

**NISQUALLY SOUTH RESERVATION HOUSING
PHASE I
PROJECT PO-14-B88**

**NISQUALLY INDIAN RESERVATION
THURSTON COUNTY, WASHINGTON**

***A COOPERATIVE PROJECT BETWEEN
THE INDIAN HEALTH SERVICE
AND
THE NISQUALLY TRIBE***

CONTRACT DOCUMENTS



**MOA CONTRACT NUMBER: SEADO-14-MOA1
NISQUALLY TRIBAL COUNCIL**

CONTRACT PACKAGE PREPARED FOR THE NISQUALLY TRIBE BY:

**U.S. DEPARTMENT OF HEALTH AND HUMAN SERVICES
PUBLIC HEALTH SERVICE
INDIAN HEALTH SERVICE
OFFICE OF ENVIRONMENTAL HEALTH
AND ENGINEERING
PORTLAND AREA OFFICE
SEATTLE DISTRICT OFFICE
SEPTEMBER 2018**

**REBECCA MIDKIFF, E.I.T.
PROJECT ENGINEER
(206) 615-2781**



EXPIRES 7/19/2019

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**SECTION 00015
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VOLUME II - Contract Drawings (Bound Separately)

**“INDIAN HEALTH SERVICE, SANITATION FACILITIES CONSTRUCTION,
NISQUALLY SOUTH RESERVATION HOUSING, PHASE I, PROJECT PO-14-B88,
NISQUALLY INDIAN RESERVATION, THURSTON COUNTY, WASHINGTON”**

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8 SHEETS TOTAL

END

**SECTION 00100
ADVERTISEMENT FOR BIDS**

Scope: The Nisqually Tribe plans to issue a construction contract for furnishing all labor, equipment, and supervision necessary to construct and connect septic tank effluent pumping (STEP) systems to existing sewer force main and provide water service connections for a 20-unit multi-family housing complex.

Eligible Contractors shall bid on all items on the Bid Offer Sheet.

Contacts: *Technical Information:* Tony Berkson
Nisqually Public Works Director
4820 She-Nah-Num Drive
Olympia, WA 98513
Phone: 360-456-5221
berkson.tony@nisqually-nsn.gov

Rebecca Midkiff, Project Engineer
Indian Health Service,
Seattle District Office
701 Fifth Avenue, Suite 1655
Seattle, WA 98104
(206) 615-2781

Contract Information: David Iyall
Nisqually Projects Manager
4820 She-Nah-Num Dr. SE
Olympia WA 98513
Phone: 360-456-5221

Plans/Specifications available from: Tom Arnbrister
Nisqually Public Works Manager
4820 She-Nah-Num Drive
Olympia, WA 98513
Phone: 360-456-5221
arnbrister.tom@nisqually-nsn.gov

Estimated Construction Cost: \$100,000 - \$200,000

Performance Time: 120 Calendar Days

Bid Closing Date: [October 24th, 2018 by 11:00 AM](#)

**SECTION 00110
INFORMATION FOR BIDDERS**

BIDS will be received by the appropriate personnel at the Nisqually Tribe (herein called the "TRIBE"), at address below, until October 24th 2018 at 11:00 am, and then at said office publicly opened and read aloud.

If submitted by mail, each BID must be submitted in a sealed envelope, addressed to:

Bid for Nisqually South Reservation Housing Phase I Water and Sewer
Nisqually Indian Tribe
Attn: David Iyall, Projects Manager
4820 She Nah Num Dr. SE
Olympia, WA 98513
Phone: 360-456-5221

Mailed bids must arrive to the TRIBE by the above mentioned time and date. BIDDERS must account for inter-departmental mail delays.

If delivered by hand, each BID must be submitted in a sealed envelope, addressed to:

Bid for Nisqually South Reservation Housing Phase I Water and Sewer
Nisqually Indian Tribe
Attn: David Iyall, Projects Manager
4820 She Nah Num Dr. SE
Olympia, WA 98513

Each sealed envelope containing a BID must be plainly marked on the outside as **BID for Nisqually South Reservation Housing Phase I Water and Sewer** and the envelope should bear on the outside the name of the BIDDER, his address, his license number if applicable and the name of the project for which the BID is submitted. If forwarded by mail, the sealed envelope containing the BID must be enclosed in another envelope addressed to the TRIBE.

All BIDS must be made on the required BID forms. All blank spaces for BID prices must be filled in, in ink or typewritten, and the BID forms must be fully completed and executed when submitted. Only one copy of each Bid form is required.

Required Forms for BID submittal:

1. BID OFFER
2. BID SCHEDULE
3. BID BOND
4. INDIAN ENTERPRISE QUALIFICATION STATEMENT (If applicable)

The TRIBE may waive any informalities or minor defects or reject any and all BIDS. Any BID may be withdrawn prior to the above scheduled time for the opening of BIDS or authorized postponement thereof. Any BID received after the time and date specified shall not be considered. No BIDDER may withdraw a BID within 60 days after the actual date of the opening thereof. Should there be reasons why the contract cannot be awarded within the specified period, the time may be extended by mutual agreement between the TRIBE and the BIDDER.

BIDDERS must satisfy themselves of the accuracy of the estimated quantities in the BID Schedule by examination of the site and a review of the drawings and specifications including ADDENDA. After BIDS have been submitted, the BIDDER shall not assert that there was a misunderstanding concerning the quantities of WORK or of the nature of the WORK to be done

The TRIBE shall provide to BIDDERS prior to BIDDING, all information, which is pertinent to, and delineates and describes, the land owned and rights-of-way acquired or to be acquired.

The CONTRACT DOCUMENTS contain the provisions required for the construction of the PROJECT. Information obtained from an officer, agent, or employee of the TRIBE or any other person shall not affect the risks or obligations assumed by the CONTRACTOR or relieve him from fulfilling any of the conditions of the contract.

A BID bond payable to the TRIBE must accompany each BID for five percent of the total amount of the BID. As soon as the BID prices have been compared, the TRIBE will return the BONDS of all except the three lowest responsible BIDDERS. When the Agreement is executed the bonds of the two remaining unsuccessful BIDDERS will be returned. The BID BOND of the successful BIDDER will be retained until the payment BOND and performance BOND have been executed and approved, after which it will be returned. A certified check may be used in lieu of a BID BOND.

A performance BOND and a payment BOND, each in the amount of 100 percent of the CONTRACT PRICE, with a corporate surety approved by the TRIBE, will be required for the faithful performance of the contract.

Attorneys-in-fact who sign BID BONDS or payment BONDS and performance BONDS must file with each BOND a certified and effective dated copy of their power of attorney.

The party to whom the contract is awarded will be required to execute the Agreement and obtain the performance BOND and payment BOND within ten (10) calendar days from the date when NOTICE OF AWARD is delivered to the BIDDER. The necessary Agreement and BOND forms shall accompany the NOTICE OF AWARD. In case of failure of the BIDDER to execute the Agreement, the TRIBE may at their option consider the BIDDER in default, in which case the BID BOND accompanying the proposal shall become the property of the TRIBE.

The TRIBE with ten (10) days of receipt of acceptable performance BOND, payment BOND and Agreement signed by the party to whom the Agreement was awarded shall sign the Agreement and return to such party an executed duplicate of the Agreement. Should the TRIBE not execute the Agreement within such period, the BIDDER may by WRITTEN NOTICE withdraw his signed Agreement. Such notice of withdrawal shall be effective upon receipt of the notice by the TRIBE.

The NOTICE TO PROCEED shall be issued within (10) days of the execution of the Agreement by the TRIBE. Should there be reasons why the NOTICE TO PROCEED cannot be issued within such period, the time may be extended by mutual agreement between the TRIBE AND CONTRACTOR. If the NOTICE TO PROCEED has not been issued within the ten (10) day period or within the period mutually agreed upon, the CONTRACTOR may terminate the Agreement without further liability on the part of either party.

The TRIBE may make such investigations as he deems necessary to determine the ability of the BIDDER to perform the WORK, and the BIDDER shall furnish to the TRIBE all such information and data for this purpose as the TRIBE may request. The TRIBE reserves the right to reject any BID if the evidence submitted by, or investigation of, such BIDDER fails to satisfy the TRIBE that such BIDDER is properly qualified to carry out the obligations of the Agreement and to complete the WORK contemplated therein.

A conditional or qualified BID will not be accepted.

Award will be made to the lowest responsible BIDDER.

The OWNER reserves the right to award all, none, or a combination of the line items on the BID OFFER SHEET.

All applicable laws, ordinances, and the rules and regulations of all authorities having jurisdiction over construction of the PROJECT shall apply to the contract throughout.

Disputes under this contract will be submitted to the TERO Office as third party mediation; if not resolved, submit the dispute to the tribal court.

Each BIDDER is responsible for inspecting the site and for reading and being thoroughly familiar with the CONTRACT DOCUMENTS. The failure or omission of any BIDDER to do any of the foregoing shall in no way relieve any BIDDER from any obligation in respect to his BID. Further, the BIDDER agrees to abide by the requirements under Executive Order No. 11246, as amended, including specifically the provisions of the equal opportunity clause set forth in the GENERAL PROVISIONS.

The low BIDDER shall supply the names and addresses of major material SUPPLIERS and SUBCONTRACTOR when requested to do so by the TRIBE.

Minimum percentage of work to be completed by the prime CONTRACTOR is 33-1/3%.

State lien laws do not apply on Federal Trust Land.

TERO does apply to this CONTRACT and before beginning work CONTRACTOR must negotiate a Tribal Employment Rights Ordinance (TERO) Compliance Plan with the TERO Officer of the TRIBE and shall agree to pay a 1.75% TERO fee.

This is not a Federal Contract, responsibility for compliance with and enforcement of the contract resides with the TRIBE. State and Local taxes apply as applicable.

The Indian Health Service is serving as a technical advisor and Construction Inspector for the TRIBE.

The ENGINEER is:

Rebecca Midkiff, E.I.T.
Field Engineer
Seattle District Office
Indian Health Service
701 Fifth Ave. Suite 1655
Seattle, WA 98104
(206) 615-2781

**SECTION 00400
BID OFFER**

Bid of _____
(hereinafter called "BIDDER"), organized and existing under the laws of the
State of _____ doing business with Nisqually Tribe
(hereinafter called "TRIBE").

In compliance with your Advertisement for Bids, BIDDER hereby proposes to perform all WORK for the construction of SOUTH RESERVATION HOUSING PHASE I WATER AND SEWER in strict accordance with the CONTRACT DOCUMENTS, within the time set forth therein, and at the prices stated in the BID SCHEDULE.

By submission of this BID, each BIDDER certifies, and in the case of a joint BID each party thereto certifies as to his own organization, that this BID has been arrived at independently, without consultation, communication, or agreement as to any matter relating to this BID with any other BIDDER or with any competitor.

BIDDER hereby agrees to commence WORK under this contract on or before a date to be specified in the NOTICE TO PROCEED and to fully complete the PROJECT within **120 consecutive calendar days** thereafter. BIDDER further agrees to pay as liquidated damages, **the sum of \$150.00** for each consecutive calendar day thereafter as provided in the General Provisions.

BIDDER acknowledges receipt of the following ADDENDUM:

BIDDER agrees to perform all the work described in the CONTRACT DOCUMENTS for the following prices listed in the BID SCHEDULE.

BIDDER agrees to submit to Administrative Services and the Nisqually TERO office the complete salary breakdown of all hired employees.

**SECTION 00410
 BID SCHEDULE**

Refer to Section 01270, Article 2.02, for a description of the scope of each line item.

Item	Description	Estimated Quantity	Unit	Unit Cost	Total Cost
1	Mob/Demobilization	1	LS	\$ _____	\$ _____
2	6-Unit STEP System and Equipment	2	EA	\$ _____	\$ _____
3	4-Unit STEP System and Equipment	2	EA	\$ _____	\$ _____
4	Sewer Transport Piping	640	LF	\$ _____	\$ _____
5	STEP Effluent Pressure Line	690	LF	\$ _____	\$ _____
6	Connection to Sewer Force Main	4	EA	\$ _____	\$ _____
7	Water Service Connection and Meter	2	EA	\$ _____	\$ _____
8	Water Service Line	390	LF	\$ _____	\$ _____
				Subtotal	\$ _____
7	TERO Fee (1.75% of Subtotal)	1	LS	\$ _____	\$ _____
Total Bid					\$ _____

Total Bid Price Includes all State and Local Taxes

- _____ **BID OFFER (COMPLETED FORM)**
- _____ **BID SCHEDULE (COMPLETED AND SIGNED)**
- _____ **BID BOND**
- _____ **LICENSE**
- _____ **INDIAN ENTERPRISE QUALIFICATION STATEMENT (AS APPLICABLE)**

Bid Submitted By:

Address & Phone
Number:

Company Name

Authorized Signature:

Seal (if by Corporation)

Signature and Date

**SECTION 00450
INDIAN ENTERPRISE QUALIFICATION STATEMENT**

NOTE: If BIDDER wishes to qualify as an "Indian-owned Economic Enterprise", submit this completed questionnaire to the OWNER within the time frame specified. Use additional sheets to complete answers if needed.

The undersigned certifies under oath the truth and correctness of all answers to questions made hereinafter:

1. Applicant wishes to qualify as:

An "Economic Enterprise" as defined in Section 23(e) of the Indian Financing Act of 1974 (P.L. 93-262); that is "any Indian-Owned ... commercial, industrial or business activity established or organized for the purpose of profit: provided, that such Indian ownership shall constitute not less than 51 percent of the enterprise:

or

A "Tribal Organization" as defined in Section 4 (c) of the Indian Self-Determination and Education Assistance Act (P.L. 93-638); that is: "the recognized governing body of any Indian Tribe; any legally established organization of Indians which is controlled, sanctioned or chartered by such governing body or which is democratically elected by the adult members of the Indian community to be served by such organization and which includes the maximum participation of Indian in all phases of its activities: Provided, that in any case where a contract is let or grant made to an organization to perform services benefitting more than one Indian Tribe, the approval of each such Indian Tribe shall be a prerequisite to the letting or making of such contract or grant ..."

2. Name of Enterprise or Organization:

Address:

Telephone Number:

3. Check One:

- | | |
|--|--|
| <input type="checkbox"/> Corporation | <input type="checkbox"/> Joint Venture |
| <input type="checkbox"/> Partnership | <input type="checkbox"/> Other |
| <input type="checkbox"/> Sole Proprietorship | |

4. Answer the following:

If a Corporation:

a. Date of incorporation: _____ b. State of incorporation:

c. Give the names and addresses of the officers of this Corporation and establish whether they are Indian (I) or Non-Indian (NI).

<u>Name and Social Security No.</u>	<u>I or NI</u>	<u>Title</u>	<u>Address</u>	<u>% of stock Ownership</u>
_____	—	<u>President</u>	_____	
_____	—	<u>Vice-President</u>	_____	
_____	—	<u>Secretary or Clerk</u>	_____	
_____	—	<u>Treasurer</u>	_____	

d. Complete the following information on all stockholders who are not listed in C above, owning 10% or more of the stock. Establish whether they are Indian (I) or Non-Indian (NI).

<u>Name and Social Security No.</u>	<u>I or NI</u>	<u>Address</u>	<u>% of stock Ownership</u>
_____	—	_____	
_____	—	_____	
_____	—	_____	
_____	—	_____	
_____	—	_____	
_____	—	_____	
_____	—	_____	

If a Sole Proprietorship or Partnership:

- a. Date of Organization:
- b. Give the following information on the individual or partners and establish whether they are Indian (I) or Non-Indian (NI).

<u>Name and Social Security No.</u>	<u>I or NI</u>	<u>Address</u>	<u>% of stock Ownership</u>
_____	___	_____	
_____		_____	
_____	___	_____	
_____		_____	
_____	___	_____	
_____		_____	

If a Joint Venture:

- a. Date of Joint Venture Agreement:
 - b. Attach the information for each member of the joint venture prepared in the appropriate format given above.
5. Give the name, address, and telephone number of the principal spokesperson of your organization:
6. Will any officer or partner listed in #4 be engaged in outside employment?

___ Yes ___ No

If Yes, complete:

<u>Name/Title:</u>	<u>Hours Per Week Outside the Enterprise</u>

7. Does this enterprise have any subsidiaries or affiliates or is it a subsidiary or affiliate of another concern?

Yes No

If yes, complete:

Name and address of subsidiary, affiliate or other concern:

Description of Relationship

8. Does this enterprise or any person listed in #4 above have or intend to enter into any type of agreement with any other concern or person which relates to or affects the on-going administration, management or operations of this enterprise? These include but are not limited to management and joint venture agreements and any arrangement or contract involving the provision of such compensated services as administrative assistance, data processing, management consulting of all types, marketing, purchasing, production and other type of compensated assistance.

Yes No

If yes, attach a copy of any written agreement or an explanation of any oral or intended agreement:

9. Trade References (include addresses and phone numbers):

10. a. Indicate the core employees in your work force, their job titles, and whether they are Indian or Non-Indian. Core crew is defined as an individual who is a current bona-fide individual who is regularly employed by the contractor in a supervisory or other key position when work is available.

b. Over the past three years, what has been the average number of employees?

11. Attach certification by a Tribe or other evidence of enrollment in a Federally recognized Tribe, or qualification as a California Indian according to Federal law, for each officer, partner or individual designated as an Indian in #4.

12. Attach a certified copy of the charter, article of incorporation, by-laws, partnership agreement, joint venture agreement and/or other pertinent organizational documentation.

**SECTION 00500
AGREEMENT**

THIS AGREEMENT, entered into by and between the Nisqually Tribe (hereinafter the **TRIBE**) and (hereinafter the **CONTRACTOR**), is for personal services as set forth herein.

1. PARTIES' ADDRESS AND TELEPHONE

NISQUALLY TRIBE (TRIBE)
4820 She-Nah-Num Dr. SE
Olympia, WA 98513
(360) 456-5221

(CONTRACTOR)
Mailing Address:
City/State/ZIP:
Telephone
EIN or SS#

2. PURPOSE OF CONTRACT AND DEFINITION

The purpose of this contract is to provide construction services for the Nisqually Tribe as stated in Paragraph 3 in strict accordance with the **CONTRACT DOCUMENTS**. **For purposes of this Contract the CONTRACT DOCUMENTS consist of the following;**

Document Name	Date
1. Contract Documents titled: Nisqually South Reservation Housing, Phase I, Project PO-14-B88	9/18
2. Drawings titled: Nisqually South Reservation Housing, Phase I, Projects PO-14-B88	9/18
3. This Agreement, as executed by the parties' authorized signatures	
4. Any contract amendments signed in accordance with Paragraph 15 herein	

The term **CONTRACTOR** also includes any **SUBCONTRACTOR** employed by **CONTRACTOR** to perform any duties under the Contract Documents and **SUBCONTRACTOR** shall be fully bound by the terms and conditions of the Contract Documents.

3. SCOPE OF WORK

The **CONTRACTOR** will perform the following Work:

Furnish all labor, equipment, and supervision necessary to construct and connect septic tank effluent pumping (STEP) systems to existing sewer force main and provide water service connections for a 20-unit multi-family housing complex.

4. REPORTING REQUIREMENTS

CONTRACTOR is required to submit the following reports to the Tribal Contract Representative (see paragraph 7, below) no later than 30 days after completion of the Work:

5. CONTRACT AMOUNT

The Contract Amount is _____ and _____ /100 DOLLARS (\$ _____), and shall not be exceeded except upon the prior written authorization of the **TRIBE**.

6. BILLING RATE, METHOD OF BILLING, PAYMENT

A. Billing Rate: Unless agreed otherwise, **CONTRACTOR** shall submit a billing that shall detail amounts claimed for the following:

i. Professional Services – Services shall be billed as follows:

Fixed Price for a total not to exceed the Contract Amount

Hourly, or day rate, \$ _____ per _____, the total of which, plus other costs identified in subparagraph ii, shall not exceed the Contract Amount.

ii. Other costs (detail type and price of other costs) –

iii. Construction Services - Service shall be billed as follows:

a. Fixed Price for a total contract price not to exceed \$ _____.

No other costs shall be allowed unless agreed to in writing by the parties to this Contract.

B. Submission of Billing – **CONTRACTOR** shall submit billings of fees and costs incurred under this Contract on a monthly basis to the Tribal Contract Representative, unless otherwise agreed in writing by the **TRIBE**. The Tribal Contract Representative must approve all billings for payment.

C. Method of Payment – **TRIBE** shall pay **CONTRACTOR** by check within 30 days of approval for payment by the Tribal Contract Representative.

7. TRIBAL CONTRACT REPRESENTATIVE

The Tribal Contract Representative for this Contract shall be . **CONTRACTOR** will direct all communications concerning this Contract, including billings, to Tribal Contract Representative.

8. EFFECTIVE DATE AND COMPLETION DATE

The Effective Date of this Contract shall be the date this Contract is executed by the **TRIBE**. This Contract shall be in full force and effect from the Effective Date until , 20 (Completion Date), unless terminated on an earlier date and can be extended only by the written agreement of the parties hereto. **CONTRACTOR** agrees to begin work within three (3) days of the Effective Date, unless otherwise agreed to by the parties in writing or unless a notice to proceed is required by paragraph 24 of this Contract.

9. INDEMNIFICATION

- A.** **CONTRACTOR** shall, to the fullest extent permitted by law, indemnify, defend and hold the **TRIBE** harmless from and against any and all claims, causes, actions, suits, or allegations (collectively "claims") by any third party, alleging any damage or injury, including but not limited to bodily injury (including death), personal injury, and/or property damage (including attorney fees and costs) arising out of, pertaining to, or in any way connected with **CONTRACTOR'S** performance of its obligations under this Contract, including but not limited to claims that allege the negligence of **CONTRACTOR** in combination with the negligence of any other party or person, including the **TRIBE**; provided, however, that claims arising from and based upon the sole and exclusive willful or intentional misconduct of the **TRIBE** are excluded from **CONTRACTOR'S** obligation under this provision.
- B.** Upon written notification by the **TRIBE** to **CONTRACTOR** of a claim falling within the terms of subparagraph A above, **CONTRACTOR** shall immediately defend and indemnify the **TRIBE**. In the event **CONTRACTOR** does not agree to defend the **TRIBE** within seven (7) days of the **TRIBE'S** written notice of claim, the **TRIBE** shall be entitled to retain counsel of its choosing and to take such other steps as it deems necessary, appropriate, and prudent to protect its interests and shall be entitled to recover from **CONTRACTOR** all reasonable costs, attorney fees, settlements, judgments, and other expenses reasonably incurred by the **TRIBE** in taking such action.
- C.** **CONTRACTOR**, shall, at its sole expense, procure and maintain such insurance as identified in paragraph 10, below, providing coverage to **CONTRACTOR** and its employees or agents engaged in the performance of this Contract.

If this box is checked, **CONTRACTOR** shall, before commencement of any work or activity under this Contract, furnish the Tribal Contract Representative with a formal endorsement evidencing such coverage and additional insured status countersigned or executed by the

carrier or an authorized general agent of the carrier. This provision shall in no way limit, modify, or change the requirements of subparagraph A, above.

10. **INSURANCE REQUIREMENTS FOR CONTRACTORS**

- WORKMEN'S COMPENSATION – CONTRACTOR** must certify coverage of any paid employees and submit evidence of such coverage in amount acceptable to the TRIBE or be listed on the State of Washington, Department of Labor & Industries, list of self-insured employers at <http://www.lni.wa.gov/ClaimsIns/Insurance/SelfInsure/EmpList/FindEmps>.
- CONTRACTOR'S BOND-CONTRACTOR** must provide proof of contractor licensing and bond in amount acceptable to the **TRIBE**.
- COMMERCIAL GENERAL LIABILITY- CONTRACTOR** must certify, and provide proof of coverage, that it has current commercial general liability insurance with a minimum bodily injury and property damage per occurrence limit of \$500,000. The policy shall include Products/Completed Operations coverage with a minimum of \$500,000. The policy shall contain the following provisions:
1. Blanket contractual liability coverage for liability assumed under this Contract, including but not limited to liability assumed under paragraph 9 and all contracts and subcontracts relative to this Contract.
 2. Independent contractors' coverage.
 3. Thirty (30) day notice of cancellation in favor of the **TRIBE**.
- PROFESSIONAL LIABILITY-If CONTRACTOR** is a licensed professional (such as a health care provider, attorney, accountant, etc.), s/he must provide proof of current professional licensing and professional liability insurance with limits acceptable to the **TRIBE**.
- A&E PROFESSIONAL LIABILITY INSURANCE-If CONTRACTOR** is a design professional (i.e., architects and engineers) that will affix its seal to design or construction drawings as part of the Scope of Work, such insurance is required with a minimum limit of liability of \$1,000,000 per claim/occurrence to pay on behalf of the assured all sums which the assured shall become legally obligated to pay as damages by reason of any negligent act, error, or omission committed or alleged to have been committed with respect to plans, maps, drawings, analyses, reports, surveys, change orders, designs or specifications prepared or alleged to have been prepared by the assured. The policy shall provide for 30 day notice of cancellation in favor of the **TRIBE**.
- AUTOMOBILE LIABILITY INSURANCE**, for all **CONTRACTORS** owned non-owned and hired vehicles with a minimum combined single limit of \$500,000 per occurrence for bodily injury and

property damage. Alternate acceptable limits are \$250,000 bodily injury per person, \$500,000 bodily injury per occurrence and at least \$100,000 property damage liability per accident.

11. NO WITHHOLDING

The **TRIBE** will not withhold Federal withholding tax, social security, insurance premiums, or any other benefits or gratuities from payments made to **CONTRACTOR** pursuant to paragraph 6.

12. NO ASSIGNMENT OF CONTRACT

This Contract is intended to secure the unique personal services of the **CONTRACTOR**. Accordingly, **CONTRACTOR** agrees that he/she will not assign, transfer, convey, pledge, or encumber this Contract or his/her right, title, or interest therein, or his power to execute same, or any monies due or to grow due hereunder, without the prior written consent of the **TRIBE**.

13. AUTHORIZED SIGNATORS

Authorized signatory of this Contract for the **TRIBE** shall be the General Manager or the Assistant General Manager. Authorized signatory for the **CONTRACTOR** shall be and **CONTRACTOR** hereby agrees and warrants that the person named as its signatory has the authority to execute this Contract on behalf of **CONTRACTOR** and to bind the **CONTRACTOR** to all terms and conditions in the Contract Documents.

14. NO WAIVER OF SOVERIGN IMMUNITY

By entering into this Contract the **TRIBE** does not waive its sovereign immunity from suit and nothing herein shall be construed as a waiver of any such right.

15. ENTIRE AGREEMENT, MODIFICATION AND NOTICE

The Contract Documents contain the entire agreement between the parties and may be modified only in writing signed by both parties hereto. Any notices required to be given pursuant to this Contract shall be sent by U.S. Mail, return receipt requested, to the address of the parties stated in paragraph 1 hereto.

16. TRIBE'S OWNERSHIP OF WORK PRODUCT

All reports, designs, drawings, specifications, notes and other work developed in the performance of this Contract by **CONTRACTOR** are work for hire and are the sole property of the **TRIBE** and shall not be retained by **CONTRACTOR**, used for any other purpose, nor released to any third party without the express written consent of the **TRIBE**.

17. TERMINATION

TRIBE shall have the right to terminate this Contract upon five (5) days written notice to the **CONTRACTOR** by the Tribal Contract Representative. The **TRIBE** shall have the

right to terminate this Contract with no notice if the **TRIBE**, in its sole discretion, determines that **CONTRACTOR** or its performance of the Work violates the law of the **TRIBE** or of the United States or that it poses an immediate threat to the health, safety and welfare of the **TRIBE**.

18. LIQUIDATED DAMAGES

For each calendar day beyond the Completion Date, the **CONTRACTOR** shall pay \$150.00 per day damages to the Tribe.

19. RECORDS RETENTION AND INSPECTION

All financial records, supporting documents, statistical records and all other records pertinent to this Contract shall be available at all times for inspection by **TRIBE**, any Federal Grantor Agency, the Comptroller of the United States, or any authorized representative of the **TRIBE** for the purposes of auditing, examining, or making transactions. **TRIBE** shall give **CONTRACTOR** or any of its **SUBCONTRACTORS** at least three (3) days written notice of any such inspection. **CONTRACTOR** and any **SUBCONTRACTOR** must keep all records for a period of three years after final payment. The records shall be retained beyond the three-year period if audit findings have not been resolved.

20. LAW GOVERNING

- A.** **CONTRACTOR** and **TRIBE** agree that this Contract has been executed and entered at Nisqually, Washington, within the exterior boundaries of the Nisqually Indian Reservation, and that entry into this Contract establishes a consensual relationship between **CONTRACTOR** and the **TRIBE**.
- B.** This Contract shall be governed by the laws of the Nisqually Indian Tribe, and by Federal contract law where tribal law does not exist both as to interpretation and performance.

21. QUALIFICATIONS AND WARRANTIES

- A.** By the signature of its authorized signatory to this Contract, **CONTRACTOR** certifies that s/he possesses the necessary training, expertise, and experience to perform the Scope of Work identified in paragraph 3 to the standard acceptable in **CONTRACTOR'S** industry or profession.
- B.** If this Contract is for construction, the following shall apply:
- 1. CONTRACTOR'S Warranties.** **CONTRACTOR** warrants to the **TRIBE** that (1) materials and equipment furnished under the Contract will be of good quality and new unless otherwise required or permitted by the Contract Documents, (2) the Work will be free from defects not inherent in the quality required or permitted, and (3) that the Work will conform to the requirements of the Contract Documents. Work not conforming to these requirements, including substitutions not properly approved and authorized,

may be considered defective. This warranty excludes remedy for damage or defect caused by abuse, modifications not signed by the Contractor, improper or insufficient maintenance, improper operation, or normal wear and tear under normal usage. If required by the **TRIBE, CONTRACTOR** shall furnish satisfactory evidence as to the kind and quality of materials and equipment.

2. One-Year Correction Period. If, within one year after the date of Substantial Completion of the Scope of Work, any of the Work is found to be not in accordance with the requirements of the Contract Documents, **CONTRACTOR** shall correct it, at **CONTRACTOR'S** sole expense, within five (5) days after receipt of written notice from the **TRIBE** to do so unless the **TRIBE** has previously given **CONTRACTOR** a written acceptance of such condition or unless the **TRIBE** permits a longer correction period in writing. **CONTRACTOR'S** obligation under this paragraph shall survive the **TRIBE'S** acceptance of the Work and termination of the Contract. The **TRIBE** shall give such notice within three (3) days after discovery of any condition to be corrected.
3. **TRIBE'S** Right to Correct. If **CONTRACTOR** fails to correct nonconforming Work within a reasonable time, the **TRIBE** may correct it at reasonable expense. If **CONTRACTOR** does not proceed with correction of such nonconforming Work within a reasonable time fixed by written notice from the **TRIBE**, the **TRIBE** may remove it and store the salvageable materials or equipment at **CONTRACTOR'S** expense. If **CONTRACTOR** does not pay costs of such removal and storage within ten (10) days after written notice, the **TRIBE** may upon ten (10) additional days' written notice sell such materials and equipment at auction or at private sale and shall account for the proceeds thereof, after deducting costs and damages that should have been borne by **CONTRACTOR**, including compensation for professional services and expenses made necessary thereby. If such proceeds of sale do not cover costs which **CONTRACTOR** should have borne, the Contract Amount shall be reduced by the deficiency. If payments then or thereafter due the **CONTRACTOR** are not sufficient to cover such amount, the **CONTRACTOR** shall pay the difference to the **TRIBE**.
4. Severability. Contractor and Owner agree that this section 20.B overrides any and all portions of the Contract that contradict this section. If any portion of this section 20.B is deemed or is determined to be in conflict with tribal or federal statutes, both **CONTRACTOR** and **TRIBE** agree that the non-conflicting portion of this section shall remain binding for both parties.

22. REQUIRED PROFESSIONAL LICENSING AND BONDING

1. Number:
2. Number:

23. ADDITIONAL REQUIREMENTS

- A.** Unless the Contract Amount is under \$10,000, **CONTRACTOR** shall comply with equal employment opportunity---Executive Order 11246, as amended by Executive Order 11375.
- B.** If the Contract Amount exceeds \$2,000 for construction, or \$2,500 total, **CONTRACTOR**, agrees to comply with the requirements of the Contract Work Hours and Safety Standards Act.
- C.** If the Scope of Work in this Contract involves research, development, experimental, or demonstration work, additional provisions, which shall include a notice of grantor Agency requirements regarding reporting, patents, copyrights, and rights to data, shall be attached to this Contract as an appendix.
- D.** If the Contract Amount exceeds \$100,000, **CONTRACTOR** shall comply with all applicable standards, orders, or requirements issued under sections 306 and 508 or the Clean Air Act, Executive Order 11738, and Environmental Protection Agency regulations, Corps of Engineers permitting requirements, and tribal environmental ordinances, permitting procedures and other applicable environmental regulatory requirements.
- E.** All contracts for construction shall comply with current versions of the National Electrical Code, Uniform Building Code, National Plumbing Code, National Fire Code, State Energy Plan, Thurston County PUD energy requirements, and any water conservation requirements.
- F.** If the Contract Amount exceeds \$25,000, the attached **FEDERAL DEBARMENT AND SUSPENSION CERTIFICATION** statements must be signed for this Contract to be valid.

24. NOTICE TO PROCEED

- A.** Immediately upon execution of this Contract, **CONTRACTOR** is authorized to proceed with work.
- B.** **TRIBE** shall give **CONTRACTOR** written notice to proceed once all the information, documentation, appendices and fees required by this Contract are fulfilled or executed.

25. FACSIMILE SIGNATURE

The parties agree that, signatures on an electronic facsimile of this document shall be considered legal and binding by all parties.

CONTRACTOR:

NISQUALLY TRIBE

By: _____
Printed name

By: _____
Printed name

Signature

Signature

Date: _____

Date: _____

DIRECTOR:

By: _____
Printed name

Signature

Date: _____

FEDERAL DEBARMENT AND SUSPENSION CERTIFICATION

1. Title 28 of the Code of Federal Regulations (CFS), Part 67, provides that executive departments and agencies shall participate in a system for debarment and suspension from programs and activities involving Federal financial and non-financial assistance and benefits. Debarment or suspension of a participant in a program by one agency has government wide effect. It is the policy of the Federal Government to conduct business only with responsible persons, and these guidelines will assist agencies in carrying out this policy.

2. Certification regarding Debarment, Suspension, Ineligibility and other responsibility matter – Primary Covered Transactions. Certifications must be completed and submitted by recipients of discretionary awards to the awarding agency’s program offices during the application stage. Block/formula recipients are exempt from submission of this certification but are responsible for monitoring sub recipient submissions of the lower tier certification and for maintaining them at the State level.

3. Certification regarding Debarment, Suspension, Ineligibility and Voluntary Exclusion – Lower Tier Covered Transactions. This requirement includes persons, corporations, etc., who have critical influence on or substantive control over the award. The direct recipient will be responsible for monitoring the submission and maintaining the official sub recipient certification.

I, the above-named **CONTRACTOR** herein or its duly authorized representative, do hereby certify that the **CONTRACTOR** named above is not presently Debarred, or Suspended, or Ineligible from doing business with programs and activities involving Federal financial and non-financial assistance and benefits of \$25,000 or more.

DATE: _____

SIGNED: _____

TRIBAL DEBARMENT AND SUSPENSION CERTIFICATE

1. THE NISQUALLY TRIBE REQUIRES THAT ALL DEPARTMENTS AND PROGRAMS PARTICIPATE IN A SYSTEM FOR DEBARMENT AND SUSPENSION FROM PROGRAMS AND ACTIVITIES INVOLVING FINANCIAL AND NON-FINANCIAL ASSISTANCE AND BENEFITS. DEBARMENT OR SUSPENSION OF A PARTICIPANT IN A ONE PROGRAM HAS A TRIBAL WIDE EFFECT. IT IS THE POLICY OF THE NISQUALLY TRIBAL COUNCIL TO CONDUCT BUSINESS ONLY WITH RESPONSIBLE PERSONS, AND THESE GUIDELINES WILL ASSIST PROGRAM IN CARRYING OUT THIS POLICY.

2. CERTIFICATION REGARDING DEBARMENT, SUSPENSION, INELIGIBILITY AND OTHER RESPONSIBILITY MATTERS. CERTIFICATION MUST BE SUBMITTED BY RECIPIENTS OF AWARD TO THE TRIBAL PROGRAM DURING THE APPLICATION STAGE.

I, THE ABOVE-NAMED **CONTRACTOR** HEREIN OR ITS DULY AUTHORIZED REPRESENTATIVE, DO HEREBY CERTIFY THAT THE **CONTRACTOR** NAMED ABOVE IS NOT PRESENTLY DEBARRED, OR SUSPENDED, OR INELIGIBLE FROM DOING BUSINESS WITH THE NISQUALLY TRIBE?

DATE: _____

SIGNED: _____

**SECTION 00510
NOTICE OF AWARD**

To: _____

Project Description: NISQUALLY SOUTH RESERVATION HOUSING PHASE I WATER AND SEWER

The TRIBE has considered the BID submitted by you for the above-described WORK in response to its Advertisement for Bids dated _____, 2018 and Information for Bidders.

You are hereby notified that your BID has been accepted for items in the amount of \$_____.

You are required by the Information for Bidders to execute the Agreement and furnish the required CONTRACTOR'S Performance BOND, Payment BOND, TERO compliance plan and certificates of insurance within ten (10) calendar days from the date of this Notice to you.

If you fail to execute said Agreement and to furnish said BONDS within ten (10) days from the date of this Notice, said TRIBE will be entitled to consider all your right arising out of the TRIBE'S acceptance of your BID as abandoned and as a forfeiture of your BID BOND. The TRIBE will be entitled to such other rights as may be granted by law.

You are required to return an acknowledged copy of this NOTICE OF AWARD to the TRIBE.

Dated this _____ day of _____, 20____.

TRIBE
By _____
Title _____

ACCEPTANCE OF NOTICE

Receipt of the above NOTICE OF AWARD is hereby acknowledged

by _____
this the _____ day of _____, 20____
By _____
Title _____

**SECTION 00550
NOTICE TO PROCEED**

To: _____

Date: _____

You are hereby notified to commence WORK in accordance with the Agreement dated _____, 20_____, on or before _____, 20_____, and you are to complete the WORK within **one-hundred (120)** consecutive calendar days thereafter. The date of completion of all WORK is therefore _____, 20_____. You will be required to mobilize within 10 days from the commencement date given above.

You are required to return an acknowledged copy of this NOTICE OF AWARD to the TRIBE.

Dated this _____ day of _____, 2_____.

TRIBE
By _____
Title _____

ACCEPTANCE OF NOTICE

Receipt of the above NOTICE OF AWARD is hereby acknowledged by _____
this the _____ day of _____, 2_____
By _____
Title _____

**SECTION 00610
BID BOND**

KNOW ALL MEN BY THESE PRESENTS, that we, the undersigned,
_____ as Principal, and
_____ as Surety, are hereby held and firmly
bound unto _____ as TRIBE in the
penal sum of \$_____ for the payment of which, well and truly to
be made, we hereby jointly and severally bind ourselves, successors and assigns.
Signed this _____ day of _____ 2_____.

The Condition of the above obligation is such that whereas the Principal has
submitted to the Nisqually Tribe a certain BID, attached hereto and hereby made
a part hereof to enter into a contract in writing, for the

NOW, THEREFORE,

- (a) If said BID shall be rejected, or
- (b) 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 for the payment of all persons performing labor or furnishing materials in connection therewith, 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: it being expressly understood and agreed that the liability of the Surety for any and all claims hereunder shall, in no event, exceed the penal 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 any extension of the time with which the TRIBE may accept such BID: and said Surety does hereby waive notice of any 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 proper officers, the day and year first set forth above.

_____(L.S.)

Principal

Surety

By: _____

IMPORTANT – Surety companies executing BONDS must appear on the Treasury Department’s most current list (Circular 570 as amended) and be authorized to transact business in the state where the PROJECT is located.

**SECTION 00620
PAYMENT BOND**

KNOW ALL MEN BY THESE PRESENTS: THAT

Name of Contractor

Address of Contractor

a _____ hereinafter called Principal.
Corporation, Partnership or Individual
and _____

Name of Surety

Address of Surety

Hereinafter called Surety, are held and firmly bound unto _____

Name of TRIBE

Address of TRIBE

Hereinafter called TRIBE, in the penal sum of _____ Dollars, \$ (_____)

In lawful money of the United States, for the payment of which sum well and truly to be made, we bind ourselves, successors, and assigns, jointly and severally, firmly by these presents.

THE CONDITION OF THIS OBLIGATION is such that whereas, the Principal entered into a certain contract with the TRIBE, dated the ____ day of __, 2____, a copy of which is hereto attached and made a part hereof for the construction of:

NOW, THEREFORE, if the Principal shall promptly make payment to all person, firms, SUBCONTRACTORS, and corporations furnishing materials for or performing labor in the prosecution of the WORK provided for in such contract, and any authorized extension or modification thereof, including all amounts due for materials, lubricants, oil, gasoline, coal and coke, repairs on machinery, equipment and tools, consumed or used in connection with the construction of such WORK, and all insurance premiums on said WORK, and for all labor, performed in such WORK whether by SUBCONTRACTOR or otherwise, then this obligation shall be void: otherwise to remain in full force and effect.

PROVIDED, FURTHER, that the said Surety for value received hereby stipulates and agrees that no change, extension of time, alteration or addition to the terms of the contract or to the WORK to be performed hereunder or the SPECIFICATIONS accompanying the same shall in any wise affect its obligation on this BOND, and it does hereby waive notice of any such change, extension of time, alteration or addition to the terms of the contract or to the WORK or the SPECIFICATIONS.

PROVIDED, FURTHER, that no final settlement between the TRIBE and the CONTRACTOR shall abridge the right of any beneficiary hereunder, whose claim may be unsatisfied.

IN WITNESS WHEREOF, this instrument is executed in _____ counterparts, each
Number
one of which shall be deemed an original, this the _____ day of _____, 2_____

ATTEST: _____
Principal

Principal Secretary

(SEAL)

By _____(s)

Address

Witness as to Principal

Address

Surety

ATTEST:

Attorney-in-Fact

Witness as to Surety Address

Address

Address

NOTE: Date of BOND must not be prior to date of Contract.
If CONTRACTOR is Partnership, all partners should execute BOND.

IMPORTANT: Surety companies executing BONDS must appear on the Treasury Department's most current list (Circular 570 as amended) and be authorized to transact business in the State where the PROJECT is located.

**SECTION 00630
PERFORMANCE BOND**

KNOW ALL MEN BY THESE PRESENTS: THAT

Name of Contractor

Address of Contractor

a _____ hereinafter called Principal.
Corporation, Partnership or Individual
and _____

Name of Surety

Address of Surety

Hereinafter called Surety, are held and firmly bound unto _____

Name of TRIBE

Address of TRIBE

Hereinafter called TRIBE, in the penal sum of _____ Dollars, \$ (_____)

In lawful money of the United States, for the payment of which sum well and truly to be made, we bind ourselves, successors, and assigns, jointly and severally, firmly by these presents.

THE CONDITION OF THIS OBLIGATION is such that whereas, the Principal entered into a certain contract with the TRIBE, dated the _____ day of __, 2____, a copy of which is hereto attached and made a part hereof for the construction of:

NOW, THEREFORE, if the Principal shall well, truly and faithfully perform its duties, all the undertakings, covenants, terms, conditions, and agreements of said contract during the original term thereof, and any extensions thereof, which may be granted by the TRIBE, with or without notice to the Surety, and during the one year guaranty period, and if he shall satisfy all claims and demands incurred under such contract, and shall fully indemnify and save harmless the TRIBE, from all costs and damages which it may suffer by reason of failure to do so, and shall reimburse and repay the TRIBE all outlay and expense which the TRIBE may incur in making good any default, then this obligation shall be void; otherwise to remain in full force and effect.

PROVIDED, FURTHER, that the said surety, for value received hereby stipulates and agrees that no change, extension of time, alteration or addition to the terms of

the contract or to WORK to be performed hereunder or the SPECIFICATIONS accompanying the same shall in any wise affect its obligation on this BOND, and it does hereby waive notice of any such change, extension of time, alteration or addition to the terms of the contract or to the WORK or to the SPECIFICATIONS.

PROVIDED, FURTHER, that no final settlement between the TRIBE and the CONTRACTOR shall abridge the right of any beneficiary hereunder, whose claim may be unsatisfied.

IN WITNESS WHEREOF, this instrument is executed in _____ counterparts, each
Number
one of which shall be deemed an original, this the _____ day of _____, 20____

ATTEST:

Principal

Principal Secretary

(SEAL)

By _____(s)

Address

Witness as to Principal

Address

Surety

ATTEST:

Attorney-in-Fact

Witness as to Surety Address

Address

Address

Address

NOTE: Date of BOND must not be prior to date of Contract.
IF CONTRACTOR is Partnership, all partners should execute BOND.
IMPORTANT: Surety companies executing BONDS must appear on the Treasury Department's most current list (Circular 570 as amended) and be authorized to transact business in the state where the PROJECT is located.

SECTION 00700 GENERAL PROVISIONS

01. Definitions
02. Additional Instructions and Detail Drawings
03. Reports and Records
04. Drawings and Specifications
05. Site Investigation and Conditions Affecting the Work
06. Shop Drawings
07. Materials, Services and Facilities
08. Substitutions
09. Patents
10. Surveys, Permits, Regulations
11. Laws and Regulations Affecting Work
12. Taxes
13. Protection of Work, Property, Persons
14. Protection of Existing Vegetation, Structures, Equipment, Utilities, and Improvements
15. Operations and Storage Areas
16. Insurance
17. Indemnification
18. Contract Security
19. Accident Prevention and Safety Program
20. Temporary Sanitary Facilities
21. Supervision by Contractor
22. Subcontracting
23. Separate Contracts
24. Time for Completion and Liquidated Damages
25. Progress Schedules and Requirements for Compliance
26. Land and Right-of-Way
27. Suspension of Work, Termination and Delay
28. Inspection and Testing
29. Correction of Work
30. Changes in the Work
31. Changes in the Contract Price
32. Differing Site Conditions
33. Use and Possession Prior to Completion
34. Cleanup and Finish Grading
35. Measurement and Payment
36. Variation in Estimated Quantities
37. Payments to Contractor
38. Assignments
39. Guaranty
40. Acceptance of Final Payment as release
41. Engineer's Role and Authority
42. Resolution of Disputes
43. Equal Employment Opportunity
44. Clean Air and Water
45. Indian Health Service

1. DEFINITIONS

- 1.1 Wherever used in the CONTRACT DOCUMENTS, the following terms shall have the meanings indicated which shall be applicable to both the singular and plural thereof:
- 1.2 ADDENDA -Written or graphic instruments issued prior to the execution of the Agreement which modify or interpret the CONTRACT DOCUMENTS, DRAWINGS and SPECIFICATIONS, by additions, deletions, clarifications or corrections.
- 1.3 BID -The offer or proposal of the BIDDER submitted on the prescribed form setting forth the prices for the WORK to be performed.
- 1.4 BIDDER -Any person, firm or corporation submitting a BID for the WORK.
- 1.5 BONDS -Bid, Performance, and Payment Bonds and other instruments of security, furnished by the CONTRACTOR and his surety in accordance with the CONTRACT DOCUMENTS.
- 1.6 CHANGE ORDER -A written order to the CONTRACTOR authorizing an addition, deletion or revision in the WORK within the general scope of the CONTRACT DOCUMENTS, or authorizing an adjustment in the CONTRACT PRICE or CONTRACT TIME.
- 1.7 CONTRACT DOCUMENTS -The contract, including Advertisement For Bids, Information For Bidders, Bid, Bid Bond, Agreement, General Provisions, Labor Provisions, Special Provisions, Payment Bond, Performance Bond, NOTICE OF AWARD, NOTICE TO PROCEED, CHANGE ORDER, DRAWINGS, Technical Provisions, Submittal Requirements, and ADDENDA.
- 1.8 CONTRACT PRICE -The total monies payable to the CONTRACTOR under the terms and conditions of the CONTRACT DOCUMENTS.
- 1.9 CONTRACT TIME -The number of calendar days stated in the CONTRACT DOCUMENTS for the completion of the WORK.
- 1.10 CONTRACTING OFFICER -The person with the OWNER organization who is authorized to administer the contract for the OWNER.
- 1.11 CONTRACTING OFFICER'S REPRESENTATIVE - The representative of the CONTRACTING OFFICER authorized to deal with the CONTRACTOR at the site to administer the technical aspects of the CONTRACT, and to assure compliance with the drawings and specifications.

- 1.12 CONTRACTOR - The person, firm or corporation with whom the OWNER has executed the Agreement.
- 1.13 DRAWINGS - The part of the CONTRACT DOCUMENTS, which show the characteristics and scope of the WORK to be performed, and which have been prepared or approved by the ENGINEER.
- 1.14 ENGINEER - The person, firm or corporation named as such in the CONTRACT DOCUMENTS.
- 1.15 FIELD ORDER- A written order effecting a change in the WORK not involving an adjustment in the CONTRACT PRICE or an extension of the CONTRACT TIME, issued by the ENGINEER to the CONTRACTOR during construction.
- 1.16 INDIAN HEALTH SERVICE (IHS) - Federal agency which is providing funding and/or technical assistance to the Owner on this project.
- 1.17 NOTICE OF AWARD -The written notice of the acceptance of the Bid from the OWNER to the successful BIDDER.
- 1.18 NOTICE TO PROCEED -Written communication issued by the OWNER to the CONTRACTOR authorizing him to proceed with the WORK and establishing the date of commencement of the WORK.
- 1.19 OWNER -A public or quasi-public body or authority, tribe, corporation, association, partnership, or individual for whom the WORK is to be performed.
- 1.20 PROJECT -The undertaking to be performed as provided in the CONTRACT DOCUMENTS.
- 1.21 RESIDENT PROJECT REPRESENTATIVE -The authorized representative of the OWNER who is assigned to the PROJECT site or any part thereof.
- 1.22 SHOP DRAWINGS -All drawings, diagrams, illustrations, brochures, schedules and other data which are prepared by the CONTRACTOR, a SUBCONTRACTOR, manufacturer, SUPPLIER or distributor, which illustrate how specific portions of the WORK shall be fabricated or installed.
- 1.23 SPECIFICATIONS -A part of the CONTRACT DOCUMENTS consisting of written descriptions of a technical nature of materials, equipment,

construction systems, standards and workmanship.

- 1.24 SUBCONTRACTOR -An individual, firm or corporation having a direct contract with the CONTRACTOR or with any other SUBCONTRACTOR for the performance of a part of the WORK at the site.
- 1.25 SUBSTANTIAL COMPLETION -That date as certified by the ENGINEER when the construction of the PROJECT is sufficiently completed in accordance with the CONTRACT DOCUMENTS, so that the PROJECT or specified part can be utilized for the purposes for which it is intended.
- 1.26 SPECIAL PROVISIONS -Modifications and additions to General Provisions which may be required by a Federal agency for participation in the PROJECT, or such requirements that may be imposed by applicable state or local laws, or the OWNER'S contracting practices.
- 1.27 SUPPLIER - ANY person or organization who supplies materials or equipment for the WORK, including that fabricated to a special design, but who does not perform labor at the site.
- 1.28 TRIBE -The governing body of the INDIAN TRIBE which has jurisdiction on the INDIAN RESERVATION on or near which the WORK will be performed.
- 1.29 WORK -All labor necessary to produce the construction required by the CONTRACT DOCUMENTS and all materials and equipment incorporated or to be incorporated in the PROJECT.
- 1.30 WRITTEN NOTICE -Any notice to any party of the Agreement relative to any part of this Agreement in writing and considered delivered and the service thereof completed, when posted by certified or registered mail to the said party at his last given address, or delivered in person to said party or his authorized representative on the WORK.

2. ADDITIONAL INSTRUCTIONS AND DETAIL DRAWINGS

- 2.1 The CONTRACTOR may be furnished additional instructions and detail drawings, by the ENGINEER, as necessary to carry out the WORK required by the CONTRACT DOCUMENTS.
- 2.2 The additional drawings and instruction thus supplied will become a part of the CONTRACT DOCUMENTS. The CONTRACTOR shall carry out the WORK in accordance with the additional detail drawings and instructions.

3. REPORTS AND RECORDS

- 3.1 The CONTRACTOR shall submit to the OWNER such schedule of quantities and costs, payrolls, reports, estimates, records and other data where applicable as are required by the CONTRACT DOCUMENTS for the WORK to be performed.
- 3.2 The CONTRACTOR shall keep all records related to the CONTRACT for a minimum of three years after acceptance of the completed work.

4. DRAWINGS AND SPECIFICATIONS

- 4.1 The intent of the DRAWINGS and SPECIFICATIONS is that the CONTRACTOR shall furnish all labor, materials, tools, equipment, and transportation necessary for the proper execution of the WORK in accordance with the CONTRACT DOCUMENTS and all incidental work necessary to complete the PROJECT in an acceptable manner, ready for use, occupancy or operation by the OWNER.
- 4.2 In case of conflict between the DRAWINGS and SPECIFICATIONS, the SPECIFICATIONS shall govern. Figure dimensions on DRAWINGS shall govern over scale dimensions, and detailed DRAWINGS shall govern over general DRAWINGS.
- 4.3 Any discrepancies found between the DRAWINGS and SPECIFICATIONS and site conditions or any inconsistencies or ambiguities in the DRAWINGS or SPECIFICATIONS shall be immediately reported to the ENGINEER, in writing, who shall promptly correct such inconsistencies or ambiguities in writing. WORK done by the CONTRACTOR after his discovery of such discrepancies, inconsistencies or ambiguities shall be done at the CONTRACTOR'S risk.

5. SITE INVESTIGATION AND CONDITIONS AFFECTING THE WORK

- 5.1 The CONTRACTOR will take steps necessary to ascertain the nature and location of the work, and investigate the general and local conditions which can affect the work or its cost, including but not limited to (1) conditions bearing upon transportation, disposal, handling, and storage of materials; (2) the availability of labor, water, electric power, and roads; (3) uncertainties of weather, river stages, tides, or similar physical conditions at the site; (4) the conformation and conditions of the ground; and (5) the character of equipment and facilities needed preliminary to and during work performance. The CONTRACTOR also will observe and determine the character, quality, and quantity of surface and subsurface materials or obstacles to be encountered insofar as this information is reasonably

ascertainable from an inspection of the site, including all exploratory work done by the OWNER, as well as from the drawings and specifications made a part of this contract. Any failure of the CONTRACTOR to take the actions described and acknowledged in this paragraph will not relieve the CONTRACTOR from responsibility for estimating properly the difficulty and cost of successfully performing the work, or for proceeding to successfully perform the work without additional expense to the OWNER.

- 5.2 The OWNER assumes no responsibility for any conclusions or interpretations made by the Contractor based on the information made available by the OWNER. The OWNER does not assume responsibility for any understanding reached or representation made concerning conditions which can affect the work by any of its representatives before the execution of this contract, unless that understanding or representation is expressly stated in this contract.

6. SHOP DRAWINGS

- 6.1 The CONTRACTOR shall provide SHOP DRAWINGS as may be necessary for the prosecution of the WORK as required by the CONTRACT DOCUMENTS. The ENGINEER shall promptly review all SHOP DRAWINGS. The ENGINEER'S approval of any SHOP DRAWING shall not release the CONTRACTOR from responsibility for deviations from the CONTRACT DOCUMENTS. The approval of any SHOP DRAWING which substantially deviates from the requirement of the CONTRACT DOCUMENTS shall be evidenced by a CHANGE ORDER.
- 6.2 When submitted for the ENGINEER'S review, SHOP DRAWINGS shall bear the CONTRACTOR'S certification that he has reviewed, checked and approved the SHOP DRAWINGS and that they are in conformance with the requirements of the CONTRACT DOCUMENTS.
- 6.3 Portions of the WORK requiring a SHOP DRAWING or sample submission shall not begin until the SHOP DRAWING or submission has been approved by the ENGINEER. A copy of each approved SHOP DRAWING and each approved sample shall be kept in good order by the CONTRACTOR at the site and shall be available to the ENGINEER.

7. MATERIALS, SERVICES AND FACILITIES

- 7.1 It is understood that, except as otherwise specifically stated in the CONTRACT DOCUMENTS, the CONTRACTOR shall provide and pay for all materials, labor, tools, equipment, water, light, power, transportation, supervision, temporary construction of any nature, and all other services and facilities of any nature whatsoever necessary to execute, complete,

and deliver the WORK within the specified time.

- 7.2 Materials and equipment shall be so stored as to insure the preservation of their quality and fitness for the WORK. Stored materials and equipment to be incorporated in the WORK shall be located so as to facilitate prompt inspection.
- 7.3 Manufactured articles, materials and equipment shall be applied, installed, connected, erected, used, cleaned and conditioned as directed by the manufacturer.
- 7.4 Materials, supplies and equipment shall be in accordance with samples submitted by the CONTRACTOR and approved by the ENGINEER.
- 7.5 Materials, supplies or equipment to be incorporated into the WORK shall not be purchased by the CONTRACTOR or the SUBCONTRACTOR subject to a chattel mortgage or under a conditional sale contract or other agreement by which an interest is retained by the seller.

8. SUBSTITUTIONS

- 8.1 Whenever a material, article or piece of equipment is identified on the drawings or specifications by reference to brand name or catalogue number, it shall be understood that this is referenced for the purpose of defining the performance or other salient requirements and that other products of equal capacities, quality and function shall be considered. The CONTRACTOR may recommend the substitution of a material, article, or piece of equipment of equal substance and function for those referred to in the CONTRACT DOCUMENTS by reference to brand name or catalogue number, and if, in the opinion of the ENGINEER, such material, article, or piece of equipment is of equal substance and function to that specified, the ENGINEER may approve its substitution and use by the CONTRACTOR. Any cost differential shall be deductible from the CONTRACT PRICE and the CONTRACT DOCUMENTS shall be appropriately modified by CHANGE ORDER. The CONTRACTOR warrants that if substitutes are approved, no major changes in the function or general design of the PROJECT will result. Incidental changes or extra component parts required to accommodate the substitute will be made by the CONTRACTOR without a change in the CONTRACT PRICE or CONTRACT TIME.

9. PATENTS

- 9.1 The CONTRACTOR shall pay all applicable royalties and license fees. He shall defend all suits or claims for infringement of any patent rights and

save the OWNER harmless from loss on account thereof, except that the OWNER shall be responsible for any such loss when a particular process, design, or the product of a particular manufacturer or manufacturers is specified, however if the CONTRACTOR has reason to believe that the design, or product specified is an infringement of a patent, he shall be responsible for such loss unless he promptly gives such information to the ENGINEER.

10. SURVEYS, PERMITS, AND REGULATIONS

- 10.1 The OWNER shall furnish all boundary surveys and establish all base lines for locating the principal component parts of the WORK together with a suitable number of benchmarks adjacent to the WORK as shown in the CONTRACT DOCUMENTS. From the information provided by the OWNER, unless otherwise specified in the CONTRACT DOCUMENTS, the CONTRACTOR shall develop and make all detail surveys needed for construction such as slope stakes, batter boards, stakes for pile locations and other working points, lines, elevations and cut sheets.
- 10.2 The CONTRACTOR shall carefully preserve bench marks, reference points and stakes and, in case of willful or careless destruction, he shall be charged with the resulting expense and shall be responsible for any mistakes that may be caused by their unnecessary loss or disturbance.
- 10.3 Permits and licenses of a temporary nature necessary for the prosecution of the WORK shall be secured and paid for by the CONTRACTOR unless otherwise specified in the CONTRACT DOCUMENTS. Permits, licenses and easements for permanent structures or permanent changes in existing facilities shall be secured and paid for by the OWNER, unless otherwise specified. The CONTRACTOR shall give all notices and comply with all laws, ordinances, rules and regulations bearing on the conduct of the WORK as drawn and specified. If the CONTRACTOR observes that the CONTRACT DOCUMENTS are at variance therewith, he shall promptly notify the ENGINEER in writing, and any necessary changes shall be adjusted as provided in Section 30 - "CHANGES IN THE WORK".

11. LAWS AND REGULATIONS AFFECTING WORK

- 11.1 The CONTRACTOR shall at all times observe and comply with Federal, State, City, County and Tribal laws, ordinances and regulations which in any manner affect the conduct of the work; and all such orders and decrees as exist at the present and which may be enacted later by legislative bodies or tribunals having legal jurisdiction or authority over the work. No pleas of misunderstanding or ignorance thereof will be considered. The CONTRACTOR shall be wholly responsible for any claim

or liability arising from or based on the violation of any such law, ordinance, regulation, order or decree.

12. TAXES

12.1 The CONTRACTOR will pay all sales, consumer, use and other similar taxes required by the law of the place where the WORK is performed.

13. PROTECTION OF WORK, PROPERTY AND PERSONS

13.1 The CONTRACTOR will be responsible for initiating, maintaining and supervising all safety precautions and programs in connection with the WORK. He will take all necessary precautions for the safety of and will provide the necessary protection to prevent damage, injury or loss to all employees on the WORK and other persons who may be affected thereby, all the WORK and all materials or equipment to be incorporated therein, whether in storage on or off the site, and other property at the site or adjacent thereto.

14. PROTECTION OF EXISTING VEGETATION, STRUCTURES, EQUIPMENT, UTILITIES, AND IMPROVEMENTS

14.1 The CONTRACTOR shall preserve and protect all structures, equipment, and vegetation (such as trees, shrubs, and grass) on or adjacent to the work site, which are not to be removed and which do not unreasonably interfere with the work required under this contract. The CONTRACTOR shall remove trees only when specifically authorized to do so, and shall avoid damaging vegetation that will remain in place. If any limbs or branches of trees are broken during contract performance, or by the careless operation of equipment, or by workmen, the CONTRACTOR shall trim those limbs or branches with a clean cut and paint the cut with a tree-pruning compound as directed by the ENGINEER.

14.2 The CONTRACTOR shall protect from damage all existing improvements and utilities (1) on or near the work site and (2) on adjacent property of a third party, the locations of which are made known to or should be known by the CONTRACTOR. The existence and location of utilities are not guaranteed by the OWNER and shall be investigated and verified in the field by the CONTRACTOR before commencing construction activities in any particular area. The CONTRACTOR shall repair any damage to those facilities, including those that are the property of a third party, resulting from failure to comply with the requirements of this contract or failure to exercise reasonable care in performing the work. If the CONTRACTOR fails or refuses to repair the damage promptly, the OWNER may have the necessary work performed and charge the cost to the CONTRACTOR.

15. OPERATIONS AND STORAGE AREAS

- 15.1 The CONTRACTOR shall confine all operations (including storage of materials) to areas authorized or approved by the OWNER. The CONTRACTOR shall hold and save the OWNER and its representatives, free and harmless from liability of any nature occasioned by the CONTRACTOR'S performance.
- 15.2 Temporary buildings (e.g., storage sheds, shops, offices) and utilities may be erected by the CONTRACTOR only with the approval of the OWNER and shall be built with labor and materials furnished by the CONTRACTOR without expense to the OWNER. The temporary buildings and utilities shall remain the property of the CONTRACTOR and shall be removed by the CONTRACTOR at its expense upon completion of the work. Only with the written consent of the OWNER may the buildings and utilities be abandoned and not removed.
- 15.3 The CONTRACTOR shall use only established roadways, or use temporary roadways constructed by the CONTRACTOR when and as authorized by the OWNER. In such case, the CONTRACTOR shall minimize disruption and delays to traffic in the affected areas. When materials are transported in prosecuting the work vehicles shall not be loaded beyond the loading capacity recommended by the manufacturer of the vehicle or prescribed by any Federal, State, or local law or regulation. When it is necessary to cross curbs or sidewalks, the CONTRACTOR shall protect them from damage. The CONTRACTOR shall repair or pay for the repair of any damaged curbs, sidewalks, or roads.

16. INSURANCE

- 16.1 The CONTRACTOR shall purchase and maintain such insurance as will protect him from claims set forth below which may arise out of or result from the CONTRACTOR'S execution of the WORK, whether such execution be by himself or by any SUBCONTRACTOR or by anyone directly or indirectly employed by any of them, or by anyone for whose acts any of them may be liable:
- 16.1.1 Claims under workmen's compensation, disability benefit and other similar employee benefit acts;
- 16.1.2 Claims for damages because of bodily injury, occupational sickness or disease, or death of his employees;

- 16.1.3 Claims for damages because of bodily injury, sickness or disease, or death of any person other than his employees;
 - 16.1.4 Claims for damages insured by usual personal injury liability coverage which are sustained (1) by any person as a result of an offense directly or indirectly related to the employment of such person by the CONTRACTOR or (2) by any other person; and
 - 16.1.5 Claims for damages because of injury to or destruction of tangible property, including loss of use resulting therefrom.
- 16.2 Certificates of Insurance acceptable to the OWNER shall be filed with the OWNER prior to commencement of the WORK. These Certificates shall contain a provision that coverages afforded under the Policies will not be cancelled unless at least fifteen (15) days prior WRITTEN NOTICE has been given to the OWNER.
- 16.3 The CONTRACTOR shall procure and maintain, at his own expense, during the CONTRACT TIME, liability insurance as hereinafter specified;
- 16.3.1 CONTRACTOR'S General Public Liability and Property Damage Insurance including vehicle coverage issued to the CONTRACTOR and protecting him from all claims for personal injury, including death, and all claims for destruction of or damage to any property, arising out of or in connection with any operations under the CONTRACT DOCUMENTS, whether such operations be by himself or by any SUBCONTRACTOR under him, or anyone directly or indirectly employed by the CONTRACTOR or by a SUBCONTRACTOR under him. Insurance shall be written with a limit of liability of not less than \$500,000 for all damages arising out of bodily injury, including death, at any time resulting therefrom, sustained by any one person in any one accident; and a limit of liability of not less than \$1,000,000 aggregate for any such damages sustained by two or more persons in any one accident. Insurance shall be written with a limit of liability of not less than \$200,000 for all property damage sustained by any one person in any one accident; and a limit of liability of not less than \$500,000 aggregate for any such damage sustained by two or more persons in any one accident.
 - 16.3.2 The CONTRACTOR shall acquire and maintain, if applicable, Fire and Extended Coverage insurance upon the

PROJECT to the full insurable value thereof for the benefit of the OWNER, the CONTRACTOR, and SUBCONTRACTORS as their interest may appear. This provision shall in no way release the CONTRACTOR or CONTRACTOR'S surety from obligations under the CONTRACT DOCUMENTS to fully complete the PROJECT.

- 16.4 The CONTRACTOR shall procure and maintain, at his own expense, during the CONTRACT TIME, in accordance with the provisions of the laws of the state in which the work is performed, Workmen's Compensation Insurance, including occupational disease provisions, for all of his employees at the site of the PROJECT and in case any work is sublet, the CONTRACTOR shall require such SUBCONTRACTOR similarly to provide Workmen's Compensation Insurance, including occupational disease provisions for all of the latter's employees unless such employees are covered by the protection afforded by the CONTRACTOR. In case any class of employees engaged in hazardous work under this contract at the site of the PROJECT is not protected under Workmen's Compensation statute, the CONTRACTOR shall provide, and shall cause each SUBCONTRACTOR to provide, adequate and suitable insurance for the protection of his employees not otherwise protected.
- 16.5 The CONTRACTOR shall secure, if applicable, "All Risk" type Builder's Risk Insurance for WORK to be performed. Unless specifically authorized by the OWNER the amount of such insurance shall not be less than the CONTRACT PRICE totaled in the BID. The policy shall cover not less than the losses due to fire, explosion, hail, lightning, vandalism, malicious mischief, wind, collapse, riot, aircraft, and smoke during the CONTRACT TIME, and until the WORK is accepted by the OWNER. The policy shall name as the insured the CONTRACTOR, the ENGINEER, and the OWNER.

17. INDEMNIFICATION

- 17.1 The CONTRACTOR will indemnify and hold harmless the OWNER and the ENGINEER and their agents and employees from and against all claims, damages, losses and expenses including attorney's fees arising out of or resulting from the performance of the WORK, provided that any such claims, damage, loss or expense is attributable to bodily injury, sickness, disease or death, or to injury to or destruction of tangible property including the loss of use resulting therefrom; and is caused in whole or in part by any negligent or willful act or omission of the CONTRACTOR, and SUBCONTRACTOR, anyone directly or indirectly employed by any of them or anyone for whose acts any of them may be liable.

- 17.2 In any and all claims against the OWNER or the ENGINEER or any of their agents or employees, by any employee of the CONTRACTOR, any SUBCONTRACTOR anyone directly or indirectly employed by any of them, or anyone for whose acts any of them may be liable, the indemnification obligation shall not be limited in any way by any limitation on the amount or type of damages, compensation or benefits payable by or for the CONTRACTOR or any SUBCONTRACTOR under Workmen's Compensation Acts, disability benefit acts or other employee benefits acts.
- 17.3 The obligation of the CONTRACTOR under this paragraph shall not extend to the liability of the ENGINEER, his agents or employees arising out of the preparation or approval of maps, DRAWINGS, opinions, reports, surveys, CHANGE ORDERS, designs or SPECIFICATIONS.
18. CONTRACT SECURITY (For Contracts Greater than \$100,000.00)
- 18.1 The CONTRACTOR shall submit with the BID OFFER with a 5% Bid Bond.
- 18.2 The CONTRACTOR shall within ten (10) days after the receipt of the NOTICE OF AWARD furnish the OWNER with a Performance Bond and a Payment Bond in penal sums equal to the amount of the CONTRACT PRICE, conditioned upon the performance by the CONTRACTOR of all undertakings, covenants, terms, conditions and agreements of the CONTRACT DOCUMENTS, and upon the prompt payment by the CONTRACTOR to all persons supplying labor and materials in the prosecution of the WORK provided by the CONTRACT DOCUMENTS. Such BONDS shall be executed by the CONTRACTOR and a corporate bonding company licensed to transact such business in the state in which the WORK is to be performed. The expense of these BONDS shall be borne by the CONTRACTOR. If at any time a surety on any such BOND is declared as bankrupt or loses its right to do business in the state in which the WORK is to be performed, the CONTRACTOR shall within ten (10) days after notice from the OWNER to do so, substitute an acceptable BOND (or BONDS) in such form and sum and signed by such other surety or sureties as may be satisfactory to the OWNER. The premiums on such BOND shall be paid by the CONTRACTOR. No further payments shall be deemed due nor shall be made until the new surety or sureties shall have furnished an acceptable BOND to the OWNER.
19. ACCIDENT PREVENTION AND SAFETY PROGRAM
- 19.1 The CONTRACTOR shall be solely and completely responsible for conditions of the jobsite, including safety of all persons, including

employees, and property during performance of the work. This requirement shall apply continuously and not be limited to normal working hours. Safety provisions shall conform to U.S. Department of Labor (OSHA), and all other applicable Federal, State, County, and local laws, ordinances, codes, the requirements set forth below, and any regulations that may be detailed in other parts of these documents. Where any of these are in conflict, the more stringent requirement shall be followed. The CONTRACTOR's failure to thoroughly familiarize himself with the aforementioned safety provisions shall not relieve him from compliance with the obligations and penalties set forth herein.

- 19.2 The OWNER or his Representative will notify the CONTRACTOR of any observed non-compliance with the foregoing provisions and the action to be taken. The CONTRACTOR shall, upon receipt of such notice, immediately take corrective action. If the CONTRACTOR fails or refuses to comply promptly, the OWNER may issue an order stopping all or part of the WORK until satisfactory corrective action has been taken. No part of the time lost due to any such stop orders shall be made the subject of claims for extension of time, or for excess costs or damages by the CONTRACTOR.
- 19.3 The CONTRACTOR shall develop and maintain for the duration of this Contract, a safety program that will effectively incorporate and implement all required safety provisions. The CONTRACTOR shall appoint an employee who is qualified and authorized to supervise and enforce compliance with the safety program.
- 19.4 The CONTRACTOR as a part of his safety program, shall maintain at his office or other well-known place at the jobsite, safety equipment applicable to the WORK as prescribed by the aforementioned authorities, all articles necessary for giving first aid to the injured, and shall establish the procedure for the immediate removal to a hospital or a doctor's care of persons who may be injured on the jobsite.
- 19.5 If death or serious injuries or serious damages are caused, the accident shall be reported immediately by telephone or messenger to both the ENGINEER and OWNER. In addition, the CONTRACTOR must promptly report in writing to appropriate authorities and the OWNER'S representative all accidents whatsoever arising out of, or in connection with, the performance of the WORK whether on, or adjacent to, the site, giving full details and statements of witnesses. If a claim is made by anyone against the CONTRACTOR or any subcontractor on account of any accident, the CONTRACTOR shall promptly report the facts in writing to the OWNER giving full details of the claim.

19.6 The CONTRACTOR shall provide, erect, and maintain all necessary barricades, suitable and sufficient lights, danger signals, signs and other traffic control devices, and shall take all necessary precautions for the protection of the WORK and safety of the public. Highways closed to traffic shall be protected by effective barricades, and obstructions shall be illuminated during the hours of darkness. Suitable warning signs shall be provided to control and direct traffic properly. The CONTRACTOR shall erect warning signs in advance of any place on the project where operations may interfere with the use of the road by traffic, and at all intermediate points where the new work crosses or coincides with an existing road.

19.7 Compliance with the requirements of this provision by subcontractors will be the responsibility of the CONTRACTOR.

20. TEMPORARY SANITARY FACILITIES

20.1 The CONTRACTOR shall provide and maintain necessary sanitary conveniences for the use of those employed on or about the WORK, properly secluded from public observation in such a manner and at such points as shall be approved by the OWNER'S representative, and their use shall be strictly enforced.

21. SUPERVISION BY CONTRACTOR

21.1 The CONTRACTOR will supervise and direct the WORK. He will be solely responsible for the means, methods, techniques, sequences and procedures of construction. The CONTRACTOR will employ and maintain on the WORK a qualified supervisor or superintendent who shall have been designated in writing by the CONTRACTOR as the CONTRACTOR'S representative at the site. The supervisor shall have full authority to act on behalf of the CONTRACTOR and all communications given to the supervisor shall be as binding as if given to the CONTRACTOR. The supervisor shall be present on the site at all times as required to perform adequate supervision and coordination of the WORK.

22. SUBCONTRACTING

22.1 The CONTRACTOR may utilize the services of specialty SUBCONTRACTORS on those parts of the WORK which, under normal contracting practices, are performed by specialty SUBCONTRACTORS.

22.2 The CONTRACTOR must perform at least thirty three (33%) of the total amount of the WORK using the CONTRACTOR'S own work force and

equipment The CONTRACTOR shall not award WORK to SUBCONTRACTOR(s), in excess of sixty seven (67%) percent of the CONTRACT PRICE, without prior written approval of the OWNER.

- 22.3 The CONTRACTOR shall be fully responsible to the OWNER for the acts and omissions of his SUBCONTRACTORS, and of persons either directly or indirectly employed by them, as he is for the acts and omissions of persons directly employed by him.
- 22.4 The CONTRACTOR shall cause appropriate provisions to be inserted in all subcontracts relative to the WORK to bind SUBCONTRACTORS to the CONTRACTOR by the terms of the CONTRACT DOCUMENT insofar as applicable to the WORK of SUBCONTRACTORS and to give the CONTRACTOR the same power as regards terminating any subcontract that the OWNER may exercise over the CONTRACTOR under any provision of the CONTRACT DOCUMENTS.
- 22.5 Nothing contained in this CONTRACT shall create any contractual relation between any SUBCONTRACTOR and the OWNER

23. SEPARATE CONTRACTS

- 23.1 The OWNER reserves the right to let other contracts in connection with this PROJECT. The CONTRACTOR shall afford other CONTRACTORS reasonable opportunity for the introduction and storage of their materials and the execution of their WORK, and shall properly connect and coordinate his WORK with theirs. If the proper execution or results of any part of the CONTRACTOR'S WORK depends upon the WORK of any other CONTRACTOR, the CONTRACTOR shall inspect and promptly report to the ENGINEER any defects in such WORK that render it unsuitable for such proper execution and results.
- 23.2 The OWNER may perform additional WORK related to the PROJECT by himself, or he may let other contracts containing provisions similar to these. The CONTRACTOR will afford the other CONTRACTORS who are parties to such Contracts (or the OWNER, if he is performing the additional WORK himself), reasonable opportunity for the introduction and storage of materials and equipment and the execution of WORK. and shall properly connect and coordinate his WORK with theirs.
- 23.3 If the performance of additional WORK by other CONTRACTORS or the OWNER is not noted in the CONTRACT DOCUMENTS prior to the execution of the CONTRACT, written notice thereof shall be given to the CONTRACTOR prior to starting any such additional WORK. If the CONTRACTOR believes that the performance of such additional WORK

by the OWNER or others involves him in additional expense or entitles him to an extension of the CONTRACT TIME, he may make a claim therefore as provided in Sections 30 and 31.

24. TIME FOR COMPLETION AND LIQUIDATED DAMAGES

- 24.1 The TIME FOR COMPLETION of the WORK is an essential condition of the CONTRACT DOCUMENTS. The TIME FOR COMPLETION appears in the Special Provisions. The WORK embraced shall be commenced on a date specified in the NOTICE TO PROCEED.
- 24.2 The CONTRACTOR will proceed with the WORK at such rate of progress to insure full completion within the TIME FOR COMPLETION. It is expressly understood and agreed, by and between the CONTRACTOR and the OWNER, that TIME FOR COMPLETION of the WORK under the CONTRACT is a reasonable time, taking into consideration the average climatic and economic conditions and other factors prevailing in the locality of the WORK.
- 24.3 If the CONTRACTOR shall fail to complete the WORK within the TIME FOR COMPLETION, or extension of time granted by the OWNER, then the CONTRACTOR will pay to the OWNER the amount for liquidated damages as specified in the Special Provisions for each calendar day that the work shall be incomplete after the date established by the TIME FOR COMPLETION.
- 24.4 The CONTRACTOR shall not be charged with liquidated damages or any excess cost when the delay in completion of the WORK is due to the following, and the CONTRACTOR has promptly given WRITTEN NOTICE of such delay to the OWNER or ENGINEER.
- 24.4.1 To any preference, priority or allocation order duly issued by the OWNER.
- 24.4.2 To unforeseeable causes beyond the control and without the fault or negligence of the CONTRACTOR, including but not restricted to, acts of God, or of the public enemy, acts of the OWNER, acts of another CONTRACTOR in the performance of a contract with the OWNER, fires, floods, epidemics, quarantine restrictions, strikes, freight embargoes, and abnormal and unforeseeable weather; and
- 24.4.3 To any delays of SUBCONTRACTORS occasioned by any of the causes specified in paragraphs 24.4.1 and 24.4.2 of this article.

25. PROGRESS SCHEDULES AND REQUIREMENTS FOR COMPLIANCE

- 25.1 The CONTRACTOR shall within 10 days of receipt of NOTICE TO PROCEED, submit to the OWNER through the ENGINEER for approval a practicable schedule, showing the order in which the CONTRACTOR proposes to carry on the WORK, the dates on which he will start the major items of work (including procurement of materials, plant and equipment) and the contemplated dates for completing the same. The schedule shall be prepared on the form entitled "Contract Progress Schedule," a copy of which is included in the contract.
- 25.2 If, in the opinion of the OWNER, the CONTRACTOR falls behind the progress schedule, the CONTRACTOR shall take such steps as may be necessary to assure performance within the allowable TIME FOR COMPLETION. The CONTRACTOR may propose for approval by the OWNER measures such as increasing number of workers, number of shifts, or overtime operations, days of work, or the amount of construction plant, or all of them. The OWNER may require the CONTRACTOR to submit for approval such supplementary schedule or schedules necessary to demonstrate that the WORK shall be performed within the allowable TIME FOR COMPLETION, all without additional cost to the OWNER.
- 25.3 Failure of the CONTRACTOR to comply with the requirements of this provision shall be grounds for determination that the CONTRACTOR is not prosecuting the work with such diligence as will insure completion within the specified TIME FOR COMPLETION. Upon such determination the OWNER may terminate the CONTRACTOR'S right to proceed with the WORK, or any separable part thereof in accordance with Section 27 entitled "Suspension of Work, Termination and Delay".

26. LAND AND RIGHTS-OF- WAY

- 26.1 Prior to issuance of NOTICE TO PROCEED, the OWNER shall obtain all land and rights-of-way necessary for carrying out and for the completion of the WORK to be performed pursuant to the CONTRACT DOCUMENTS, unless otherwise mutually agreed.
- 26.2 The OWNER shall provide to the CONTRACTOR information which delineates and describes the lands owned and rights-of-way acquired.
- 26.3 The CONTRACTOR shall provide at his own expense and without liability to the OWNER any additional land and access thereto that the CONTRACTOR may desire for temporary construction facilities, or for storage of materials.

27. SUSPENSION OF WORK, TERMINATION AND DELAY

- 27.1 The OWNER may suspend the WORK or any portion thereof for a period of not more than ninety (90) days or such further time as agreed upon by the CONTRACTOR, by WRITTEN NOTICE to the CONTRACTOR and the ENGINEER which notice shall fix the date on which WORK shall be resumed. The CONTRACTOR will resume that WORK on the date so fixed. The CONTRACTOR will be allowed an increase in the CONTRACT PRICE or an extension of the CONTRACT TIME, or both, directly attributable to any suspension.
- 27.2 If the CONTRACTOR is adjudged as bankrupt or insolvent, or if he makes a general assignment for the benefit of his creditors or if a trustee or receiver is appointed for the CONTRACTOR or for any of his property, or if he files a petition to take advantage of any debtor's act, or to reorganize under the bankruptcy or applicable laws, or if he repeatedly fails to supply sufficient skilled workmen or suitable materials or equipment, or if he repeatedly fails to make prompt payments to SUBCONTRACTORS or for labor, materials or equipment or if he disregards laws, ordinances, rules, regulations or orders of any public body having jurisdiction of the WORK, or if he disregards the authority of the ENGINEER, or if he otherwise violates any provision of the CONTRACT DOCUMENTS then the OWNER may, without prejudice to any other right or remedy and after giving the CONTRACTOR and his surety a minimum of ten (10) days from delivery of a WRITTEN NOTICE, terminate the services of the CONTRACTOR and take possession of the PROJECT and of all materials, equipment, tools, construction equipment and machinery thereon owned by the CONTRACTOR, and finish the WORK by whatever method he may deem expedient. In such case the CONTRACTOR shall not be entitled to receive any further payment until the WORK is finished. If the unpaid balance of the CONTRACT PRICE exceeds the direct and indirect costs of completing the PROJECT, including compensation for additional professional services, such excess SHALL BE PAID TO THE CONTRACTOR. If such costs exceed such unpaid balance, the CONTRACTOR will pay the difference to the OWNER. Such costs incurred by the OWNER will be determined by the ENGINEER and incorporated in a CHANGE ORDER.
- 27.3 Where the CONTRACTOR'S services have been so terminated by the OWNER, said termination shall not affect any right of the OWNER against the CONTRACTOR then existing or which may thereafter accrue. Any retention or payment of monies by the OWNER due the CONTRACTOR will not release the CONTRACTOR from compliance with the CONTRACT DOCUMENTS.

- 27.4 After ten (10) days from delivery of a WRITTEN NOTICE to the CONTRACTOR and the ENGINEER, the OWNER may without cause and without prejudice to any other right or remedy, elect to abandon the PROJECT and terminate the CONTRACT. In such case, the CONTRACTOR shall be paid for all WORK executed and any expense sustained plus reasonable profit. If this contract is terminated by the OWNER without cause, the rights, duties, and obligations of the parties, including compensation to the CONTRACTOR, shall be in accordance with Part 49 of the Federal Acquisition Regulation in effect on the date of this contract.
- 27.5 If, through no act or fault of the CONTRACTOR, the WORK is suspended for a period of more than ninety (90) days by the OWNER or under an order of court or other public authority, or the ENGINEER fails to act on any request for payment within thirty (30) days after it is submitted, or the OWNER fails to pay the CONTRACTOR substantially the sum approved by the ENGINEER or awarded by arbitrators within thirty (30) days of its approval and presentation, then the CONTRACTOR may, after ten (10) days from delivery of a WRITTEN NOTICE to the OWNER and the ENGINEER, terminate the CONTRACT and recover from the OWNER payment for all WORK executed and all expenses sustained. In addition and in lieu of terminating the CONTRACT, if the ENGINEER has failed to act on a request for payment or if the OWNER has failed to make any payment as aforesaid, the CONTRACTOR may upon ten (10) days WRITTEN NOTICE to the OWNER and the ENGINEER stop the WORK until he has been paid all amounts then due, in which event and upon resumption of the WORK, CHANGE ORDERS shall be issued for adjusting the CONTRACT' PRICE or extending the CONTRACT TIME or both to compensate for the costs and delays attributed to the stoppage of the WORK.
- 27.6 If the performance of all or any portion of the WORK is suspended, delayed, or interrupted as a result of a failure of the OWNER or ENGINEER to act within the time specified in the CONTRACT DOCUMENTS, or if no time is specified, within a reasonable time, an adjustment in the CONTRACT PRICE or an extension of the CONTRACT TIME, or both, shall be made by CHANGE ORDER to compensate the CONTRACTOR for the costs and delays necessarily caused by the failure of the OWNER or ENGINEER.

28. INSPECTION AND TESTING

- 28.1 All materials and equipment used in the construction of the PROJECT shall be subject to adequate inspection and testing in accordance with

- generally accepted standards, as required and defined in the CONTRACT DOCUMENTS.
- 28.2 The OWNER shall provide all inspection and testing services not required by the CONTRACT DOCUMENTS.
- 28.3 The CONTRACTOR shall provide at his expense the testing and inspection services required by the CONTRACT DOCUMENTS.
- 28.4 If the CONTRACT DOCUMENTS, laws, ordinances, rules, regulations or orders of any public authority having jurisdiction require any WORK to specifically be inspected, tested, or approved by someone other than the CONTRACTOR, the CONTRACTOR will give the ENGINEER timely notice of readiness. The CONTRACTOR will then furnish the ENGINEER the required certificates of inspection, testing or approval.
- 28.5 Inspections, tests or approvals by the ENGINEER or others shall not relieve the CONTRACTOR from his obligations to perform the WORK in accordance with the requirements of the CONTRACT DOCUMENTS.
- 28.6 The ENGINEER and his representatives will at all times have access to the WORK. In addition, authorized representatives and agents of any participating Federal or state agency shall be permitted to inspect all work, materials, payrolls, records of personnel, invoices of materials, and other relevant data and records. The CONTRACTOR will provide proper facilities for such access and observation of the WORK and also for any inspection, or testing thereof.
- 28.7 If any WORK is covered contrary to the written instructions of the ENGINEER it must, if requested by the ENGINEER, be uncovered for his observation and replaced at the CONTRACTOR'S expense.
- 28.8 If the ENGINEER considers it necessary or advisable that covered WORK be inspected or tested by others, the CONTRACTOR, at the ENGINEER'S request, will uncover, expose or otherwise make available for observation, inspection or testing as the ENGINEER may require, that portion of the WORK in question, furnishing all necessary labor, materials, tools and equipment. If it is found that such WORK is defective, the CONTRACTOR will bear all the expenses of such uncovering, exposure, observation, inspection and testing and of satisfactory reconstruction. If, however, such WORK is not found to be defective, the CONTRACTOR will be allowed an increase in the CONTRACT PRICE or an extension of the CONTRACT TIME, or both, directly attributable to such uncovering, exposure, observation, inspection, testing and reconstruction and an appropriate CHANGE ORDER shall be issued.

29. CORRECTION OF WORK

- 29.1 The CONTRACTOR shall promptly remove from the premises all WORK rejected by the ENGINEER for failure to comply with the CONTRACT DOCUMENTS, whether incorporated in the construction or not, and the CONTRACTOR shall promptly replace and re-execute the WORK in accordance with the CONTRACT DOCUMENTS and without expense to the OWNER and shall bear the expense of making good all WORK of other CONTRACTORS destroyed or damaged by such removal or replacement.
- 29.2 All removal and replacement WORK shall be done at the CONTRACTOR'S expense. If the CONTRACTOR does not take action to remove such rejected WORK within ten (10) days after receipt of WRITTEN NOTICE, the OWNER may remove such WORK and store the materials at the expense of the CONTRACTOR.

30. CHANGES IN THE WORK

- 30.1 The OWNER may at any time, as the need arises, order changes within the scope of the WORK without invalidating the Agreement. If such changes increase or decrease the amount due under the CONTRACT DOCUMENTS, or in the time required for performance of the WORK, an equitable adjustment shall be authorized by CHANGE ORDER.
- 30.2 The ENGINEER, also, may at any time, by issuing a FIELD ORDER, make changes in the details of the WORK. The CONTRACTOR shall proceed with the performance of any changes in the WORK so ordered by the ENGINEER unless the CONTRACTOR believes that such FIELD ORDER entitles him to a change in CONTRACT PRICE or TIME, or both, in which event he shall give the ENGINEER WRITTEN NOTICE thereof within seven (7) days after the receipt of the ordered change. Thereafter the CONTRACTOR shall document the basis for the change in CONTRACT PRICE or TIME within thirty (30) days. The CONTRACTOR shall not execute such changes pending the receipt of an executed CHANGE ORDER or further instruction from the OWNER.

31. CHANGES IN CONTRACT PRICE

- 31.1 The CONTRACT PRICE may be changed only by a CHANGE ORDER. The value of any WORK covered by a CHANGE ORDER or of any claim for increase or decrease in the CONTRACT PRICE shall be determined by one or more of the following methods in the order of precedence listed below:

- a. Unit prices previously approved.
- b. An agreed lump sum
- c. The actual cost for labor, direct overhead, materials, supplies, equipment, and other services necessary to complete the work. In addition there shall be added an amount to be agreed upon but not to exceed fifteen (15) percent of the actual cost of the WORK to cover the cost of general overhead and profit.

32. DIFFERING SITE CONDITIONS

32.1 The CONTRACTOR shall promptly, and before such conditions are disturbed, except in the event of an emergency, notify the OWNER by WRITTEN NOTICE of:

32.1.1 Subsurface or latent physical conditions at the site differing materially from those indicated in the CONTRACT DOCUMENTS; or

32.1.2 Unknown physical conditions at the site, of an unusual nature, differing materially from those ordinarily encountered and generally recognized as inherent in WORK of the character provided for in the CONTRACT DOCUMENTS.

32.2 The OWNER shall promptly investigate the conditions, and if he finds that such conditions do so materially differ and cause an increase or decrease in the cost of, or in the time required for, performance of the WORK, an equitable adjustment shall be made and the CONTRACT DOCUMENTS shall be modified by a CHANGE ORDER. Any claim of the CONTRACTOR for adjustment hereunder shall not be allowed unless he has given the required WRITTEN NOTICE; provided that the OWNER may, if he determines the facts so justify, consider and adjust any such claims asserted before the date of final payment.

33. USE AND POSSESSION PRIOR TO COMPLETION

33.1 The OWNER shall have the right to take possession of or use any completed or partially completed part of the work. Before taking possession of or using any work, the OWNER shall furnish the Contractor a list of items of work remaining to be performed or corrected on those portions of the work that the OWNER intends to take possession of or use. However, failure of the OWNER to list any item of work shall not relieve the Contractor of responsibility for complying with the terms of the contract. The OWNER'S possession or use shall not be deemed an acceptance of any work under the contract

33.2 While the OWNER has such possession or use, the Contractor shall be relieved of the responsibility for the loss of or damage to the work resulting directly from the OWNER'S possession or use. If prior possession or use by the OWNER delays the progress of the work or causes additional expense to the Contractor, an adjustment shall be made in the contract price, the time of completion or both, and the contract shall be modified in writing accordingly.

34. CLEANUP AND FINISH GRADING

34.1 The CONTRACTOR shall restore all areas disturbed by construction to a condition at least equal to that existing prior to construction. Excess construction materials, equipment, tools, waste excavation, and rubbish shall be removed. Excavated areas shall be finish graded to provide drainage as required by the drawings and specifications, or in the absence of specific requirements, to provide drainage away from the facilities constructed and to restore original drainage patterns in existence prior to construction and to provide drainage away from excavated areas and installed facilities.

35. MEASUREMENT AND PAYMENT

35.1 Completed items of work shall be measured and paid for in accordance with the requirements listed in the Bid Schedule. Payment shall be based on the actual quantities completed and shall represent full compensation under the contract. The price paid for the completed item of work shall include full compensation for furnishing all labor, materials, (other than that furnished by the OWNER), tools, equipment, and performing all work required by the provisions of the contract to furnish and install the item of work, complete in place. In all cases, the finished product shall be a complete, operational system or component. The price for the completed item of work shall also include all applicable state and local sales and other taxes.

36. VARIATION IN ESTIMATED QUANTITIES

36.1 If the quantity of a unit-priced item in this CONTRACT is an estimated quantity and the actual quantity of the unit-priced item varies more than 25 percent above or below the estimated quantity, an equitable adjustment in the contract price shall be made upon demand of either party. The equitable adjustment shall be based upon any increase or decrease in costs due solely to the variation above 125 percent or below 75 percent of the estimated quantity. If the quantity variation is such as to cause an increase in the time necessary for completion, the CONTRACTOR may request, in writing, an extension of time, to be received by the OWNER

within 10 days from the beginning of the delay, or within such further period as may be granted by the OWNER before the date of final settlement of the CONTRACT. Upon the receipt of a written request for an extension, the OWNER shall ascertain the facts and make any appropriate adjustment for extending the completion date.

37. PAYMENTS TO CONTRACTOR

- 37.1 The CONTRACTOR will submit to the ENGINEER a partial payment estimate filled out and signed by the CONTRACTOR covering the WORK performed during the period covered by the partial payment estimate and supported by such data as the ENGINEER may reasonably require. The request for payment may also include an allowance for the cost of such major materials and equipment which are suitably stored either at or near the site. If payment is requested on the basis of materials and equipment not incorporated in the WORK but delivered and suitably stored at or near the site, the partial payment estimate shall also be accompanied by such supporting data, satisfactory to the OWNER, as will establish the OWNER'S title to the material and equipment and protect his interest therein, including applicable insurance. The ENGINEER will, within ten (10) days after receipt of each partial payment estimate, either indicate in writing his approval of payment and present the partial payment estimate to the OWNER, or return the partial payment estimate to the CONTRACTOR indicating in writing his reasons for refusing to approve payment. In the latter case, the CONTRACTOR may make the necessary corrections and resubmit the partial payment estimate. The OWNER will, within twenty (20) days of presentation to him of an approved partial payment estimate, pay the CONTRACTOR a progress payment on the basis of the approved partial payment estimate. The OWNER shall retain ten (10) percent of the amount of each payment until final completion and acceptance of all work covered by the CONTRACT DOCUMENTS. The OWNER at any time, however, after fifty (50) percent of the WORK has been completed, if he finds that satisfactory progress is being made, shall reduce retainage to five (5%) percent on the current and remaining estimates. When the WORK is substantially complete (operational or beneficial occupancy), the retained amount may be further reduced below five (5) percent to only that amount necessary to assure completion. On completion and acceptance of a part of the WORK on which the price is stated separately in the CONTRACT DOCUMENTS, payment may be made in full, including retained percentages less authorized deductions.
- 37.2 Upon completion and acceptance of the WORK, the ENGINEER shall issue a certificate attached to the final payment request that the WORK has been accepted by him under the conditions of the CONTRACT DOCUMENTS. The entire balance found to be due the CONTRACTOR

including the retained percentages, but except such sums as may be lawfully retained by the OWNER, shall be paid to the CONTRACTOR within thirty (30) days of completion and acceptance of the WORK

37.3 The CONTRACTOR will indemnify and save the OWNER or the OWNER'S agents harmless from all claims growing out of the lawful demands of SUBCONTRACTORS, laborers, workmen, mechanics, material men, and furnishers of machinery and parts thereof, equipment, tools, and all supplies, incurred in the furtherance of the performance of the WORK. The CONTRACTOR shall at the OWNER'S request, furnish satisfactory evidence that all obligations of the nature designated above have been paid, discharged, or waived. If the CONTRACTOR fails to do so the OWNER may, after having notified the CONTRACTOR, either pay unpaid bills or withhold from the CONTRACTOR'S unpaid compensation a sum of money deemed reasonably sufficient to pay any and all such lawful claims until satisfactory evidence is furnished that all liabilities have been fully discharged whereupon payment to the CONTRACTOR shall be resumed, in accordance with the terms of the CONTRACT DOCUMENTS, but in no event shall the provisions of this sentence be construed to impose any obligations upon the OWNER to either the CONTRACTOR, his Surety, or any third party. In paying any unpaid bills of the CONTRACTOR, any payment so made by the OWNER shall be considered as a payment made under the CONTRACT DOCUMENTS by the OWNER to the CONTRACTOR and the OWNER shall not be liable to the CONTRACTOR for any such payments made in good faith.

37.4 If the OWNER fails to make payment thirty (30) days after approval by the ENGINEER, in addition to other remedies available to the CONTRACTOR, there shall be added to each such payment interest at the maximum legal rate commencing on the first day after said payment is due and continuing until the payment is received by the CONTRACTOR.

38. ASSIGNMENTS

38.1 Neither the CONTRACTOR nor the OWNER shall sell, transfer, assign or otherwise dispose of the CONTRACT or any portion thereof, or of his right, title or interest therein, or his obligations thereunder, without written consent of the other party.

39. GUARANTY

39.1 The CONTRACTOR shall guarantee all materials and equipment furnished and WORK performed for a period of one (1) year from the date of SUBSTANTIAL COMPLETION of the system that the completed system is free from all defects due to faulty materials or workmanship and

the CONTRACTOR shall promptly make such corrections as may be necessary by reason of such defects including the repairs of any damage to other parts of the systems resulting from such defects. The OWNER will give notice of observed defects with reasonable promptness. In the event that the CONTRACTOR should fail to make such repairs, adjustments, or other WORK that may be made necessary by such defects, the OWNER may do so and charge the CONTRACTOR the cost thereby incurred. The performance BOND shall remain in full force and effect through the guarantee period.

40. ACCEPTANCE OF FINAL PAYMENT AS RELEASE

40.1 The acceptance by the CONTRACTOR of final payment shall be and shall operate as a release to the OWNER of all claims and all liability to the CONTRACTOR other than claims in stated amounts as may be specifically excepted by the CONTRACTOR for all things done or furnished in connection with this WORK and for every act and neglect of the OWNER and others relating to or arising out of this WORK. Any payment, however, final or otherwise, shall not release the CONTRACTOR or his sureties from any obligations under the CONTRACT DOCUMENTS or the performance BOND and Payment BONDS.

41. ENGINEER'S ROLE AND AUTHORITY

41.1 The ENGINEER shall act as the OWNER'S representative during the construction period. He shall decide questions which may arise as to quality and acceptability of materials furnished and WORK performed. He shall interpret the intent of the CONTRACT DOCUMENTS in a fair and unbiased manner. The ENGINEER will make visits to the site and determine if the WORK is proceeding in accordance with the CONTRACT DOCUMENTS.

41.2 The CONTRACTOR will be held strictly to the intent of the CONTRACT DOCUMENTS in regard to the quality of materials, workmanship and execution of the WORK. Inspections may be made at the factory or fabrication plant of the source of material supply.

41.3 The ENGINEER will not be responsible for the construction means, controls, techniques, sequences, procedures, or construction safety.

41.4 The ENGINEER does not have authority to obligate the OWNER to changes in the terms of the CONTRACT without the approval of the OWNER.

42. RESOLUTION OF DISPUTES

42.1 The laws of the Nisqually Indian Tribe govern this contract. Venue for any cause of action to enforce the terms of this contract shall be by the Nisqually Tribal Court. Nothing in this contract shall be construed as a waiver of the Tribe's sovereign immunity for suit.

43. EQUAL EMPLOYMENT OPPORTUNITY

43.1 During the performance of this contract, the CONTRACTOR agrees as follows:

- 43.1.1 The CONTRACTOR shall not discriminate against any employee or applicant for employment because of race, color, religion, sex, or national origin.
- 43.1.2 The CONTRACTOR shall take affirmative action to ensure the applicants are employed, and that employees are treated during employment, without regard to their race, color, religion, sex, or national origin. Such action shall include, but not be limited to, the following: employment, upgrading, demotion, transfer, recruitment or recruitment advertising, layoff or termination, rates of pay or other forms of compensation, and selection for training, including apprenticeship.
- 43.1.3 The CONTRACTOR agrees to post in conspicuous places available to employees and applicants for employment, notices setting forth the provisions of this nondiscrimination clause.
- 43.1.4 The CONTRACTOR shall, in all solicitations or advertisements for employees placed by or on behalf of the CONTRACTOR, state that all qualified applicants shall receive consideration for employment without regard to race, color, religion, sex, or national origin.
- 43.1.5 The CONTRACTOR shall send, to each labor union or representative of workers with which he/she has a collective bargaining agreement or other contract or understanding, a notice advising the labor union or workers' representative of the CONTRACTOR'S commitment under this clause, and post copies of the notice in conspicuous places available to employees and applicants for employment.

- 43.1.5 The CONTRACTOR shall comply with all provisions of Executive Order No. 11246, as amended, and the rules, regulations, and relevant orders of the Secretary of Labor.
- 43.1.6 The CONTRACTOR shall furnish to the OWNER, all information required by Executive Order No. 11246, as amended, and by the rules, regulations, and orders of the Secretary of Labor. Standard Form 100 (EEO -1), or any successor form, is the prescribed form to be filed within 30 days following the award, unless filed within 12 months preceding, the date of award.
- 43.1.7 The CONTRACTOR shall permit access to its books, records, and accounts by the OWNER or the Office of Federal Contract Programs (OFCCP) for the purposes of investigation to ascertain compliance with the applicable rules, regulations, and orders.
- 43.1.8 If the OFCCP determines that the CONTRACTOR is not in compliance with this clause or any rules, regulations, and orders of the Secretary of Labor, this contract may be cancelled, terminated, or suspended in whole or in part and the CONTRACTOR may be declared ineligible for further Government contracts in accordance with procedures authorized in Executive Order No. 11246, as amended. In addition, sanctions may be imposed and remedies invoked against the CONTRACTOR as provided in Executive Order No. 11246, as amended, the rules, regulations, or orders of the Secretary of Labor, or as otherwise provided by law.
- 43.1.9 The CONTRACTOR shall include the terms and conditions of this clause in every SUBCONTRACT or purchase order unless exempted by the rules, regulations, or orders of the Secretary of Labor issued under Executive Order No. 12246, as amended, so that such provisions will be binding upon each SUBCONTRACTOR or vendor.
- 43.1.10 The CONTRACTOR shall take such action with respect to any SUBCONTRACT or purchase order as the OWNER may direct as a means of enforcing these terms and conditions, including sanctions for noncompliance; provided that if the CONTRACTOR becomes involved in, or is threatened with litigation with a SUBCONTRACTOR or vendor as a result of such direction by the OWNER, the CONTRACTOR may

request the OWNER and the United States to enter into such litigation to protect the interests of the United States.

- 43.1.11 Notwithstanding any other clause in this contract, disputes relative to this clause will be governed by the procedures in 41 CFR 60-1.1.

44. CLEAN AIR AND WATER

44.1 The CONTRACTOR agrees:

- 44.1.1 To comply with all the requirements of section 114 of the Clean Air Act (42 U.S.C. 7414) and section 308 of the Clean Water Act (33 U.S.C. 1318) relating to inspection, monitoring, entry, reports, and information, as well as other requirements specified in section 114 and section 308 of the Clean Air Act and the Clean Water Act, and all regulations and guidelines issued to implement those acts before the award of this contract
- 44.1.2 That no portion of the WORK required by this prime contract will be performed in a facility listed on the Environmental Protection Agency List of Violating Facilities on the date when this contract was awarded unless and until the EPA eliminates the name of the facility from the listing.
- 44.1.3 To use best efforts to comply with clean air standards and clean water standards at the facility in which the contract is being performed.
- 44.1.4 To insert the substance of this clause into any nonexempt SUBCONTRACT, including this subparagraph 44.1.4.

45. INDIAN HEALTH SERVICE

- 45.1 There shall be no contractual relationship either implied or express between the IHS and the CONTRACTOR or any SUBCONTRACTOR at any tier.
- 45.2 IHS representatives shall be afforded access to the site at all times during the construction period to observe the work and determine if the work conforms to the intent of the design.
- 45.3 IHS representatives shall not be responsible for the construction means, controls, techniques, sequences, procedures, or construction safety.

- 45.4 IHS representatives do not have authority to obligate the OWNER to changes in the terms of the CONTRACT nor to act as an agent of the OWNER in any manner. Inspections conducted by IHS representatives shall be for the sole benefit of the IHS and the OWNER and shall not relieve the CONTRACTOR of any contract requirements.

SECTION 00705 SPECIAL PROVISIONS

SP-01 SITE CONDITIONS

Work is to be performed on the Nisqually Indian Reservation, Thurston County, Washington and is accessible from WA Highway 510. Special site conditions to be noted by the CONTRACTOR are as follows:

- 1) The CONTRACTOR is responsible to verify the location of all utilities, including those not located or shown on the drawings.

SP-02 DAYS OF WORK AND WORK HOURS

Construction work shall not be normally permitted on Saturdays, Sundays, or Federal holidays. The CONTRACTOR may submit a written request to the Owner at least 48 hours in advance, for permission to work on any Saturday, Sunday, or Federal holiday. Written approval must be obtained before the CONTRACTOR may work on any such day. Work shall be performed between the hours of 7:00 AM and 5:00 PM.

SP-03 TIME FOR COMPLETION

In accordance with the NOTICE TO PROCEED, the TIME FOR COMPLETION (as described in GC 24.1) shall be 120 calendar days for all work.

SP-04 LIQUIDATED DAMAGES

If the CONTRACTOR shall fail to complete the WORK within the TIME FOR COMPLETION, or extension of time granted by the OWNER, then the CONTRACTOR will pay to the OWNER \$150.00 for each calendar day that the work shall be incomplete after the date established by the TIME FOR COMPLETION

SP-05 LICENSING

The General Contractor performing work shall be registered in the State of Washington for the type of construction and magnitude of construction being performed.

SP-06 INSURANCE

CONTRACTOR'S insurance policy shall name the Nisqually Tribe as co-insured. A certificate of insurance naming the Nisqually Tribe shall be submitted to the Nisqually Tribe prior to NOTICE TO PROCEED.

CONTRACTOR shall carry General Public Liability and Property Damage Insurance including vehicle coverage issued to the CONTRACTOR and protecting him from all claims for personal injury, including death, and all claims for destruction of or damage to any property, arising out of or in connection with any operations under the CONTRACT DOCUMENTS, whether such operations be by himself or by any SUBCONTRACTOR under him, or anyone directly or indirectly employed by the CONTRACTOR or by a SUBCONTRACTOR under him. Insurance shall be written with a limit of liability of not less than \$1,000,000 for all damages arising out of bodily injury, including death, at any time resulting therefrom, sustained by any one person in any one accident; and a limit of liability of not less than \$2,000,000 aggregate for any such damages sustained by two or more persons in any one accident. Insurance shall be written with a limit of liability of not less than \$200,000 for all property damage sustained by any one person in any one accident; and a limit of liability of not less than \$500,000 aggregate for any such damage sustained by two or more persons in any one accident.

SP-07 RESOLUTION OF DISPUTES

Any dispute or claim relating to this Contract or any breach hereof that cannot be negotiated between the parties shall be submitted to the Nisqually TERO office for third party mediation. If not resolved the dispute shall be heard in Nisqually Tribal Court. The CONTRACTOR will carry on the WORK and maintain the progress schedule during any proceedings, unless otherwise mutually agreed in writing. This shall supersede the conditions of GENERAL CONDITION 42 - RESOLUTION OF DISPUTES.

SP-08 RIGHT TO AWARD ALL, NONE, OR A COMBINATION OF LINE ITEMS

The OWNER reserves the right to award all, none, or a combination of the line items on the BID OFFER SHEET.

SP-09 ORDER OF PRECEDENCE

In the event of an inconsistency between provisions of this contract, the inconsistency shall be resolved by giving precedence in the following order:

- 1) Bid Schedule (Schedule A) and Terms and Conditions of Contract.
- 2) Written bid instructions.

- 3) Special Provisions
- 4) General Provisions
- 5) Exhibits and other provisions of the contract, where incorporated by reference or otherwise
- 6) Technical Specifications
- 7) Drawings

SP-10 INDIAN OWNED PREFERENCE

Preference in the award of this CONTRACT shall be given to Indian and Alaskan Native organizations and economic enterprises. The OWNER shall give preference to a 51 percent Indian owned Economic Enterprise so long as the BID by this Enterprise does not exceed the lowest responsive bid submitted by more than ten (10) percent and is within the project budget. "Indian owned Economic Enterprise" means any Indian owned commercial, industrial, or business activity established or organized for the purpose of profit, provided that such Indian ownership shall constitute not less than 51 percent of the enterprise, and that ownership shall encompass active operation and control of the enterprise. All preferences shall be publicly announced at the bid opening. Any BIDDER claiming Indian preference shall complete and submit with the BID the attached form entitled "Indian Enterprise Qualification Statement" to support their claim. The BIDDER also agrees to give preference to Indian-owned economic enterprises in the awarding of any subcontracts, and the acquisition of materials, to the extent feasible and consistent with the efficient performance of this CONTRACT. Feasibility regards reasonable terms and conditions, including price, and the timely delivery of services and supplies.

SP-11 ADVERSE WEATHER

If in the opinion of the Contractor, adverse weather conditions prevent construction activities to proceed under this contract, the contractor may submit a written request to the Contracting Officer to suspend the contract performance period and construction activities until fairer seasonal weather returns. The Contracting Officer shall consider the request and if in agreement, issue a modification to the contract to suspend work due to adverse weather conditions and establish a date to resume work. The contract performance period shall remain unchanged by the modification and there will be no additional payment made. If the Contracting Officer disapproves the contractor's request, the contractor will be notified in writing. If the request is disapproved, the contractor shall proceed with work under the contract and no additional payment will be made.

**SECTION 00810
LABOR PROVISIONS**

I. DAVIS-BACON ACT

- (a) All laborers and mechanics employed or working upon the site of the WORK will be paid unconditionally and not less often than once a week, and without subsequent deduction or rebate on any account (except such payroll deductions as are permitted by regulations issued by the Secretary of Labor under the Copeland Act (29 CFR Part 3), the full amount of wages and bona fide fringe benefits (or cash equivalents thereof) due at time of payment computed at rates not less than those contained in the wage determination of the Secretary of Labor which is attached hereto and made a part hereof, regardless of any contractual relationship which may be alleged to exist between the CONTRACTOR and such laborers and mechanics. Contributions made or costs reasonably anticipated for bona fide fringe benefits under section I(b)(2) of the Davis-Bacon Act on behalf of laborers or mechanics are considered wages paid to such laborers or mechanics, subject to the provisions or paragraph (d) of this clause also, regular contributions made or costs incurred for more than a weekly period (but not less than quarterly) under plans, funds, or programs which cover the particular weekly period, are deemed to be constructively made or incurred during such period. Such laborers and mechanics shall be paid not less than the appropriate wage rate and fringe benefits in the wage determination for classification of work actually performed without regard to skill, except as provided in the clause entitled "Apprentices" and "Trainees." Laborers or mechanics performing work in more than one classification may be compensated at the rate specified for each classification for the time actually worked therein: Provided, that the employer's payroll records accurately set forth the time spent in each classification in which work is performed. The wage determination (including any additional classification and wage rates conformed under paragraph (b) of this clause) and the Davis-Bacon poster (WH-I321) shall be posted at all times by the CONTRACTOR and its subcontractors at the site of the WORK in a prominent and accessible place where it can be easily seen by the workers.
- (b) (1) The OWNER shall require that any class of laborers or mechanics which is not listed in the wage determination and which is to be employed under the contract shall be classified in conformance with the wage determination. The OWNER shall approve an additional classification and wage rate and fringe benefits therefore only when the following criteria have been met:
- (i) The work to be performed by the classification requested is not performed by a classification in the wage determination; and
 - (ii) The Classification is utilized in the area by the construction industry; and
 - (iii) The proposed wage rate, including any bona fide fringe benefits, bears a reasonable relationship to the wage rates contained in the wage determination.
- (2) If the CONTRACTOR and the laborers and mechanics to be employed in

the classification (if known), or their representatives, and the OWNER agree on the classification and wage rate (including the amount designated for fringe benefits where appropriate), a report of the action taken shall be sent by the OWNER to the Administrator of the Wage and Hour Division, Employment Standards Administration, U.S. Department of Labor, Washington, D.C. 20210. The Administrator or an approved authorized representative, will approve, modify, or disapprove every additional classification action within 30 days of receipt and so advise the OWNER or will notify the OWNER within a 30-day period of that additional time is necessary.

(3) In the event the CONTRACTOR, the laborers or mechanics to be employed in the classification or their representatives, and the OWNER do not agree on the proposed classification and wage rate (including the amount designated for fringe benefits, where appropriate), the OWNER shall refer the questions, including the views of all interested parties and the recommendation of the OWNER, to the Administrator of the Wage and Hour Division for determination. The Administrator or an authorized representative, will issue a determination within 30 days of receipt and so advise the OWNER or will notify the OWNER within the 30-day period that additional time is necessary.

(4) The wage rate (including fringe benefits where appropriate) determined pursuant to subparagraphs (b)(2) or (b)(3) of this clause, shall be paid to all workers performing work in the classification under this contract from the first day on which work is performed in the classification.

- (c) Whenever the minimum wage rate prescribed in the contract for a class of laborers or mechanics includes a fringe benefit which is not expressed as an hourly rate, the CONTRACTOR shall either pay the benefit as stated in the wage determination or shall pay another bona fide fringe benefit or an hourly cash equivalent thereof.
- (d) If the CONTRACTOR does not make payments to a trustee or other third person, the CONTRACTOR may consider as part of the wages of any laborer or mechanic the amount of any costs reasonably anticipated in providing bona fide fringe benefits under a plan or program. Provided, that the Secretary of Labor has found, upon the written request of the CONTRACTOR, that applicable standards of the Davis-Bacon Act have been met. The Secretary of Labor may require the CONTRACTOR to set aside in a separate account assets for the meeting of obligations under the plan or program.

2. CONTRACT WORK HOURS AND SAFETY STANDARDS ACT - OVERTIME COMPENSATION

- (a) Overtime requirements: No contractor or subcontractor contracting for any part of the contract work which may require or involve the employment of laborers or mechanics (See Federal Acquisition Regulation 22.300) shall require or permit any such laborer or mechanic in any workweek in which individual is employed on such work to work in excess of forty hours in such workweek unless such laborer or mechanic receives compensation at a rate not less than one and one-half times the basic rate of pay for all hours worked in excess of forty hours in such workweek.

- (b) Violation, liability for unpaid wages, liquidated damages: In the event of any violation of the provisions set forth in paragraph (a) of this clause, the CONTRACTOR and any subcontractor responsible therefore shall be liable for the unpaid wages. In addition, such contractor and subcontractor shall be liable to the United States (in the case of work done under contract for the District of Columbia or a territory, to such District or to such territory), for liquidated damages. Such liquidated damages shall be computed with respect to each individual laborer or mechanic, employed in violation of the provisions set forth in paragraph (a) of this clause, in the sum of \$10 for each calendar day for which such individual was required or permitted to work in excess of the standard workweek of 40 hours without payment of the overtime wages required by the provisions set forth in paragraph (a) of this clause.
- (c) Withholding for unpaid wages and liquidated damages: The Contracting officer shall upon his or her own action or written request of an authorized representative of the Department of Labor withhold or cause to be withheld, from any moneys payable on account of work performed by the CONTRACTOR or subcontractor under any such contract or any other Contract with the same Prime Contractor, or any other Federally-assisted contract subject to the Contract Work Hours and Safety Standards Act, which is held by the same Prime contractor, such sums as may be determined to be necessary to satisfy any liabilities of such contractor or subcontractor for unpaid wages and liquidated damages as provided in the provisions set forth in paragraph (b) of this clause.
- (d) Payrolls and basic records:
- (1) The CONTRACTOR or subcontractor shall maintain payrolls and basic payroll records during the course of contract work and shall preserve them for a period of 3 years from the completion of the contract for all laborers and mechanics working on the contract. Such records shall contain the name and address of each such employee, social security number, correct classifications, hourly rates of wages paid, daily and weekly number of hours worked, deductions made, and actual wages paid. Nothing in this paragraph shall require the duplication of records required to be maintained for construction work by Department of Labor regulations at 29 CFR 5.5(a)(3) implementing the Davis-Bacon Act.
- (2) The records to be maintained under paragraph (d)(1) of this clause shall be made available by the CONTRACTOR or subcontractor for inspection, copying, or transcription by authorized representatives of the OWNER or the Department of Labor. The CONTRACTOR or subcontractor shall permit such representatives to interview employees during working hours on the job.
- (e) Subcontracts: The CONTRACTOR or subcontractor shall insert in any subcontracts the provisions set forth in paragraphs (a) through (d) of this clause and also a clause requiring the subcontractors to include these provisions any lower tier subcontracts. The Prime CONTRACTOR shall be responsible for compliance by any subcontractor or lower tier subcontractor with the provisions set forth in paragraphs (a) through (d) of this clause.

3. APPRENTICES AND TRAINEES

- (a) Apprentices: Apprentices will be permitted to work at less than the predetermined rate for the work they performed when they are employed pursuant to and individually registered in a bona fide apprenticeship program registered with the U.S. Department of Labor, Employment and Training Administration, Bureau of Apprenticeship and Training, or with a State Apprenticeship Agency recognized by the Bureau, or if a person is employed in his or her first 90 days of probationary employment as an apprentice in such an apprenticeship program, who is not individually registered in the Program but who has been certified by the Bureau of Apprenticeship and Training or a State Apprenticeship Agency (where appropriate) to be eligible for probationary employment as an apprentice. The allowable ratio of apprentices to journeyman on the job site in any craft classification shall not be greater than the ratio permitted to the CONTRACTOR as to the entire work force under the registered program. Any worker listed on a payroll at an apprentice wage rate, who is not registered or otherwise employed as stated in this paragraph shall be paid not less than the applicable wage rate on the wage determination for the classification of work actually performed. In addition, any apprentice performing work on the job site in excess of the ratio permitted under the registered program shall be paid not less than the applicable wage rate on the wage determination for the work actually performed. Where a contractor is performing construction on a project in a locality other than that in which its program is registered, the ratios and wage rates (expressed in percentages of the journeyman's hourly rate) specified in the contractor's or subcontractor's registered program shall be observed. Every apprentice must be paid at not less than the rate specified in the registered program for the apprentice's level of progress, expressed as percentage of the journeyman hourly rate specified in the applicable wage determination. Apprentices shall be paid fringes in accordance with the provisions of the apprenticeship program.

If the apprenticeship program does not specify fringe benefits, apprentices must be paid the full amount of fringe benefits listed on the wage determination for the applicable classification. If the Administrator determines that a different practice prevails for the applicable apprentice classification, fringe benefits shall be paid in accordance with that determination.

In the event the Bureau of Apprenticeship and Training, or a State Apprenticeship Agency recognized by the Bureau, withdraws approval of an apprenticeship program, the CONTRACTOR will no longer be permitted to utilize apprentices at less than the applicable predetermined rate for the work performed until an acceptable program is approved.

- (b) Trainees: Except as provided in 29 CFR 5.16, trainees will not be permitted to work at less than the predetermined rate for the work performed unless they are employed pursuant to and individually registered in a program which has received prior approval, evidenced by formal certification by the U.S. Department of Labor, Employment and Training Administration. The ratio of trainees to journeymen on the job site shall not be greater than permitted under the plan approved by the Employment and Training Administration. Every trainee must be paid at not less than the rate specified in the approved program

for the trainee's level of progress, expressed as a percentage of the journeyman hourly rate specified in the applicable wage determination. Trainees shall be paid fringe benefits in accordance with the provisions of the trainee program. If the trainee program does not mention fringe benefits, trainees shall be paid the full amount of fringe benefits listed on the wage determination unless the Administrator of the Wage and Hour Division determines that there is an apprenticeship program associated with the corresponding journeyman wage rate on the wage determination which provides for less than full fringe benefits for apprentices. Any employee listed on the payroll at a trainee rate who is not registered and participating in a training plan approved by the Employment and Training Administration shall be paid not less than the applicable wage rate on the wage determination for the classification of work actually performed. In addition, any trainee performing work on the job site in excess of the ratio permitted under the registered program shall be paid not less than the applicable wage rate on the wage determination for the work actually performed. In the event the Employee and Training Administration withdraws approval of a training program, the CONTRACTOR will not longer be permitted to utilize trainees at less than the applicable predetermined rate for the work performed until an acceptable program is approved.

- (c) Equal Employment Opportunity: The utilization of apprentices, trainees and journeymen under this part shall be in conformity with the equal employment opportunity requirements of Executive Order 11246, as amended, and 29 CFR Part 30.

4. PAYROLLS AND BASIC RECORDS

- (a) Payrolls and basic records relating thereto shall be maintained by the CONTRACTOR during the course of the work and preserved for a period of three years thereafter for all laborers and mechanics working at the site of the WORK. Such records shall contain the name, address, and social security number of each such worker, his or her correct classification, hourly rates or wages paid (including rates of contributions or costs anticipated for bona fide fringe benefits or cash equivalents thereof of the types described in section 1(b)(2)(B) of the Davis-Bacon Act), daily and weekly number of hours worked, deduction made and actual wages paid. Whenever the Secretary of Labor has found under paragraph (d) of the clause entitled "Davis-Bacon Act" that the wages of any Laborer or mechanic include the amount of any costs reasonably anticipated in providing benefits under a plan or program described in section 1(b)(2)(B) of the Davis-Bacon Act, the CONTRACTOR shall maintain records which show that the commitment to provide such benefits is enforceable, that the plan or program is financially responsible, and the plan or program has been communicated in writing to the laborers or mechanics affected, and records which show the costs anticipated or the actual costs incurred in providing such benefits. Contractors employing apprentices or trainees under approved programs shall maintain written evidence of the registration of apprenticeship programs and certification of trainee programs, the registration of the apprentices and trainees, and the ratios and wage rates prescribed in the applicable programs.

- (b) (1) The CONTRACTOR shall submit weekly for each week in which any contract work is performed a copy of all payrolls to the OWNER. The payrolls submitted shall set out accurately and completely all of the information required to be maintained under paragraph (a) of this clause. The information may be submitted in any form desired. Optional Form WH-347 Federal stock number 029-005-00014-1 is available for this purpose and may be purchased from the Superintendent of Documents, U.S. Government Printing Office, Washington, D.C. 20402. The Prime Contractor is responsible for the submission of copies of payrolls by all subcontractors.
- (2) Each payroll submitted shall be accompanied by a "Statement of Compliance" signed by the CONTRACTOR or subcontractor or his or her agent who pays or supervises the payment of the persons employed under the contract and shall certify the following:
- (i) That the payroll for the payroll period contains the information required to be maintained under paragraph (a) of this clause entitled "Payrolls and Basic Records" and that such information is correct and complete.
 - (ii) That each laborer or mechanic (including each helper, apprentice, and trainee) employed on the contract during the payroll period has been paid the full weekly wages earned, without rebate, either directly or indirectly and that no deductions have been made either directly or indirectly from the full wages earned, other than permissible deduction as set forth in Regulations, 29 CFR Part 3 and
 - (iii) That each laborer or mechanic has been paid not less than the applicable wage rates and fringe benefits or cash equivalents for the classification of work performed, as specified in the applicable wage determination incorporated into the contract.
- (3) The weekly submission of a properly executed certification set forth on the reverse side of Optional Form WH-347 shall satisfy the requirement for submission of the "Statement of Compliance" required by subparagraph (b)(2) of this clause.
- (4) The falsification of any of the certifications may subject the CONTRACTOR or subcontractor to civil or criminal prosecution under Section 1001 of Title 18 and Section 18 and Section 231 of Title 31 of the United States Code.
- (c) The CONTRACTOR or subcontractor shall make the records required under paragraph (a) of this clause available for inspection, copying, or transcription by authorized OWNER or representatives of the OWNER or the Department of Labor. The CONTRACTOR or subcontractor shall permit the OWNER or representatives of the OWNER or the Department of Labor to interview employees during working hours on the job. If the CONTRACTOR or subcontractor fails to submit the required records or to make them available, the OWNER may, after written notice to the CONTRACTOR, sponsor take such

action as may be necessary to cause the suspension of any further payment. Furthermore, failure to submit the required records upon request or to make such records available may be grounds for debarment action pursuant to 29 CFR 5.12.

5. COMPLIANCE WITH COPELAND ACT REQUIREMENTS

The CONTRACTOR shall comply with the requirements of 29 CFR Part 3, which are incorporated by reference in this contract.

6. WITHHOLDING OF FUNDS

The OWNER shall upon his or her own action or upon written request of an authorized representative of the Department of Labor withhold or cause to be withheld from the CONTRACTOR under this contract or any other Federal contract with the same Prime Contractor, or any other Federally-assisted contract subject to Davis-Bacon prevailing wage requirement, which is held by the same Prime CONTRACTOR, so much of the accrued payment or advances as may be considered necessary to pay laborers and mechanics, including apprentices, trainees, and helpers, employed by the CONTRACTOR or any subcontractor the full amount of wages required by the contract. In the event of failure to pay any laborer or mechanic, including any apprentice, trainee, or helper, employed or working on the site of WORK, all or part of the wages required by the contract, the OWNER may, after written notice to the CONTRACTOR, take such action as may be necessary to cause the suspension of any further payment, advance, or guarantee of funds until such violations have ceased.

7. SUBCONTRACTS (LABOR STANDARDS)

- (a) The CONTRACTOR or subcontractor shall insert in any subcontracts the clauses entitled "Davis-Bacon Act", "Contract Work Hours and Safety Standards Act Overtime Compensation", "Apprentice and Trainees", "Payrolls and Basic Records", "Compliance With Copeland Act Requirements", "Withholding of Funds", "Subcontracts (Labor Standards)", "Contract Termination: Debarment", "Disputes Concerning Labor Standards", "Compliance with Davis-Bacon and Related Act Requirements", and "Certification of Eligibility", and such other clauses as the OWNER may by appropriate instruction require, and also a clause requiring the subcontractors to include these clauses in any lower tier subcontracts. The Prime Contractor shall be responsible for the compliance by any subcontractor or lower tier subcontractor with all the contract clauses cited in this paragraph.
- (b) (1) Within 14 days after of the contract, the CONTRACTOR shall deliver to the OWNER a completed Statement and Acknowledgment Form (SF-1413) for each subcontract, including the subcontractor's signed and dated acknowledgement that the clauses set forth in paragraph 7.1 of this clause have been included in the subcontract.

(2) Within 14 days after the award of any subsequently awarded subcontract the CONTRACTOR shall deliver to the OWNER an updated completed SF 1413 for such additional subcontract.

8. CONTRACT TERMINATION: DEBARMENT

A breach of the contract clauses entitled "Davis-Bacon Act", "Contract Work Hours and Safety Standards Act-Overtime Compensation", "Apprentices and Trainees", "Payrolls and Basic Records", "Compliance with Copeland Act Requirements", "Subcontracts", (Labor Standards) "Compliance with Davis-Bacon and Related Act Requirements", and "Certification of Eligibility" may be grounds for termination of the contract, and for debarment as a contractor and a subcontractor as provided in 29 CFR 5.12.

9. DISPUTES CONCERNING LABOR STANDARDS

The United States Department of Labor has set forth in 29 CFR Parts 5, 6, and 7 procedures for resolving disputes concerning labor standards requirements. Such disputes shall be resolved in accordance with the procedures and not the Disputes clause of this Contract. Disputes within the meaning of this clause include disputes between the CONTRACTOR (or any of its subcontractors) and the OWNER, the U.S. Department of Labor, or the employees or their representatives.

10. COMPLIANCE WITH THE DAVIS-BACON AND RELATED ACT REQUIREMENTS

All rulings and interpretations of the Davis-Bacon and Related Acts contained in 29 CFR Parts 1, 3, and 5 are herein incorporated by reference in this contract.

11. CERTIFICATION OF ELIGIBILITY

- (a) By entering into this contract, the CONTRACTOR certifies that neither it (nor he or she) nor any person or firm who has an interest in the contractor's firm is a person or firm ineligible to be awarded Government assisted contracts by virtue of section 3(a) of the Davis-Bacon Act or 29 CFR 5.12(a)(1).
- (b) No part of this contract shall be subcontracted to any person or firm ineligible for award of a Government assisted contract by virtue of Section 3(a) of the Davis-Bacon Act or 29 CFR 5.12(a)(1).
- (c) The penalty for making false statements is prescribed in the U.S. Criminal Code, 18 U.S.C. 1001.

**SECTION 00815
WAGE DETERMINATION**

General Decision Number: WA180102 08/10/2018 WA102

Superseded General Decision Number: WA20170102

State: Washington

Construction Type: Heavy
including water and sewer line construction

County: Thurston County in Washington.

HEAVY CONSTRUCTION PROJECTS (including sewer/water construction).

Note: Under Executive Order (EO) 13658, an hourly minimum wage of \$10.35 for calendar year 2018 applies to all contracts subject to the Davis-Bacon Act for which the contract is awarded (and any solicitation was issued) on or after January 1, 2015. If this contract is covered by the EO, the contractor must pay all workers in any classification listed on this wage determination at least \$10.35 per hour (or the applicable wage rate listed on this wage determination, if it is higher) for all hours spent performing on the contract in calendar year 2018. The EO minimum wage rate will be adjusted annually. Please note that this EO applies to the above-mentioned types of contracts entered into by the federal government that are subject to the Davis-Bacon Act itself, but it does not apply to contracts subject only to the Davis-Bacon Related Acts, including those set forth at 29 CFR 5.1(a)(2)-(60). Additional information on contractor requirements and worker protections under the EO is available at www.dol.gov/whd/govcontracts.

Modification Number	Publication Date
0	01/05/2018
1	03/30/2018
2	08/10/2018

CARP0770-031 06/01/2016

	Rates	Fringes
CARPENTER (Including Formwork)...	\$ 40.92	14.59
PILEDRIVERMAN.....	\$ 41.17	14.59

(HOURLY ZONE PAY: WESTERN AND CENTRAL WASHINGTON - ALL CLASSIFICATIONS EXCEPT MILLWRIGHTS AND PILEDRIVERS

Hourly Zone Pay shall be paid on jobs located outside of the free zone computed from the city center of the following listed cities:

Seattle	Olympia	Bellingham
Auburn	Bremerton	Anacortes
Renton	Shelton	Yakima
Aberdeen-Hoquiam	Tacoma	Wenatchee

NISQUALLY TRIBE

SOUTH RESERVATION HOUSING PHASE I

Ellensburg Everett Port Angeles
 Centralia Mount Vernon Sunnyside
 Chelan Pt. Townsend

Zone Pay:

0 -25 radius miles Free
 26-35 radius miles \$1.00/hour
 36-45 radius miles \$1.15/hour
 46-55 radius miles \$1.35/hour
 Over 55 radius miles \$1.55/hour

(HOURLY ZONE PAY: WESTERN AND CENTRAL WASHINGTON - MILLWRIGHT AND PILEDRIVER ONLY)

Hourly Zone Pay shall be computed from Seattle Union Hall, Tacoma City center, and Everett City center

Zone Pay:

0 -25 radius miles Free
 26-45 radius miles \$.70/hour
 Over 45 radius miles \$1.50/hour

 ELEC0076-005 01/01/2018

	Rates	Fringes
ELECTRICIAN.....	\$ 40.78	23.01

* ENGI0612-022 06/01/2018

	Rates	Fringes
POWER EQUIPMENT OPERATOR		
Group 1A.....	\$ 38.39	17.40
GROUP 1A.....	\$ 44.43	19.15
Group 1AA.....	\$ 38.96	17.40
GROUP 1AA.....	\$ 45.09	19.15
Group 1AAA.....	\$ 39.52	17.40
GROUP 1AAA.....	\$ 45.73	19.15
Group 1.....	\$ 37.84	17.40
GROUP 1.....	\$ 43.79	19.15
Group 2.....	\$ 37.35	17.40
GROUP 2.....	\$ 43.24	19.15
Group 3.....	\$ 36.93	17.40
GROUP 3.....	\$ 42.74	19.15
Group 4.....	\$ 34.57	17.40
GROUP 4.....	\$ 40.02	19.15

Zone Differential (Add to Zone 1 rates):
 Zone 2 (26-45 radius miles) - \$1.00
 Zone 3 (Over 45 radius miles) - \$1.30

BASEPOINTS: Aberdeen, Bellingham, Bremerton, Everett, Kent, Mount Vernon, Port Angeles, Port Townsend, Seattle, Shelton, Wenatchee, Yakima

POWER EQUIPMENT OPERATORS CLASSIFICATIONS

GROUP 1AAA - Cranes-over 300 tons, or 300 ft of boom (including jib with attachments)

GROUP 1AA - Cranes 200 to 300 tons, or 250 ft of boom (including jib with attachments); Tower crane over 175 ft in height, base to boom; Excavator/Trackhoe: Over 90 metric tons

GROUP 1A - Cranes, 100 tons thru 199 tons, or 150 ft of boom (including jib with attachments); Crane-overhead, bridge type, 100 tons and over; Tower crane up to 175 ft in height base to boom; Loaders-overhead, 8 yards and over; excavator/Trackhoe: over 50 metric tons to 90 metric tons; Backhoe- 6 yards and over with attachments

GROUP 1 - Cranes 45 tons thru 99 tons, under 150 ft of boom (including jib with attachments); Crane-overhead, bridge type, 45 tons thru 99 tons; Derricks on building work; Excavator/Trackhoe: over 30 metric tons to 50 metric tons; Loader- overhead 6 yards to, but not including 8 yards; Dozer D-10; Screedman; Scrapers: 45 yards and over; Grader/Blade; Paver

GROUP 2 - Cranes, 20 tons thru 44 tons with attachments; Crane-overhead, bridge type-20 tons through 44 tons; Drilling machine; Excavator/Trackhoe: 15 to 30 metric tons; Horizontal/directional drill operator; Loaders-overhead under 6 yards; Crane Oiler-100 Tons and Over; Scraper: under 45 tons; Backhoe- 3 yards and under; Mechanic; Piledriver; Boring Machine

GROUP 3 - Cranes-thru 19 tons with attachments; A-frame crane over 10 tons; Dozers-D-9 and under; Motor patrol grader-nonfinishing; Roller-Plant Mix; Crane Oiler under 100 tons; Excavator/Trackhoe: under 15 metric tons; Service Oiler; Conveyors; Backhoe 75 hp and under; Boom Truck over 10 tons ; Forklift-3000 lbs and over

GROUP 4 - Cranes-A frame-10 tons and under; Roller-other than plant mix; Rigger/Bellman; Grade Checker; Drill Assistant; Boom Truck 10 tons and under; Forklifts under 3000 lbs

IRON0086-010 07/01/2017

	Rates	Fringes
IRONWORKER (Reinforcing, Structural and Ornamental).....	\$ 40.52	25.21

* LABO0252-009 06/01/2018

	Rates	Fringes
Laborers:		
GROUP 2.....	\$ 29.83	11.59
GROUP 3.....	\$ 37.27	11.59
GROUP 4.....	\$ 38.19	11.59
GROUP 5.....	\$ 38.80	11.59

ZONE DIFFERENTIAL (ADD TO ZONE 1 RATES):
ZONE 2 - \$1.00
ZONE 3 - \$1.30

BASE POINTS: BELLINGHAM, MT. VERNON, EVERETT, SEATTLE, KENT, TACOMA, OLYMPIA, CENTRALIA, ABERDEEN, SHELTON, PT. TOWNSEND, PT. ANGELES, AND BREMERTON

ZONE 1 - Projects within 25 radius miles of the respective city hall
 ZONE 2 - More than 25 but less than 45 radius miles from the respective city hall
 ZONE 3 - More than 45 radius miles from the respective city hall

LABORERS CLASSIFICATIONS

GROUP 2: Flagman

GROUP 3: General Laborer; Mason Tender-Cement/Concrete; Form Stripping

GROUP 4: Grade Checker; Pipe Layer; Handheld Drill; High Scaler; Jackhammer

GROUP 5: Mason Tender-Brick

 * PAIN0005-008 07/01/2018

	Rates	Fringes
PAINTER (Brush, Roller and Spray).....	\$ 22.94	11.61

 * PLAS0528-004 06/01/2018

	Rates	Fringes
CEMENT MASON/CONCRETE FINISHER....	\$ 42.63	17.44

 * TEAM0174-006 01/01/2017

	Rates	Fringes
Truck drivers:		
ZONE A:		
GROUP 1:.....	\$ 34.13	18.57
GROUP 2:.....	\$ 33.29	18.57

ZONE B (25-45 miles from center of listed cities*): Add \$.70 per hour to Zone A rates.

ZONE C (over 45 miles from centr of listed cities*): Add \$1.00 per hour to Zone A rates.

*Zone pay will be calculated from the city center of the following listed cities:

BELLINGHAM	CENTRALIA	RAYMOND	OLYMPIA
EVERETT	SHELTON	ANACORTES	BELLEVUE
SEATTLE	PORT ANGELES	MT. VERNON	KENT
TACOMA	PORT TOWNSEND	ABERDEEN	BREMERTON

TRUCK DRIVERS CLASSIFICATIONS

GROUP 1 - Water Truck-3,000 gallons and over; Semi-Trailer Truck

GROUP 2 - Water Truck- less than 3,000 gallons

HAZMAT PROJECTS

Anyone working on a HAZMAT job, where HAZMAT certification is required, shall be compensated as a premium, in addition to the classification working in as follows:

LEVEL C: +\$.25 per hour - This level uses an air purifying respirator or additional protective clothing.

LEVEL B: +\$.50 per hour - Uses same respirator protection as Level A. Supplied air line is provided in conjunction with a chemical "splash suit."

LEVEL A: +\$.75 per hour - This level utilizes a fully-encapsulated suit with a self-contained breathing apparatus or a supplied air line.

 SUWA2009-068 08/07/2009

	Rates	Fringes
LABORER: Landscape & Irrigation.....	\$ 13.52	3.35
OPERATOR: Asphalt Plant.....	\$ 34.14	0.68
OPERATOR: Bobcat/Skid Steer/Skid Loader.....	\$ 10.63	0.00
OPERATOR: Broom/Sweeper.....	\$ 30.39	3.77
OPERATOR: Power Shovel.....	\$ 25.12	7.83
TRUCK DRIVER, Includes Dump Truck.....	\$ 25.75	8.38
TRUCK DRIVER: Flatbed Truck.....	\$ 22.74	6.29
TRUCK DRIVER: Lowboy Truck.....	\$ 22.89	5.72

 WELDERS - Receive rate prescribed for craft performing operation to which welding is incidental.

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 Note: Executive Order (EO) 13706, Establishing Paid Sick Leave for Federal Contractors applies to all contracts subject to the Davis-Bacon Act for which the contract is awarded (and any solicitation was issued) on or after January 1, 2017. If this contract is covered by the EO, the contractor must provide employees with 1 hour of paid sick leave for every 30 hours they work, up to 56 hours of paid sick leave each year. Employees must be permitted to use paid sick leave for their own illness, injury or other health-related needs, including preventive care; to assist a family member (or person who is like family to the employee) who is ill, injured, or has other

health-related needs, including preventive care; or for reasons resulting from, or to assist a family member (or person who is like family to the employee) who is a victim of, domestic violence, sexual assault, or stalking. Additional information on contractor requirements and worker protections under the EO is available at www.dol.gov/whd/govcontracts.

Unlisted classifications needed for work not included within the scope of the classifications listed may be added after award only as provided in the labor standards contract clauses (29CFR 5.5 (a) (1) (ii)).

The body of each wage determination lists the classification and wage rates that have been found to be prevailing for the cited type(s) of construction in the area covered by the wage determination. The classifications are listed in alphabetical order of "identifiers" that indicate whether the particular rate is a union rate (current union negotiated rate for local), a survey rate (weighted average rate) or a union average rate (weighted union average rate).

Union Rate Identifiers

A four letter classification abbreviation identifier enclosed in dotted lines beginning with characters other than "SU" or "UAVG" denotes that the union classification and rate were prevailing for that classification in the survey. Example: PLUM0198-005 07/01/2014. PLUM is an abbreviation identifier of the union which prevailed in the survey for this classification, which in this example would be Plumbers. 0198 indicates the local union number or district council number where applicable, i.e., Plumbers Local 0198. The next number, 005 in the example, is an internal number used in processing the wage determination. 07/01/2014 is the effective date of the most current negotiated rate, which in this example is July 1, 2014.

Union prevailing wage rates are updated to reflect all rate changes in the collective bargaining agreement (CBA) governing this classification and rate.

Survey Rate Identifiers

Classifications listed under the "SU" identifier indicate that no one rate prevailed for this classification in the survey and the published rate is derived by computing a weighted average rate based on all the rates reported in the survey for that classification. As this weighted average rate includes all rates reported in the survey, it may include both union and non-union rates. Example: SULA2012-007 5/13/2014. SU indicates the rates are survey rates based on a weighted average calculation of rates and are not majority rates. LA indicates the State of Louisiana. 2012 is the year of survey on which these classifications and rates are based. The next number, 007 in the example, is an internal number used in producing the wage determination. 5/13/2014 indicates the survey completion date for the classifications and rates under that identifier.

Survey wage rates are not updated and remain in effect until a new survey is conducted.

Union Average Rate Identifiers

Classification(s) listed under the UAVG identifier indicate that no single majority rate prevailed for those classifications; however, 100% of the data reported for the classifications was union data. EXAMPLE: UAVG-OH-0010 08/29/2014. UAVG indicates that the rate is a weighted union average rate. OH indicates the state. The next number, 0010 in the example, is an internal number used in producing the wage determination. 08/29/2014 indicates the survey completion date for the classifications and rates under that identifier.

A UAVG rate will be updated once a year, usually in January of each year, to reflect a weighted average of the current negotiated/CBA rate of the union locals from which the rate is based.

WAGE DETERMINATION APPEALS PROCESS

1.) Has there been an initial decision in the matter? This can be:

- * an existing published wage determination
- * a survey underlying a wage determination
- * a Wage and Hour Division letter setting forth a position on a wage determination matter
- * a conformance (additional classification and rate) ruling

On survey related matters, initial contact, including requests for summaries of surveys, should be with the Wage and Hour Regional Office for the area in which the survey was conducted because those Regional Offices have responsibility for the Davis-Bacon survey program. If the response from this initial contact is not satisfactory, then the process described in 2.) and 3.) should be followed.

With regard to any other matter not yet ripe for the formal process described here, initial contact should be with the Branch of Construction Wage Determinations. Write to:

Branch of Construction Wage Determinations
Wage and Hour Division
U.S. Department of Labor
200 Constitution Avenue, N.W.
Washington, DC 20210

2.) If the answer to the question in 1.) is yes, then an interested party (those affected by the action) can request review and reconsideration from the Wage and Hour Administrator (See 29 CFR Part 1.8 and 29 CFR Part 7). Write to:

Wage and Hour Administrator
U.S. Department of Labor

200 Constitution Avenue, N.W.
Washington, DC 20210

The request should be accompanied by a full statement of the interested party's position and by any information (wage payment data, project description, area practice material, etc.) that the requestor considers relevant to the issue.

3.) If the decision of the Administrator is not favorable, an interested party may appeal directly to the Administrative Review Board (formerly the Wage Appeals Board). Write to:

Administrative Review Board
U.S. Department of Labor
200 Constitution Avenue, N.W.
Washington, DC 20210

4.) All decisions by the Administrative Review Board are final.

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END OF GENERAL DECISION

SECTION 00820 TERO REQUIREMENTS

NATIVE AMERICAN PREFERENCE

The Owner intends to make available any and all opportunities for employment and training for Nisqually Tribal Members, their immediate families, and all other Native Americans. Therefore, the Tribal Employment Rights Ordinance (**TERO**) is in effect for this project. This may include but is not limited to:

- Native American preference in employment. We have set a goal for each project to employ 35% TERO Referrals.
- Native American preference in contracting.
- 1.75% Employment Rights tax on projects \$20,000 and over

It is the responsibility of the Contractor to contact the TERO Office for details:

Cynthia Iyall
iyall.cynthia@nisqually-nsn.gov
Office: (360) 456-5221 ext. 1253

Tribal Employment Rights Ordinance

Notice

Notice is hereby given that the Nisqually Indian Tribe has a Tribal Employment Rights Ordinance in effect for this project covering Native American employment, training, contracting, subcontracting, wages and fees/taxes. All bidders must contact the Nisqually Tribal Employment Rights Office to obtain all relevant information prior to bidding. An approved TERO Compliance Plan must be obtained before any work commences within the jurisdiction of the Nisqually Indian Tribe.

The contractor is advised that Section 42.13.01 (a) of the Nisqually Tribe's Tribal Employment Rights Ordinance states:

“(a) Every covered employer or entity with a construction contract or subcontract of \$20,000.00 or more shall pay a one-time tax of 1.75% of the total project/contract costs, i.e., equipment, labor, materials and operations and any increase of the contract/project or subcontract amount. If the employer (regulated) initially enters into a contract/project or subcontract of less than \$20,000.00, but subsequently increases costs, as a result in the total contract/project or subcontract amount of \$20,000.00 or more, the tax shall apply to the total amount including increases.”

Any contractor/subcontractor that does not obtain an approved compliance plan may be denied the right to commence or continue business on Nisqually Tribal Projects.

Bidders are required to contact the TERO Office for information concerning TERO requirements in the following areas:

- Fees/Taxes
- Wage Rates
- Native American preference in Subcontracting
- Native American preference in employment. We have set a goal for each project to employ 35% TERO Referrals.
- Contractor Training obligations

Direct all TERO inquiries to:

Nisqually TERO; Cynthia Iyall
(360) 456-5221 ext.1253
lyall.cynthia@nisqually-nsn.gov

**SECTION 00930
CHANGE ORDER**

Order No. _____

Date _____

Agreement Date _____

Name of Project: SOUTH RESERVATION HOUSING PHASE I SEWER AND WATER

Construction/Installation of:

OWNER: Nisqually Tribe

CONTRACTOR:

The following changes are hereby made to the CONTRACT DOCUMENTS:

Justification:

Change to CONTRACT PRICE:

Current CONTRACT PRICE: \$ _____

Current CONTRACT PRICE adjusted by previous CHANGE ORDER \$ _____

The CONTRACT PRICE due to this CHANGE ORDER will be increased by: \$ _____

The new CONTRACT PRICE including this CHANGE ORDER will be: \$ _____

Change to CONTRACT TIME:

The CONTRACT TIME will be (increased)(decreased) by ____ calendar days.

The date for completion of all work will be _____.

Approvals Required:

To be effective this ORDER must be approved by the Federal agency if it changes the scope or objective of the PROJECT, or as may otherwise be required by the GENERAL REQUIREMENTS.

Recommended by: (ENGINEER) _____

Ordered by: (Owner) _____

Accepted by: (Contractor) _____

SECTION 01100 SUMMARY OF WORK

PART 1 - GENERAL

1.01 SUMMARY

- A. This section provides background on the proposed work and briefly summarizes the work to be completed under this Contract.
- B. The work to be performed under this contract shall consist of furnishing all tools, equipment, materials, supplies, and manufactured articles; all transportation and services, including but not limited to, fuel, power, temporary roadways, and essential communications; all labor, work, or other operations required for the fulfillment of the contract in accordance with the specifications, drawings, and other contract documents, including such detail sketches as may be furnished by the project engineer from time to time during construction in explanation of said contract documents.

1.02 WORK REQUIRED

- A. Furnish all labor, materials, equipment and supervision necessary to construct the following facilities as described by these specifications and drawings. All work, materials and services not expressly listed as being provided by others or that are called for in the contract or necessary to provide a complete and operational system will be furnished, installed and performed by the contractor.
- B. Description of Work: As Phase 1 of the South Reservation Housing Plan, the Nisqually Indian Tribe is constructing a multi-family housing complex consisting of two 4-unit buildings and two 6-unit buildings, comprising a total of 20 units and four buildings. The multi-unit complex requires connection to existing sewer and water force mains.

Site conditions and existing infrastructure determine that the use of septic tank effluent pumping (STEP) systems is applicable for each building. The project will install a STEP system with connection to existing sewer force main for each building. Additionally, two water meter connections will be provided and service lines from each water meter will be installed such that each water meter serves two buildings.

The proposed work generally consists of:

- 1. Mobilization/Demobilization
 - a. Mobilization of all equipment, materials, and supplies to site and all costs associated with site preparation and clean-up

2. 6-Unit STEP system with piping, controls and equipment (2)
 - a. Sch 40 PVC piping with cleanout from stub-out to septic tank
 - b. Septic tank with effluent baffle for primary treatment
 - c. Sch 40 PVC piping from septic tank to STEP Tank
 - d. STEP tank with duplex STEP assembly and control panel with audio and visual alarm

3. 4-Unit STEP System with piping, controls and equipment (2)
 - a. Sch 40 PVC piping with cleanout from stub-out to septic tank
 - b. Septic tank with effluent baffle for primary treatment
 - c. Sch 40 PVC piping from septic tank to STEP tank
 - d. STEP tank with duplex STEP assembly, control panel with audio and visual alarm

4. STEP sewer force line
 - a. Sewer force line to convey STEP effluent from STEP tank to sewer force main

5. Connection to sewer force main (4)
 - a. Sewer corporation stop and saddle connection from each STEP force line to existing sewer force main

6. Water service connection (2)
 - a. Corporation stop and saddle connection to existing water main
 - b. Service line from water main to water meter
 - c. Two water meter installations at approximate locations shown in Project Drawings: each water meter to serve two buildings
 - d. Yard hydrant to be placed near each building as shown in Project Drawings. Each water service connection line item will service 2 buildings and as such shall include full and complete installation of 2 yard hydrants.

7. Water service line
 - a. Water service line to each building

1.03 SITE CONDITIONS

A. Utilities

1. Known buried utilities are shown on the drawings as an indication as to what the contractor may encounter, **NOT FOR LOCATION PURPOSES**. Locations, material and sizes of any shown are approximate and not meant as a complete representation. Contractor must obtain exact locations.

2. Protect existing utilities during construction.
 3. Immediately notify Project Engineer and the utility owner of any damaged utilities.
 4. Any and all damage that results from work under this contract shall be promptly repaired at the expense of the Contractor (exception is utilities owned and located incorrectly by the Tribe. Contractor will repair damage and be reimbursed for costs).
- B. Roads
1. Nisqually Public Works, Tony Berkson, Director, 360-456-5221.
- C. Tribal Employment Rights Ordinance (TERO)
1. Contractor must comply with Nisqually TERO. Contact Frances Rohr, TERO Compliance Officer, at 360-456-5221 ext. 1128.
- D. Rights-of-Way
1. All work will be performed within existing rights-of-way.
- E. Site Ownership
1. The construction site is entirely located inside the Nisqually Indian Reservation and on land controlled by the Nisqually Tribe.

1.04 CONTRACT ROLES

- A. Nisqually Indian Tribe: The Nisqually Indian Tribe is the CONTRACTING OFFICER and OWNER for this project. The Tribe's CEO, Sharlaine LaClair, will provide authorized signatures to applicable documents which legally bind the Tribes in this Contract, and will be responsible for awarding the contract, issuing notices to proceed, and issuing change orders.
1. Contact:
 - David Iyall, Nisqually Project Manager
 - Nisqually Indian Tribe
 - 4820 She-Nah-Num Dr. SE
 - Olympia, WA 98513
 - Ph: (360) 456-5221
 - iyall.david@nisqually-nsn.gov
- B. Indian Health Service: The Indian Health Service (IHS) is the Design Engineer. IHS is providing project funding and technical support to the Tribes, and has prepared the technical specifications for this Contract. IHS does not fill any roll

between the Contracting Officer and Contractor. Its relationship is with the Tribe only. However, upon request of the Tribes, IHS can assist with technical matters not readily addressed between the Contractor and Contracting Officer's Representative. In addition, IHS can provide periodic site inspections.

1. Contact:

Luke Moilanen, P.E.
Environmental Engineer
Indian Health Service
701 5th Avenue, Suite 1600
Seattle, WA 98104
Ph: (206) 615-2795
Fax: (206) 615-2797
lucas.moilanen@ihs.gov

END OF SECTION

**SECTION 01270
PRICE AND PAYMENT**

PART 1 - GENERAL

1.01 SUMMARY

- A. Work covered by this section includes method of measurement and basis of payment for all sections included.
- B. All measurements and payments will be based on completed and accepted work performed in accordance with the drawings and specifications.
- C. Payment shall be full compensation to complete the work items in good faith, including incidental work.
- D. Payment under each line item shall be full compensation for the following:
 - 1. labor
 - 2. materials
 - 3. equipment
 - 4. tools
 - 5. testing
 - 6. subcontracts and services

PART 2 – BID SCHEDULE ITEMS

2.01 GENERAL

- A. Payment shall be full compensation to complete work items in good faith, including incidental work.
- B. Payment shall be full compensation for the following:
 - 1. Labor
 - 2. Materials
 - 3. Equipment
 - 4. Tools
 - 5. Testing equipment
 - 6. General Requirements in Division 01
 - a. Submittals
 - b. Record drawings
 - c. Temporary facilities and treatments
 - d. Operation and maintenance manuals

2.02 BID ITEMS

- A. Mob/Demobilization

- a. Measurement: Lump Sum
 - b. Basis for Payment: Payment shall be full compensation for the transportation and delivery of materials, supplies, and equipment to site, and all costs associated with site preparation and clean-up during the project.
 - c. Work related to this payment is addressed in Sections:
 - (1) 01100 Summary
 - (2) 01310 Project Management and Coordination
- B. 6-Unit STEP System and Equipment
- a. Measurement: Each.
 - b. Basis for Payment: Payment shall be full compensation for the provision, delivery to site, and installation of all materials, equipment, products and labor necessary to install a septic tank and STEP tank to full working order for the 6-unit buildings.
 - c. Work related to this payment is addressed in Sections:
 - (1) 02545 Concrete Tanks and Piping
 - (2) 02532 Sewer Service Lines
 - (3) 16010 General Electrical
- C. 4-Unit STEP System and Equipment
- a. Measurement: Each.
 - b. Basis for Payment: Payment shall be full compensation for the provision, delivery to site, and installation of all materials, equipment, products and labor necessary to install a septic tank and STEP tank to full working order for the 4-unit buildings.
 - c. Work related to this payment is addressed in Sections:
 - (1) 02545 Concrete Tanks and Piping
 - (2) 02532 Sewer Service Lines
 - (3) 16010 General Electrical
- D. Sewer Transport Piping
- a. Measurement: Linear feet of gravity sewer transport line installed.
 - b. Basis for Payment: Payment shall be full compensation for the actual number of linear feet of gravity sewer transport piping installed, including trenching, bedding, pipe materials, fittings and connections, and cover/backfill; and all other necessary items required for a complete

installation of sewer transport pipe to ensure full functionality of installed facilities.

c. Work related to this payment is addressed in Sections:

- (1) 02315 Excavation, Trenching and Backfilling
- (2) 02532 Sewer Service Lines

E. STEP Effluent Pressure Line

a. Measurement: Linear feet of sewer force line installed.

b. Basis for Payment: Payment shall be full compensation for the actual number of linear feet of sewer force line installed, including trenching, bedding, tracer tape, pipe materials, fittings and connections, and cover/backfill; and all other necessary items required for a complete installation of pressure effluent pipe to ensure full functionality of the STEP system.

c. Work related to this payment is addressed in Sections:

- (1) 02315 Excavation, Trenching and Backfilling
- (2) 02532 Sewer Service Lines

F. Connection to Existing Sewer Force Main

a. Measurement: Each.

b. Basis for Payment: Payment shall be full compensation for the actual number of linear feet abandoned, including removal and disposal of any existing drop pipe, pump(s), and wiring; and sealing with acceptable sealing material; and all other necessary items required for a complete abandonment of the designated wells. No payment will be made without receipt of a record of well decommissioning report, in accordance with the specifications.

c. Work related to this payment is addressed in Sections:

- (1) 02538 Sewer Forcemain
- (2) 02315 Excavation, Trenching and Backfilling

G. Water Service Connection and Meter

a. Measurement: Each.

b. Basis for Payment: Payment shall be full compensation for all labor, materials, equipment, necessary to provide water service to the multi-family complex, including excavation, connection saddle and tapping, corporation stops and valves, water meters, meter boxes and yard hydrants.

c. Work related to this payment is addressed in Sections:

(1) 025185 Water Service

H. Water Service Line

a. Measurement: Linear feet of water service line installed.

b. Basis for Payment: Payment shall be full compensation for all labor, materials, equipment necessary to install water service line from the meter box to each individual building, including excavation, pipe and fittings, tracer tape, connection to home stub-out and backfill such that the result is fully functional and operational water service to each building.

c. Work related to this payment is addressed in Sections:

(1) 02518 Water Service

END OF SECTION

**SECTION 01310
PROJECT MANAGEMENT AND COORDINATION**

PART 1 - GENERAL

1.01 SUMMARY

- A. Section includes the preconstruction conference, construction scheduling and coordination requirements.
- B. Costs associated with project management and coordination are incidental to the contract work and are included in the contract unit and lump sum costs.

1.02 PRE-CONSTRUCTION CONFERENCE AND PROGRESS MEETINGS

- A. Prior to beginning construction, but following contract award, the Contractor, Subcontractors and other interested parties must participate in a Preconstruction Conference.
- B. Periodically throughout the contract performance period, the Contractor and Subcontractors shall avail themselves to project progress meetings. These meetings shall be held as often as the parties determine is necessary, but will be at least once every other month (bimonthly).
- C. Representatives from the following shall attend each meeting:
 - 1. Prime Contractor
 - 2. Subcontractors
 - 3. Contracting Officer
 - 4. Project Engineer and Inspector
 - 5. Tribal Project Manager
- D. Contractor is responsible for notifying Subcontractors of meeting time and date.
- E. Meeting Minutes:
 - 1. Meeting Minutes will be recorded, typed up in a memorandum and distributed to all attendees by the Project Engineer.
 - 2. Any attendee may question or challenge the content of the meeting minutes, in writing to the Project Engineer, prior to the next project meeting. If the meeting minutes are unchallenged, they will be accepted as an accurate representation of the meeting discussions and decisions.
 - 3. Challenges will be resolved as "old business" at the subsequent project progress meeting.

1.03 CONSTRUCTION SCHEDULE

- A. Present three original signed copies to the contracting officer a written preliminary construction schedule in the form of a “critical path” diagram or equivalent chart showing the following as a minimum (all times referenced to calendar dates):
 - 1. activity
 - 2. activity description
 - 3. duration
 - 4. early start
 - 5. early finish
 - 6. latest start
 - 7. latest finish
 - 8. total float for that activity
- B. Provide enough detail to allow the Engineer to evaluate work progress both on-site and off-site.
- C. Review of the schedule by the Engineer shall not constitute endorsement of the Contractor’s approach, means, methods sequences or procedures nor shall it constitute assignment of the Contractor’s responsibility to provide superintendence and project management.
- D. Provide the Engineer with a revised schedule whenever major changes occur to the schedule.

1.04 WEEKLY ACTIVITY SCHEDULE

- A. Provide the Engineer with a written weekly activity schedule (facsimile or email is acceptable) indicating planned activities, locations, and approximate schedules.
- B. Note the planned visits by manufacturer’s representatives, testing firms, or other site visitors that may be of significance to the Engineer.
- C. Provide the weekly activity schedule to the engineer by noon on the last day of the workweek for activities during the following week.

END OF SECTION

SECTION 01330
SUBMITTAL PROCEDURES AND REQUIREMENTS

PART 1 - GENERAL

1.01 SUMMARY

- A. This section includes information on submittal procedures and general submittal requirements. Materials requiring submittal are listed in the appropriate specification section.

1.02 SUBMITTAL PROCEDURES

- A. Submit one (1) original copy of submittals to the project Engineer.
- B. Identify each cut sheet or shop drawing with the following information:
 - 1. Contract number.
 - 2. Supplier(s).
 - 3. Specification section, plan sheet or detail drawing number to which the submittal pertains.
- C. Submit the following information, *as applicable*, in accordance with the submittal requirements of each section.
 - 1. Manufacturer's cut sheets indicating compliance with references and standards (e.g. applicable ASTM, AWWA standards).
 - 2. Laboratory results, as applicable.
 - 3. Dimensional drawings or shop drawings, as applicable.
 - 4. Other specific information required by the particular section of the specification.
- D. Variations from Contract Documents or Products Specified:
 - 1. Bring all submitted variations to the attention of the Project Engineer.
 - 2. Variations not brought to the Project Engineer's attention, in writing, and that conflict with the Contract Documents, do not relieve the contractor from the requirements of the contract documents.

E. Revisions and Resubmittals:

1. Revise and resubmit submittals as required and identify all changes made since previous submittal.
2. Engineer Obligations for Resubmittals:
 - a. The Engineer will be obligated to review the original submittal and one resubmittal for each item requiring submittal.
 - b. Subsequent resubmittals will be at the Contractor's expense, deducted from the subsequent partial pay request and ultimately credited to the contract via subsequent change order at an hourly rate of \$60 per hour.
3. Incomplete submittals or rejected submittals that result in the need for the Contractor to resubmit cannot be grounds for a contract time extension or equitable adjustment to contract price, unless the Engineer did not meet the obligations outlined in Paragraph 1.02, Subparagraphs E and G.

F. Distribute copies of reviewed submittals to concerned parties, (i.e. suppliers, sub-contractors).

G. Submittal Time Requirements:

1. Submit information to the Project Engineer at least one week in advance of the work to be performed.
2. The Engineer will have up to 3 calendar days, from the date received in the Engineer's office, to respond to the submittal or resubmittal.
3. If the Engineer takes longer than 3 calendar days to respond to a submittal or resubmittal and if the Contractor can show damage resulting from the Engineer's delay in responding, the contractor will receive a contract time extension or equitable adjustment for the number of days in excess of 3 calendar days that the Engineer held the particular submittal.
4. Repeated resubmittals resulting from "Rejected" or "Incomplete Submittals" (as defined in Article 1.03) will not be grounds for a contract time extension.
5. Lack of response does not constitute approval.

H. Approval Required Before Installation:

1. Approval of submittals must be provided by the Project Engineer prior to installation of materials.

2. Materials installed without written submittal approval will be at the Contractor's risk, and may require removal, at no expense to the Owner.

1.03 DEFINITIONS

- A. Approved: Deemed to be acceptable for use in accomplishing the requirements of the plans and specifications, but does not extend to the means, methods, or procedures of construction (except where specific means, methods, or procedures are specifically required by the contract documents) and does not imply approval of the system or construction in which the submitted item is a part.
- B. Conditionally Approved: Deemed to be acceptable for use in accomplishing the requirements of the plans and specifications, if the conditions noted in the submittal approval letter are met. The approval does not extend to the means, methods, or procedures of construction (except where specific means, methods, or procedures are specifically required by the contract documents) and does not imply approval of the system or construction in which the submitted item is a part.
- C. Rejected: Deemed unacceptable for the use for which it was submitted.
- D. Incomplete Submittal: Information is insufficient to ascertain acceptability. Neither approval nor rejection is implied.

END OF SECTION

SECTION 01420 REFERENCES

PART 1 - GENERAL

1.01 SUMMARY

- A. This section includes a list of organizations, associations or appropriate agencies with jurisdiction that have references, standards, laws or regulations cited in these specifications.
- B. Use latest revision of all references, standards, laws or regulations, as applicable.

1.02 LIST OF ORGANIZATIONS, ASSOCIATIONS & AGENCIES

A. National Standards Organizations & Associations

American Association of State Highway
and
Transportation Officials (AASHTO)
444 North Capital Street NW, Suite 249
Washington DC, 20001
(202) 624-5800
www.aashto.org

American Concrete Institute (ACI)
ACI International
PO Box 9094
Farmington Hills, Michigan 48333-9094
(810) 848-3700
www.aci-int.org

American Society for Testing and
Materials (ASTM)
100 bar Harbor Drive
West Conshohocken, Pa 19428-2959
(610) 832-9585
www.astm.org

American Water Works Association
(AWWA)
6666 West Quincy Avenue
Denver, CO 80235
(303) 794-7711
www.awwa.org

National Electric Code (NEC)
National Fire and Protection Association
1 Batterymarch Park
Quincy, MA 02269-9959
1 888 632-2633
www.nec.com

National Electrical Manufacturer's
Association NEMA
1300 North 17th Street
Rosslyn, VA 22209
(703) 841-3200
www.nema.org

Underwriters' Laboratories, Inc. UL
333 Pfingston Road
Northbrook, IL 60062
(847) 272-8800
www.ul.com

B. Federal Agencies

Environmental Protection Agency
(EPA)
U.S. EPA Region 10
1200 6th Avenue
Seattle, WA 98101
(206) 553-1200
<http://www.epa.gov/region10>

Occupational Health and Safety
Administration 1111 Third Avenue,
Suite 715
Seattle, Washington 98101-3212
(206) 553-5930
(206) 553-6499 FAX
www.osha.gov

C. State Agencies

Washington Department of Transportation
Engineering Publications
PO Box 47408
Olympia, WA 98504-7408
Phone 360-705-7430
<http://www.wsdot.wa.gov/fasc/EngineeringPublications/>

Washington Department of Ecology
Department of Water Resources
P.O. Box 47600
Olympia, WA 98504-07600
Phone: 360-407-6872
<http://www.ecy.wa.gov/>

PART 2 – PRODUCTS (N/A)

PART 3 – EXECUTION (N/A)

END OF SECTION

SECTION 01430
QUALITY CONTROL/QUALITY ASSURANCE

1.01 SUMMARY

- A. This section includes prerequisites and procedures to ensure the quality of the construction and to provide assurance that the Contractor is capable of meeting quality requirements.
- B. The costs for Contractor Quality Control/Quality Assurance measures are incidental to the overall contract and are included in the applicable contract line items.

1.02 CONTRACTOR QUALIFICATIONS

- A. The General Contractor performing work shall be registered in the State of Washington for the type of construction and magnitude of construction being performed.

1.03 INSTALLER QUALIFICATIONS

- A. Trade work shall be performed under the direct supervision of personnel licensed in the State of Washington for the trade being performed.

1.04 CONTROL OF INSTALLATION

- A. Inspect materials for acceptability when delivered to the site.
- B. Store and handle materials to prevent damage.
- C. Inspect materials, services, and workmanship to ensure that work is performed in accordance with the specifications.
- D. Comply with manufacturers' instructions.
- E. Should manufacturers' instructions conflict with contract documents, request clarification from Project Engineer before proceeding.
- F. Correct defective work to the satisfaction of the Project Engineer.

1.05 START-UP

- A. Prior to start-up, ensure that all equipment is ready for its use, as designed.
- B. Ensure that all power sources are balanced and ready for use.

- C. Provide the services of manufacturers' field representative for start-up, testing, and adjustment of all major equipment items.
- D. Provide reports from the manufacturer, including their observations and documentation of workmanship to the Project Engineer within 30 days of manufacturer's visit, unless a sooner response is required by the applicable specification section.
- E. Work will not be considered complete until all systems and subsystems have been tested for proper functionality and proper adjustment.

1.06 SAMPLES

- A. When requested by the Project Engineer, supply samples of materials proposed for use.

1.07 WARRANTY

- A. Provide a minimum one (1) year warranty for all materials and labor, covering defects in the materials or deficiencies resulting from contractor installation.
- B. Provide additional warranties as required by specific sections.

END OF SECTION

**SECTION 01770
CLOSEOUT PROCEDURES**

PART 1 - GENERAL

1.01 SUMMARY

- A. This section presents information on closeout procedures and final cleaning of the project site(s).

1.02 RELATED WORK

- A. Section 01270 – Price and Payment
- B. Section 01430 – Quality Control / Quality Assurance
- C. Section 01780 – Closeout Submittals
- D. Section 01785 – Operation and Maintenance Manuals

1.03 CLOSEOUT PROCEDURES

- A. Substantial Completion Process shall be completed in accordance with Article 40 of the General Conditions.

1.04 FINAL INSPECTION

- A. Submit written certification that work is complete in accordance with the contract documents and ready for final inspection at least five (5) calendar days prior to final inspection.
- B. Perform and coordinate the final inspection with the Project Engineer, representatives of the Owner and other funding partners (i.e. funding agencies) involved in the project.
- C. Final inspection shall include inspection of all facilities installed under the project. Any remaining deficiencies and/or items of work documented during the final inspection will be detailed, in a written letter, from the Project Engineer within three (3) days of final inspection.
- D. Provide warranties and record documents (e.g. as-built drawings) to Project Engineer within ten (10) days of final inspection.

1.05 FINAL COMPLETION

- A. Final completion will be established once the final punch list deficiencies are remedied and applicable General and Contracting Requirements are met.

- B. All final punch list deficiencies must be completed before full payment is made. Any retainage held for punchlist items shall be based on the estimated cost to retain an alternate Contractor to complete the punchlist items.

END OF SECTION

**SECTION 01780
CLOSEOUT SUBMITTALS**

PART 1 - GENERAL

1.01 SUMMARY

- A. This section describes the requirements for closeout submittals including, record documents, warranty information and general operation and maintenance information.

1.02 RELATED WORK

- A. Section 01770 – Closeout Procedures

1.03 DELIVERY

- A. Provide all closeout submittals meeting these requirements and any specific requirements of each section.
- B. All closeout submittals must be received in a correct and complete manner before final payment can be made.

PART 2 – PRODUCTS (NOT APPLICABLE)

PART 3 - EXECUTION

3.01 MANUFACTURER DOCUMENTS

- A. Provide manufacturer product sheets for the following:
 - 1. Septic Tank
 - 2. Effluent Filter
 - 3. STEP Tank
 - 4. STEP Pumps
 - 5. Sewer Saddle
 - 6. Valves and appurtenances
 - 7. Water meter

3.02 CLOSEOUT DOCUMENTS

- A. Upon completion of construction and prior to final payment, Contractor shall provide the following:
 - 1. Construction Drawing As-Builts
 - 2. Installer's Warranty

END OF SECTION

**SECTION 01785
OPERATION AND MAINTENANCE MANUALS**

PART 1 - GENERAL

1.01 SUMMARY

- A. Work under this section defines the requirements to complete an operation and maintenance manual.

1.02 RELATED WORK

- A. Section 01770 – Closeout Procedures
- B. Section 01780 – Closeout Submittals
- C. Section 01821 – Operational Testing and Operator Training

PART 2 - PRODUCTS

2.01 OPERATION AND MAINTENANCE (O&M) MANUAL

- A. Provide three (3) electronic copies in MSWord format and three (3) copies of a bound operation and maintenance manuals for the STEP pumping systems:

PART 3 – EXECUTION

3.01 DELIVERY

- A. Provide the Project Engineer with draft copies of the O&M Manuals for review prior to substantial completion of the facilities.
- B. Allow the Project Engineer 21 calendar days for review and comment.
- C. Revise and submit final O&M Manuals prior to closeout (Section 01780).

3.02 TRAINING

- A. Orient the Owner's utility operator to the contents of the O&M manual in conjunction with the training outline in Section 01821.

END OF SECTION

**SECTION 01821
OPERATIONAL TESTING AND OPERATOR TRAINING**

PART 1 - GENERAL

1.01 SUMMARY

- A. This section specifies the operational testing requirements to be performed in the presence of the Owner's Utility Operator and specifies the training required for the Owner's Utility Operator.

1.02 RELATED WORK

- A. Section 01770 – Closeout Procedures
- B. Section 01780 – Closeout Submittals
- C. Section 01785 – Operation and Maintenance Manuals

PART 2 - PRODUCTS (NOT USED)

PART 3 - EXECUTION

3.01 START-UP TESTING

- A. Prior to placing into beneficial use (i.e. treating and delivering the community's potable water supply), test and monitor all components for proper operation.
- B. Perform all operational tests in the presence of the Project Engineer and the Owner's Utility Manager. Coordinate the tests with the Project Engineer at least five (5) calendar days in advance.
- C. Perform all operational tests in conjunction with an orientation of the O&M Manual (Section 01785).
- D. For the following components, a technical representative of the manufacturer or system integrator must be on-site to oversee the start-up testing.
 - 1. Control System
- E. Provide a written start-up report from each representative certifying proper operation.

3.02 OPERATOR TRAINING

- A. Training may be done in conjunction with Start-Up adjustment or at a later date, but must be performed before the contract can be closed out.
- B. Demonstrate the operational features to the Owner's Utility Manager.
- C. Demonstrate routine and periodic maintenance activities to the Owner's Utility Manager.

END OF SECTION

**SECTION 02315
EXCAVATION, TRENCHING AND BACKFILL**

PART 1 - GENERAL

1.01 SUMMARY

- A. This section includes excavation, trenching and backfill necessary for the construction of the facilities as indicated on the plans including, but not limited to: water mains and service lines, sewer mains and service lines, valves and concrete manholes.

1.02 RELATED WORK

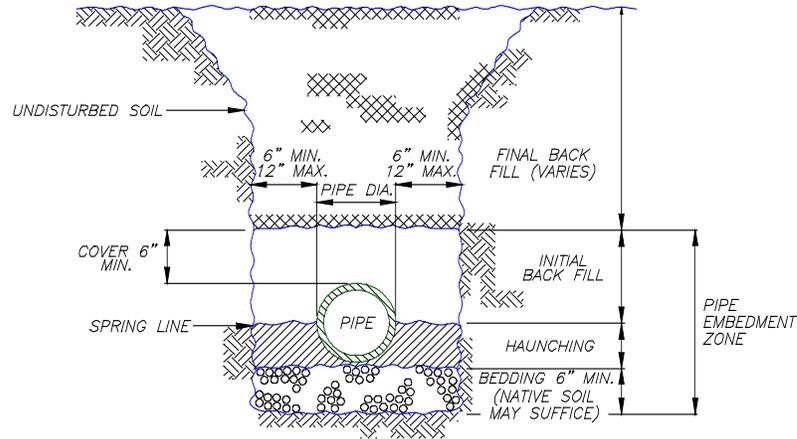
- A. Section 01500 – Temporary Facilities and Controls
- B. Section 01720 – Staking and Construction Surveying
- C. Section 01780 – Closeout Submittals
- D. Section 02310 – Grading
- E. Section 02316 – Rock Excavation
- F. Section 02370 – Erosion and Sediment Control
- G. Section 02510 – Water Distribution Mains
- H. Section 02705 – Road Restoration
- I. Section 02706 – Gravel Access Road
- J. Section 02920 – Topsoiling, Seeding, Fertilization and Mulching

1.03 REFERENCES

- A. ASTM D698 – Test Methods for Moisture Density Relations of Soils and Soil-Aggregate Mixtures Using 5.5 lb. Rammer and 12-in. Drop [Standard Proctor Test].
- B. ASTM D1556 – Test Method for Density of Soil in Place by the Sand-Cone Method
- C. ASTM D2216 – Test Method for Laboratory Determination of Water Content of Soil, Rock and Soil-Aggregate Mixtures
- D. ASTM D2487 – Classification of Soils for Engineering Purposes [Unified Soil Classification System].
- E. ASTM D2774 – Underground Installation of Thermoplastic Pressure Piping
- F. ASTM D2922 – Test Method for Density of Soil and Soil Aggregate and Rock in Place by Nuclear Methods (Shallow Depth)
- G. ASTM D3017 – Test Method for Water Content of Soil and Rock in Place by Nuclear Methods (Shallow Depth)
- H. OSHA 1926 – Occupational Safety and Health Standards for the Construction Industry
- I. Washington DOT – Standard Specifications for Road, Bridge and Municipal Construction, 2000, English Units

1.04 DEFINITIONS

- A. Bedding, Haunching and Initial Backfill zones as defined herein and on the standard thermoplastic pipe trench detailed drawing below.



- B. Native, Import and Select Material Definitions:

1. Native Material: Soils excavated from the trench in the immediate vicinity of current pipe installation activities.
2. Import Material: Soils transported from a soil pit stockpile at a location other than the location where trench excavation is taking place.

- C. Soil Materials as summarized in the table below and further defined in ASTM D2487:

USCS Group	Description
GW	Well-Graded Gravel, with less than 5% fines
GP	Poorly-Graded Gravel, with less than 5% fines
SW	Well-Graded Sands, with less than 5% fines
SP	Poorly-Graded Sands, with less than 5% fines
GW-GM or GW-GC	Well-Graded Gravel, with 5-12% fines
GP-GM or GP-GC	Poorly-Graded Gravel, with 5-12% fines
SW-SM or SW-SC	Well Graded Sands with 5-12% fines
SP-SM or SP-SC	Poorly Graded Sands with 5-12% fines

1.05 SUBMITTALS

- A. Submit the result of standard proctors, including proctor curve, for each soil type encountered and used on the job.

- B. Submit all compaction test results in writing within 5 days of being performed.

1.06 QUALITY ASSURANCE

- A. **Compaction Testing Qualifications:** Tests must be performed by a firm or professional regularly engaged in soil testing for engineering purposes. The individual on site shall be certified to operate nuclear density equipment.
- B. **Locations:** Provide compaction test results at locations as designated by the Project Engineer.
 - 1. **Frequency:**
 - a. Excavation, Trenching and Backfilling in an Established, Traveled Roadway Road Shoulders, and Driveways: see 02705.
 - b. Excavation, Trenching and Backfilling outside of an Established, Traveled Roadway: once per 1000-feet along the pipeline.
 - 2. At locations where paved streets, roadway shoulders, driveways, or sidewalks will be constructed or reconstructed over the trench, the backfill shall be spread in layers and be compacted by mechanical tampers. In such cases, the backfill material shall be placed in successive layers not exceeding 6 inches in loose thickness, and each layer shall be compacted with mechanical tampers to the density specified herein. Mechanical tampers shall be of the impact type as approved by the Engineer.
 - 3. At each location, provide enough tests to demonstrate compliance with the compaction requirements for both the pipe embedment zone and the final backfill zone.
 - 4. If testing reveals inadequate compaction, retest at that location after remedying the non-compliance with the specifications.

PART 2 – PRODUCTS

2.01 BEDDING, HAUNCHING AND INITIAL BACKFILL MATERIAL

- A. **Imported Bedding, Haunching and Initial Backfill Materials:** Use one of the following materials.
 - 1. Crushed, processed or naturally occurring aggregates that meet Washington DOT specification 9.03.12(3), “Gravel Backfill for Pipe Zone Bedding”:

<u>Sieve Size</u>	<u>Percent Passing</u>
1" Square	100%
¼" Square	25% - 80%
U.S. No. 200	5% max.

2. USCS (ASTM D2487) soil types GP, GW, SP, SW (coarse grained soils with less than 5% fines) and GP-GM, GP-GC, GW-GM, GW-GC, SP-SM, SP-SC, SW-SM, SW-SC, with maximum particle sizes limited to 1-inch, utilized as stipulated in Part 3 - Execution.

B. Native bedding, native haunching and native initial backfill material:

1. Use in accordance with the restrictions of Part 3 – Execution.
2. Free from particles greater than 1-inch in dimension.

2.02 FINAL BACKFILL MATERIAL

A. General:

1. Free from soil chunks larger than 4-inches in dimension.
2. Free from stones or rocks larger than 4-inches in dimension.
3. Free from organic materials.
4. Free from frost chunks.

B. Imported Final Backfill for Wet Conditions:

1. Types GW, GP, SW, SP (coarse grained soils with less than 5% fines) or GW-GC/GM, GP-GC/GM, SW-SC/SM, SP-SC/SM (coarse grained soils with 5-12% fines).
2. Otherwise meeting the general requirements of Article 2.02 Paragraph A.

PART 3 - EXECUTION

3.01 GENERAL

- A. Conform to applicable safety laws, including, but not limited to, OSHA 29 CFR Part 1926.
- B. Obtain all permits from the appropriate road agencies for construction within road right of way.
- C. Repair damage resulting from settlement, slides, cave-ins, water pressure, and other causes.

- D. Provide traffic control and other temporary provisions in accordance with Section 01500.

3.02 EXCAVATION

- A. Remove brush, trees and stumps from excavation and site.
- B. Strip and stockpile existing topsoil.
- C. Maintain surface drainage away from trenching or excavation.
- D. If existing soil cannot provide uniform and stable bearing support along the length of the pipe, or if the existing soil contains stones greater than 1-inch in dimension, then over-excavate 4-inches below bottom of pipe.

3.03 TRENCHING

- A. Total Bottom Width:
 - 1. Minimum: Pipe diameter plus 12-inches.
 - 2. Maximum: Pipe diameter plus 24-inches.
- B. Depth: Provide minimum cover as specified, or depths shown on plans.
- C. Top Width: As needed to meet safety requirements, but minimize the width where possible.
- D. Trench Walls: Keep trench walls vertical in the pipe embedment zone.
- E. Length of Open Trench:
 - 1. Unless authorized by the Project Engineer in writing, the length of trench excavation in advance of pipe being laid shall not exceed 200-feet during active construction.
 - 2. All trenches must be backfilled during non-work hours, or alternately, up to 20-feet of trench can be left open during non-work hours if the trench is completely barricaded and fenced.
 - 3. If open trenches in excess of this specification result in the wetting of moisture-sensitive stockpiled materials, such that the moisture content makes it impossible to meet compaction requirements, the contractor shall provide imported material that complies with these specifications and haul away the wet materials at no expense to the project or the Owner.

3.04 BEDDING

A. General:

1. Where over excavation is necessary, install 4-inches of Imported Bedding.
2. Level and form the bottom of the trench to provide uniform bearing support along the length of the pipe.

B. Compaction of Imported Bedding: Meet the following density requirements based on standard proctor (ASTM D698):

<i>Location</i>	<i>Percent of Max.Dry Density Required</i>
Areas of Recent Fill or Embankment	95%
Areas Traveled By Vehicular Traffic, Rights-of-Way	90%
Unimproved Surfaces or Fields	80%

3.05 HAUNCHING AND INITIAL BACKFILL

A. General

1. Provide complete and uniform bearing and support for the pipe, including allowance for bell holes.
2. Work material under the pipe haunches and around the pipe to ensure full pipe support.
3. Place material in lifts no greater than 6-inches thickness in loose measure.
4. Install initial backfill to a depth of 6-inches over the crown of the pipe.

B. Material Usage:

1. Rigid Pipe (Ductile Iron):
 - a. Dry Trench and Site Conditions: Use native material free from particles greater than 1-inch in dimension.
 - b. Wet Trench Conditions: Imported Material.
2. Plastic Pipe: Imported Material

C. Compaction of Haunching and Initial Backfill:

1. Compact haunching material and initial backfill using walk-behind vibratory plate compactor or manual hand-tamping tools
2. Ensure no contact between compacting equipment and the pipe.

3. Prohibited Compaction Equipment for Haunching and Initial Backfill:
 - a. hoe-pack
 - b. hydrohammer
 - c. rammer-tamper
 - d. vibratory rollers
4. Prevent movement of the pipe during placement or compaction of material.
5. Meet the following density requirements based on standard proctor (ASTM D698):

<i>Location</i>	<i>Percent of Max. Dry Density Required</i>
Areas of Recent Fill or Embankment	95%
Areas Traveled By Vehicular Traffic, Rights-of-Way	90%
Unimproved Surfaces or Fields	80%

3.06 FINAL BACKFILL

A. General:

1. If moisture content of the native soil results in the inability to meet compaction requirements (due to fines), use imported material that meets Article 2.02 B.
2. Waste or haul away material not meeting the requirements.
3. Conform to Section 02705 – Road Restoration for backfill requirements under roadways.
4. Repair any trenches improperly backfilled or where settlement occurs, then refill and compact.

B. Compaction:

1. Install 2-feet of total fill over the pipe crown before subjecting the trench to hydrohammers, hoe-packs, or vehicular traffic.
2. Backfill in lifts to meet compaction requirements throughout the full depth of backfilled trench.
3. Compact to the following requirements (Densities as a percent of Standard Proctor):

<i>Location</i>	<i>Maximum Lift</i>	<i>Percent of Max. Dry Density Required</i>
Under Roadways or Surfaces Traveled by Vehicular Traffic	12-inches	95%
Areas of Recent Fill or Embankment	12-inches	90%
Rights-of-Way	12-inches	90%
Unimproved Surfaces or Fields	24-inches	70%

- 4. Use smaller lifts if necessary to meet the in-place density requirements.

3.07 REMOVAL OF NUISANCE WATER

- A. Control site drainage, springs and runoff, and prevent water from adversely affecting trenching locations.
- B. Remove nuisance water entering the trenches. Water that can be removed through the use of sump or trash pumps will not be considered dewatering.
- C. Keep trenches free from standing water until the facilities are in place, the end plugged against the entrance of water, and backfill has been placed and compacted.

3.08 LOCATE EXISTING UTILITIES

- A. Field locate all existing underground utilities.
 - 1. Utilize state “utility locate” hotlines.
 - 2. Contact all other utility owners not covered by the state “Utility Locate” hotlines.
- B. Contact tribal water and sewer officials 48-hours in advance of work in areas needing utility location service.

3.09 UTILITY CONFLICTS

- A. Protect existing utilities from damage during excavation and backfilling operations.
- B. Provide temporary support for existing water, gas, telephone, power, or other utility services that cross the trench until backfilling of trench is complete.
 - 1. Compact backfill to 95% of maximum density under disturbed utilities.

2. Coordinate the repair of existing utilities, regardless of whether they were properly located.
 - a. Damage to existing utilities properly located through “Utility Locate” programs will be the responsibility of the Contractor to repair, at no cost to the Owner or Government.
 - b. Damage to existing utilities improperly located by “Utility Locate” programs shall be at the expense of the “Utility Locate” service or the owner of the damaged utilities.
 - c. Fair compensation will be negotiated for repairs to tribal water and sewer utilities that were improperly located. However, if the Contractor neglects to request a Tribal utility locate in accordance with the Contract requirements, no compensation will be made to the Contractor.
- C. Water and sewer parallel and perpendicular crossings:
 1. Maintain a 10-foot horizontal separation (O.D. to O.D.) for parallel mains.
 2. Upon approval by the Engineer, water and sewer mains may be installed in parallel as close as 5-feet, provided all of the following conditions:
 - a. Vertical separation is 18 inches (O.D. to O.D.)
 - b. Water main is above the sewer main.
 - c. Sewer pipe is constructed to withstand 150 psi static pressure without leaking.
 3. Maintain a minimum 18-inch vertical separation (O.D. to O.D.) for perpendicularly crossing mains.
 - a. Place water pipe over sewer pipe.
 - b. Lay pipe with joints equidistant from the point of crossing.
 4. If it is impossible to meet any of the above separation distances and deviations, and specific provisions are not indicated on the plans, bring the matter to the attention of the Project Engineer for resolution.

END OF SECTION

**SECTION 02518
WATER SERVICE LINES**

PART 1 - GENERAL

1.01 SUMMARY

- A. This section includes the material and installation requirements for water service lines complete with corporation stops and saddles, meter setters, water meters, meter boxes and other appurtenances for community water systems.

1.02 RELATED WORK

- A. Section 01780 – Closeout Submittals
- B. Section 02315 – Excavation, Trenching and Backfill for Pipelines
- C. Section 02510 – Water Distribution Mains

1.03 REFERENCES

- A. AWWA C700 – Cold-Water Meters – Displacement Type, Bronze Main Case
- B. AWWA C800 – Underground Service Line Valves and Fittings
- C. AWWA C901 – Polyethylene (PE) Pressure Pipe and Tubing, 1/2 Inch through 3 Inch, For Water Service.
- D. ASTM B 88 – Standard Specification for Seamless Copper Water Tube.

1.04 SUBMITTALS

- A. Water Service Line
- B. Fittings
- C. Saddles, Tees or Tapped Couplings
- D. Meter Setter
- E. Water Meter
- F. Meter Box
- G. Meter Box Lid
- H. Yard Hydrant

1.05 ACCEPTANCE

- A. Work covered by this section will not be accepted until satisfactory backfilling and testing is complete.

PART 2 - PRODUCTS**2.01 WATER SERVICE LINE AND APPURTENANCES****A. Polyethylene Service Pipe**

1. Conform to AWWA C901
2. Minimum Pressure Rating: 200 psi.
3. CTS size PE: SDR 9 or SDR 7.
4. IPS size PE : SDR 7.
5. Material: High density, ultra high molecular weight polyethylene pipe compound PE-3408 or 3406.
6. Stainless steel stiffeners for compression fittings.

B. Copper Pipe

1. Conform to ASTM B 88.
2. Type "K" soft annealed seamless copper tubing.

C. Saddles: Use saddle appropriate for the main being tapped.

1. Saddle Material: ductile iron, bronze or stainless steel.
2. Saddles for PVC Mains must have flat stainless steel straps or bands
3. Saddles for ¾ -inch and 1-inch services may be single band with either AWWA tapered thread or female iron pipe thread outlet.
4. Saddles for 1½ -inch and 2-inch services must be double strap with female iron pipe thread outlet.

D. Corporation Stops

1. Corporation Stop Material: Bronze Alloy
Inlet Threads: Either AWWA tapered or iron pipe.
2. Outlet: Compatible with connecting piping
3. Ford F1101, Mueller or equal

E. Fittings

1. Material: Bronze Alloy
2. Acceptable Copper Tubing Fittings:
 - a. flare type
 - b. compression type
3. Acceptable PE Tubing Fittings:
 - a. compression type
 - b. stab type with internal grip-ring and O-ring seal

F. Curb Stops

1. Brass Minneapolis pattern curb stops.
2. IPS polyethylene service line: Mueller H – 15159, A.Y. McDonald 6104 – 33, Ford B66M or equal with conductive compression connections.
3. CTS polyethylene service line: Mueller H – 15155, A.Y. McDonald 6104 – 22, Ford B44M or equal.
4. Copper service line: Mueller No. H – 15155, Ford B44M, A.Y. McDonald 6104 – 22, or equal with nonflare connections.

G. Curb Boxes with Stationary Rod

1. Cast iron Minneapolis pattern with stationary rod.
2. Mueller H – 10302, A.Y. McDonald 5622 or equal.
3. Curb box lids: Mueller No. 89980, A.Y. McDonald 5623L or equal.

H. Meter Setters

1. Standard: AWWA C800
2. Construction Features:
 - a. angle meter stop
 - b. angle check valve
 - c. drilled padlock wing
 - d. meter saddle nuts for installation and removal of the meter
 - e. height sufficient to place meter 12 inches below the lid
 - f. inlet and outlet: compatible with connecting service line material

I. Water Meters

1. Standard: AWWA C700
2. Range: ¼ gpm to 20 gpm

J. Meter Boxes

1. For Non-Traffic Areas:
 - a. Acceptable Materials: Reinforced concrete or high density polyethylene.
2. For areas traveled by vehicular traffic, the box and lid must be designed for H-20 loading.

K. Meter Box Lids

1. Cast iron
2. Flush mount with inner lid
3. Locking with standard pentagon bolt
4. Acceptable Manufacturers: Ford Wabash or equal

L. Yard Hydrant

1. Non-freeze, lockable construction
2. Bury depth: 2 ft
3. Galvanized steel casing
4. Woodford R34 or equivalent

2.02 WATER TESTING LAB

- A. State certified testing lab.

2.03 ACCESSORIES

A. Pentagon Wrenches

1. Suitable for curb box and meter box lid furnished.
2. Equal to Mueller H-10323 or A.Y. McDonald 304K.

B. Combination keys

1. 36 inches long and suitable for the curb stop furnished.
2. Equal to Mueller H-10321 or A.Y. McDonald 304B.

PART 3 - EXECUTION

3.01 WATER SERVICE LINE AND APPURTENANCES

- A. Install water service line of the size and material indicated on the Bid Schedule or on the plans.
- B. Install at the locations shown on the drawings or as directed by the Project Engineer.
- C. Refer to Section 02315 for trenching, backfilling, compaction, and separation distances from other utilities.
- D. Install service line:
1. From the main to a location into or near each home.
 - a. Connect to the homes existing water stub-out if provided outside the home.
 - b. If no stub-out is provided, cap service line and mark with stake.
 - c. Additional project specific requirements will be identified on the plans.
 2. Bury at depth shown on plans.

3. Splices are not allowed in the service line without the written permission of the Project Engineer.
 4. Use insert stiffeners with HDPE service line compression fittings.
 5. Use insulated couplings when coupling to an existing galvanized steel or iron pipe to copper pipe or other fittings that would cause galvanic corrosion.
- E. Install saddle at each corporation stop tapping location, except for ductile iron mains of class 53 or thicker.
1. Live Taps: Use an approved tapping machine.
 2. Dry Taps: Only use during new main installation, before disinfection of the main.
- F. Individual PRVs:
1. Adjust outlet pressure to 50 psi unless otherwise directed by the Project Engineer.
 2. Install in meter box on a tandem meter setter or install in house plumbing.
- G. Meter Boxes and Meter Setters
1. Install the meter box flush with finish grade.
 2. Install at locations shown on the plans. If not shown, locate outside of traveled area.
 3. Install meter setter so meter is not more than 12 inches below the lid.
 4. Stuff box with fiberglass batt insulation when installation is complete.
- H. Yard Hydrants
1. Yard hydrant location shown on map is approximate. Confirm location with Owner prior to installation.

3.02 UTILITY CONFLICTS

- A. Refer to Section 02315.

3.04 TESTING

- A. Existing Water System: Turn on each corporation stop and apply main pressure to the service line in the presence of the IHS representative before backfilling.
- B. New Water System: If a new water main is pressure tested, test the water service lines, up to the meter setter or property line, at the same time and pressure as the water main.

- C. Repair all visible leaks and retest the line until test is successfully completed at no cost to the owner.

3.05 INTERRUPTION OF SERVICE

- A. Notify homeowners 24-hours in advance of interrupting their water service.
- B. Do not leave water shut off overnight.

3.06 AS-BUILTS

- A. Provide as-built information on each system in accordance with Section 01780.

END OF SECTION

**SECTION 02532
SEWER SERVICE LINES**

PART 1 - GENERAL

1.01 SUMMARY

- A. The work covered by this section includes the furnishing of all plant, labor, tools, equipment, and material, and performing all operations in connection with the construction of sewer service lines, including connection to sewer mains (wyes) or side sewer stub outs, connection to building (house) drains, service cleanouts, abandonment of existing septic tanks, fittings, and appurtenances in accordance with these technical provisions and applicable drawings.

1.02 RELATED WORK

- A. Section 01780 – Closeout Submittals
- B. Section 02315 – Excavation, Trenching and Backfill
- C. Section 02705 – Road Restoration

1.03 REFERENCES

- A. ASTM D 3034 – Type PSM Polyvinyl Chloride (PVC) Sewer Pipe and Fittings
- B. ASTM D 3212 – Joints for Drain and Sewer Plastic Pipes Using Flexible Elastomeric Seals
- C. ASTM F 477 – Elastomeric Seals (Gaskets) for Joining Plastic Pipe
- D. ASTM F1336 – PVC Gasketed Sewer Fittings

1.04 SUBMITTALS

- A. Sewer Service Line Pipe and Fittings
- B. Sewer Wyes and Saddles
- C. Service Line Cleanout Plug

1.05 ACCEPTANCE

- A. The Work will not be accepted until satisfactory pipe backfilling and clean up is complete.

- B. If the Work does not meet the specified requirements of this section and related sections, remove, and replace at no additional cost.

PART 2 - PRODUCTS

2.01 SEWER SERVICE LINE MATERIALS

- A. Polyvinyl Chloride (PVC) Pipe and Fittings
1. Pipe Standard: ASTM D 3034
 2. Pipe Class: SDR 35
 3. Nominal Diameter: 4-inch unless indicated otherwise
 4. Joints: Bell-ended conforming to ASTM D 3212
 5. Standard Length: 20-feet
 6. All joints and connections in the pipe shall be watertight.
 7. Elastomeric gaskets conforming to ASTM F 477
 8. Each length of pipe shall be clearly marked with the following:
 - a. Manufacturer
 - b. Nominal Pipe Size
 - c. The PVC Cell Classification
 - d. Type PSM PVC Sewer Pipe
 - e. ASTM Designation
 - f. Pipe Class
 9. Service Line Cleanout Plug: brass, cast iron or PVC as indicated on the plans.
- B. Sewer Wyes
1. Connection to New Sewers: Refer to Section 02530
 2. Connection to Existing Sewers:
 - a. PVC Sewer Mains:
 - (1) PVC conforming to ASTM 3034, watertight with gasket.
 - (2) Two stainless steel bands and connectors for securing to the main.
 - (3) GPK Products, Fargo, ND, or approved equal.

- b. Asbestos-Cement, Concrete, or Vitrified Clay Sewers: Neoprene rubber boot with stainless steel bands for concrete, asbestos-cement or vitrified clay sewer main.
- c. Submit other saddle wyes to the Project Engineer for review and approval.

PART 3 - EXECUTION

3.01 EXAMINATION

- A. Verify that dimensions and elevations are as indicated on the Drawings.
- B. Verify that all products are in new condition.
- C. Inspect pipe and fittings for defects.
- D. Remove materials from the site that are defective, damaged, used, unsound, or that otherwise do not meet the specifications.

3.02 UTILITY CONFLICTS

- A. Refer to Section 02315.

3.03 SEWER SERVICE LINE INSTALLATION

- A. Sewer Wyes and Saddles:
 - 1. Connection to New PVC: Furnish and install wyes at the locations indicated by the plans or by the Project Engineer.
 - 2. Install a solvent weld cap or a plug and leave in place until service line construction begins.
 - 3. Properly reference, record and stake wye locations to allow ready relocation, in accordance with Section 01780, and provide information to the Project Engineer.
 - 4. Connection to Existing PVC:
 - a. Install saddle wyes at the locations indicated by the plans or by the Project Engineer.

- b. Repair damage caused during the tapping process at no additional cost.
5. Rotate the branch or wye of the saddle no more than 45 degrees from horizontal.

B. Risers:

1. Extend riser from sanitary wye to an elevation that will allow for a service line to be laid at specified grades.
2. Install riser at an angle equal to or less than 45 degrees measured from horizontal.
3. Risers in Rock Trenches:
 - a. Install riser pipe in the sewer trench.
 - b. Install riser pipe approximately vertical.
 - c. Encase the bottom of riser, wye and 1/8 bend in crushed rock or sand.
 - d. Extend bedding the full width of the trench as excavated and not less than 18 inches in length from either side of the center of the riser.
 - e. Place bedding material to a point 12 inches above centerline of the sewer main at the location of the wye.
4. No separate payment will be made for risers.

C. Service Lines:

1. Furnish and install sewer service lines at the locations on the plans or as directed by the Project Engineer.
 - a. Connect to an existing building (house) sewer stub out if present. Connections to existing building (house) drains which result in a change of direction of the line by more than 45 degrees requires the installation of an underground cleanout at that location.
 - b. If no connection is made, cap sewer service within 5 feet of proposed building (house) with a watertight plug. Embed a 2 x 4 post near the end of the pipe. Clearly record the location in accordance with the "as-built" requirements of Section 01780.

2. Follow general pipe installations requirements of Section 02315 – Excavation, Trenching and Backfill for Pipelines.
3. Slope Requirements:
 - a. Maximum Slope: ½-inch per foot (4 %)
 - b. Minimum Slope: ¼-inch per foot (2%)
 - c. The engineer may permit a minimum slope of 1/8-inch per foot (1%) on a case-by-case basis.
4. Sewer service lines and connections must be constructed with maximum joint deflection not to exceed the manufacturer's printed recommendations and in no case shall exceed 1 inch per foot in any joint.
 - a. Larger changes in direction must be made by use of standard 1/16 or greater bends.
 - b. Sewer service lines shall not be installed as vertical risers, but must be laid on a slope not to exceed 2 feet vertical to 1 foot horizontal
5. Ninety-degree bends are not allowed between the building and the septic tank.

D. Sewer Service Line Cleanouts:

1. Two-Way Cleanouts: Install at the locations indicated on the Drawings or as directed by the Project Engineer.
2. One-Way Cleanouts:
 - a. Install one-way cleanouts at a spacing not to exceed 100 feet.
 - b. Install one-way cleanouts so that the service can be rodded or snaked in the direction of flow.
3. Construct as shown on the standard details.
4. Install a 4-inch sewer wye in the sewer service line and connect risers of the same material from the wye to the ground surface.
 - a. Attach a schedule 40 PVC adapter and threaded plug to the end of the riser.
 - b. The cleanout shall be extended so that the square nut on the threaded plug is 1/2 inch below finished ground level.
 - c. Teflon tape shall be used on the plug threads; no substitutes will be allowed.

5. Pour a concrete pad 18 inches square and 4 inches deep around each cleanout at the ground surface.
 - a. This pad shall be reinforced with welded wire mesh with a minimum 1 1/2-inch concrete cover over mesh.
 - b. The wire mesh shall be ASTM approved W1.4 (1/8 Inch) wire mesh on 6 inch centers.

3.04 EXISTING SEPTIC TANK ABANDONMENT

- A. Abandon existing septic tanks and/or wet wells where directed by the Project Engineer.
- B. Pump tanks prior to abandonment. Dispose the contents in accordance with state and federal requirements.
- C. Remove and dispose of any interior pipes, plumbing, or pumps.
- D. Remove and dispose of concrete tank cover, risers, and inspection pipes.
- E. Backfill interior of the tank with suitable, compactable soil material.
- G. Locate abandoned septic tanks on the as-built drawing.

3.05 AS-BUILTS

- A. Provide as-built information on each system in accordance with Section 01780. Use IHS forms (if supplied) by the Project Engineer.

END OF SECTION

**SECTION 02538
SEWAGE EFFLUENT PRESSURE LINES**

PART 1 - GENERAL

1.01 SUMMARY

- A. Section Includes:
 - 1. Sewer effluent pressure lines, fittings, valves, and appurtenances.
 - 2. Furnishing of all material, labor, and installation.
 - 3. Testing for sewage force main.

1.02 RELATED WORK

- A. Section 1.0 – General Requirements
- B. Section 02315 - Excavation, Trenching, and Backfill
- C. Section 02545 – Concrete Tanks and Piping
- D. Section 02705 - Road Restoration

1.03 REFERENCES

- A. Use latest revision for all references.
- B. ANSI/AWWA C509 - Resilient Seated Gate Valves for Water Supply Service.
- C. ASTM D2241 - Polyvinyl Chloride (PVC) Pipe (SDR - PR).
- D. ASTM D3139 - Joints for Plastic Pressure Pipes Using Flexible Elastomer.
- E. ASTM F477 - Elastomeric Seals (Gaskets) for Joining Plastic Pipe.

1.04 SUBMITTALS

- A. Pipe and fittings
- B. Locator tape
- C. Flexible Marker Posts
- D. Valves and valve boxes

1.05 SCHEDULING

- A. Schedule connections to sewer system so that service to existing customers is not disrupted.
- B. Notify Project Engineer and local utility 48 hours before scheduled connection to existing system.

1.06 ACCEPTANCE

- A. The Work will not be accepted until satisfactory backfilling, testing, and clean up is complete.

- B. If Work does not meet specified requirements; remove Work, replace, and retest at no additional cost.

PART 2 - PRODUCTS

2.01 PIPE AND FITTINGS

- A. Polyvinyl Chloride Pipe and Fittings: ASTM D2241, SDR 26.
 - 1. Elastomeric gasket joints, ASTM F477; or solvent welding
 - 2. Protect from direct sunlight; cover or store indoors.
 - 3. 1.5-inch diameter
- B. High-Density Polyethelene (HDPE) Pipe and Fittings: ASTM D2239
 - 1. Installation: ASTM D2774
 - 2. Cover or store indoors
 - 3. 1.5-inch diameter

2.02 VALVES AND VALVE BOXES

- A. Isolation Valves
 - 1. Isolation valves on STEP effluent lines shall be either ball valve, gate valve, or plug valve design.
 - 2. Valve assembly shall also include check valve, as shown in the project drawings.
- B. Valve boxes
 - 1. Valve box/riser shall be made from PVC, HDPE, or other weatherproof material with a secured lid.
 - 2. Valve box lid to be made at finished grade

PART 3 - EXECUTION

3.01 EXAMINATION

- A. Inspect pipe, fittings, and appurtenances for defects prior to installation.
- B. Reject defective, damaged, or unsound materials.

3.02 PREPARATION

- A. Notify Engineer 48 hours in advance for locations where staking is required.
- B. Preserve stakes. Re-staking for disturbed or displaced stakes shall be at the Contractor's expense.

- C. Prepare trench/excavation in accordance with Section 02315 – Excavation, Trenching and Backfill.

3.03 INSTALLATION

- A. Install pipe, fittings, and appurtenances in accordance with these specifications and manufacturer's instructions.
- B. Install pipe, fittings, and appurtenances of the size and material, and at the locations identified on the drawings.
- C. Lay pipe true to line as shown on the drawings.
- D. Refer to Section 02315 for excavating, backfilling, and compacting requirements.
- E. Protection of pipeline
 1. Maintain interior of pipe free from dirt and superfluous material.
 2. If trench is left unattended, close exposed end of pipe to prevent the entrance of dirt, animals, or foreign objects.

3.04 UTILITY CONFLICTS

- A. Provide temporary support for existing water, gas, telephone, power, or other utility services that cross the trench until backfilling of trench is complete.
- B. Compact backfill beneath existing utility to 95% maximum density.
- C. Refer to Section 02315 for separation requirements for water and sewer mains.

3.05 HYDROSTATIC TESTING

- A. Furnish necessary material, equipment, and labor for testing including pump, water storage vessel, piping, pressure gage, valve, hydrant, and corporation stop.
- B. Test duration: 2 hours minimum.
- C. Maximum length of test section: 2,000 feet.

3.06 CONNECTION TO EXISTING SEWER FORCE MAIN

- A. Each sewer force line is to be connected via live tap to existing sewer force main. Connection method subject to approval by Engineer.

- B. Schedule connections as specified in Part 1.05 of this section.
- C. Do not start work until all material and equipment is on site.
- D. Submittals:
 - 1. Piping material and connection method, if applicable (gasket or solvent weld)
 - 2. Sewer Saddle
 - 3. Corporation Stop
 - 4. Check Valve
- E. Maintain exposed connection and visually inspect for leaks using STEP tank pump or other pumping technique approved by Project Engineer.
- F. Allow Engineer to verify integrity of connection, and backfill in accordance with Section 02315.

END OF SECTION

**SECTION 02545
CONCRETE TANKS AND PIPING**

PART 1 - GENERAL

1.01 SUMMARY

- A. This section covers rectangular precast tanks for the construction of septic and STEP tanks.

1.02 RELATED WORK

- A. Section 02315 – Excavation, Trenching and Backfill
- B. Section 02532 – Sewer Service Lines

1.03 REFERENCES

- A. ASTM D2241 - Polyvinyl Chloride (PVC) Pipe (SDR - PR).
- B. ASTM D 1785 – Polyvinyl Chloride (PVC) Plastic Pipe Schedule 40, 80 and 120.
- C. ASTM D 3034 – Type PSM Polyvinyl Chloride (PVC) Sewer Pipe and Fittings.
- D. State of Washington, Department of Health, Washington Administrative Code, Chapter 246-272 WAC

1.04 SUBMITTALS

- A. Tank (including wire mesh detail or manufacturers literature on fibers)
- B. Effluent Filter
- C. Tank riser and lid
- D. Gate Valves and Valve Boxes
- E. Solid sewer pipe and fittings

1.05 STATE AND COUNTY INDIVIDUAL SEWAGE TREATMENT SYSTEM CODES

- A. These specifications are considered minimum requirements. Where there is conflict with these specifications, state and county sewage treatment system codes shall take precedence.

1. Septic tanks shall provide at least two access openings, no less than 18 inches in diameter, with each tank. Septic tanks with volume 2,500 gallons or above must have three access openings, each at least 18 inches in diameter.
2. STEP tanks must have at least two access openings, no less than 18 inches in diameter, with each tank. The access opening of the STEP tank must be large enough to accommodate the STEP pumping assembly.
3. Submit riser system with septic tank drawings and specifications for approval by the Project Engineer.
4. Risers shall be a minimum of 24 inches in diameter with a substantial, fitted, watertight cover to be approved by the Project Engineer.

2.02 VALVES

A. Check Valves

1. Conform to state and county standards and accepted construction installation practices for thermoplastic valves.

B. Gate Valves

1. Conform to state and county standards and accepted construction installation practices for thermoplastic valves.
2. Push-on or threaded joint ends.
3. Maintain full nominal pipe diameter through valve.
4. Spears 1.5" plug gate valve or equivalent.

2.03 SOLID SEWER PIPE AND FITTINGS

A. Polyvinyl Chloride Pipe and Fittings: ASTM D2241.

1. Elastomeric gasket joints; ASTM F477.
2. Protect from direct sunlight; cover or store indoors.

PART 3 - EXECUTION

3.01 SOLID SEWER PIPE

- A. Install solid sewer pipe from the building stub-out to the septic tank, and from the septic tank to the STEP tank.

- A. Minimum cover over solid sewer pipe is 12 inches.
- B. Install cleanout between building stub-out and septic tank at a minimum 5 feet from foundation of building.
- C. Minimum slope is 1/4 inch per foot (2%).
- D. There shall be no 90-degree bends in the pipe upstream of septic tank.
- E. Properly seal pipe connections to tanks to prevent groundwater infiltration.
- F. Solvent weld all pipe joint connections.

3.02 TANK INSTALLATION

- A. Place tanks in excavations at the locations and elevations designated on the plans or by the Project Engineer.
- B. Refer to Section 02315 for excavation, backfill, and grading requirements.
- C. Place tanks level.
- D. Seal joints when the tank is set with an epoxy based sealing compound or Rub-R-Nek flexible gasket, as manufactured by the Henry Group (formerly K.T. Snyder Company Inc.), Houston, Texas, or equal.
- E. Seal inlet and outlet with temporary plugs until connections are made to the inlet and outlet lines.
- F. Furnish approved covered risers over the access.
 - 1. Risers shall extend to grade.
- G. Do not drive over the tank during and after construction.

3.03 AS-BUILTS

- A. Provide as-built information on each system in accordance with General Requirements Section 1.16.

END OF SECTION

**SECTION 02705
ROAD RESTORATION**

PART 1 - GENERAL

1.01 SUMMARY

- A. This section includes road restoration required when existing roadways, road shoulders, or driveways are disturbed during the normal course of construction.

1.02 RELATED WORK

- A. Section 02315 – Excavation, Trenching and Backfill

1.03 REFERENCES

- A. ASTM D698 – Test Methods for Moisture Density Relations of Soils and Soil-Aggregate Mixtures Using 5.5 lb Rammer and 12-in. Drop [Standard Proctor Test].
- B. Washington Department of Transportation Standard Specifications for Road, Bridge and Municipal Construction.

1.04 SUBMITTALS

- A. Road cut permit if applicable
- B. Furnish bonds if applicable

1.05 DEFINITIONS

- A. Roadways: Driveways, paved parking lots, unimproved roads, paved streets, and highways.
- B. Roadway Limits: To be established by Project Engineer and may include highway shoulders and drainage ditches.

1.06 RESPONSIBILITIES

- A. Comply with the standards and construction requirements of the applicable local, municipal, county, state, and federal authorities.

PART 2 – PRODUCTS**2.01 ASPHALT CONCRETE PAVEMENT**

- A. Meet the requirements of Section 5-04 of the Washington DOT Standard Specifications.
- B. Comply with additional construction requirements of the applicable Tribal or Federal (Bureau of Indian Affairs – Roads Division) entity.

2.02 CEMENT CONCRETE PAVEMENT

- A. Meet the requirements of Section 5-05 of the Washington DOT Standard Specifications (see Section 01420 for contact information).

2.03 GRAVEL

- A. Comply with the standards and construction requirements of the applicable local, municipal, county, state, or federal authorities.

PART 3 - EXECUTION**3.01 ROAD CROSSING**

- A. Cut pavement prior to excavation with pavement saw, backhoe wheel or by method approved in writing by the Project Engineer.
- B. Replace or repair damages to roadway at own expense if the road cut extends beyond the approved road cut width.

3.02 BACKFILL

- A. Stockpile material for backfilling.
- B. Compact backfill to a density no less than 90% of the maximum density determined by the Standard Proctor Test ASTM D 698 to within 3-feet of the surface.
- C. Within 3-feet of the surface compact backfill to a density no less than 95% of the maximum density determined by the Standard Proctor Test ASTM D 698.
- D. At locations where paved streets, roadway shoulders, driveways, or sidewalks will be constructed or reconstructed over the trench, the backfill shall be

spread in layers and be compacted by mechanical tampers. In such cases, the backfill material shall be placed in successive layers not exceeding 6 inches in loose thickness, and each layer shall be compacted with mechanical tampers to the density specified herein. Mechanical tampers shall be of the impact type as approved by the Engineer.

- E. See Section 02315 for backfill requirements around manholes, hydrants, valve boxes, and other appurtenances.
- F. Do not use heavy compaction within 2-feet of pipelines. Refer to Section 02315 for more detail.

3.03 REGRAVELING ROADWAYS

- A. Remove existing gravel surfacing and stockpile material.
- B. Restore road to original conditions as approved by project engineer or local authority.

3.04 BITUMINOUS OR CONCRETE RESTORATION

- A. Restore asphalt driveways and road to original conditions.
- B. Match existing surfacing with respect to depth, material, surface finish, including pavement markings and appurtenances.
- C. Comply with the standards and construction requirements of the applicable local, municipal, county, state, and federal authorities.

END OF SECTION

**SECTION 03300
CAST-IN-PLACE CONCRETE (NON-STRUCTURAL)**

PART 1 - GENERAL

1.01 SUMMARY

- A. This section includes provisions for non-structural cast-in-place concrete.

1.02 RELATED WORK

- A. Section 02532– Sewer Service Lines

1.03 REFERENCES

- A. ASTM C33 – Standard Specification for Concrete Aggregates.
- B. ASTM C94 – Standard Specification for Ready Mix Concrete.
- C. ASTM C150 – Standard Specification for Portland Cement.
- D. ASTM A185 – Welded Steel Wire Fabric, Plain for Concrete Reinforcement
- E. ASTM A615 – Deformed and Plain Billet-Steel Bars for Concrete Reinforcement

1.04 QUALITY ASSURANCE

- A. Obtain cement and aggregate from the same source for all work
- B. The Project Engineer may require slump and compression tests.

PART 2 - PRODUCTS

2.01 CONCRETE MATERIALS

- A. Cement: ASTM C150, Portland Cement Type – IA, Air Entrained.
- B. Aggregates: ASTM C33.
 - 1. Fine Aggregates:
 - a. Fine aggregates shall be clean, hard, tough, water sound and free of deleterious substances.
 - b. One hundred percent passing 3/8 inch sieve.
 - c. At least fifty percent passing No. 16 sieve.
 - 2. Coarse Aggregates:
 - a. Coarse aggregates shall be clean, hard, tough, water sound and free of deleterious substances.
 - b. Maximum aggregate size for reinforced concrete shall not be larger than 1/5 of the narrowest dimension between forms, nor larger than 3/4 of the minimum clear spacing between reinforcing bars or between bars and forms.

- c. Maximum aggregate size for unreinforced slabs shall not be larger than 1/3 the slab thickness or 2 inches, whichever is smaller.
- C. Mixing Water
 - 1. Use potable water unless approved by Project Engineer.
- D. Material Storage
 - 1. Store materials in such a manner as to prevent deterioration or intrusion of foreign matter.

PART 3 - EXECUTION

3.01 PLACING CONCRETE

- A. Concrete shall not be placed when atmospheric temperature is below 40 degrees Fahrenheit unless authorized in writing by the Project Engineer.
- B. Forms shall conform to shapes, lines and dimensions of members as called for on the plans and shall be sufficiently tight to prevent leakage of mortar.
- C. Properly brace and tie forms together to maintain position and shape and prevent leakage.
- D. Remove water from place of deposit before concrete is placed.
- E. Moisten subgrade at the time the concrete is deposited.
- F. For job mixed concrete, rotate the mix at the speed recommended by the manufacturer in a clean batch machine. Mix the materials until they are uniformly distributed.
- G. Deliver and mix Ready-Mixed Concrete in accordance with ASTM C94.
- H. Access to the mixing plant shall be provided to the Project Engineer.
- I. Tickets indicating time of adding initial mixing water may be required by the Project Engineer.
- J. Place concrete in one continuous operation, once placing is started.
- K. Remove supporting forms and shoring after members have acquired sufficient strength to support their weight and imposed loads safely.

- L. If concrete placement is authorized for atmospheric temperatures at or below 40 degrees Fahrenheit, concrete temperature shall not be less than 45 degrees Fahrenheit at the time of placement.
- M. Heating procedures that alter or prevent the entrainment of the required amount of air in the concrete will not be permitted.
- N. Do not heat aggregates and water used for mixing to a temperature exceeding 120 degrees Fahrenheit.
- O. Air temperatures surrounding concrete shall be maintained at a temperature of not less than 45 degrees Fahrenheit, nor more than 70 degrees Fahrenheit, for a period of four days.
 - 1. Following the four-day period, the concrete shall be protected from air temperatures below 35 degrees Fahrenheit, for an additional four-day period.
- L. Chemical or other foreign material shall not be added to the concrete.

3.02 FIELD QUALITY CONTROL

- A. Concrete shall have a design compressive strength of 3000 psi at 28 days.

END OF SECTION

**SECTION 13430
STEP PUMPS****PART 1 – GENERAL**

1.01 SUMMARY

- A. Work covered by this section includes providing and installing STEP pumps and all associated appurtenances, equipment and accessories.

1.02 RELATED WORK

- A. Section 02545 – Concrete Tanks and Piping
- B. Section 16010 – General Electrical

1.03 REFERENCES

- A. Use latest revisions of all References
- B. National Electric Code
- C. NFPA 79 – Electrical Standard for Industrial Machinery

1.04 SUBMITTALS

- A. Submersible Sewage Pumps, Warranty, Motor and Pump Data and Characteristic Curves
- B. Pump Discharge Elbow

1.05 ACCEPTANCE

- A. Work covered by this section will not be accepted until backfilling and testing connected with this work has been completed satisfactorily.
- B. Work found defective in material, alignment, joints, or performance shall be corrected to the satisfaction of the Project Engineer.

PART 2 – PRODUCTS

2.01 SEPTIC EFFLUENT PUMP PACKAGE

- A. Provide duplex package pump system. One pump to be equipped with the mix/flush valve.
- B. Submersible sewage pump shall be capable of efficiently pumping 30 GPM against 55-feet of head and be Orenco ProSTEP pumping system, or equivalent.

- C. 230 Volt, three-phase service.
- D. Pump motor horsepower shall be sized to be non-overloading at any point on the pump impeller curve.
- E. Pump motors shall be equipped with seal fail and over temperature sensors.
- F. Pump motor cable shall be of sufficient length to reach the disconnect panel without the need for splices. No junction boxes or splices shall be allowed in the wet well.
- G. The pump shall be designed to pass up to a nominal 1/8-inch solid.
- H. Orenco VeriComm (VCOM) duplex controls, panel and equipment, or equivalent:
 - a. Alternating pump control
 - b. Visible and audio alarm
 - c. Communication and alarm management with remote telemetry
 - d. NEMA 4X enclosure
- I. All wiring shall conform to NEC specifications for application.
- J. Sliding guide bracket shall be an integral part of the pumping unit.
- K. A single linear downward motion of the pump shall seal the pump unit to the discharge connection elbow.
- L. Provide five-year manufacturer's warranty against defects in workmanship and materials.
- M. Provide two copies of the warranty to the Project Engineer at the time of submittals.

2.02 PUMP CABLE PLUG

- A. Provide plugs for the pump cable to allow for connection to the disconnect box.
- B. Plugs to be Meltric with power supply, seal fail and over temperature contacts

2.03 OPERATION AND MAINTENANCE MANUALS

- A. Provide submersible sewage pump operation and maintenance manual from the manufacturer.

2.05 PUMP DISCHARGE ELBOW

- A. Provide 1.5" discharge elbow to match pumps and existing piping.

PART 3 – EXECUTION

3.01 STEP PUMPS

- A. Install new pump discharge elbows. Connect to existing discharge piping and guide rails.
- B. The Contractor shall demonstrate successful installation and removal of the submersible pumps from the lift station.
- C. Pump cables to be equipped with a plug.
- D. Plug pump cable into disconnect panel.
- E. Wiring shall be performed by a certified electrician and conform to NEC.

3.02 OPERATION AND MAINTENANCE MANUALS

- A. Contractor shall provide three copies of the Operation and Maintenance Manuals.

END OF SECTION

**SECTION 16010
ELECTRICAL GENERAL**

PART 1 GENERAL

1.01 SCOPE:

- A. This section specifies general requirements for electrical work.

1.02 RELATED WORK

- A. Section 01270 Price and Payment
- B. Section 13430 STEP Pumps

1.03 SUMMARY:

- A. The Contractor shall:

Provide all labor, material, tools, equipment and services required to complete the furnishing, installation, wiring, connection, calibration, adjustment, testing and operation of all electrical equipment, devices and components as indicated and implied by the plans and these specifications.

1. Complete the wiring to, connection to, adjustment and calibration of, testing of electrical equipment.
2. Complete the procurement, installation, wiring, connection, calibration, adjustment, testing and operation of all electrical devices, components, accessories and equipment which is not shown or specified but which is nonetheless required to make the systems shown and specified function properly.
3. Provide adequate space for the electrical installation, including but not limited to, determination of access-ways and doorways, shipping sections, wall and floor space, and space occupied by pump house equipment and materials.
4. Check electrical equipment prior to installation so that defective equipment is not installed. Acceptance testing for electrical equipment shall be performed to prove out all systems function as designed.
5. Provide start-up and training of the Owner's personnel for electrical systems.

1.04 STANDARDS AND CODES:

- A. Electrical work shall be executed in strict accordance with the latest edition of the National Electrical Code and local ordinances and regulations.
- B. All electrical equipment, materials, construction methods, tests and definitions shall be in strict conformity with the established standards of the following in their latest adopted revision:

1. Underwriters' Laboratories, Inc. (UL)
 2. National Electrical Manufacturers Association (NEMA)
 3. Canadian Standards Association (CSA)
 4. Electrical Testing Laboratories (ETL)
 5. Factory Mutual (FM)
 6. All applicable Washington State Codes and local City Codes.
- C. All materials and equipment specified herein shall, within the scope of UL Examination Services, be approved by the Underwriter's Laboratories for the purpose for which they are used and shall bear the UL label.
- D. All materials shall be new, free from defects, of current manufacture, of quality specified or shown. Each type of material shall be of the same manufacturer throughout the work.

1.05 SITE FAMILIARIZATION:

- A. Before submitting a bid, the Electrical Contractor shall become familiar with all features of the site, which may affect the execution of the work. The Contractor shall take all field measurements necessary for the work and shall assume full responsibility for their accuracy.

PART 2 PRODUCTS

2.01 PUMP PANEL AND CONTROLS

- A. Pump panel and controls shall be installed in accordance with manufacturer recommendations.
- B. Panel to be attached to side of building as shown in Project Drawings
- C. Contractor shall submit product information prior to installation.

2.02 AUDIO AND VISUAL ALARM DEVICES

- D. Audio and Visual alarm device shall be installed in accordance with manufacturer specifications.
- E. Contractor shall submit product information prior to installation.

PART 3 EXECUTION

3.01 SITE INSPECTIONS

- A. Prior to final acceptance the Engineer will perform one or more site observation trips to develop a "punch list" of items deemed incomplete
- B. Each punch list item shall be completed by the Contractor and checked off of the list. When all of the items on the list are completed or commented on, the list shall be signed by the Contractor and returned to the Engineer for verification.

3.02 FINAL ACCEPTANCE:

- A. When all work is complete, the Contractor shall call the Engineer for the final acceptance testing inspections to verify all equipment is installed and operates to the requirements of the contract documents.
- B. Final acceptance will not be given until:
 - 1. All work is complete
 - 2. All "site inspection" punch-lists are checked off and returned to the Engineer
 - 3. All test reports are received
 - 4. All O&M manuals are received
 - 5. All spare parts are received
 - 6. All project record drawings are received.

END OF SECTION