shall not be placed on surfaces that are muddy, frozen, or contain frost or ice.

With the exception of asphalt, debris, and vegetation, the soils removed from beneath the parking lot are generally suitable as berm fill materials. All materials used for the berm fill shall be approved by the Geotechnical Engineer prior to placement. Contractor shall take due care to protect the resulting native material stockpiles from being compromised with coarse particles such as cobbles or asphalt. Oversized particles (greater than 4" diameter) shall be removed from berm fill material or import fill will be required. Berm fill shall meet the following requirements:

Berm Fill Requirements			
Sieve Size	Percent Passing		
	(by dry weight)		
4"	100		
3⁄4″	70-100		
No. 40	15-80		
No. 200	5-40		
Liquid Limit	40 max.		
Plasticity Index	10 max.		

Berm fill shall be placed in a maximum of 12 inch loose lifts and densified to at least 92 percent relative compaction except (ASTM D1557). Berm fill shall have a moisture content within 3 percent of optimum. Higher moisture contents may be acceptable if the soil lift is stable, required compaction is attained, and approval is given by Geotechnical Engineer. Field density testing shall be performed on each lift of fill.

A Geotechnical Engineer, employed by NTCD, will be on site to identify native fill suitable for berm construction and perform compaction testing. The Contractor shall inform NTCD at least 48 hours in advance if the Geotechnical Engineer is needed on site. The Contractor shall perform and submit material testing reports and other data as necessary to validate the source and makeup of import fill selected for placement in the work, and to provide the Engineer with established laboratory values for optimum moisture and maximum dry density, for any fill material requiring density testing. Any proposed import fill that deviates from the criteria stated herein, shall have written acceptance from the Engineer and geotechnical engineer prior to import or placement in the work.

The Contractor is hereby advised that some of the on-site soils may be saturated and will require drying prior to placement in order to achieve the specified degree of compaction.

205.06 Topsoil Placement

Placement of topsoil (salvage, import, or amended fill) to the required thickness, including any associated finish grading and compaction, shall produce a finished surface to the lines and grades as shown on the Project Plans, and all work shall be in conformance with the applicable sections of these Special Technical Provisions. The topsoil (salvage, import, or amended fill) shall be placed to blend with the adjacent project improvements and floodplain areas to create a generally smooth, natural appearance (including minor variations) as directed by the Engineer; and to create a stable area to receive all proposed revegetation treatments as specified elsewhere in these Special Technical Provisions.

Following completion of excavations, fills, grading, compaction, placement of aggregates, and construction of all proposed improvements as shown on the Project Plans as required prior to placement of any topsoil (salvage, import, or amended fill), the Contractor shall schedule for a site inspection by the Engineer (minimum of 4 working days notice required) in order to inspect the subject work area for conformance with the contract documents, plans, and specifications. **Placement of topsoil shall not commence until the Engineer have inspected and accepted the subject work area**. In addition the base soils will be inspected (using a soil probe or penetrometer) for any areas of excessive compaction. Upon discovery the Engineer will mark all areas/items required for corrective measures, and mark the limits of areas where soils shall be loosened/decompacted in order to commence placement of topsoil (salvage, import, or amended fill) and subsequent installation of the revegetation

treatments in accordance with the applicable provisions of Section 260, "Revegetation" of these Special Technical Provisions.

Salvaged topsoil shall only be generated from the project site (within the limits of grading) as specified in Sections 195 "Clearing and Grubbing" and 260 "Revegetation" of these Special Technical Provisions.

Earthen materials used for imported topsoil shall be imported to the project site and/or produced onsite, and all construction and materials shall be in conformance with the Plans and applicable portions of these Special Technical Provisions and Standard Specifications. Attention is directed to Section 260 "Revegetation" of these Special Technical Provisions for specific material requirements for the imported topsoil and amended fill.

205.07 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, topsoil salvage, storm drain excavation, and basin 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.

205.08 Measurement and Payment. Basin Earthwork shall be measured on a lump sum basin, 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 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 as a percent increase based on the original lump sum bid. Any associated contour grading and other general earthwork movement as required to complete the work shall be considered as included in the lump sum price.

The lump sum price paid for "Basin 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.

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 210 – DECOMMISSION EXISTING DRAINAGE CHANNEL

210.01 General

Work under this item shall consist of furnishing all labor, tools, equipment, and materials necessary for decommissioning the existing drainage ditch to the extents shown on the Plans including, but not limited to, protection of the existing vegetation, vegetation removal where indicated, backfill, earthwork, excavation, and compaction as necessary.

Backfill, grading, and compaction of the proposed berm shall produce a finished grade surface that matches the grades of the adjacent meadow, and all work shall be in conformance with the applicable sections of these Special Technical Provisions, and as directed by the Engineer.

Earthen materials used for native fill and import fill shall be in conformance with the requirements stated herein. Placement, layering, compaction, and locations of the fill materials to create a distinct soil profile to produce a finished grade surface shall be as shown on the Project Plans, described herein, and as directed by the Engineer.

210.02 Site Preparation

Work shall occur when the ditch is free of surface water. Existing vegetation shall be protected in place. Sod shall be removed from the top of the ditch berm and stockpiled in a suitable location (Section 265 of these Special Provisions). With approval from the Engineer, woody vegetation may be trimmed to allow access to place fill within the ditch. In the areas receiving ditch plugs, a 10 foot swath of vegetation shall be removed. Associated roots shall be removed to a minimum depth of 12 inches below finished grade in the footprint of the "ditch plug." Recycled materials shall not be used within the ditch fill.

210.03 Grading and Filling of Ditch with Preserved Vegetation

The berm adjacent to the ditch shall be removed and pushed into the ditch. Fill produced from construction of the basin shall be placed around the existing vegetation in 12" lifts and tamped with a bucket or other compaction method.

210.03 Grading and Filling of Ditch Plugs

Once the debris and vegetation are removed from areas to receive fill, the existing subgrade shall be scarified to a depth of 12" minimum, moisture content within 3 percent of optimum, and compacted to at least 88 percent relative compaction (ASTM D1557). Any soft or wet zones shall be stabilized by methods such as excavation or dewatering prior to final grading. Ditch plug fill materials shall not be placed on surfaces that are muddy, frozen, or contain frost or ice.

Ditch plug shall be placed in a maximum of 12 inch loose lifts and densified to at least 92 percent relative compaction except (ASTM D1557). Berm fill shall have a moisture content within 3 percent of optimum. Higher moisture contents may be acceptable if the soil lift is stable, required compaction is attained, and approval is given by Geotechnical Engineer. Field density testing shall be performed on each lift of fill.

210.04 Measurement and Payment. "Decommission Existing Drainage Channel" shall be measured on a lump sum 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 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 as a percent increase based on the original lump sum bid. Any associated contour grading and other general earthwork movement as required to complete the work shall be considered as included in the lump sum price.

The lump sum price paid for "Decommission Existing Drainage Channel" 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.

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 215 - CONCRETE CUTOFF WALL

215.01 General

Work covered under this specification consists of furnishing all of the labor, materials, tools, and equipment necessary for the construction and installation of a concrete cutoff wall in accordance with the Contract Documents, NDOT Standard Plans and 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.

215.02 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" 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.

215.03 Measurement and Payment

"Concrete Cutoff Wall" shall be measured on a per each basis, complete in place and accepted by the Engineer as conforming to all the requirements in the complete work. Mortar, grout, finishing, 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, 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 headwalls as shown on the plans, as specified in the Special Provisions, and as directed by the NTCD.

SECTION 220 - STORM DRAIN AND BASIN STRUCTURES

220.01 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 and basin structures including manholes, basin outlet structure, and all appurtenances in accordance with the Contract Documents, NDOT 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.

220.02 Manholes

Work under this item shall consist of installation of Douglas County Type 2 Eccentric 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.

220.03 Existing Vault Connection

Work under this item shall consist of connection of the proposed storm drain pipe to the existing vault as shown on the project plans. Pipe connections and pipe invert elevations shall be confirmed with Engineer prior to installation. Connections shall be water-tight and utilize the materials specified per plan and in section 235 of these Special Provisions and in the Standard Plans. Plastic pipe connections shall use A-lok 490 gasket or equivalent. A minimum difference of 0.1'shall be provided between the inlet and outlet pipe invert elevations in the vault. A minimum of six inches separation between pipe penetrations in the vault shall be provided.

220.04 Basin Outlet Structure

Work under this item shall consist of furnishing all labor, tools, equipment, and materials, and incidentals necessary for construction of the basin outlet as shown on the plans. Basin Outlet material shall be constructed in conformance with Sections 204 "Manholes and Catch Basins" and 311 "Concrete Structure and Masonry Construction" of the Standard Specifications. **The Contractor shall submit shop drawings and material data sheets showing dimensions, materials, reinforcement, penetrations, frame and grate, etc of the proposed basin outlet structure components.**

The complete finished basin outlet structure including grate, hardware, and drainage components shall be constructed in a water-tight fashion meeting ASTM C890 and C913 specifications, and conformance with these Special Provisions and the Standard Specifications. The basin outlet structures shall consist of a single unit (i.e. monolithic without joints or seams) precast concrete drain inlet structure modified as necessary to receive the grate assembly (including hinges, lock, and other hardware) and drainage components (including PVC pipe and fittings, elliptical pipe, etc). Each basin outlet structure shall be installed to meet the lines, grades, and elevations as shown on the Project Plans and applicable details. Backfill materials shall be in conformance with section 200 "Aggregates for Base Courses" of the Standard Specifications.

All completed steel components, hardware, and exposed surfaces shall be colored to minimize the structures' appearance. The galvanized steel grate and associated hardware for the basin outlet structure shall be stained with "Natina Steel" or approved equal to achieve a color of "Federal color RAL 6012" as described on the website http://www.ralcolor.com. to blend with surrounding features and/or as directed by the Engineer) in accordance with the Project Plans, Standard Plans, Standard Specifications, these Special Provisions, and as directed by the Engineer. The stain must consist of a clear soluble solution of soft buffered organic acids that accelerates the oxidization process without compromising the protective qualities of the galvanized surfacing. No pigment based colorants should be added to achieve the desired color. The stain must react with the galvanized surface over a period of 5-10 days to produce a dark brown color with a matte finish. The stain must be resistant to fading in the sun. Prior to application, the Contractor shall submit a color same to the Engineer for review and acceptance. The painting/coloring of any portion of the basin outlet structure shall be included in the cost of the basin outlet structure and no additional compensation will be allowed for.

220.05 Flared End Section

Work under this item shall consist of furnishing all labor, tools, equipment, and materials, and incidentals necessary for construction of the 36" equivalent elliptical reinforced concrete pipe flared end section and trash rack as shown on the plans. Flared end section material shall be constructed in conformance with Sections 202.10, 306 "Storm Drain, Culverts, and Sanitary Sewer Construction," and 311 "Concrete Structure and Masonry Construction" of the Standard Specifications. **The Contractor shall submit shop drawings and material data sheets showing dimensions, materials, reinforcement, penetrations, frame and grate, etc of the proposed flared end section.**

The complete finished flared end section shall be constructed in a water-tight fashion meeting ASTM C890 and C913 specifications, and conformance with these Special Provisions and the Standard Specifications. The flared end section shall consist of a single unit (i.e. monolithic without joints or seams) precast concrete structure modified as necessary to receive the trash rack assembly (including hinges, lock, and other hardware).

All completed steel components, hardware, and exposed surfaces shall be colored to minimize the structures' appearance. The galvanized steel grate and associated hardware for the basin outlet structure shall be stained with "Natina Steel" or approved equal to achieve a color of "Federal color RAL 6012" as described on the website http://www.ralcolor.com. to blend with surrounding features and/or as directed by the Engineer) in accordance with the Project Plans, Standard Plans, Standard Specifications, these Special Provisions, and as directed by the Engineer. The stain must consist of a clear soluble solution of soft buffered organic acids that accelerates the oxidization process without compromising the protective qualities of the galvanized surfacing. No pigment based colorants should be added to achieve the desired color. The stain must react with the galvanized surface over a period of 5-10 days to produce a dark brown color with a matte finish. The stain must be resistant to fading in the sun. Prior to application, the Contractor shall submit a color same to the Engineer for review and acceptance. The painting/coloring of any portion of the basin outlet structure shall be included in the cost of the basin outlet structure and no additional compensation will be allowed for.

220.06 Manual Pond Drain Valve

Work under this item shall consist of furnishing all labor, tools, equipment, and materials, and incidentals necessary for construction of a manual pond drain valve as shown on the plans. Valve material shall be constructed in conformance with Section 307.11.03 "Gate Valves." Valve box shall be constructed in conformance with section 307.11.06 "Valve Boxes" of the Standard Specifications.

220.07 Measurement and Payment

"Manhole" 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 "Manhole" 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.

"Basin Outlet Structure" 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 "Basin Outlet Structure" shall include full compensation for furnishing all labor, materials, tools, equipment, and incidentals, and for performing all the work involved in constructing the "Basin Outlet Structure," complete in place, including any excavation, bedding, structural backfill, concrete, 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.

"Existing Vault Connection" shall be measured and compensated for the lump sum price established, completed and accepted by the Engineer as conforming to all the requirements in the complete work. The contract lump sum price paid for "Existing Vault Connection" 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.

"Manual Pond Drain Valve" 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 "Manual Pond Drain Valve" 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.

SECTION 225 – CONCRETE CURB

225.01 General

Concrete curb is to be constructed on in accordance with the plans, these special provisions and in conformance with the Standard Specifications. Attention is directed to section 312 "Concrete Curbs, Gutters, Walks, Driveways, and Alley Returns" of the Standard Specifications.

225.02 Type 2 Median Curb

Where removed, median curb shall be replaced in kind to match the existing curb. Curb should be removed and replaced at existing joints if possible. Contractor shall make transitions from existing to new curb uniform.

225.03 Type 1 PCC Curb

Where removed, Type 1 PCC Curb shall be replaced in kind to match the existing curb. Curb should be removed and replaced at existing joints if possible. Contractor shall make transitions from existing to new curb uniform.

225.04 Measurement and Payment

"Median Curb" 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 "Median Curb" shall include full compensation for furnishing all labor, materials, tools, equipment, and incidentals, and for performing all the work involved installing vertical curb, 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 Standard Specifications, these Special Technical Provisions, and as directed by the Engineer; and no additional compensation will be allowed.

"Type 1 PCC Curb" 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 "Type 1 PCC Curb" shall include full compensation for furnishing all labor, materials, tools, equipment, and incidentals, and for performing all the work involved installing vertical curb, 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 Standard Specifications, these Special Technical Provisions, and as directed by the Engineer; and no additional compensation will be allowed.

SECTION 235 – PIPE

235.01 General

Work covered under this specification consists of furnishing all of the labor, materials, tools, and equipment necessary for the installation of storm drain pipe including the pipes in and out of the basin outlet, storm conveyance drain pipe, and all pipe connections in accordance with the Contract Documents, 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 Reinforced Concrete Pipe (RCP)

36" Equivalent Elliptical Pipe

Reinforced Concrete Elliptical Pipe used in the outlet structure shall have a 29" rise by a 45" span and a round equivalent of 36" pipe. Pipe material shall conform to Section 202.10 and be constructed in conformance with section 306 "Storm Drain, Culverts, and Sanitary Sewer Construction" of the Standard Specifications.

<u>42" RCP</u>

Reinforced Concrete Pipe used for stormwater conveyance shall have an interior diameter of 42 inches. Pipe shall be joined bell & spigot with water-tight joints or must have external sealing bands per ASTM C877. Pipe material shall conform to section 202.10 and be constructed in conformance with section 306 "Storm Drain, Culverts, and Sanitary Sewer Construction" of the Standard Specifications.

235.03 Plastic Pipe

Work under this item shall consist of furnishing all labor, tools, equipment, and materials, and incidentals necessary for installation of the plastic storm drain pipe as shown on the plans. This includes the bedding and backfill.

<u>36" HDPE Pipe</u>

36" High Density Polyethylene Pipe (HDPE) shall meet the specifications outlined in Section 708 of the 2014 NDOT Standard Specifications for Road and Bridge Construction.

6" PVC Pipe

6" PVC pipe specified for the manually operated pond drain shall meet the requirements of Section 203.20 of the Standard Specifications inclusive.

235.04 Water Stops

Work under this item shall consist of furnishing all labor, tools, equipment, and materials, and incidentals necessary for the installation of water stops along the pipe line as shown on the Project Plans.

235.05 Measurement and Payment

"36" Equivalent Elliptical Pipe" 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 "36" Equivalent Elliptical Pipe" shall include full compensation for furnishing all labor, materials, tools, equipment, and incidentals, and for performing all the work involved installing 36" equivalent elliptical pipe, complete in place, including any excavation, bedding, structural backfill, 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.

"42" RCP" 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 "42" RCP" shall include full compensation for furnishing all labor, materials, tools, equipment, and

incidentals, and for performing all the work involved installing 42" RCP, complete in place, including any excavation, bedding, structural backfill, 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.

"36" HDPE Pipe" 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 "36" HDPE Pipe" shall include full compensation for furnishing all labor, materials, tools, equipment, and incidentals, and for performing all the work involved installing 36" HDPE Pipe, complete in place, including any excavation, bedding, structural backfill, connection to drainage structures, 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.

"6" PVC Pipe" 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 "6" PVC Pipe" shall include full compensation for furnishing all labor, materials, tools, equipment, and incidentals, and for performing all the work involved installing 6" PVC Pipe, complete in place, including any excavation, bedding, structural backfill, connection to drainage structures, 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.

"Water stops" shall be measured on the unit price established per each installed complete in place and accepted by the Engineer as conforming to all the requirements in the complete work. The contract unit price paid for "Water Stops" shall include full compensation for furnishing all labor, materials, tools, equipment, and incidentals, and for performing all the work involved installing a water stop, complete in place, including any excavation, bedding, structural backfill, connection to drainage structures, 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.

SECTION 240 - CONCRETE BLOCK FOREBAY

240.01 Description

Work shall consist of furnishing all material, labor, services and related items to complete the installation of concrete block forebay. Work includes installing the materials in conformity with the lines, grades, design, and dimensions shown in the Project Plans.

240.02 Materials

Obtain one color, type and variety of interlocking and overlapping articulating concrete block revetment system from a single lot manufactured by a single source. Color shall be buff tan in nature and is to be approved by the Engineer prior to submitting an order. Materials shall be available and be consistent in quality, appearance and physical properties without delaying progress of work. Protect all materials from damage due to jobsite conditions and in accordance with manufacturer's recommendations. Damaged materials shall not be incorporated into the work. Tapered, Overlapping Articulating Concrete

Block Revetment System shall be manufactured with fiber reinforced concrete and not be capable of having one block protrude against direction of flow relative to another block.

Property	Unit	Value
Specific Weight	lbs./cu. ft.	130 – 150
Compressive strength	psi	4000
Maximum Absorption	lbs./cu. ft.	10
Nominal Dimensions	Inches (I x w x h)	21.5 x 21.5 x 6
Net Coverage per Block	sq. ft.	3.21
Total Block Weight	lbs.	176
Unit Block Weight	lbs./sq. ft.	54.8
Open Area (nominal)	Percent	21.5
Fiber Reinforcement Cast in Block	lbs./cu.yd	2.5
Allowable Unit Protrusion	Inches / block	0
Minimum Vertical Interlock	Inches / block	.5

The base aggregate for forebay access shall conform to Section 200 "Aggregates for Base." Filter fabric shall be a nonwoven geocomposite Tenax Tendrain 750 or equivalent.

240.03 Installation

Prior to commencing the work of this section, verify the accuracy of layout and grading. Verify that all sub-grades and base and/ or drainage course aggregate conditions are as specified. Notify the Engineer of any discrepancies and coordinate the correction of those discrepancies with other trades as necessary. Protect partially completed installation against damage from run-on or other construction traffic when work is in progress.

Stable and compacted subgrade soil shall be prepared to the lines, grades and cross sections shown on the contract drawings. Termination trenches and transitions between slopes, embankment crests, benches, berms and toes shall be compacted, shaped and uniformly graded to facilitate the development of intimate contact between the articulated block system and the underlying grade. Termination between the concrete block revetment system and a concrete slab, wall or similar structure, shall be secured in a manner which prevents soil migration.

The subgrade soil conditions shall meet or exceed the required material properties described elsewhere in the document prior to placement of the system. Soils not meeting the requirements shall be removed and replaced with acceptable material. Unsatisfactory soils, soils having excessive in-place moisture content and soils containing clods, roots, sod, brush, or other organic materials shall be removed, backfilled with approved material and compacted. It is recommended that the subgrade be uniformly compacted to a minimum of 90 percent of Standard Proctor density (ASTM D 698) or as directed by the engineer of record. Should the subgrade surface for any reason become rough corrugated uneven textured or traffic marked prior to concrete block revetment installation, such unsatisfactory portion shall be scarified, reworked, re-compacted or replaced as directed by the Engineer. Excavation of the subgrade above the water line shall not be more than 2 inches (50 mm) below the grade indicated on the contract drawings. Where such areas are below the allowable grades, they shall be brought to grade by placing and compacting approved material in layers not exceeding 6 inches (150 mm) thick. Where such areas are above the allowable grades, they shall be brought to grade by removing material or reworking existing material and compacting. The subgrade shall be raked, screeded, or rolled by hand or machine to achieve a smooth compacted surface that is free of loose material.

Care shall be exercised so as not to excavate below the grades shown on the contract drawings, unless directed by the Engineer to remove unsatisfactory materials. Any excessive excavation shall be filled with approved backfill material and compacted.

The areas to receive the concrete block revetment system shall be graded to establish a smooth surface and ensure that intimate contact is achieved between the subgrade surface and the geotextile, and between the geotextile or drainage layer and the bottom surface of the concrete block.

Immediately prior to placing the geotextile and concrete block revetment system, the prepared subgrade shall be inspected. The geotextile shall be placed directly on the prepared area, in intimate contact with the subgrade and free of folds or wrinkles. The geotextile shall be placed in such a manner that placement of the overlying materials will not excessively stretch or tear the geotextile. After geotextile placement, the work area shall not be disturbed so as to result in a loss of intimate contact between the concrete block, the geotextile, and the subgrade. The geotextile shall not be left exposed longer than the manufacturer's recommendation to minimize potential damage due to ultraviolet radiation.

The geotextile shall be placed so that upstream strips overlap downstream strips and so that upslope strips overlap down slope strips. Overlaps shall be in the direction of flow wherever possible. The longitudinal and transverse joints shall be overlapped at least 2 feet. The geotextile shall extend beyond the top, toe and side termination points of the revetment. If necessary to expedite construction and to maintain the recommended overlaps anchoring pins, "U" – staples or weights shall be used.

The concrete block revetment shall be placed on the geotextile / drainage layer in such a manner as to produce a surface that achieves intimate contact with the geotextile.

Placement of the concrete block revetment system whether done with a grappling device multiple units at a time or individual units placed by hand shall be performed to ensure that the individual blocks have intimate contact and are vertically interlocked. In areas of curvature or grade change, alignment of an individual block with adjacent blocks shall be oriented such that intimate contact between the block, gravel, geotextile, and subgrade is maintained and block to block interconnection is achieved. Some block cutting and/or reinforced poured concrete of irregular transition sections may be required.

Care shall be taken during block installation so as to avoid damage to the geotextile or subgrade during the installation process. Preferably, where the geotextile is laid on the ground prior to the concrete block installation, the concrete block placement shall begin at the downstream section and proceed upstream. On sloped sections where practical, placement shall begin at the toe of the slope and proceed up-slope. Vertical overlap shall be maintained and no protrusions allowed against the direction

of flow. Where required by the specifications, joining of structures and adjacent blocks can be accomplished after the blocks have been set in place.

The open area of the articulating concrete block system is to be backfilled with suitable soil for revegetation. Backfilling with soil within the cells of the system shall be completed as soon as practicable after the revetment has been installed. For topsoil, overfill by 1 inch to account for backfill material consolidation.

Concrete edges shall to be constructed on in accordance with the plans, these special provisions and in conformance with the Standard Specifications. Attention is directed to section 312 "Concrete Curbs, Gutters, Walks, Driveways, and Alley Returns" of the Standard Specifications.

240.04 Measurement and Payment

"Concrete Block Forebay" shall be measured on a per square foot basis including concrete block access path and concrete edges. Full compensation for furnishing all labor, material, equipment, and incidentals necessary to construct the concrete block forebay, including, but not limited to, aggregate base, geotextile, drainage layer, grading, placement, topsoil, and incidentals shall be included the unit price bid for "Concrete Block Forebay" and no additional compensation will be allowed.

SECTION 245 – GATE RELOCATION

245.01 General

Access Gate Relocation consists of removing the existing access gate as indicated on the plans, restoring the location to natural conditions, and reinstalling the access gate in the location indicated on the plans. Exact location for the access gate installation shall be marked in the field by the Engineer prior to installation. The Contractor shall provide a written request for the location a minimum of 5 days prior to installation.

245.02 Measurement and Payment

"Gate Relocation" shall be measured per each on the number of units, complete in place and accepted by the Engineer as conforming to all the requirements in the complete work. Full compensation for furnishing all labor, materials, tools, equipment, and incidentals and for doing all the work involved in removing and reinstalling the access gate, complete in place, including, site restoration, transport, excavation, installation, backfill, compaction, disposal of materials, and any other appurtenances, as shown on the Project Plans, as specified in the Standard Specifications and these Special Provisions, and as directed by the Engineer shall be at the contract unit price per each access gate constructed and accepted by the Engineer under the bid item for "Gate Relocation" and no additional compensation will be allowed.

SECTION 250 – ROCK SPILLWAY

250.01 General. Work under this item shall consist of furnishing all labor, tools, materials, and equipment necessary construct the rock spillway and outlet dissipator as indicated on the Project Plans, described in these Special Technical Provisions, and directed by the Engineer, in conformance with the Contract Documents, Standard Specifications, and these Special Technical Provisions. The limits of rock 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 rock used shall be in strict conformance with the Standard Specifications, and other applicable provisions found elsewhere in these Special Technical Provisions.

Attention is directed to section 200.07 "RIP RAP" of the Standard Specifications. Rock size shall be angular and conform to Class 550 rip rap as defined in the Standard Specifications unless otherwise called out on in the plans.

250.02 Execution.

All Rip Rap, including imported and reused rock, shall be thoroughly washed outside of the confines of the proposed basin in a location approved by the engineer so that each material runs clear when water is applied. Rip Rap shall be placed to the lines, grades and depths shown on the Project Plans, or as directed by the Engineer. Place rock so as to minimize the number of voids. Rock shall be placed in lifts with a thickness not exceeding the D100 of the specified stone. Each lift shall be backfilled to half its depth with "Backfill Material", prior to placement of the subsequent lift. Backfill shall be placed in a manner that does not interfere with direct rock to rock contact of successive lifts. Backfill shall be placed by the Engineer.

Final placement of all rock will not be allowed to be "dumped", the rock shall be placed as directed by the Engineer for a natural appearance, which will require hand placement of rock. The Contractor shall take all necessary measures to protect any underlayment, fabric, or blanket from damage (if such material is damaged the product shall be repaired per the manufactures recommendations, and as directed by the Engineer). All rock is to be placed to minimize the potential for movement when flow is induced into the feature and this will be accomplished by interlocking the angular nature of the rock with itself. Local surface irregularities of the rock rip-rap shall not vary from the planned slopes by more than four inches (4-in) measured at right angles to the slope.

250.03 Measurement and Payment.

"Rock Spillway" will be paid for at the contract price per square foot, which price will be payment in full for furnishing all labor, materials, tools, equipment, and incidentals necessary to complete the riprap placement, including rock removal, relocation, staging, backfill, excavation, subgrade preparation, processing work, and rock placement as shown on the plans and as specified in these Special Technical Provisions, and as directed by the Engineer.

SECTION 255 – WILLOW WATTLES

255.01 General. Work under this item shall consist of furnishing all labor, tools, materials, and equipment necessary to install the willow wattles as indicated on the Project Plans, described in these Special Technical Provisions, and directed by the Engineer, in conformance with the Contract Documents, Standard Specifications, and these Special Technical Provisions. The limits of willow wattle placement as indicated on the Project Plans are approximate, and the exact limits of placement shall be determined in the field by the Engineer.

250.02 Execution.

Locations for willow cuttings shall be specified by Engineer and preferable come from willows that are to be relocated per Section 260. All willow cuttings shall consist of living woody plant cuttings capable of rooting in moist soils and usually assembled into bundles called wattles or fascines; generally ¼ - 1 inch diameter and 3-4 feet in length. Stakes shall be living woody plant cuttings capable of quickly rooting in moist soils; generally ½ - 2 inches in diameter and 1-3 feet long and large enough to be tamped-in as stakes. Wattles shall be bundles of cuttings bound together into sausage-like structures capable of

rooting in moist soils; generally wattles are at least 3-4 feet long. Wattles shall be placed in trenches per detail and secured with live stakes.

250.03 Measurement and Payment.

"Willow Wattles" will be paid for at the contract price per linear foot, which price will be payment in full for furnishing all labor, materials, tools, equipment, and incidentals necessary to complete the willow wattle placement, including excavation, subgrade preparation, collection and cutting of willow, and placement and staking as shown on the plans and as specified in these Special Technical Provisions, and as directed by the Engineer.

SECTION 260 – REVEGETATION

260.01 General

Work shall be conducted and/or overseen by a licensed Landscape Contractor (C-10) in the State of Nevada and will be inspected by the Engineer, in conjunction with a RS. The Contractor shall perform all revegetation work as specified herein and in accordance with the provisions of these Special Technical Provisions, the Project Plans, and the Standard Specifications. The revegetation work shall consist of all site preparation associated with the revegetation treatments, and shall include sod and organic matter salvage, storage and placement; willow and Woods rose salvage, storage and replanting; seedbed preparation; seeding; mulching; design, installation and management of the irrigation system; one year of maintenance; and record keeping.

Areas to receive revegetation treatments shall include <u>all</u> areas disturbed during construction and all areas indicated on the plans and as directed by the Engineer and/or the RS.

The Contractor is further required to only use "low impact equipment" for this project. No equipment having a ground pressure that will disturb and/or compact the ground (generally ground pressures less than 25 psi) will be allowed off of paved areas or designated temporary truck haul routes under any circumstances. All equipment on the project site, (off paved areas or designated truck haul routes), shall meet this low-pressure requirement.

All revegetated areas shall be maintained for one year following completion of work to ensure proper establishment of vegetation. Supplemental treatments may be required if revegetation efforts are unsatisfactory following completion of work as determined by the Engineer. The cost of this bonding shall be included in the Revegetation bid item. Warranty 100 % survival of all salvaged and transplanted sod, willows, and roses.

The Contractor shall notify the Engineer and RS no less than ten (10) working days in advance of revegetation work and shall not begin work until prepared revegetation treatment areas have been accepted by the Engineer and RS. The Contractor shall request that treatment types and boundaries are located by the Engineer and/or RS prior to progressing with the work.

No substitutions or alterations to these Special Technical Provisions shall be accepted without the prior written approval of the Engineer and the RS. No further disturbance of any treatment area shall be allowed once revegetation has been initiated.

260.02 Soil Disturbance

Soil disturbance shall be minimized and limited to those areas that require treatment. All existing vegetation within the project limits not designated for removal shall be protected. Delineate project boundaries with fencing per the requirements in Construction Limit Fencing and in these Special Technical Provisions. Traffic outside of project area is prohibited. Any existing or previously installed vegetation damaged shall be replaced by the Contractor. Areas to receive revegetation treatments shall include all areas disturbed during construction, as indicated on the Project Plans and as directed by the Engineer and/or the RS.

260.03 Revegetation Treatment Types

Treatment Type 1 (TT1): Basin Bottom and Sides

Salvage sod and organic matter, store, and replant. Top dress bare areas, including temporary access road, with Seed Mix 1. rake seed to incorporate. Cover with salvaged mowings. Irrigate to establish sod and seeded areas.

Treatment Type 2 (TT3): Basin Screening

Salvage, store, and re-plant willows and Woods rose as show on the plans and as directed by the RS. Top dress bare areas with Seed Mix 1. Rake seed to incorporate. Irrigate to establish willows and Woods rose.

Treatment Type 3 (TT3): Pipeline ROW

Decompact soils to a maximum of 85%. Apply Seed Mix 2, incorporate. Apply wood chip mulch to achieve 85% cover.

260.04 Submittals

Within thirty (30) calendar days following the Notice to Proceed for the contract, the Contractor shall submit to the Engineer statements proving that order for seed has been received and accepted by the supplier(s). The statement(s) shall include product specifications and quantity to be delivered and the estimated date(s) of delivery. Additionally, the Contractor shall submit plans, labels or material samples for the following items:

- Revegetation schedule and order of work
- Seed mixes
- Wood chip mulch
- Irrigation system design and schedule
- Sod salvage equipment, harvest, and storage plan
- Willows and Woods rose salvage equipment and storage plan

Proposed substitutions must be submitted in writing for approval by the Engineer.

260.05 Materials

<u>Seed</u>

All seed shall conform to all laws and regulations pertaining to the sale and shipment of seed required by the Nevada Department of Agriculture and the Federal Seed Act. Test all seed within twelve (12) months prior to application date. Seed tags must reflect the most recent test date. Submit original seed tests by lot number to the RS a minimum of thirty (30) calendar days prior to application for approval. Following approval by the RS, seed may be mixed and delivered to the site.

All seed shall be delivered to the project site in sealed bags with proper labeling. Weed seed shall not exceed 0.15% of the pure live seed (PLS) specified and shall not include any seed of cheatgrass (*Bromus tectorum*) or sweet clovers (*Melilotus officinalis, M. alba*). Crop seed shall not exceed 0.25%. The State may reject any seed that includes other un-desirable weedy species.

The Contractor shall notify the State at least 72 hours in advance of any seeding.

The State will remove seed labels from the seed bags at the time of seeding to verify all species, lot numbers, and origins in the mix and application rate in accordance with these Special Provisions.

Seed tags shall show the following information

- 1) Scientific name
- 2) Common name
- 3) Lot number
- 4) Percent purity
- 5) Percent germination, including hard and dormant seed
- 6) Percent weed seed
- 7) Percent crop seed
- 8) Origin

Seed Mix 1 (Basin)			
Species (Scientific Name)	Species (Common Name)	PLS LBS per Acre	
Deschampsia cespitosa	Tufted hairgrass	0.50	
Carex praegracilis	Slender sedge	0.50	
Elymus glaucus	Blue Wildrye 'Stanislaus'	3.00	
Hordeum brachyantherum ¹	Meadow barley	2.00	
Juncus balticus	Baltic rush	0.10	
Leymus triticoides	Creeping wildrye	3.00	
Lupinus polyphyllus	Tahoe lupine	1.00	
Penstemon rydbergii	Rydberg's penstemon	0.25	

¹ Sources above 6,000 ft. in elevation

Potentilla gracilis	Slender cinquefoil	0.50		
Total		11.85		
Seed Mix 2 (Pipeline ROW)				
Species (Scientific Name)	Species (Common Name)	PLS LBS per Acre		
Bromus carinatus	California Sierra Brome	4.00		
Elymus elymoides	Squirreltail	2.00		
Elymus trachycaulus	Slender wheatgrass 'Revenue', or 'Pryor'	4.00		
Poa secunda	Sandberg bluegrass 'Sherman'	1.00		
Total		11.00		

Salvaged Wetland Sod and Organic Matter

Prior to sod salvage, mow all herbaceous vegetation for re-use as mulch on site. Harvest from the footprint of the basin as shown on the plans and as staked in the field. Do not stockpile more than 30 calendar days.

Use a low weight bearing equipment ASV-POSI TRACK SKID STEER with a front-end bucket to salvage and transport sod and minimize damage to native vegetation remaining in place along temporary maintenance access road.

Salvaged sod shall consist of cohesive, contiguous material of sedges (*Carex spp*.) and Baltic rush (*Juncus balticus*), and other wetland and mesic meadow species, as shown on the plans and as staked in the field by the RS. Remove in as large a unit as practicable, resulting in clean, vertical edges. Sod shall be scalped from the original ground surface to a depth of no less than eight (8) inches, as measured from the root crown. Do not stack. If stored, sod shall be placed with roots down and edges snugly adjoining adjacent sections in a shaded facility for a maximum time of one month; minimize storage and handling. Maintain as a viable growth media and do not let material dry out during handling and storage. Re-plant concurrent with basin construction to the greatest extent possible and as directed by the RS.

Material that cannot be moved in a contiguous manner shall be salvaged, stockpiled, and re-applied as organic matter on the berm as directed by the RS.

Salvaged Willows and Roses

Salvage small, medium, and large native willows clumps and Woods rose as shown on the plans, and as staked in the field, and as follows:

Salvage material as needed to match the quantities on the plans. Remove and re-plant willows and Woods rose concurrent with construction as much as practicable.

Prior to removal, prune willows and Woods roses so that branches include two to three nodes, but do not exceed six (6) inches in length. Cuts shall be clean, leave no frayed bark, and be made $\frac{1}{2}$ inch above the node.

Carefully remove plants by excavating around the root zone with a backhoe bucket, or other approved equipment. As much of the root ball as feasible shall be removed intact. Prune damaged roots. Burlap may be used to wrap and protect the root zone during transport. Store in pre-excavated, pre-watered trenches and maintain well-watered and healthy until move to the permanent planting sites.

Wood Chip Mulch

Mulch shall be wood chips or tub grindings.

Wood chip particle size shall be between ½ inch and two (2) inches in length and not less than ½ inch in width and 0.125 inches in thickness, with at least 95% conforming to specified sizes. Wood chips shall be free of rock fines, soil, and other extraneous material. The wood chips shall be stored unprotected outside for at least 6 months, so as to have been subjected to weather and precipitation. A sample of the aged wood chips shall be submitted to the RS thirty (30) calendar days prior to expected use for written approval.

Alternatively, tub-ground wood chips (tub grindings) may be used if aged wood chips are unavailable. Tub grindings are those wood materials that are produced by a hammer mill-type tub grinder and are of uneven consistency. Tub grindings shall be at least six months old prior to use in the project area. Tub grindings aged at least one season are preferred. Tub grindings shall be derived from clean, disease-free trees or tree stumps.

Neither wood chips nor tub grindings shall contain more than five percent pine needles or other nonwood material.

Temporary Irrigation System

An irrigation connection plan (Point of Connection) must be submitted to and approved by KGID or Douglas County prior to beginning irrigation work. Alternate irrigation methods proposed by the Contractor shall be submitted to the Engineer for review and acceptance prior to commencement of irrigation activities.

A suitable timer/controller device shall be part of the temporary irrigation system in order to program an irrigation schedule and apply water to the revegetation treatments areas as specified herein.

The temporary irrigation system shall consist of above-ground piping that is flexible, highly burst resistant and suitable for use in a pressure piping system (Certa-Lok Yelomine [™] or accepted equal), and the piping shall be capable of connecting to full circle heads (low precipitation rate, < 2.5 gallons per minute [gpm]) each with a radius of 20 feet stream rotor or equivalent spray heads capable of delivering water to the areas where the applicable revegetation treatments are applied as shown on the Plans. Previously used piping and spray heads may be used in the project work as long as the materials are in good working condition and meet the standards noted herein. Above-ground irrigation shall be constructed in a manner that the reach of sprinklers shall overlap thirty (30) percent in order to cover the entire surface of the revegetated area. The Contractor shall be responsible to provide for any underground crossings and pipe sleeves as may be necessary to avoid surface conflicts with roads, trails,

and other public use areas. Restoration of any paved/concrete surface shall be considered included with this item of work, and no additional compensation will be allowed. No irrigation application or overspray to concrete or asphalt surfaces will be allowed.

The Contractor is further responsible for the connection to an existing system, disconnection of the existing system, usage metering, and the necessary repairs to the existing system to assure a properly functioning system during and after the Contractor's irrigation period. The Contractor is responsible for all costs associated with connecting to the system (including paperwork and permitting), water usage, disconnection from the system, and system repairs.

260.06 Installation of Treatments

The Contractor shall notify the Engineer and RS no less than ten (10) working days in advance of revegetation work and shall not begin the work until prepared treatment areas have been approved. The Engineer or RS shall verify labeling of seed upon delivery to the site and prior to application.

Seed Bed Preparation

All soils in the project area, and those in areas outside the project area that were disturbed by the Contractor, shall be loosened as needed to a depth of 6 inches unless otherwise specified on the plans or directed by the Engineer and/or RS. Soils shall be loosened with hand tools, an agricultural disc, rippers, or other equipment approved by the Engineer and RS. Final surfaces shall be left rough. No wheeled or other mechanical equipment shall be permitted to travel on the prepared seedbed.

Seeding

Seed with Seed Mix 1 or Mix 2 where shown on the plans and as field verified.

Seed Mix 1 shall be uniformly broadcast over sod and organic matter with hand-held seeders and raked to incorporate to a depth of ¼ inch to ½ inch.

Uniformly broadcast Seed Mix 2 over prepared seed beds at specified rates. Incorporate seed by raking or harrowing to a depth of ¼ inch to ½ inch. Seed shall not be left uncovered more than 24 hours. Seeding shall not occur under conditions that would allow the seed to become windborne (winds greater than 5 mph).

<u>Mulching</u>

Wood chip mulch shall be evenly applied to a depth of approximately one (1) inch, to achieve 85% cover over the pipeline ROW.

Re-planting Salvaged Sod and Organic Matter

The RS shall approve the planting locations. The contractor shall schedule the planting ten (10) working days in advance of the proposed planting time.

Over-excavate areas for installation as needed so that all material, including crowns of sod, are at finish grade, approximately eight inches below the final plan grade as staked in the field. Plant into moist soil

such that edges snugly adjoining adjacent sections. Chink with native topsoil so that the edges of the sod are well covered. Final elevation of sod crowns shall match the plan elevation.

Install sod in a staggered pattern perpendicular to the flow line, so that seams alternate, as directed by the RS.

Thoroughly water sod. Sod shall be maintained in a moist, healthy condition as directed by the RS until established according to the one-year warranty period.

Spread organic matter on pre-wetted surfaces to a depth of approximately six (6) inches and rake smooth to match sod and finish grade. Roll or compact with hand tools.

Irrigate all material immediately following placement.

Planting Salvaged Willows and Woods Rose

Plant where shown on the plans on the north side of the basin and as field verified by the RS.

Planting holes may not be prepared more than eight (8) hours prior to plant removal from storage site. Holes shall be excavated twelve (12) inches below the root zone and twelve (12) inches wider on both sides of the root mass. Loosen soils in the bottom and along the sides of the hole and place the plant in the hole. Backfill with the excavated moist soil so that the root ball is two to four (2 - 4) inches below existing grade. Tamp soil and thoroughly water immediately following planting.

Temporary Irrigation

Temporary irrigation shall be performed such that water is applied evenly throughout Treatment Type 1, shall penetrate to at least six (6) inches below the ground surface within twelve (12) hours of irrigation, and allows the surface soil to dry out while maintaining adequate moisture levels at depth. Temporary irrigation must be provided to for salvaged sod, willows, and Woods rose during storage unless otherwise directed by the RS. Exact irrigation scheduling for all areas shall depend on air and soil temperatures and will require adjusting during the course of the project. Irrigation schedules shall be as submitted to the Engineer and RS for acceptance to ensure proper timing, frequency and duration. Above-ground irrigation shall take place early in the morning or late in the evening whenever possible in order to minimize water loss due to high air temperatures and wind. A suitable timer/controller device shall be part of the temporary irrigation system in order to program an irrigation schedule an apply water to the revegetation treatments areas as specified herein.

All costs associated with connecting to the system (including paperwork and permitting), water usage, disconnection from the system, and system repairs shall be included in the unit price for irrigation. An irrigation connection plan must be submitted to and approved by KGID prior to beginning irrigation work.

260.07 Maintenance and Revegetation Maintenance Bond

A Maintenance Bond (12 month) shall be supplied by the Contractor prior to acceptance of the revegetation and irrigation work, by the Contractor (at the completion of the construction of the project and acceptance of the entire project by the Engineer). The Maintenance Bond shall be in the amount of

\$150,000 or the lump sum bid value of the revegetation bid item, whichever value is greater, for a length of one year from the date of final acceptance.

The one-year maintenance period shall start when the overall project has been accepted, in full, by the Engineer in writing (completion of construction of the project – final payment). The Owner and Engineer will not accept portions of the revegetation or irrigation work nor will it "stagger" the start of the one-year maintenance period. If at any time it is deemed that proper maintenance is not being performed, the countdown for the maintenance period shall be stopped and not resumed until the project is brought up to the specifications and proper maintenance is resumed, thus increasing the "calendar" duration time of the maintenance period. All costs with re-issuance of the bond as a result of this extension will be borne by the Contractor and no additional compensation will be allowed for.

Work under this item shall consist of maintaining all revegetation areas (and revegetation types) and irrigation systems for one year following completion of construction and acceptance of the Project (acceptance of the entire project, and closeout of the construction contract, NOT upon completion of any specific revegetation component) so that there is no evidence of erosion, such as rills or sheet erosion, or failure to the irrigation system. During the maintenance period, all revegetated areas shall be kept free from noxious and invasive weeds at all times. Revegetation maintenance shall further include the following:

- Maintain irrigation system as needed, and
- Insure establishment of revegetation

260.08 Performance Standard and Acceptance

The Contractor shall guarantee revegetation in accordance with these Special Technical Provisions. Revegetated areas will be inspected by the Engineer at completion of installation and accepted subject to compliance with specified materials and installation requirements.

Following one full growing seasons after treatment, the Contractor must achieve 85% mulch coverage over the pipeline ROW. Cover assessment shall be assessed by the point-intercept method. If specified coverage is not achieved, the Contractor may be required to re-plant re-seed, and/or re-mulch.

Warranty 100% survival of all transplanted material. The Engineer, upon the Contractor's request, will make final inspection and acceptance at the conclusion of the maintenance period. The Contractor will provide the Engineer notification at least ten (10) working days before the requested inspection date.

Security shall remain in effect until maintenance and survival guarantee criteria have been met as defined herein and accepted in writing by the Engineer. The acceptance for releasing the security will occur following the end of the growing season if the success criteria is met. This guarantee period constitutes the warranty period strictly associated with the revegetation work described herein.

Acceptance of other work and/or filing of a Notice of Completion shall not constitute acceptance, waiver and/or modification of the revegetation, revegetation maintenance, and survival guarantee portion of the project.

260.09 Revegetation Warning Signs

This work shall consist of furnishing and installing revegetation warning signs in locations shown on the plans and as directed by the Engineer. Attach sign to post at top and bottom (min 2 inch clear) using

5/16 inch diameter hex head bolt with flat washers, fiber washer, nut and jam nut. Bolt heads shall not obscure any lettering. Bolts shall not extend more than two (2) inches from back of post. Fastening hardware must be commercial quality and steel components hot-dip galvanized after fabrication. The backs of all signs installed shall be painted with a color of midnight green of black green. Sign lettering shall be black on a white background. The Contractor shall submit a diagram/drawing of the sign layout and wording to the Engineer for review and acceptance prior to manufacturing the signs.

260.10 Measurement and payment

"Revegetation Treatment Type 1", "Revegetation Treatment Type 2", and "Revegetation Treatment Type 3" shall be measured on a square foot basis parallel to the surface from the outside dimensions of the facility, complete in palce and accepted by the Engineer as conforming to all the requirements in the complete work. Full compensation for furnishing all labor, materials, tools, equipment, and incidentals for doing all the work involved for the installation and maintenance of the revegetation treatment types, complete in place, including but not limited to submittals, material salvage and storage, mowing, salvaged sod, seed bed preparation, salvaged topsoil, seed mix, wood chips, mulch, stakes, and any other appurtenances, as shown on the Project Plans, specified in these Special Provisions and the Standard Specifications, and as directed by the Engineer and Revegetation Specialist shall be at the contract unit price paid per each square foot of revegetation Treatment Type 1", "Revegetation Treatment Type 2", and "Revegetation Treatment Type 3."

"Revegetation Warning Sign" shall be measured per each on the number of structures, complete in place and accepted by the Engineer as conforming to all the requirements in the complete work. Full compensation for furnishing all labor, materials, tools, equipment and incidentals necessary to complete construction, installation, and maintenance of the revegetation warning signs including, but not limited to posts, sign, painting, hardware, excavation, backfill, and disposal of materials as shown on the Project Plans, specified in the Special Provisions and Standard Specifications, and as directed by the Engineer shall be considered as included in the contract unit price per each for "Revegetation Warning Sign" and no additional compensation will be allowed therefore.

"Irrigation" shall be measured on a lump sum basis, complete in place and accepted by the Engineer as conforming to all the requirements in the complete work. Full compensation for furnishing all labor, materials, tools, equipment and incidentals necessary to provide for temporary watering for revegetation, complete in place, including but not limited to submittals, water, service connections, meters, backflow devices, valves, controllers, piping, spray heads, hardware, crossings and pipe sleeves, installation, operation, maintenance, winterization, excavation, backfill, disposal of materials, and any other appurtenances, as shown on the Project Plans, as specified in these Special Provisions, the Standard Specifications, Project Permits, and as directed by the Engineer and RS shall be at the contract unit price paid to provide for temporary watering for revegetation as accepted by the Engineer under the bid item for "Irrigation" 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.

Appendix A: Stormwater Pollution Prevention Plan
Stormwater Pollution Prevention Plan (SWPPP)

Table of Contents

Contents	Page(s)
Site/Owner/Operator Information	1-2
Stormwater Team	3
Nature of Construction Activities	4
Emergency-Related Construction Activities	5
Schedule of Construction Activities	6-7
Site Description	8
Site Map(s)	9
Receiving Waters	10
Stormwater Control Measures	11-13
Potential Pollutant Sources	14-15
Spill Prevention & Response	16-17
Waste Management	18
Documentation Requirements	19-21
Inspection, Maintenance, and Corrective Action	22-23
Additional Information	24-27
Signature Requirements	28-29
Attachments	-

Site / Owner / Operator

Provide site, owner, and operator information.

Site	
ID Number	CSW-
Name	Kahle Water Quality Basin Implementation Project
Address Line 1	Along Kahle Drive, North of Highway 50
Address Line 2	
City	Stateline
State	NV
Zip Code	89449
Contact Name	
Phone Number	
Email Address	

Owner		
Name	Nevada Tahoe Conservation District (NTCD)	
Address Line 1	400 Dorla Court	
Address Line 2	PO Box 915	
City	Zephyr Cove	
State	NV	
Zip Code	89449-0915	
Contact Name	Meghan Kelly	
Phone Number	775-586-1610x30	
Email Address	mkelly@ntcd.org	

Operator 1		
Name		
Address Line 1		
Address Line 2		
City		
State		
Zip Code		
Contact Name		
Title		
Phone Number		
Email Address		
If there is more than		
one operator, identify		
the areas and phases		
over which Operator 1		
has control.		

Operator 2	
Name	
Address Line 1	
Address Line 2	
City	
State	
Zip Code	
Contact Name	
Title	
Phone Number	
Email Address	
Identify the areas and phases over which Operator 2 has control.	

Operator 3	
Name	
Address Line 1	
Address Line 2	
City	
State	
Zip Code	
Contact Name	
Title	
Phone Number	
Email Address	
Identify the areas and phases over which Operator 3 has control.	

Stormwater Team

List the name, title, and individual responsibilities for each member of the stormwater team. The stormwater team is responsible for overseeing the development of the SWPPP, any modifications to the SWPPP, and compliance with the requirements of the <u>Construction Stormwater General Permit</u> <u>NVR100000</u> (hereinafter referred to as the "Permit"). The team may include members who are not employed by the operator (such as third party consultants).

Stormwater Team Member 1		
Name		
Title		
Responsibilities		

Stormwater Team Member 2		
Name		
Title		
Responsibilities		

Stormwater Team Member 3		
Name		
Title		
Responsibilities		

Stormwater Team Member 4		
Name		
Title		
Responsibilities		

Stormwater Team Member 5		
Name		
Title		
Responsibilities		

Nature of Construction Activities

Describe the nature of the construction activities, including the size of the property and the total area expected to be disturbed by construction activities, construction support activity areas covered by the Permit, and the maximum area expected to be disturbed at any one time.

Nature of Construction Activities		
What is the size of the property?	247	acres
What is the total area expected to be disturbed by construction activities?	1.60	acres
What is the maximum area expected to be disturbed at any one time?	1.60	acres
Describe the construction support activity areas covered by the Permit. Cor activities covered by the Permit are described in Permit section $1.2.1.2$ and 40 of the Permit.	nstruction defined c	າ support ວn page
The Kahle Water Quality Basin Implementation Project will expand the existing 0.1 acre-ft Kahle Basin to a larger 0.8 acre-ft wet basin and upgrade the existing storm drain pipe along Kahle Drive. The Project will increase the treatment capacity and effectiveness by installing a treatment suited to the site conditions. The Project will replace the existing undersized reinforced concrete pipe along Kahle Drive with 42" and 36" HDPE pipe capable of conveying the 25-year peak flow (design storm) to meet current Douglas County design standards. The Project will also replace 3 manholes and remove 2 manholes and pave access to the site for Maintenance. The west end of Kahle drive will also be modified to raise the grade and improve drainage and stormwater treatment.		
The project is located along Kahle Drive and at the location of the existing Ka Meadow on United States Forest Service (USFS) land, between Kahle Drive in Stateline, Nevada within Douglas County. The pipe alignment is located in right-of way. The existing and proposed basins are located within USFS pare 1318-22-001-009.	ahle Basi and Burk ו Douglas cel	in in Rabe <e creek<br="">s County</e>
 The goal of the Kahle Water Quality Basin Implementation Project is to improve treatment of stormwater runoff in Kahle Basin by increasing basin treatment capacity and effectiveness and improving conveyance capacity along Kahle Drive. There are four objectives: 1. Complete the first phase of a larger multi-benefit project identified in the Burke Creek-Rabe Meadow Complex Master Plan. 2. Improve the long-term performance of the water quality basin by constructing adequate pre-treatment and access for maintenance equipment. 3. Maximize Lake Clarity Credits for NDOT and Douglas County while balancing construction cost and maintenance need considerations. 4. Design stormwater treatment that blends with the existing recreational uses of Rabe Meadow. 		
Construction activities and support activities include staging and storage, der improvements, clearing and grubbing, tree removal, trenching and installation pipe and manholes, grading to create a wet basin, construction of a concrete forebay and pipe inlet, installation of a basin outlet structure, spillway and dis	nolition o n of storm block se sipater, c	of existing n drain diment offhaul of

Emergency-Related Construction Activities

For earth-disturbing activities in response to a public emergency, document the cause of the public emergency, provide information substantiating its occurrence, and describe the construction necessary to reestablish affected public services.

Cause of the Public Emergency

Describe the cause of the public emergency (e.g., natural disaster, extreme flooding conditions, etc.).

N/A

Substantiating Information

Provide information substantiating the occurrence of the public emergency (such as a state disaster declaration or similar state or local declaration). Attach supporting documentation to the end of the SWPPP.

N/A

Necessary Construction

Describe the construction necessary to reestablish affected public services.

N/A

Sequence and Estimated Dates of Construction Activities

Provide a schedule of the estimated start dates and the duration of the activity for installation of stormwater control measures, construction activities, cessation of construction activities, and stabilization of areas of exposed soil.

Installation of Stormwater Control Measures		
What is the estimated start date for the installation of stormwater control measures?	<u> </u>	
What is the estimated duration of the installation of stormwater control measures?	As necessary for the duration of construction activities approximately 46 calendar days	
When will the stormwater control measures be made operational?		
Prior to the start of construction activities		
Explain the sequence and schedule for installation of stormwater control measures.		
Temporary construction BMPs will be installed prior to construction. No construction activities will occur without adequate storm water control measures in place. After clearing and grubbing and prior to any storms, additional BMPs may be installed, if needed.		

Construction Activities			
What is the estimated start date of construction activities?	7 <u>/</u> 23 <u>/</u> 2018		
What is the estimated duration of construction activities?46 calendar days			
Describe the intended sequence of construction activities. C clearing and grubbing, grading, site preparation (i.e., excave grading, and creation of soil and vegetation stockpiles require The order of work shall be as follows: 1. Verification of all underground utilities within the project area. 2. Instalation of Temporary Traffic Control Measures. 3. Construction of all temporary traffic Control Measures as shown on the project plans and as approved by the Engineer and Tahoe Reg 4. Construction of all temporary traffic control Measures as shown on the project plans and as described in the Special Technical Provisions. 5. Construction of the storm drain conveyance as shown on the project plans and as described in the Special Technical Provisions. 6. Restoration of measures as shown on the project plans and as described in the Special Technical Provisions. 8. Restoration of the taping and access. 9. Restoration of saling and access. 9. Removal of temporary BMPs with approval of Engineer. 9. Pre-Final site walk with the Engineer, Contractor, Douglas County, US Forest Service, NDOT, and TRPA. 8. Development of project punchilist (by Engineer).	Construction activities include ating, cutting, and filling), final ring stabilization.		

Page 6 of 29

Cessation of Construction Activities			
What is the estimated start date for the cessation of construction activities?	<u> </u>		
Will the cessation of construction activities be temporary or permanent?	O Temporary	Permanent	
If the cessation of construction activities will be temporary, provide the estimated duration of the cessation of construction activities.	N	/Α	
Will the cessation of construction activities occur on the entire site (100%) or in designated portions of the site?	0 100%	Designated Portions	
If the cessation of construction activities will occur in designated portions of the site, identify the designated portions of the site where the cessation of construction activities will occur.			
It is estimated that all grading will cease August 27, 2018. However, some construction activities such as revegetation and project site restoration may occur throughout the site and as indicated on the project plans.			

Stabilization of Areas of Exposed Soil		
What is the estimated start date for the <i>temporary</i> stabilization of areas of exposed soil?	<u> </u>	
What is the estimated duration of the <i>temporary</i> stabilization of areas of exposed soil?	14 days for various areas throughout the duration of construction	
What is the estimated start date for the <i>final</i> stabilization of areas of exposed soil?	<u> </u>	
What is the estimated duration of the <i>final</i> stabilization of areas of exposed soil?	Final stabilization shall occur after the new basin and storm drain pipe are constructed. Approximately 46 calendar days.	
Note: The dates for stabilization shall reflect the applicable deadlines in Permit section <u>3.6</u> Site Stabilization Requirements, Schedules, and Deadlines.		

Departures from Initial Projections

If departures from initial projections for any of the activities on pages 6 and 7 of this SWPPP are necessary, identify and describe such departures. Alternatively, documentation describing such departures may be attached to the end of the SWPPP.

Site Description

Provide the following construction site information.

Site Description			
Project Name	ect Name Kahle Water Quality Basin Implementation Project		
Project Address	roject Address Along Kahle Drive, North of Highway 50		
Project City	Stateline		
Project County	Douglas		
Project APN	1318-22-002-017; 1318-22-001-009		
Describe the site residential, shopp Current site includ	and its intended use after the Notice of Termination is file bing mall, highway, etc.) les creek, parking lot, and open space. Intended use is op	ed (e.g., lov ben space (v density meadow).
What is the total	area of the site?	247	acres
What is the estim construction activ fill areas, and sta	ated total area of the site expected to be disturbed by vities, including off-site supporting activities, borrow and ging and equipment storage areas?	1.60	acres
What percentage	of the site is impervious before and after construction?	Before:	%
what percentage		After:	%
For areas where it is infeasible to maintain a 50-foot buffer in accordance with Permit section <u>3.5.1</u> , provide the reasons why the 50-foot buffer cannot be maintained, identify and describe the alternative additional erosion and sediment controls that were selected for the site, document the natural buffer width retained on the property, and attach any relevant documentation to the end of the SWPPP. Because the construction project will excavate a high groundwater area for a proposed wet basin, a 50 foot buffer will not be feasible. A Dewatering and Diversion Plan has been established. See attachments.			
Identify and describe all on-site and off-site material storage areas, including overburden, stockpiles of dirt, borrow areas, etc. One staging and storage area has been identified at two separate Douglas County paved ares near an existing basin, and south of Highway 50 and Kahle Drive intersection. See Sheet IV of the Project Plans for exact location.			
 Attach a general location map to the end of the SWPPP. The map should contain enough detail to identify the following items: the location of the construction site and one-mile radius the waters of the State of Nevada, including tributaries, within a one-mile radius of the site 			

Site Map(s)

Attach a site map or series of maps to the end of the SWPPP.

Site	Site Map(s)		
Attach, to the end of the SWPPP, a legible site map or series of maps completed to scale. The map(s) should show the entire site and identify all of the items listed below. Check the box next to each item to confirm that the item is identified on the map(s).			
\checkmark	Topography of the site, existing types of cover (e.g., forest, pasture, pavement, structures), and drainage pattern(s) of flow onto, over, and from the site both before and after major grading activities Figures 1 & 2		
\checkmark	Areas of soil disturbance and areas that will not be disturbed Figure 2		
\checkmark	Boundaries of the property Figure 2		
\checkmark	Locations where construction activities will occur, noting any phasing Sheets C-1-C-6		
\checkmark	Locations where sediment or soil will be stockpiled Sheet iv		
\checkmark	Locations of any crossings of surface waters N/A		
\checkmark	Designated points on the site where vehicles will exit onto paved road Sheet iv		
\checkmark	Locations of construction support activity areas covered by the Permit Sheet iii		
\checkmark	Locations of temporary and permanent stormwater control measures identified in this SWPPP Sheet iv		
\checkmark	Locations where stabilization control measures are expected to occur civil sheets and R-1		
\checkmark	Areas protected by buffers (i.e., either the 50-foot buffer or other buffer areas retained on site when within 50 feet of perennial water) consistent with Permit section $3.5.1$, as well as the boundary line of all such buffers Figure 2		
\checkmark	Locations of on-site material, waste, borrow areas or equipment storage areas, and other supporting activities (per Permit section 1.2.1.2) Sheet iv		
\checkmark	Locations of all potential pollutant-generating activities identified on pages 14-15 of this SWPPP Sheets C-1-C-6		
\checkmark	Locations of all surface waters and any impaired waters within ¼ mile of the site Figure 1		
\checkmark	 Stormwater discharge locations, using arrows to indicate discharge directions, including: locations where stormwater and/or allowable non-stormwater discharges are discharged to a Water of the U.S. locations of any discharges to municipal separate storm sewer systems (MS4s) from the construction site 		
\checkmark	Areas where final stabilization has been accomplished and no further construction permit requirements apply Project Plans		
\checkmark	Location of trees and boundaries of environmentally sensitive areas and buffer zones to be preserved Sheet iv		

Receiving Waters

Identify the receiving waters.

Receiving Waters

Identify the name of the receiving water(s) and the areal extent and description of wetland or other special aquatic sites at or near the site which will be disturbed or which will receive discharges from disturbed areas of the construction site.

The receiving water for the project area is Burke Creek, a tributary of Lake Tahoe.

Impaired Water

Is any discharge point from the construction site within 1/4 mile of impaired water?

If any discharge point from the construction site is within ¼ mile of impaired water, identify any common construction-related pollutants, such as sediment, sediment-related parameters, and nutrients (including nitrogen and phosphorous), listed on the 303(d) list that may potentially be discharged from the construction site and describe additional or enhanced control measures to minimize discharges of these pollutants. The 303(d) list can be found on the Nevada Division of Environmental Protection (NDEP), Bureau of Water Quality Planning (BWQP) website (http://ndep.nv.gov/bwgp/303dlist2012.htm).

)Yes

(•) No

N/A

Stormwater Control Measures

Describe the stormwater control measures that will be used during construction activity.

Stormwater Control Measures

Identify and describe all control measures as required by Permit section <u>3.0</u> that will be implemented and maintained as part of the construction project to reduce and control pollutants in stormwater discharges from the construction site. Include control measures used at support activity areas.

Control Measure 1

Erosion and Sediment Control- will include drainage inlet protection, filter fence, sediment rolls, perimeter control through construction limit fencing, temporary gravel construction entrances, daily sweeping, dust control via watering truck, and properly stored spoil piles.

Control Measure 2

Site Stabilization- Temporary stabilization will be achieved by above described erosion and sediment control measures, activity sequencing, and utilizing site topography. Permanent stabilization will include a compacted berm, rock outlet structure, concrete block forebay, and revegetation using both seed and salvaged plants. The project site will be considered stabilized upon the completion of construction activities.

Control Measure 3

Pollution Prevention- The staging and storage area will be the only designated area for any hazardous waste, fueling, a concrete washout facility, and materials storage. All materials shall be stored in accordance with local, state, and federal regulations as well as the NDEP 2015 Construction Stormwater General Permit.

Control Measure 4

Dewatering and Diversion- see attached plan.

Control Measure 5

Control Measure 6

Stormwater Control Measures for Major Construction Activities

For each major construction activity at the site, describe the appropriate control measures and the general timing (or sequence) during the construction process that the measure will be implemented and identify the operator responsible for implementation of the control measures. Fill out one table for each major construction activity.

Construction Activity 1

Identify the type of construction activity.

Staging and Storage

Describe the control measure(s) used for this activity.

The staging and storage area will be the only designated area for any fueling, a concrete washout facility, and materials storage. All materials shall be stored in accordance with local, state, and federal regulations as well as the NDEP 2015 Construction Stormwater General Permit. Access to staging area will be via Kahle Drive only. BMPs such as perimeter fencing and DI protection will be installed in staging area as shown in figures to prevent run-off.

Describe the general timing/sequence during the construction process that the measure(s) will be implemented.

Throughout construction activities.

Which operator is responsible for implementation of this control measure?

Construction Activity 2

Identify the type of construction activity.

Grading

Describe the control measure(s) used for this activity.

The project itself is an erosion control measure. Grading will be along the northern section of Kahle Drive. Temporary BMPs such as filter fence will be used for construction erosion control to protect the existing meadow. Permanent measures include installation of rock and dissipation structure. The project requires net cut. Off haul will be conducted immediately to minimize the need for spoil pile storage. See Dewatering and Diversion Plan for measures associated with potential groundwater interception.

Describe the general timing/sequence during the construction process that the measure(s) will be implemented.

Completion of the permanent stabilization measures is estimated to be September 7, 2018.

Which operator is responsible for implementation of this control measure?

Construction Activity 3

Identify the type of construction activity.

Paving and concrete installation

Describe the control measure(s) used for this activity.

Pollution Prevention- The staging and storage area will be the only designated area for any waste, fueling, a concrete washout facility, and materials storage. All materials shall be stored in accordance with local, state, and federal regulations as well as the NDEP 2015 Construction Stormwater General Permit.

Describe the general timing/sequence during the construction process that the measure(s) will be implemented.

Measures will be implemented during pavement and concrete installation. Installation will not occur during storm events or inclement weather.

Which operator is responsible for implementation of this control measure?

Construction Activity 4

Identify the type of construction activity. Dewatering and Diversion

Describe the control measure(s) used for this activity.

See attached Dewatering and Diversion Plan

Describe the general timing/sequence during the construction process that the measure(s) will be implemented.

As necessary during grading activities

Which operator is responsible for implementation of this control measure?

Construction Activity 5

Identify the type of construction activity. Storm Drain Pipe Installation

Describe the control measure(s) used for this activity.

Trenching for storm drain installation will be limited in width and gravel bags and fiber rolls will be kept on site in the event of a storm or groundwater to control runoff.

Describe the general timing/sequence during the construction process that the measure(s) will be implemented.

during the pipe trenching

Which operator is responsible for implementation of this control measure?

Construction Activity 6

Identify the type of construction activity.

Describe the control measure(s) used for this activity.

Describe the general timing/sequence during the construction process that the measure(s) will be implemented.

Which operator is responsible for implementation of this control measure?

Potential Pollutant Sources

Identify and describe any pollutant sources expected to be associated with the project.

Potential Pollutant Sources

Identify all potential sources of pollution that may reasonably be expected to affect the quality of stormwater discharges from the construction site. Also identify the location of and describe any pollutant sources, including any non-stormwater discharges expected to be associated with the project, from areas other than construction (i.e., support activities including stormwater discharges from dedicated asphalt or concrete plants and any other non-construction pollutant sources such as fueling and maintenance operations, materials stored on-site, waste piles, equipment staging yards, etc.).

Potential Pollutant Source 1

What is the location of the potential pollutant source?

Stormwater discharges and tracked dirt from equipment from grading areas as show on the plans.

Describe the potential pollutant source.

Sediment could run off in stormwater discharges from temporarily unstable grading areas. Dust could be propagated and sediment could be tracked from temporarily unstable grading areas.

Potential Pollutant Source 2

What is the location of the potential pollutant source?

Staging and storage area in Douglas County parking lot

Describe the potential pollutant source.

Stormwater and non-stormwater discharges from materials storage, fuel, concrete and paving materials

Potential Pollutant Source 3

What is the location of the potential pollutant source?

Groundwater dewatering

Describe the potential pollutant source.

If groundwater is encountered during excavation, it will have to be disposed of properly to complete the work. See the Dewatering and Diversion Plan.

Potential Pollutant Source 4

What is the location of the potential pollutant source?

Goundwater dewatering

Describe the potential pollutant source.

See Dewatering and Diversion Plan

Potential Pollutant Source 5

What is the location of the potential pollutant source?

Describe the potential pollutant source.

Potential Pollutant Source 6

What is the location of the potential pollutant source?

Describe the potential pollutant source.

Potential Pollutant Source 7

What is the location of the potential pollutant source?

Describe the potential pollutant source.

Spill Prevention & Response

Describe procedures to prevent and respond to spills, leaks, and other releases. Other existing spill prevention plans, such as the Spill Prevention Control and Countermeasure (SPCC) plans developed for the construction activity under Part 311 of the Clean Water Act (CWA), or spill control programs otherwise required by NDEP permits for the construction activity, may be referenced provided that a copy of that other plan is kept onsite with the SWPPP. Attach a copy of any referenced plan(s) to the end of the SWPPP.

Container Labeling

Describe procedures for plainly labeling containers (e.g., "Used Oil", "Pesticides", etc.) that could be susceptible to spillage or leakage to encourage proper handling and facilitate rapid response as spills or leaks occur.

Containers will be clearly labeled before arriving on site. Temporary containers will be labeled before use. Material safety data sheets (MSDS) will be kept on site for all necessary materials.

Preventive Measures

Describe preventive measures such as barriers between material storage and traffic areas, secondary containment provisions, and procedures for material storage and handling.

Construction equipment shall be stored at the designated staging area at the end of each work day. The Contractor will divert concentrated stormwater runoff around equipment, vehicles, and materials staging areas. Tracking control devices will be maintained to and from all work areas to paved areas (e.g. stabilized gravel entrance and rumble strips). All vehicular access from work areas to paved areas will utilize the tracking controls. A concrete washout facility will be maintained within the staging area. All fueling will occur in the designated staging area. The Contractor shall maintain all construction equipment, to prevent oil and fluid leaks. The Contractor shall regularly inspect all equipment and vehicles for fluid leaks. Pallets and secondary containment areas shall be provided for chemicals, drums, or bagged materials that require special controls.

Spill/Leak Stoppage, Containment, and Cleaning

Describe procedures for expeditiously stopping, containing, and cleaning up spills, leaks, and other releases.

All staging areas must a have an appropriate spill response and cleanup kit available and visible at these locations. Should materials spills occur; materials and/or contaminants will be promptly cleaned from the Project site and recycled or disposed of to the satisfaction of NDEP. All on-site construction personnel shall be trained in spill prevention practices and provided visibly available spill containment kits at all staging areas. All contractors are responsible for instructing their personnel on how to effectively deploy and properly use the spill containment kits. The Contractor shall store an adequate amount of extra BMP materials such as silt fence, fiber rolls, and gravel bags on site for use during major storm events or accidental water and sewer line utility breaks. In the event of any accidental water and sewer line utility breaks the Contractor shall immediately contact NTCD, who will provide immediate notice to TRPA, NDSL, NDEP, Douglas County, NDOT, and the appropriate utility provider.

Identify the name or position of the employee(s) responsible for detecting and responding to spills or leaks.

Spill/Leak Notification

Describe procedures for notification of appropriate facility personnel, emergency response agencies, and regulatory agencies where a leak, spill, or other release containing a hazardous substance or oil in an amount equal to or in excess of a reportable quantity established under 40 Code of Federal Regulations (CFR) Part 110, 40 CFR Part 117, or 40 CFR Part 302, occurs during a 24-hour period. Contact information shall be in locations that are readily accessible and available.

Facility Personnel

Emergency Response Agencies

Regulatory Agencies

Waste Management

Describe procedures for handling and disposing of all wastes generated at the site.

Waste Management Procedures

Describe procedures for handling and disposing of all wastes generated at the site, including, but not limited to, clearing and demolition debris, sediment removed from the site, construction and domestic waste, hazardous or toxic waste, and sanitary waste.

The amount of construction materials stored on site shall be minimized. Soil materials shall not be stockpiled on site over a weekend (Saturday, Sunday and Holidays) unless they are completely covered (in accordance with TRPA and NDEP standards, regulations and permits) and tacked down or secured with a 12 inch diameter fiber roll installed around the entire perimeter.

Solid waste dumpsters, if used, shall be covered during storm events and locked at the end of each work day. The dumpster cover will be carefully secured to withstand weather conditions and animal intrusion. The Contractor shall separate wastes and recycle or dispose of them off-site n compliance with local, regional and/or state regulation.

The Project requires the use of heavy mechanical equipment, machinery and materials which have the potential to generate solid and liquid wastes that requires proper disposal. All construction related material waste such as, excess sediment/soil, aggregate, decomposed granite, excess pipe, etc., will be disposed of at a site approved by NTCD, NDEP and TRPA.

The Contractor shall place liquid wastes (i.e. grease, oil, oil filters, antifreeze, cleaning solutions, batteries, hydraulic fluids, transmission fluids, etc.) in proper sealed containers, store the containers in designated storage areas, and ultimately properly dispose or recycle the materials off-site.

Documentation Requirements

Provide the following information.

Notice of Intent (NOI)

Attach, to the end of the SWPPP, a copy of the signed electronic NOI certification page submitted to the NDEP.

Approval Letter

Attach, to the end of the SWPPP, a copy of the approval letter received from the NDEP.

Permit

Attach a copy of the Permit to the end of the SWPPP.

Significant Spills/Leaks/Releases

Describe any incidences of significant spills, leaks, or other releases that resulted in discharges of pollutants in stormwater to a regulated MS4 or waters of the State of Nevada that meet the definition of Waters of the U.S. Include the date of occurrence, the circumstances leading to the release, actions taken in response to the release, and measures taken to prevent recurrence of such releases.

Structural Control Measure Repairs

Attach, to the end of the SWPPP, documentation of repairs made to structural control measures. Such documentation shall include the date(s) of discovery of areas in need of repair/replacement, date(s) that the structural control measure(s) returned to full function, and the justification for any extended repair schedules.

Inspection Reports

Attach, to the end of the SWPPP, all inspection reports including post-storm event inspections.

Corrective Action

Describe any corrective action taken at the site. Include events and dates when problems were discovered and modification occurred.

Buffer Documentation

If the site's disturbance area is located within 50 feet of perennial water, attach buffer documentation to the end of the SWPPP.

Employee Training Records

Attach records of employee training to the end of the SWPPP. Records should include the date training was received.

Plans Required By Other Agencies

The SWPPP may incorporate by reference the appropriate elements of plans required by other agencies. Attach, to the end of the SWPPP, a copy of the requirements incorporated by reference.

DeMinimis Discharges

For DeMinimis discharges, describe the discharge, provide the beginning and end dates of the discharge, and attach a copy of the sampling analysis report to the end of the SWPPP.

DeMinimis Discharge 1			
Start Date	Description		
<u> </u>			
End Date			
<u>l</u>			

DeMinimis Discharge 2			
Start Date	Description		
<u>I</u>			
End Date			
<u>/ /</u>			

DeMinimis Discharge 3			
Start Date	Description		
<u>//</u>			
End Date			
<u>/</u>			

Post-Construction Stormwater Management

Describe the stormwater management control measures that will be installed during the construction process to control pollutants in stormwater discharges after construction has been completed.

The project will result in a large-scale stormwater management facility including upgraded conveyance pipe and a 0.8 acre-ft wet basin with multi-stage treatment including sedimentation, filtration, and biological processes. Sod and native vegetation will be salvaged on site and reused as well as native seed mix. Inlets and outlets are appropriately stabilized with concrete block or rock. All disturbed areas are to be revegetated after construction.

Inspection, Maintenance, and Corrective Action

Describe the procedures operators will follow for maintaining their stormwater control measures, conducting site inspections, and, where necessary, taking corrective actions, in accordance with Permit sections <u>3.0 Effluent Limitations Applicable to All Discharges from Construction Sites</u>, <u>4.0 Effluent Limitations Applicable to Sites Using Constructed Stormwater Conveyance Channels or Sediment Basins</u>, and <u>5.0 Inspections</u>.

Inspection Procedures

Describe the procedures operators will follow for conducting site inspections.

All areas of disturbed and bare soil, areas used for storage of materials and equipment that are exposed to precipitation, on-site vehicle entrance and exit locations and all on-site erosion and sediment control BMPs shall be routinely inspected. Dewatering and diversion equipment shall be inspected daily at a minimum or as necessary to ensure functioning. Inspectors shall keep record daily construction activities and BMP conditions. Inspection the entire project area will occur prior to storm events and the engineer or NTCD inspector will direct the Contractor to take the appropriate corrective actions.

Identify the personnel responsible for conducting inspections.

Provide the inspection schedule that will be followed based on whether the site is subject to Permit section <u>5.2 Routine Site Inspection Procedures</u>, or whether the site qualifies for the reduced inspection frequency in Permit section <u>5.3 Reduced Inspection Schedule</u>. If the site qualifies for a reduced inspection schedule in accordance with Permit section <u>5.3 Reduced Inspection Schedule</u>, include the beginning and ending dates of the reduced inspection period.

Inspection shall comply with section 5.2 Routine Site Inspection Procedures for the duration of construction activities.

Routine Facility Inspection Documentation

Attach all documented findings of each routine site inspection to the end of the SWPPP. Routine facility inspection documentation requirements are outlined in Permit section <u>5.4</u> <u>Routine Facility Inspection Documentation</u>.

Inspection Results

Attach, to the end of the SWPPP, records of actions taken based on inspection results in accordance with Permit section <u>5.5 Inspection Results</u>.

Inspection or Maintenance Checklists

Attach any inspection or maintenance checklists or other forms that will be used to the end of the SWPPP.

Maintenance Procedures

Describe the procedures operators will follow for maintaining their stormwater control measures.

Corrective Action Procedures

Describe the procedures operators will follow for taking any necessary corrective actions.

Additional Information

Provide the following additional information.

Does the facility discharge to a surface water contained in the current 303(d) Impaired Water Body listing issued by the NDEP BWQP that is impaired for (1) sediment or a sediment-related parameter, such as total suspended solids (TSS) or turbidity, and/or (2) nutrients, including impairments for nitrogen and/or phosphorous? Yes No If yes, make one of the following demonstrations (check the appropriate box to indicate which one has been selected) and attach such data and technical information to the end of the SWPPP: That the site will employ measures to prevent the discharge of stormwater pollutant(s) for which the waterbody is impaired; or Image: The the discharge from the site has no potential to contain the pollutants causing impairment; or That the discharge is not expected to cause or contribute to an exceedance of an applicable water quality standard.	Discharges To Water Quality Impaired Waters			
If yes, make one of the following demonstrations (check the appropriate box to indicate which one has been selected) and attach such data and technical information to the end of the SWPPP: That the site will employ measures to prevent the discharge of stormwater pollutant(s) for which the waterbody is impaired; or That the discharge from the site has no potential to contain the pollutants causing impairment; or That the discharge is not expected to cause or contribute to an exceedance of an applicable water quality standard.	Does the facility discharge to a surface water contained in the current 303(d) <i>Impaired Water Body</i> listing issued by the NDEP BWQP that is impaired for (1) sediment or a sediment-related parameter, such as total suspended solids (TSS) or turbidity, and/or (2) nutrients, including impairments for nitrogen and/or phosphorous?			
 That the site will employ measures to prevent the discharge of stormwater pollutant(s) for which the waterbody is impaired; or That the discharge from the site has no potential to contain the pollutants causing impairment; or That the discharge is not expected to cause or contribute to an exceedance of an applicable water quality standard. 	If yes, make one of the following demonstrations (check the appropriate box to indicate which one has been selected) and attach such data and technical information to the end of the SWPPP:			
 That the discharge from the site has no potential to contain the pollutants causing impairment; or That the discharge is not expected to cause or contribute to an exceedance of an applicable water quality standard. 	That the site will employ measures to prevent the discharge of stormwater pollutant(s) for which the waterbody is impaired; or			
That the discharge is not expected to cause or contribute to an exceedance of an applicable water quality standard.	That the discharge from the site has no potential to contain the pollutants causing impairment; or			
	That the discharge is not expected to cause or contribute to an exceedance of an applicable water quality standard.			

Control Measure Addition/Repair/Modification

If it is determined, based on an inspection of control measures performed in accordance with the inspection requirements of Permit section <u>5.0 Inspections</u>, that installation of additional control measures, or significant repair or modification of existing control measures, is necessary, and implementation before the next storm event is impracticable, document the reason(s) for the delay in the area below.

Identify and describe the modifications made to control measures.

Permit Requirement Waiver

If the project is waived from complying with a specific requirement in Permit section <u>3.0</u> <u>Effluent Limitations Applicable to All Discharges from Construction Sites</u> in accordance with Permit section 3.1.1, document this fact in the area below.

Departures from Design Specifications

Explain any departures from design specifications for the installation of all stormwater control measures.

Culvert Stabilization

If culverts are present on the site, describe the measures implemented to sufficiently minimize the threat of erosion at culvert locations to prevent the formation of rills and gullies during construction.

Unique Construction Disturbances

If the project involves construction approved under a CWA Section 404 permit or construction of a water-dependent structure or water access area (e.g., pier, boat ramp, trail), document this fact in the area below and on the site map.

Linear Construction Projects

For linear construction projects where it is infeasible to comply with the requirements of Permit section <u>3.5.1.2</u>, document the rationale for why it is infeasible to do so, and describe any buffer width retained and/or supplemental erosion and sediment controls installed.

For linear projects with rights-of-way that restrict or prevent the use of perimeter controls required by Permit section <u>3.5.2 Install Perimeter Controls</u>, identify the areas where it is impracticable to maximize the use of perimeter controls and explain why it is impracticable to do so.

Track-Out

If site conditions make it infeasible to install structural controls to prevent track-out (e.g., linear project along a paved right-of-way), explain why such controls cannot be installed and describe the alternative measures that will be used to prevent, monitor, and remove track-out sediment from paved roadways.

Sediment or Soil Stockpiles

If it is infeasible to place sediment or soil stockpiles away from stormwater conveyances, such as curb and gutter systems, and streets leading to such conveyances, explain why it is infeasible to do so.

Non-Vegetative Stabilization Methods

Describe all non-vegetative methods of stabilization employed at the site.

Rocks and erosion control blanket will all be used as non-vegetative methods of soil stabilization.

Discharges to Impaired Waterbodies Without Established Total Maximum Daily Loads

If the site discharges to a water quality-impaired water (contained in the current 303(d) impaired water body listing) for which a Total Maximum Daily Load has not been established, describe the condition for which the water has been listed and include a demonstration that the Best Management Practices that are selected for implementation will be sufficient to ensure that the discharges will not cause or contribute to an exceedance of an applicable State water quality standard.

Sediment Basin Discharges

If the use of outlet structures that withdraw water from the surface of the sediment basin in order to minimize the discharge of pollutants is determined to be infeasible, explain why it is infeasible and attach any supporting documentation to the end of the SWPPP.

Additional Discharge Requirements

Where NDEP determines it is necessary to impose additional requirements on the discharge, attach a copy of any correspondence describing such requirements to the end of the SWPPP, and describe the stormwater control measures that will be used to meet such requirements.

Signature Requirements

Print out the completed SWPPP and sign and date below in accordance with Permit section <u>7.23</u> <u>Signature Requirements</u>. All operators shall also sign and certify the SWPPP in accordance with the Permit signature requirements. Digital signatures are not accepted.

Adherence Statement

"I certify under penalty of law, that this document and all attachments were prepared under my direction or supervision in accordance with a system designed to assure that qualified personnel properly gathered and evaluated the information submitted. Based on my inquiry of the person or persons who manage the system, or those persons directly responsible for gathering information, the information submitted is, to the best of my knowledge and belief, true, accurate, and complete. I am aware that there are significant penalties for submitting false information, including the possibility of fine and imprisonment for knowing violations."

Name (print)	Title
Signature	Date
Signature	Date
Signature	Date

Operator 1	
Name (print)	Title
Signature	Date

Operator 2	
Name (print)	Title
Signature	Date

Operator 3	
Name (print)	Title
Signatura	Data
Signature	Date
	/ /
	<u>+</u>





PRELIMINARY DEWATERING PLAN

KAHLE WATER QUALITY BASIN IMPLEMENTATION PROJECT

Prepared For:



Prepared By:

Nevada Tahoe **Conservation District**

March 2018

TABLE OF CONTENTS

1.0	BACKGROUND AND OBJECTIVES	1
2.0	EFFLUENT REQUIREMENTS	2
3.0	DEWATERING REQUIREMENTS	2
3.1	Summary	2
3.2	DEWATERING FLOW RATES	2
3.3	DISCHARGE AND TREATMENT OPTIONS	3
4.0	OPERATIONS AND MAINTENANCE	3
5.0	MONITORING	3
5.1	Recorded Data	3
5.2	VISUAL INSPECTIONS	4

APPENDIX A: EXAMPLE DEWATERING DAILY INSPECTION FORM

1.0 BACKGROUND AND OBJECTIVES

The Kahle Water Quality Basin Implementation Project proposes to redesign and expand the existing Kahle Basin to a larger wet basin and improve conveyance capacity along Kahle Drive. The Project will increase the treatment capacity and effectiveness by installing a treatment suited to the site conditions. The Project will replace the undersized pipe along Kahle Drive with a pipe capable of conveying the 25-year peak flow (design storm) to meet current Douglas County design standards.

The goal of the Kahle Water Quality Basin Implementation Project is to improve treatment of stormwater runoff in Kahle Basin by increasing basin treatment capacity and effectiveness and improving conveyance capacity along Kahle Drive. There are four objectives:

- 1. Complete the first phase of a larger multi-benefit project identified in the Burke Creek-Rabe Meadow Complex Master Plan.
- 2. Improve the long-term performance of the water quality basin by constructing adequate pretreatment and access for maintenance equipment.
- 3. Maximize Lake Clarity Credits for NDOT and Douglas County while balancing construction cost and maintenance need considerations.
- 4. Design stormwater treatment that blends with the existing recreational uses of Rabe Meadow.

The purpose of this Dewatering Plan is to detail the control of groundwater and seepage flows during the construction of proposed improvements described above. Dewatering and discharge processes and monitoring described in the following sections will allow the system to operate at an acceptable level while protecting water quality until construction is completed.

The Contractor shall submit a detailed Dewatering Plan to the Engineer for distribution to NTCD, NDEP and TRPA prior to the initiation of and construction activities, and in accordance with the project plans, standard specifications, the special technical specifications, the SWPPP, and this plan. These entities will review and comment on the Plan within twenty (20) working days and provide comments to the Engineer who will then provide the comments to the Contractor. The Contractor will update the plan based on the comments, if needed, and re-submit to the Engineer for review and acceptance. No work on the Project will be allowed to be performed until an accepted plan has been provided and certified.

The detailed dewatering plan shall include the Contractors approach for dewatering including but not limited to: the dewatering location(s), number and size of pumping units (if applicable), power source for pumping units (if applicable), size and materials for pipes, materials for damming (if applicable), piping discharge point(s), fuel storage location (if applicable), location of emergency or back up detention system, settling basin (if applicable), gravel bags, baker tank (if applicable), dirt bag filter(s) and location of filtration of diverted water. The Contractor shall include manufacture's specifications were applicable.
2.0 EFFLUENT REQUIREMENTS

The dewatering operations are required to meet the permit requirements of Nevada Division of Environment Protection (NDEP), and the Tahoe Regional Planning Agency (TRPA). The NDEP standards for tributaries in the Lake Tahoe Basin reference the Nevada Administrative Code - Chapter 445A – NAC 445A.1915. The TRPA standards are specified in Chapter 81 – Water Quality Control of the TRPA Code of Ordinances. The more stringent NDEP standard for turbidity governs.

Operations will be required to fully accommodate all intercepted groundwater for entire duration of the Project to assure Project success and to protect the downstream reaches of Burke Creek and Lake Tahoe from any discharge exceeding 10 NTUs, or the baseline turbidity value established prior to construction, whichever is higher.

3.0 DEWATERING REQUIREMENTS

3.1 Summary

Excavation for the new wet basin and storm drain pipe and manholes may encounter groundwater. Groundwater and seepage flows will be removed from construction and excavation areas as necessary and be discharged to surface areas that are upland of Burke Creek and greater than 50 feet from any surface water. It is assumed that the Contractor will use flexible hose to carry the sediment-laden water from portable sump pumps to a more fixed connector pipe. A check valve should be placed on this line to assure no backflow into the construction area. After treatment, if the effluent meets water quality standards, effluent from the new storm drain system will be discharged to the new wet basin, or effluent from the new wet basin will be discharged to a point 150 feet from Burke Creek, or effluent may be reused for construction purposes as described in section 4.3. If the effluent does not meet water quality standards, it will be reused for construction purposes as described in section 4.3.

3.2 Dewatering Flow Rates

Flow from groundwater and seepage into the construction area for wet basin work, storm drain placement, and grading may be encountered. No direct aquifer testing has been completed to accurately estimate the maximum rate of groundwater flow which will need to be pumped in order maintain a dewatered construction area of the new wet basin or storm drain pipe. Historic high groundwater elevations have been logged in the Kahle Basin Groundwater Elevation Report (USDA NRCS and NTCD, 2014) from 3 inches below the ground surface in the wetland vegetation to 9 inches near the existing Aspen grove. The Contractor is responsible to appropriately dewater the construction site in order to construct the Project improvements as described in this plan, the SWPPP and the Special Technical Specifications. A copy of the Kahle Basin Groundwater Elevation Report is provided with the contract documents for the Contractor's use and information on the geotechnical conditions within the Project area.

3.3 Discharge and Treatment Options

Treatment options may include the use of dirt bag filters. The effluent that discharges from any dirt bag filter on the Project site will meet groundwater quality discharge standards before being allowed to infiltrate into the soil in a location that can appropriately accommodate it. The position shall be accepted by the Engineer prior to placement and use by the Contractor.

If the treated effluent meets water quality standards, effluent from the new storm drain system will be discharged to the new wet basin, or effluent from the new wet basin will be discharged to a point 150 feet from Burke Creek. Treated water may also be used for dust control or irrigation purposes.

If the treated decant is unable to meet requirements for surface release it may be pumped to a water truck and used as applied dust control. All discharge effluent water used for irrigation will occur at least 100 feet away from Burke Creek and will be immediately discontinued upon evidence of runoff. The effluent shall not be discharged into storm sewers for the duration of construction.

If the treated water is unable to meet quality requirements and the volume of water is too large to be consumed by use for construction purposes, a sedimentation tank may be necessary to treat the water. If necessary, a sedimentation tank would be used to bring the water to effluent standards before being discharged to the new wet basin or a point 150 feet from Burke Creek.

4.0 OPERATIONS AND MAINTENANCE

All temporary sumps and pumping systems necessary for dewatering activities shall be designed, operated, and maintained to avoid pumping of fine sediments from the subsurface. Monitoring of sumps and pump systems shall be conducted by the contractor to ensure that subsurface fine sediments are not being removed by the dewatering operation. Dewatering fluids and debris shall be disposed of in a suitable manner in compliance with the requirements of the SWPPP. Sedimentation tanks used on the project site, if required, shall only be flushed and cleaned outside of the project area at an approved facility. Disposal of material shall meet all federal, state, and local requirements. No runoff waters or stormwater shall be allowed to drain into excavated areas.

Routine monitoring of all dewatering systems will be conducted daily by the Contractor during active construction. If it is discovered that any portion of the system is not functioning properly, the Contractor shall shut down operations until the problem is evaluated and the necessary repairs to the system are made.

The Contractor shall make staff available to mobilize for immediate repairs if any issues are identified.

5.0 MONITORING

5.1 Recorded Data

When discharging construction water to the new wet basin or a point 150 feet from Burke Creek, the discharge effluent volumes are to be read daily from the flow meter placed on the discharge piping. Date and time of reading will also be noted. Discharge effluent water quality will be measured for turbidity. Grab samples will be taken at the discharge point and recorded a minimum of 1 x daily during any active dewatering operations. Additionally, the following visual inspection data will be collected at the discharge point:

- Date and time
- Weather conditions
- Presence of waterfowl or aquatic wildlife
- Color and clarity of discharge effluent
- Erosion or ponding downstream of discharge site
- Photographs taken

If turbidity levels fall outside the limits stated in section 2.0 or if the discharge exhibits any odors, discoloration or oily sheen, the Contractor shall shut down operations until the problem is evaluated and the necessary repairs to the system are made

5.2 Visual Inspections

When functioning, the Contractor will perform a visual inspection of the entire dewatering systems daily from intake to discharge point and note any problems or deficiencies in the system.

APPENDIX A:

EXAMPLE DEWATERING DAILY INSPECTION FORM

SWPPP INSPECTION REPORT			Approx. Temperature:				Storm Start: (da					ate)	
Project:			PPT:Y / N				Storm Duration:						
Inspector:			PPT Amount at time of inspection: in.			Time since last storm:							
DATE:	TIME:		DAY:	М	Т		W	TH		F	SA		SU
Constructio	on Stage:	Construction											
Area of site	exposed to storm water runoff:	Activities:											
Inspectio	n Type												
Daily	Prior to Predicted Rain		Following R	ain Event									
Weekly	During Rain Event												
	Blank=No Inspection N	IC=Needs Correctio	on, See Observation	ns OK or Check	Mark=Me	eets St	tandards	NA=No	t App	licable			
1)	Damage to containment dikes or erosion	n control fencing?										_	
2)	Improperly installed or ineffective erosion control fencing?						_						
3)	Boundary fence damage or removal?		non-construction a	areas not subject	to disturba	ancer						_	
4) 5)	Disturbed areas with inadequate erosion	prevention and se	diment control pro	otection?								_	
6)	Evidence of any sediment leakage through	gh erosion control f	fencing or containm	nent dikes?									
7)	Soil piles and other earthen materials wh	- hich are unprotecte	ed or located in a dr	rainage way?									
8)	Spilled and improperly stored chemicals,	, paint, fuel, oil, sol	vents, sealants, etc.	.?									
9)	Upstream runoff diversion structures (ar	e in place and oper	rational)?										
10)	Any evidence of sediment tracking from	construction equip	ment?										
11)	Any signs of soil erosion or deposition do	own gradient from	runoff discharges?									_	
12)	Sediment accumulation within onsite sto	orm water drainage	control facilities, a	and facilities in ne	ed of main	ntenar	nce?					_	
13)	Any evidence of non-storm water discha	rges from the proje	ect site? Authorized	d, illicit, BMP con	dition?								
14)	Does SWPPP or WPCP require revisions?	, 		C 41								_	
15)	Notable observation at relevant discharg	ge points and down	stream locations of	t the receiving wa	iter?							_	
10)	Photographs taken?	ŗ										_	
17) Photographs taken? Date = Deferiency to be addressed = 0 = Observation													
Date = Def	eciency to be addressed O = Observation	on											
Date = Def	eciency to be addressed O = Observation	on Obse	ervation/Inspection							WPCD #	Photo	Di	Date Completed
Date = Def Date added	eciency to be addressed O = Observation	on Obse	ervation/Inspection							WPCD #	Photo	Di	Date Completed
Date = Def	eciency to be addressed O = Observation	on Obse	ervation/Inspection							WPCD #	Photo	Di	Date Completed
Date = Def	eciency to be addressed O = Observati	on Obse	ervation/Inspection							WPCD #	Photo	D	Date Completed
Date = Def	eciency to be addressed O = Observation	on Obse	ervation/Inspection							WPCD #	Photo	D	Date Completed
Date = Def	eciency to be addressed O = Observati	on Obse	ervation/Inspection							WPCD #	Photo	D	Date Completed
Date = Def	eciency to be addressed O = Observation	on Obse	ervation/Inspection							WPCD #	Photo		Date Completed
Date = Def Date added	eciency to be addressed O = Observation	on Obse	ervation/Inspection							WPCD #	Photo		Date Completed
Date = Def	eciency to be addressed O = Observati	on Obse	ervation/Inspection							WPCD #	Photo		Date Completed
Date = Def Date added	eciency to be addressed O = Observati	on Obse	ervation/Inspection							WPCD #	Photo		Date Completed
Date = Def	eciency to be addressed O = Observation	on Obse	ervation/Inspection							WPCD #	Photo		Date Completed
Date = Def Date added	eciency to be addressed O = Observation	on Obse	ervation/Inspection							WPCD #	Photo		Date Completed
Date = Def Date added	eciency to be addressed O = Observation	on Obse	ervation/Inspection							WPCD #	Photo		Date Completed
Date = Def Date added	eciency to be addressed O = Observation	on Obse	ervation/Inspection							WPCD #	Photo		Date Completed
Date = Def Date added	eciency to be addressed O = Observation	on Obse	ervation/Inspection							WPCD #	Photo		Date Completed
Date = Def Date added	eciency to be addressed O = Observation	on Obse	ervation/Inspection							WPCD #	Photo		Date Completed
Date = Def	eciency to be addressed O = Observation	on Obse	ervation/Inspection							WPCD #	Photo		Date Completed
Date = Def Date added	eciency to be addressed O = Observation	on Obse	ervation/Inspection							WPCD #	Photo		Date Completed
Date = Def Date added	eciency to be addressed O = Observation	on Obse	ervation/Inspection							WPCD #	Photo		Date Completed
Date = Def Date added	eciency to be addressed O = Observation	on Obse	ervation/Inspection							WPCD #	Photo		Date Completed
Date = Def	eciency to be addressed O = Observation	on Obse	ervation/Inspection							WPCD #	Photo		Date Completed

Exhibit C

PROJECT PERMITS



Mail PO Box 5310 Stateline, NV 89449-5310 Location 128 Market Street Stateline, NV 89449

Contact

Phone: 775-588-4547 Fax: 775-588-4527 www.trpa.org

DRAFT PERMIT

PROJECT DESCRIPTION: Kahle Water Quality Basin Implementation

FILE #: EIPC2018-0001

TRPA PROJECT NUMBER: 560-101-00

PERMITTEE(S): Nevada Tahoe Conservation District

COUNTY/LOCATION: Douglas/Kahle Drive

Having made the findings required by Agency ordinances and rules, TRPA approved this permit on March 27, 2018, subject to the standard conditions of approval attached hereto (Attachment Q) and the special conditions found in this permit.

This permit shall expire on March 27, 2021 without further notice unless the construction has commenced prior to this date and diligently pursued thereafter. Diligent pursuit is defined as completion of the project within the approved construction schedule. The expiration date shall not be extended unless the project is determined by TRPA to be the subject of legal action which delayed or rendered impossible the diligent pursuit of the permit.

NO CONSTRUCTION OR GRADING SHALL COMMENCE UNTIL:

- (1) TRPA RECEIVES A COPY OF THIS PERMIT UPON WHICH THE PERMITTEE(S) HAS ACKNOWLEDGED RECEIPT OF THE PERMIT AND ACCEPTANCE OF THE CONTENTS OF THE PERMIT;
- (2) ALL PRE-CONSTRUCTION CONDITIONS OF APPROVAL ARE SATISFIED AS EVIDENCED BY TRPA'S ACKNOWLEDGEMENT OF THIS PERMIT; AND,
- (3) A TRPA PREGRADING INSPECTION HAS BEEN CONDUCTED WITH THE PROPERTY OWNER AND/OR THE CONTRACTOR, AND A CONSTRUCTION SCHEDULE SUBMITTED.

nA **TRPA Executive Director/Designee** Date

PERMITTEE'S ACCEPTANCE: I have read the permit and the conditions of approval and understand and accept them. I also understand that I am responsible for compliance with all the conditions of the permit and am responsible for my agents' and employees' compliance with the permit conditions. I also understand that if the property is sold, I remain liable for the permit conditions until or unless the new owner acknowledges the transfer of the permit and notifies TRPA in writing of such acceptance. I also understand that certain mitigation fees associated with this permit are non-refundable once paid to TRPA. I understand that it is my sole responsibility to obtain all required approvals from any other state, local or federal agencies that may have jurisdiction over this project whether or not they are listed in this permit.

Signature of Permittee(s)	D	Jate
/sf		

imagine. plan. achieve.

Security Posted: N/A

Required plans determined to be in conformance with approval: Date: ______

TRPA ACKNOWLEDGEMENT: The permittee has complied with all pre-construction conditions of approval as of this date:

TRPA Executive Director/Designee	Date	

SPECIAL CONDITIONS

- 1. This permit authorizes retrofitting an existing stormwater basin off Kahle Drive to increase its capacity and treatment effectiveness and upgrading drainage infrastructure. Improvements are within the Douglas County Right of Way and United States Forest Service property in Douglas County, Nevada.
- 2. Associated documents providing guidance, requirements, and conditions are included in the TRPA Standard Conditions of Approval (Attachment Q); the final TRPA stamped Approved Plans; and the Special Technical Provisions.
- 3. The Standard Conditions of Approval listed in Attachment Q shall apply to this permit.
- 4. Prior to permit acknowledgement submit the following to TRPA for review and approval:
 - A. 3 sets of final construction plans.
 - B. A maintenance and monitoring plan for all permanent BMPs. Douglas County submit this plan to TRPA on an annual basis. A sample plan may be viewed here: http://tahoebmp.org/Documents/BMPHandbook/Maintenance_Log_static_form. pdf
- 5. Prior to the pre-grade inspection submit the following to TRPA for review and approval:
 - A. A detailed construction schedule.
 - B. A dewatering plan.
- 6. An onsite inspection by TRPA staff is required prior to any construction or grading activity. TRPA staff shall determine if the temporary BMPs required by Attachment Q (Standard Conditions of Approval) have been properly installed. No grading or construction shall commence until TRPA pre-grade conditions of approval are met.

- 7. The permittee shall be responsible for ensuring that all temporary BMPs are constructed as directed by the TRPA Project Manager or Environmental Compliance Inspector.
- 8. If artifacts, archaeological soils, or unusual amounts of bone or shell are uncovered during the construction activities, all work in the area will be stopped and a qualified archeologist will be immediately contacted for on-site consultation.
- 9. All construction equipment working in or near Stream Environment Zones (SEZ) areas must be cleaned prior to mobilization at the project site and maintained in clean and good working order.
- 10. Vegetation shall not be disturbed, injured, or removed except in accordance with the TRPA Code or the conditions of project approval. All trees, major roots, and other vegetation, not specifically designated or approved for removal shall be protected according to methods approved by TRPA. All vegetation outside the construction site/project area boundary shall not be disturbed.
- 11. Any modifications to the TRPA approved plans shall be submitted to TRPA for review and approval.
- 12. This site shall be winterized in accordance with the provisions of Attachment Q by **October 15th** of each construction season.
- 13. 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.
- 14. Permitee shall schedule a final inspection when the project is complete.
- 15. To the maximum extent allowable by law, each party ("Indemnitor") agrees to indemnify, defend, and hold harmless the other party, its governing board, officers, employees and its agents (collectively "Indemnitee") from and against all suits, losses, damages, injuries, liabilities, and claims proximately caused by the Indemnitor. To the extent permitted by law, where the foregoing indemnity applies, it includes all suits, losses, damages, injuries, liabilities, and claims by any person from any cause whatsoever arising out of or in connection with either directly or indirectly, and in whole or in part (1) the processing, conditioning, issuance, or implementation of this permit; (2) any failure to comply with all applicable laws and regulations; and (3) the design, installation, or operation of any improvements.

END OF PERMIT



Mail PO Box 5310 Stateline, NV 89449-5310 Location 128 Market Street Stateline, NV 89449 Contact

Phone: 775-588-4547 Fax: 775-588-4527 www.trpa.org

MITIGATED FINDING OF NO SIGNIFICANT EFFECT

PROJECT DESCRIPTION: Kahle Water Quality Basin Implementation

FILE #: EIPC2018-0001

TRPA PROJECT NUMBER: 560-101-00

PERMITTEE(S): Nevada Tahoe Conservation District

COUNTY/LOCATION: Douglas/Kahle Drive

<u>Staff Analysis</u>: In accordance with Article IV of the Tahoe Regional Planning Compact, as amended, and Section 6.3 of the TRPA Rules and Regulations of Practice and Procedure, the TRPA staff has reviewed the information submitted with the subject project. Based on this initial environmental evaluation, Agency staff has found that the subject project will not have a significant effect on the environment.

<u>Determination</u>: Based on the above-stated finding, the subject project is conditionally exempt from the requirement to prepare an Environmental Impact Statement. The conditions of this exemption are the conditions of permit approval.

uner Fredman 3/27/18

TRPA Chairman or Executive Director

