

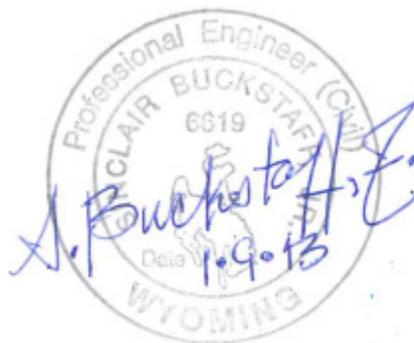
PROJECT MANUAL
**PATH 22 WEST BRIDGE
PROJECT**

**PREPARED FOR:
TETON COUNTY, WYOMING**

**PREPARED BY:
NELSON ENGINEERING
P.O. BOX 1599/430 SOUTH CACHE STREET
JACKSON, WY 83001**

IN ASSOCIATION WITH:

**HNTB
715 KIRK DRIVE
KANSAS CITY, MO 64105**



**SINCLAIR BUCKSTAFF, JR., WY PE 6619
PROJECT MANAGER**

**PROJECT NO. 10-124-02
JANUARY 2013**

SET NO. _____

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**TETON COUNTY, WYOMING
PATH 22 WEST BRIDGE
PROJECT**

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SECTION 00100

ADVERTISEMENT FOR BIDS

Notice is hereby given that **Teton County, Wyoming** is accepting sealed bids for a general contract to consist of construction of the **Path 22 West Bridge Project**.

The project is generally described as the construction of a pathway bridge across the Snake River, installation of conduit for a future gas line to be affixed to the under-decking of the bridge, associated grading, and appurtenances thereto. The bridge is an approximately 700-foot long, four-span steel girder bridge, 14 feet in width, supported by three piers on driven piles with abutments tied into existing levees on either side of the river.

The Plans and Project Manual for the work may be reviewed and obtained at the office of Nelson Engineering, P.O. Box 1599, 430 South Cache Street, Jackson, Wyoming, upon payment of a **\$75.00, non-refundable** fee for supply of the entire Project Manual and complete plan set. No partial sets will be issued.

Questions regarding the technical aspects or requirements of the Contract Documents are to be referred to the Project Manager, Sinclair Buckstaff, Jr., PE, Nelson Engineering, Jackson, Wyoming, 307-733-2087.

All Bids must be accompanied by a Cashier's Check, Irrevocable Letter of Credit, or a Bid Bond, executed by the bidder, as Principal, and a satisfactory surety company, executed in favor of the Owner in the amount of five percent (5%) of the maximum amount of the Base Bid. The Bid Bond shall be accompanied by a certified copy of Power of Attorney and signed or countersigned by an agent of the bonding company. The Cashier's Check, Irrevocable Letter of Credit, or Bid Bond will be retained by the Owner as liquidated damages if the successful bidder refuses or fails to enter into a contract or to furnish a Contractor's Payment and Performance Bond, and meet the other required provisions including insurance, within ten (10) days after being notified of the award of the Contract. Performance and Payment Bonds, or other collateral or surety acceptable to the Owner, shall be furnished by the successful bidder each in the amount of one hundred percent (100%) of the contract price. Such Performance and Payment Bonds shall be accompanied by a certified copy of Power of Attorney and shall be signed or countersigned by a Wyoming resident agent of the bonding company. No bid may be withdrawn for a period of sixty (60) days after the date of the bid opening. Each bid must conform and be responsive to all pertinent Project Manual/Project Drawing requirements and acknowledge receipt of all addenda to the project.

Sealed bids will be received in the office of **Teton County Engineering, P.O. Box 3594, 320 South King Street, Jackson, Wyoming 83001** until **January 30, 2013 at 2:00 PM.** All bids will be publicly opened and read aloud by the Owner immediately thereafter at the same location. Bids shall be sealed in an envelope plainly marked with the Bidder's name and the following title: "**Path 22 West Bridge Project**".

All bids will be reviewed by the Engineer and presented to Teton County for possible action at the next scheduled meeting subsequent to the date of the bid opening.

Attention of the bidders is particularly called to the requirements in the Wyoming Statutes regarding preference for Wyoming products and the 5% preference, which will be given to Wyoming contractors.

A **Mandatory** Pre-Bid Conference will be held at the office of Nelson Engineering, 430 South Cache Street, Jackson, WY, at **10:00 AM, January 22, 2013**. Representatives of Owner and Engineer will be present to discuss the Project. Bidders are **required** to attend and participate in the conference in order to have their bids considered at the Bid Opening.

Teton County reserves the right to reject any and all bids, to waive all informalities, and may accept any bid which in its opinion best serves its interests.

TETON COUNTY, WYOMING

PUBLISH: January 9, 16, and 23, 2013

BILL: Teton County Engineering, P.O. Box 3594, Jackson, WY 83001

SECTION 00200

INSTRUCTION TO BIDDERS

ARTICLE 1 - DEFINED TERMS

1.01 Terms used in these Instructions to Bidders have the meanings indicated in the General Conditions and Supplementary Conditions. Additional terms used in these Instructions to Bidders have the meanings indicated below:

A. *Issuing Office*--The office from which the Bidding Documents are to be issued and where the bidding procedures are to be administered. The Issuing Office is Nelson Engineering, 430 South Cache Street, P.O. Box 1599, Jackson, WY 83001, phone (307) 733-2087.

ARTICLE 2 - COPIES OF BIDDING DOCUMENTS

2.01 Complete sets of the Bidding Documents in the number and for the deposit sum, stated in the Advertisement or Invitation to Bid may be obtained from the Issuing Office.

2.02 Complete sets of Bidding Documents shall be used in preparing Bids; neither Owner nor Engineer assumes any responsibility for errors or misinterpretations resulting from the use of incomplete sets of Bidding Documents.

2.03 Owner and Engineer, in making copies of Bidding Documents available on the above terms, do so only for the purpose of obtaining Bids for the Work and do not confer a license or grant for any other use.

ARTICLE 3 - QUALIFICATIONS OF BIDDERS

3.01 To demonstrate Bidder's qualifications to perform the Work, within five days of Owner's request, Bidder shall submit written evidence such as financial data, previous experience, present commitments, and such other data as may be requested by Owner.

ARTICLE 4 - EXAMINATION OF BIDDING DOCUMENTS, OTHER RELATED DATA, AND SITE

4.01 *Subsurface and Physical Conditions*

A. The Supplementary Conditions identify:

1. Those reports of explorations and tests of subsurface conditions at or contiguous to the Site that Engineer has used in preparing the Bidding Documents.
2. Those drawings of physical conditions in or relating to existing surface and subsurface structures at or contiguous to the Site (except Underground Facilities) that Engineer has used in preparing the Bidding Documents.

B. Copies of reports and drawings referenced in Paragraph 4.01.A will be made available by Owner to any Bidder on request. Those reports and drawings are not part of the Contract Documents, but the “technical data” contained therein upon which Bidder is entitled to rely as provided in Paragraph 4.02 of the General Conditions has been identified and established in Paragraph 4.02 of the Supplementary Conditions. Bidder is responsible for any interpretation or conclusion Bidder draws from any “technical data” or any other data, interpretations, opinions or information contained in such reports or shown or indicated in such drawings.

4.02 *Underground Facilities*

A. Information and data shown or indicated in the Bidding Documents with respect to existing Underground Facilities at or contiguous to the Site is based upon information and data furnished to Owner and Engineer by owners of such Underground Facilities, including Owner, or others.

4.03 *Hazardous Environmental Condition*

A. The Supplementary Conditions identify those reports and drawings relating to a Hazardous Environmental Condition identified at the Site, if any, that Engineer has used in preparing the Bidding Documents.

B. Copies of reports and drawings referenced in Paragraph 4.03.A will be made available by Owner to any Bidder on request. Those reports and drawings are not part of the Contract Documents, but the “technical data” contained therein upon which Bidder is entitled to rely as provided in Paragraph 4.06 of the General Conditions has been identified and established in Paragraph 4.06 of the Supplementary Conditions. Bidder is responsible for any interpretation or conclusion Bidder draws from any “technical data” or any other data, interpretations, opinions, or information contained in such reports or shown or indicated in such drawings.

4.04 Provisions concerning responsibilities for the adequacy of data furnished to prospective Bidders with respect to subsurface conditions, other physical conditions and Underground

Facilities, and possible changes in the Bidding Documents due to differing or unanticipated conditions appear in Paragraphs 4.02, 4.03, and 4.04 of the General Conditions. Provisions concerning responsibilities for the adequacy of data furnished to prospective Bidders with respect to a Hazardous Environmental Condition at the Site, if any, and possible changes in the Contract Documents due to any Hazardous Environmental Condition uncovered or revealed at the Site which was not shown or indicated in the Drawings or Specifications or identified in the Contract Documents to be within the scope of the Work appear in Paragraph 4.06 of the General Conditions.

4.05 On request, Owner will provide Bidder access to the Site to conduct such examinations, investigations, explorations, tests, and studies as Bidder deems necessary for submission of a Bid. Bidder shall fill all holes and clean up and restore the Site to its former condition upon completion of such explorations, investigations, tests, and studies. Bidder shall comply with all applicable Laws and Regulations relative to excavation and utility locates.

4.06 Reference is made to Article 7 of the Supplementary Conditions for the identification of the general nature of other work that is to be performed at the Site by Owner or others (such as utilities and other prime contractors) that relates to the Work contemplated by these Bidding Documents. On request, Owner will provide to each Bidder for examination access to or copies of Contract Documents (other than portions thereof related to price) for such other work.

4.07 It is the responsibility of each Bidder before submitting a Bid to:

A. Examine and carefully study the Bidding Documents, the other related data identified in the Bidding Documents, and any Addenda;

B. Visit the Site and become familiar with and satisfy Bidder as to the general, local, and Site conditions that may affect cost, progress, and performance of the Work;

C. Become familiar with and satisfy Bidder as to all federal, state, and local Laws and Regulations that may affect cost, progress, and performance of the Work;

D. Paragraph deleted.

E. Obtain and carefully study (or accept consequences of not doing so) all additional or supplementary examinations, investigations, explorations, tests, studies, and data concerning conditions (surface, subsurface, and Underground Facilities) at or contiguous to the Site which may affect cost, progress, or performance of the Work or which relate to any aspect of the means, methods, techniques, sequences, and procedures of construction to be employed by Bidder, including applying any specific means, methods, techniques, sequences, and procedures of construction expressly required by the Bidding Documents, and safety precautions and programs incident thereto;

F. Agree at the time of submitting its Bid that no further examinations, investigations, explorations, tests, studies, or data are necessary for the determination of its Bid for performance of

the Work at the price(s) bid and within the times and in accordance with the other terms and conditions of the Bidding Documents;

G. Become aware of the general nature of the work to be performed by Owner and others at the Site that relates to the Work as indicated in the Bidding Documents;

H. Correlate the information known to Bidder, information and observations obtained from visits to the Site, reports and drawings identified in the Bidding Documents, and all additional examinations, investigations, explorations, tests, studies, and data with the Bidding Documents;

I. Promptly give Engineer written notice of all conflicts, errors, ambiguities, or discrepancies that Bidder discovers in the Bidding Documents and confirm that the written resolution thereof by Engineer is acceptable to Bidder; and

J. Determine that the Bidding Documents are generally sufficient to indicate and convey understanding of all terms and conditions for the performance of the Work.

4.08 The submission of a Bid will constitute an incontrovertible representation by Bidder that Bidder has complied with every requirement of this Article 4, that without exception the Bid is premised upon performing and furnishing the Work required by the Bidding Documents and applying any specific means, methods, techniques, sequences, and procedures of construction that may be shown or indicated or expressly required by the Bidding Documents, that Bidder has given Engineer written notice of all conflicts, errors, ambiguities, and discrepancies that Bidder has discovered in the Bidding Documents and the written resolutions thereof by Engineer are acceptable to Bidder, and that the Bidding Documents are generally sufficient to indicate and convey understanding of all terms and conditions for performing and furnishing the Work.

ARTICLE 5 - PRE-BID CONFERENCE

5.01 A Mandatory Pre-Bid conference will be held at 10:00 A.m. local time on January 22, 2013 at the office of Nelson Engineering. Representatives of Owner and Engineer will be present to discuss the Project. Bidders are encouraged to attend and participate in the conference. Engineer will transmit to all prospective Bidders of record such Addenda as Engineer considers necessary in response to questions arising at the conference. Oral statements may not be relied upon and will not be binding or legally effective.

ARTICLE 6 - SITE AND OTHER AREAS

6.01 The Site is identified in the Bidding Documents. Easements for permanent structures or permanent changes in existing facilities are to be obtained and paid for by Owner unless otherwise provided in the Bidding Documents. All additional lands and access thereto required for temporary construction facilities, construction equipment, or storage of materials and equipment to be incorporated in the Work are to be obtained and paid for by Contractor.

ARTICLE 7 - INTERPRETATIONS AND ADDENDA

7.01 All questions about the meaning or intent of the Bidding Documents are to be submitted to Engineer in writing. Interpretations or clarifications considered necessary by Engineer in response to such questions will be issued by Addenda mailed or delivered to all parties recorded by Engineer as having received the Bidding Documents. Questions received less than ten days prior to the date for opening of Bids may not be answered. Only questions answered by Addenda will be binding. Oral and other interpretations or clarifications will be without legal effect.

7.02 Addenda may be issued to clarify, correct, or change the Bidding Documents as deemed advisable by Owner or Engineer.

ARTICLE 8 - BID SECURITY

8.01 A Bid must be accompanied by Bid security made payable to Owner in an amount of five (5%) percent of Bidder's maximum Bid price and in the form of a certified check or bank money order or a Bid bond (on the form attached) issued by a surety meeting the requirements of Paragraphs 5.01 and 5.02 of the General Conditions.

8.02 The Bid security of the Successful Bidder will be retained until such Bidder has executed the Contract Documents, furnished the required contract security and met the other conditions of the Notice of Award, whereupon the Bid security will be returned. If the Successful Bidder fails to execute and deliver the Contract Documents and furnish the required contract security within 15 days after the Notice of Award, Owner may annul the Notice of Award and the Bid security of that Bidder will be forfeited. The Bid security of other Bidders whom Owner believes to have a reasonable chance of receiving the award may be retained by Owner until the earlier of seven days after the Effective Date of the Agreement or 61 days after the Bid opening, whereupon Bid security furnished by such Bidders will be returned.

8.03 Bid security of other Bidders whom Owner believes do not have a reasonable chance of receiving the award will be returned within seven days after the Bid opening.

ARTICLE 9 - CONTRACT TIMES

9.01 The number of days within which, or the dates by which, the Work is to be substantially completed and ready for final payment are set forth in the Agreement.

ARTICLE 10 - LIQUIDATED DAMAGES

10.01 Provisions for liquidated damages, if any, are set forth in the Agreement.

ARTICLE 11 - SUBSTITUTE AND “OR-EQUAL” ITEMS

11.01 The Contract, if awarded, will be on the basis of materials and equipment specified or described in the Bidding Documents without consideration of possible substitute or “or-equal” items. Whenever it is specified or described in the Bidding Documents that a substitute or “or-equal” item of material or equipment may be furnished or used by Contractor if acceptable to Engineer, application for such acceptance will not be considered by Engineer until after the Effective Date of the Agreement.

ARTICLE 12 - SUBCONTRACTORS, SUPPLIERS, AND OTHERS

12.01 If the Supplementary Conditions require the identity of certain Subcontractors, Suppliers, individuals, or entities to be submitted to Owner in advance of a specified date prior to the Effective Date of the Agreement, the apparent Successful Bidder, and any other Bidder so requested, shall within five days after Bid opening, submit to Owner a list of all such Subcontractors, Suppliers, individuals, or entities proposed for those portions of the Work for which such identification is required. Such list shall be accompanied by an experience statement with pertinent information regarding similar projects and other evidence of qualification for each such Subcontractor, Supplier, individual, or entity if requested by Owner. If Owner or Engineer, after due investigation, has reasonable objection to any proposed Subcontractor, Supplier, individual, or entity, Owner may, before the Notice of Award is given, request apparent Successful Bidder to submit a substitute, in which case apparent Successful Bidder shall submit an acceptable substitute, Bidder’s Bid price will be increased (or decreased) by the difference in cost occasioned by such substitution, and Owner may consider such price adjustment in evaluating Bids and making the Contract award.

12.02 If apparent Successful Bidder declines to make any such substitution, Owner may award the Contract to the next lowest Bidder that proposes to use acceptable Subcontractors, Suppliers, individuals, or entities. Declining to make requested substitutions will not constitute grounds for forfeiture of the Bid security of any Bidder. Any Subcontractor, Supplier, individual, or entity so listed and against which Owner or Engineer makes no written objection prior to the giving of the Notice of Award will be deemed acceptable to Owner and Engineer subject to revocation of such

acceptance after the Effective Date of the Agreement as provided in Paragraph 6.06 of the General Conditions.

12.03 Contractor shall not be required to employ any Subcontractor, Supplier, individual, or entity against whom Contractor has reasonable objection.

ARTICLE 13 - PREPARATION OF BID

13.01 The Bid Form is included with the Bidding Documents. Additional copies may be obtained from Engineer.

13.02 All blanks on the Bid Form shall be completed by printing in ink or by typewriter and the Bid signed in ink. Erasures or alterations shall be initialed in ink by the person signing the Bid Form. The Unit Bid Price and the Total Price of each bid item shall be stated in numerals.

13.03 A Bid by a corporation shall be executed in the corporate name by the president or a vice-president or other corporate officer accompanied by evidence of authority to sign. The corporate seal shall be affixed and attested by the secretary or an assistant secretary. The corporate address and state of incorporation shall be shown below the signature.

13.04 A Bid by a partnership shall be executed in the partnership name and signed by a partner (whose title must appear under the signature), accompanied by evidence of authority to sign. The official address of the partnership shall be shown below the signature.

13.05 A Bid by a limited liability company shall be executed in the name of the firm by a member and accompanied by evidence of authority to sign. The state of formation of the firm and the official address of the firm shall be shown below the signature.

13.06 A Bid by an individual shall show the Bidder's name and official address.

13.07 A Bid by a joint venture shall be executed by each joint venturer in the manner indicated on the Bid Form. The official address of the joint venture shall be shown below the signature.

13.08 All names shall be typed or printed in ink below the signatures.

13.09 The Bid shall contain an acknowledgment of receipt of all Addenda, the numbers of which shall be filled in on the Bid Form.

13.10 The address and telephone number for communications regarding the Bid shall be shown.

13.11 The Bid shall contain evidence of Bidder's authority and qualification to do business in the state where the Project is located or covenant to obtain such qualification prior to award of the Contract. Bidder's state contractor license number, if any, shall also be shown on the Bid Form.

ARTICLE 14 - BASIS OF BID; COMPARISON OF BIDS

14.01 *Unit Price*

A. Bidders shall submit a Bid on a unit price basis for each item of Work listed in the Bid schedule.

B. The total of all estimated prices will be the sum of the products of the estimated quantity of each item and the corresponding unit price. The final quantities and Contract Price will be determined in accordance with Paragraph 11.03 of the General Conditions.

C. Discrepancies between the multiplication of units of Work and unit prices will be resolved in favor of the unit prices. Discrepancies between the indicated sum of any column of figures and the correct sum thereof will be resolved in favor of the correct sum. Discrepancies between words and figures will be resolved in favor of the words.

14.02 The Bid price shall include such amounts as the Bidder deems proper for overhead and profit on account of cash allowances, if any, named in the Contract Documents as provided in Paragraph 11.02 of the General Conditions.

ARTICLE 15 - SUBMITTAL OF BID

15.01 With each copy of the Bidding Documents, a Bidder is furnished one separate unbound copy of the Bid Form, and the Bid Bond Form. The unbound copy of the Bid Form is to be completed and submitted with the Bid security AND THE FOLLOWING:

A. Certification of resident status.

15.02 A Bid shall be submitted no later than the date and time prescribed and at the place indicated in the Advertisement or Invitation to Bid and shall be enclosed in an opaque sealed envelope plainly marked with the Project title (and, if applicable, the designated portion of the Project for which the Bid is submitted), the name and address of Bidder, and shall be accompanied by the Bid security and other required documents. If a Bid is sent by mail or other delivery system, the sealed envelope containing the Bid shall be enclosed in a separate envelope plainly marked on the outside with the notation "BID ENCLOSED." A mailed Bid shall be addressed to the Bid Recipient as shown on the Bid Form.

ARTICLE 16 - MODIFICATION AND WITHDRAWAL OF BID

16.01 A Bid may be modified or withdrawn by an appropriate document duly executed in the manner that a Bid must be executed and delivered to the place where Bids are to be submitted prior to the date and time for the opening of Bids.

16.02 If within 24 hours after Bids are opened, any Bidder files a duly signed written notice with Owner and promptly thereafter demonstrates to the reasonable satisfaction of Owner that there was a material and substantial mistake in the preparation of its Bid, that Bidder may withdraw its Bid, and the Bid security will be returned. Thereafter, if the Work is rebid, that Bidder will be disqualified from further bidding on the Work.

ARTICLE 17 - OPENING OF BIDS

17.01 Bids will be opened at the time and place indicated in the Advertisement or Invitation to Bid and, unless obviously non-responsive, read aloud publicly. An abstract of the amounts of the base Bids and major alternates, if any, will be made available to Bidders after the opening of Bids.

ARTICLE 18 - BIDS TO REMAIN SUBJECT TO ACCEPTANCE

18.01 All Bids will remain subject to acceptance for the period of time stated in the Bid Form, but Owner may, in its sole discretion, release any Bid and return the Bid security prior to the end of this period.

ARTICLE 19 – EVALUATION OF BIDS AND AWARD OF CONTRACT

19.01 Owner reserves the right to reject any or all Bids, including without limitation, nonconforming, nonresponsive, unbalanced, or conditional Bids. Owner further reserves the right to reject the Bid of any Bidder whom it finds, after reasonable inquiry and evaluation, to not be responsible. Owner may also reject the Bid of any Bidder if Owner believes that it would not be in the best interest of the Project to make an award to that Bidder. Owner also reserves the right to waive all informalities not involving price, time, or changes in the Work and to negotiate contract terms with the Successful Bidder.

19.02 More than one Bid for the same Work from an individual or entity under the same or different names will not be considered. Reasonable grounds for believing that any Bidder has an interest in more than one Bid for the Work may be cause for disqualification of that Bidder and the rejection of all Bids in which that Bidder has an interest.

19.03 In evaluating Bids, Owner will consider whether or not the Bids comply with the prescribed requirements, and such alternates, unit prices and other data, as may be requested in the Bid Form or prior to the Notice of Award.

19.04 In evaluating Bidders, Owner will consider the qualifications of Bidders and may consider the qualifications and experience of Subcontractors, Suppliers, and other individuals or entities proposed for those portions of the Work for which the identity of Subcontractors, Suppliers, and other individuals or entities must be submitted as provided in the Supplementary Conditions.

19.05 Owner may conduct such investigations as Owner deems necessary to establish the responsibility, qualifications, and financial ability of Bidders, proposed Subcontractors, Suppliers, individuals, or entities to perform the Work in accordance with the Contract Documents.

19.06 If the Contract is to be awarded, Owner will award the Contract to the Bidder with the lowest total bid price and whose Bid is in the best interests of the Project.

ARTICLE 20 - CONTRACT SECURITY AND INSURANCE

20.01 Article 5 of the General Conditions, as may be modified by the Supplementary Conditions, sets forth Owner's requirements as to performance and payment bonds and insurance. When the Successful Bidder delivers the executed Agreement to Owner, it shall be accompanied by such bonds.

ARTICLE 21 - SIGNING OF AGREEMENT

21.01 When Owner gives a Notice of Award to the Successful Bidder, it shall be accompanied by the required number of unsigned counterparts of the Agreement with the other Contract Documents which are identified in the Agreement as attached thereto. Within 15 days thereafter, Successful Bidder shall sign and deliver the required number of counterparts of the Agreement and attached documents to Owner. Within ten days thereafter, Owner shall deliver one fully signed counterpart to Successful Bidder with a complete set of the Drawings with appropriate identification.

ARTICLE 22 - SALES AND USE TAXES

22.01 Sales taxes on materials and equipment are to be incorporated in the Work. Said taxes shall be included in the Bid.

ARTICLE 23 - RETAINAGE

23.01 Provisions concerning Contractor's retainage are set forth in the Agreement.

ARTICLE 24 – WYOMING PREFERENCE

24.01 Responsible resident bidders will receive a five percent (5%) preference in accordance with Wyoming State Statute 16-6-102.

“...the contract shall be let to the responsible resident making the lowest bid if the resident's bid is not more than five percent (5%) higher than that of the lowest responsible non- resident bidder...”

24.01 Certification of resident status shall be submitted with the Bid. Bidders seeking residency status must apply for such status pursuant to Wyoming State Statute 16-6-101, as amended, and rules and regulations promulgated by the Wyoming Department of Labor and Statistics. Bidders are solely responsible for contacting the Department of Labor and Statistics to determine any revisions and current policies regarding residency status. Bidders who qualify for resident status shall be required to comply with Wyoming State Statute 126-6-103:

“... Resident bidder shall not subcontract more than twenty (20%) percent of the work ... to non-resident contractors.”

24.03 Preference for State Labor and Materials: Pursuant to Wyoming State Statute 16-6-201 *et seq.* (1977), resident Wyoming laborers, workmen and mechanics shall be used in the performance of the Contract and any contract awarded as a result of the Contract; except that other laborers may be used when Wyoming laborers are not available for employment from within the State or are not qualified to perform the work involved. Pursuant to Wyoming State Statute 16-6-104 (1977), resident Wyoming laborers, workmen and mechanics shall be used upon all work enumerated in Wyoming State Statute 16-6-102 (1977) whenever possible and Wyoming materials and products of equal quality and desirability shall have preference over materials or products produced outside the state. Pursuant to Wyoming State Statute 16-6-106 (1977), preference is hereby given to materials supplied or grown in Wyoming, quality being equal to articles offered by the competitors outside of the state. Pursuant to Wyoming State Statute 16-6-107 (1977), all public structures constructed in the State of Wyoming shall be constructed and maintained by materials produced or manufactured in Wyoming if Wyoming materials are suitable and can be furnished in marketable quantities. Preference shall not be granted for materials of an inferior quality to those offered by competitors outside of the state, but a differential of not to exceed five percent (5%) may be allowed in cost of Wyoming materials of equal quality as against materials from states having or enforcing a preference rule against “out-of-state” products.

SECTION 00410

BID FORM

**TETON COUNTY, WYOMING
PATH 22 WEST BRIDGE
PROJECT**

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ARTICLE 1 – BID RECIPIENT

1.01 This Bid is submitted to: **Teton County, Wyoming**
P.O. Box 3594
Jackson, WY 83001

1.02 The undersigned Bidder proposes and agrees, if this Bid is accepted, to enter into an Agreement with Owner in the form included in the Bidding Documents to perform all Work as specified or indicated in the Bidding Documents for the prices and within the times indicated in this Bid and in accordance with the other terms and conditions of the Bidding Documents.

ARTICLE 2 – BIDDER'S ACKNOWLEDGEMENTS

2.01 Bidder accepts all of the terms and conditions of the Instructions to Bidders, including without limitation those dealing with the disposition of Bid security. This Bid will remain subject to acceptance for **60** days after the Bid opening, or for such longer period of time that Bidder may agree to in writing upon request of Owner.

ARTICLE 3 – BIDDER'S REPRESENTATIONS

3.01 In submitting this Bid, Bidder represents that:

A. Bidder has examined and carefully studied the Bidding Documents, the other related data identified in the Bidding Documents, and the following Addenda, receipt of which is hereby acknowledged.

Addendum No.	Addendum Date
_____	_____
_____	_____
_____	_____

B. Bidder has visited the Site and become familiar with and is satisfied as to the general, local and Site conditions that may affect cost, progress, and performance of the Work.

C. Bidder is familiar with and is satisfied as to all federal, state and local Laws and Regulations that may affect cost, progress and performance of the Work.

D. Bidder has obtained and carefully studied (or accepts the consequences for not doing so) all additional or supplementary examinations, investigations, explorations, tests, studies and data concerning conditions (surface, subsurface and Underground Facilities) at or contiguous to the Site which may affect cost, progress, or performance of the Work or which relate to any aspect of the means, methods, techniques, sequences, and procedures of construction to be employed by Bidder, including applying the specific means, methods, techniques, sequences, and procedures of

- construction expressly required by the Bidding Documents to be employed by Bidder, and safety precautions and programs incident thereto. Bidder is responsible for locating underground facilities and utilities prior to commencing work and responsible for ensuring that drilling operations do not damage existing utilities.
- E. Bidder does not consider that any further examinations, investigations, explorations, tests, studies, or data are necessary for the determination of this Bid for performance of the Work at the price(s) bid and within the times and in accordance with the other terms and conditions of the Bidding Documents.
 - F. Bidder is aware of the general nature of work to be performed by Owner and others at the Site that relates to the Work as indicated in the Bidding Documents.
 - G. Bidder has correlated the information known to Bidder, information and observations obtained from visits to the Site, reports and drawings identified in the Bidding Documents, and all additional examinations, investigations, explorations, tests, studies, and data with the Bidding Documents.
 - H. Bidder has given Engineer written notice of all conflicts, errors, ambiguities, or discrepancies that Bidder has discovered in the Bidding Documents, and the written resolution thereof by Engineer is acceptable to Bidder.
 - I. The Bidding Documents are generally sufficient to indicate and convey understanding of all terms and conditions for the performance of the Work for which this Bid is submitted.
 - J. Bidder will submit written evidence of its authority to do business in the state where the Project is located not later than the date of its execution of the Agreement.

ARTICLE 4 – FURTHER REPRESENTATIONS

4.01 Bidder further represents that:

- A. This Bid is genuine and not made in the interest of or on behalf of any undisclosed individual or entity and is not submitted in conformity with any agreement or rules of any group, association, organization or corporation;
- B. Bidder has not directly or indirectly induced or solicited any other Bidder to submit a false or sham Bid;
- C. Bidder has not solicited or induced any individual or entity to refrain from bidding; and

D. Bidder has not sought by collusion to obtain for itself any advantage over any other Bidder or over Owner.

ARTICLE 5 – COMPARISON OF BIDS

5.01 The comparison of Bids by Owner will be conducted on the basis of the Total Bid.

ARTICLE 6 – BASIS OF BID

6.01 Bidder will complete the Work in accordance with the Contract Documents for the following price(s):

**TETON COUNTY, WYOMING
PATH 22 WEST BRIDGE PROJECT**

BASE BID SCHEDULE

ITEM NO.	DESCRIPTION	UNIT	EST. QTY.	UNIT PRICE	TOTAL PRICE
109.04000	Force Account Work	LS	1	\$ 50,000.00	\$ 50,000.00
109.08000	Mobilization	LS	1	\$	\$
201.03200	Clearing and Grubbing	LS	1	\$	\$
203.02500	Unclassified Excavation	CY	200	\$	\$
212.02100	Dry Excavation	CY	180	\$	\$
212.02200	Wet Excavation	CY	830	\$	\$
215.01000	Contractor Storm Water Control	LS	1	\$	\$
215.03300	Silt Fence	LF	300	\$	\$
217.01030	Geotextile, Emb. & Retaining Walls	SY	864	\$	\$
501.01000	Structural Steel	LS	1	\$	\$
503.01400	Pedestrian Railing	LF	1,538	\$	\$
504.11253	Steel Piling HP12X53	LF	804	\$	\$
504.114102	Steel Piling HP14X102	LF	2,106	\$	\$
507.01000	Reinforced Concrete Approach Slab	SY	43	\$	\$
507.01100	Bridge Approach Backfill	CY	255	\$	\$
511.01000	Gabions	CY	109	\$	\$
512.01012	Expansion Joint (Plate)	LF	28	\$	\$
513.00005	Class A Concrete (Structural)	LS	1	\$	\$
513.00015	Class B Concrete (Structural)	LS	1	\$	\$
514.00015	Reinforcing Steel	LS	1	\$	\$
514.00025	Reinforcing Steel (Coated)	LS	1	\$	\$
605.10006	Underdrain Pipe (Perforated) 6 inch	LF	1	\$	\$
605.20006	Underdrain Pipe (Non-Perforated) 6 inch	LF	1	\$	\$
703.03100	Temporary Traffic Control	LS	1	\$	\$

CUMULATIVE BID, BASE BID:

_____ Dollars \$ _____

(Use Words)

(Use Figures)

BID SCHEDULE, BID ALTERNATE A

ITEM NO.	DESCRIPTION	UNIT	EST. QTY.	UNIT PRICE	TOTAL PRICE
203.02110	Borrow Special Exc., Owner-furnished	TON	2,200	\$	\$
301.01080	Crushed Base, Owner-furnished	TON	550	\$	\$
CUMULATIVE BID, BID ALTERNATE A:					
				Dollars	\$
(Use Words)				(Use Figures)	

BID SCHEDULE, BID ALTERNATE B

ITEM NO.	DESCRIPTION	UNIT	EST. QTY.	UNIT PRICE	TOTAL PRICE
203.02110	Borrow Special Exc., Contractor-furnished	TON	2,200	\$	\$
301.01080	Crushed Base, Contractor-furnished	TON	550	\$	\$
CUMULATIVE BID, BID ALTERNATE B:					
				Dollars	\$
(Use Words)				(Use Figures)	

TOTAL BID (BASE BID PLUS THE LESSER OF BID ALTERNATES A AND B)

Cumulative Bid, Base Bid	\$
Cumulative Bid, Lesser of Alternatives A and B	\$
TOTAL BID:	
	Dollars \$
(Use Words)	(Use Figures)

Unit Prices have been computed in accordance with Paragraph 11.03.B of the General Conditions.

Bidder acknowledges that estimated quantities are not guaranteed and are solely for the purpose of comparison of Bids, and final payment for all Unit Price Bid items will be based on actual quantities, determined as provided in the contract Documents.

Bidder also acknowledges that the Bid submitted is for conducting all the work contemplated by the plans and specifications, even though the individual bid schedule item descriptions are by necessity not exhaustive in their detail but, rather, indicative in a general way of the work intended.

ARTICLE 7 – TIME OF COMPLETION

7.01 Bidder agrees that the Work will be substantially complete on or Before November 1, 2013, and will be completed and ready for final payment in accordance with Paragraph 14.07. B of the General Conditions on or before December 1, 2013.

ARTICLE 8 - ATTACHMENTS TO THIS BID

8.01 The following documents are attached to and made a condition of this Bid:

- A. Required Bid Security in the form of certified or cashier's check or acceptable bid bond.
- B. Required Bidder Qualification Statement with Supporting Data.
- C. List of Proposed Subcontractors.
- D. A company-wide hourly rate sheet for equipment and labor, including operators and supervisory personnel for use under Specification SS-120, Force Account Work, in the Technical Specifications.
- E. Wyoming Certification of Residency, if claiming status as in-state contractor.

ARTICLE 9 - DEFINED TERMS

9.01 The terms used in this Bid with initial capital letters have the meanings stated in the Instructions to Bidders, the General Conditions, and the Supplementary Conditions.

ARTICLE 10 - BID SUBMITTAL

10.01 This Bid submitted by:

If Bidder is:

An Individual

Name (typed or printed): _____

By: _____

(Individual's signature)

Doing business as: _____

Business address: _____

Phone No. (_____) _____ FAX No. (_____) _____

E-Mail Address _____

A Partnership

Partnership Name: _____

By: _____

(Signature of general partner -- attach evidence of authority to sign)

Name (typed or printed): _____

Business address: _____

Phone No. (_____) _____ FAX No. (_____) _____

E-Mail Address _____

A Corporation

Corporation Name: _____

State of Incorporation: _____

Type (General Business, Professional, Service, Limited Liability): _____

By: _____

(Signature -- attach evidence of authority to sign)

Name (typed or printed): _____

Title: _____

(CORPORATE SEAL)

Attest _____

Date of Authorization to do business in *Wyoming* is / /

Business address: _____

Phone No. (_____) _____ FAX No. (_____) _____

E-Mail Address _____

A Joint Venture

Name of Joint Venture: _____

First Joint Venturer Name: _____

By: _____

(Signature of first joint venture partner -- attach evidence of authority to sign)

Name (typed or printed): _____

Title: _____

Second Joint Venturer Name: _____

By: _____

(Signature of second joint venture partner -- attach evidence of authority to sign)

Name (typed or printed): _____

Title: _____

(Each joint venturer must sign. The manner of signing for each individual, partnership, and corporation that is a party to the joint venture should be in the manner indicated above.)

Business address: _____

Phone No. (_____) _____ FAX No. (_____) _____

E-Mail Address _____

SUBMITTED on _____, 20_____.

State Contractor License No. _____. (If applicable)

SECTION 00435

BID BOND

Any singular reference to Bidder, Surety, Owner, or other party shall be considered plural where applicable.

BIDDER (Name and Address):

SURETY (Name and Address of Principal Place of Business):

OWNER (Name and Address):

BID

Bid Due Date:

Project (Brief Description Including Location):

BOND

Bond Number:

Date (Not later than Bid due date):

Penal Sum: _____ (Words) _____ (Figures)

Surety and Bidder, intending to be legally bound hereby, subject to the terms printed on the reverse side hereof, do each cause this Bid Bond to be duly executed on its behalf by its authorized officer, agent, or representative.

BIDDER

SURETY

Bidder's Name and Corporate Seal (Seal)

Surety's Name and Corporate Seal (Seal)

By: _____
Signature and Title

By: _____
Signature and Title
(Attach Power of Attorney)

Attest: _____
Signature and Title

Attest: _____
Signature and Title

Note: Above addresses are to be used for giving required notice.

1. Bidder and Surety, jointly and severally, bind themselves, their heirs, executors, administrators, successors, and assigns to pay to Owner upon default of Bidder any difference between the total amount of Bidder's Bid and the total amount of the Bid of the next lowest, responsible Bidder who submitted a responsive Bid as determined by Owner for the work required by the Contract Documents, provided that:
 - 1.1. If there is no such next Bidder, and Owner does not abandon the Project, then Bidder and Surety shall pay to Owner the penal sum set forth on the face of this Bond, and
 - 1.2. In no event shall Bidder's and Surety's obligation hereunder exceed the penal sum set forth on the face of this Bond.
2. Default of Bidder shall occur upon the failure of Bidder to deliver within the time required by the Bidding Documents (or any extension thereof agreed to in writing by Owner) the executed Agreement required by the Bidding Documents and any performance and payment bonds required by the Bidding Documents.
3. This obligation shall be null and void if:
 - 3.1. Owner accepts Bidder's Bid and Bidder delivers within the time required by the Bidding Documents (or any extension thereof agreed to in writing by Owner) the executed Agreement required by the Bidding Documents and any performance and payment bonds required by the Bidding Documents, or
 - 3.2. All Bids are rejected by Owner, or
 - 3.3. Owner fails to issue a Notice of Award to Bidder within the time specified in the Bidding Documents (or any extension thereof agreed to in writing by Bidder and, if applicable, consented to by Surety when required by Paragraph 5 hereof).
4. Payment under this Bond will be due and payable upon default by Bidder and within 30 calendar days after receipt by Bidder and Surety of written notice of default from Owner, which notice will be given with reasonable promptness, identifying this Bond and the Project and including a statement of the amount due.
5. Surety waives notice of any and all defenses based on or arising out of any time extension to issue Notice of Award agreed to in writing by Owner and Bidder, provided that the total time for issuing Notice of Award including extensions shall not in the aggregate exceed 120 days from Bid due date without Surety's written consent.
6. No suit or action shall be commenced under this Bond prior to 30 calendar days after the notice of default required in Paragraph 4 above is received by Bidder and Surety and in no case later than one year after Bid due date.
7. Any suit or action under this Bond shall be commenced only in a court of competent jurisdiction located in the state in which the Project is located.
8. Notices required hereunder shall be in writing and sent to Bidder and Surety at their respective addresses shown on the face of this Bond. Such notices may be sent by personal delivery, commercial courier, or by United States Registered or Certified Mail, return receipt requested, postage pre-paid, and shall be deemed to be effective upon receipt by the party concerned.
9. Surety shall cause to be attached to this Bond a current and effective Power of Attorney evidencing the authority of the officer, agent, or representative who executed this Bond on behalf of Surety to execute, seal, and deliver such Bond and bind the Surety thereby.
10. This Bond is intended to conform to all applicable statutory requirements. Any applicable requirement of any applicable statute that has been omitted from this Bond shall be deemed to be included herein as if set forth at length. If any provision of this Bond conflicts with any applicable statute, then the provision of said statute shall govern and the remainder of this Bond that is not in conflict therewith shall continue in full force and effect.
11. The term "Bid" as used herein includes a Bid, offer, or proposal as applicable.

SECTION 00450

STATEMENT OF QUALIFICATIONS

1. Bidder's organization has been in existence as a business under its present name and ownership for _____ years since _____.
2. Bidder's organization has had experience in work comparable to that required for this project for _____ years.
3. Bidder has performed similar work on the following projects:

Year/Contract Amount/Project Name/Type of Work

- A. _____

- B. _____

- C. _____

- D. _____

4. Bidder refers to the following for references on the aforementioned projects:

Name/Title/Organization/Address/Phone No.

- A. _____

- B. _____

- C. _____

- D. _____

5. Bank Reference (Name/Title/Financial Institution/Address/Phone No.):

6. Surety Reference (Name/Title/Entity/Address/Phone No.):

7. The following is a list of equipment definitely available for use on the project:

<u>Equipment Description</u>	<u>Units Available</u>
<hr/>	<hr/>

SECTION 00455

PROPOSED SUBCONTRACTORS

Bidder submits the following list of subcontractors proposed to be employed by Bidder if Bidder is awarded the Contract. Additional numbered pages shall be attached as required. All subcontractors to whom work in excess of \$10,000 in value is to be subcontracted shall be listed.

1. Name: _____
Address: _____

Phone No./Fax No.: _____
Work to be Performed: _____
Amount of Subcontract: _____

2. Name: _____
Address: _____

Phone No./Fax No.: _____
Work to be Performed: _____
Amount of Subcontract: _____

3. Name: _____
Address: _____

Phone No./Fax No.: _____
Work to be Performed: _____
Amount of Subcontract: _____

4. Name: _____
Address: _____
Phone No./Fax No.: _____
Work to be Performed: _____
Amount of Subcontract: _____

5. Name: _____
Address: _____
Phone No./Fax No.: _____
Work to be Performed: _____
Amount of Subcontract _____

6. Name: _____
Address: _____
Phone No./Fax No.: _____
Work to be Performed: _____
Amount of Subcontract _____

7. Name: _____
Address: _____
Phone No./Fax No.: _____
Work to be Performed: _____
Amount of Subcontract _____

8. Name: _____
Address: _____
Phone No./Fax No.: _____
Work to be Performed: _____
Amount of Subcontract _____

SECTION 00510

NOTICE OF AWARD

Dated _____

Project: Path 22 West Bridge Project	Owner: Teton County, Wyoming	Owner's Contract No.:
---	-------------------------------------	------------------------------

Contract: Path 22 West Bridge Project	Engineer's Project No.: 10-124-02
--	---

Bidder:

Bidder's Address: (send Certified Mail, Return Receipt Requested)

You are notified that your Bid dated _____ for the above Contract has been considered. You are the Successful Bidder and are awarded a Contract for the Path 22 West Project.

The Contract Price of your Contract is \$ _____, based on the unit prices bid per contract documents.

Three (3) copies of each of the proposed Contract Documents accompany this Notice of Award.

You must comply with the following conditions precedent within fifteen (15) days of the date you receive this Notice of Award.

1. Deliver to the Owner three (3) fully executed counterparts of the Contract Documents.
2. Deliver with the executed Contract Documents the Contract security Bonds as specified in the Instructions to Bidders (Article 20) and General Conditions (Paragraph 5.01).

Failure to comply with these conditions within the time specified will entitle Owner to consider you in default, annul this Notice of Award and declare your Bid security forfeited.

Within ten (10) days after you comply with the above conditions, Owner will return to you one fully executed counterpart of the Contract Documents.

Teton County, Wyoming
Owner

By: _____
Authorized Signature

Chairman, Teton County Commission

Copy to Engineer

SECTION 00520

AGREEMENT

THIS AGREEMENT is dated as of the _____ day of _____, in the year 2013, by and between **TETON COUNTY, WYOMING**, hereinafter called OWNER, and _____, hereinafter called CONTRACTOR.

OWNER and CONTRACTOR, in consideration of the mutual covenants hereinafter set forth, agree as follows:

ARTICLE 1 - WORK

1.01 Contractor shall complete all Work as specified or indicated in the Contract Documents. The Work is generally described as follows:

the construction of a pathway bridge across the Snake River, installation of conduit for a future gas line to be affixed to the under-decking of the bridge, associated grading, and appurtenances thereto. The bridge is an approximately 700-foot long, four-span steel girder bridge, 14 feet in width, supported by three piers on driven piles with abutments tied into existing levees on either side of the river.

ARTICLE 2 - THE PROJECT

2.01 The Project for which the Work under the Contract Documents may be the whole or only a part is generally described as follows: all work as shown and described in the Contract Documents for the Path 22 West Bridge Project.

ARTICLE 3 - ENGINEER

3.01 The Project has been designed by Nelson Engineering (Engineer) and its subconsultant, HNTB. Nelson Engineering will act as Owner's representative, assume all duties and responsibilities, and have the rights and authority assigned to Engineer in the Contract Documents in connection with the completion of the Work in accordance with the Contract Documents. HNTB will assist Nelson Engineering during construction.

ARTICLE 4 - CONTRACT TIMES

4.01 Time of the Essence

A. All time limits for Milestones, if any, Substantial Completion, and completion and readiness for final payment, as stated in the Contract Documents, are of the essence of the Contract.

4.02 Days to Achieve Substantial Completion and Final Payment

A. The Work will be substantially completed on or before November 1, 2013, and will be completed and ready for final payment in accordance with Paragraph 14.07 of the General Conditions on or before December 1, 2013.

4.03 Liquidated Damages

A. Contractor and Owner recognize that time is of the essence of this Agreement and that Owner will suffer financial loss if the Work is not completed within the times specified in Paragraph 4.02 above, plus any extensions thereof allowed in accordance with Article 12 of the General Conditions. The parties also recognize the delays, expense, and difficulties involved in proving in a legal or arbitration proceeding the actual loss suffered by Owner if the Work is not completed on time. Accordingly, instead of requiring any such proof, Owner and Contractor agree that as liquidated damages for delay (but not as a penalty), Contractor shall pay Owner \$1,500.00 for each day that expires after the time specified in Paragraph 4.02 for Substantial Completion until the Work is substantially complete. After Substantial Completion, if Contractor shall neglect, refuse, or fail to complete the remaining Work within the Contract Time or any proper extension thereof granted by Owner, Contractor shall pay Owner \$1,500.00 for each day that expires after the time specified in Paragraph 4.02 for completion and readiness for final payment until the Work is completed and ready for final payment.

ARTICLE 5. CONTRACT PRICE

5.01 OWNER shall pay CONTRACTOR for completion of the Work in accordance with the Contract Documents an amount in current funds equal to the sum of the established unit price for each separately identified item of Unit Price Work times the quantity of that item that is constructed and accepted. Unit prices are those listed in the Bid Schedule in the Bid Form attached as Exhibit A to this Agreement. Estimated quantities used for bidding purposes are not guaranteed, payment will be for actual quantities as determined by ENGINEER in accordance with Article 9.08 of the General Conditions. Unit prices have been computed as provided in paragraph 11.03 of the General Conditions.

ARTICLE 6 - PAYMENT PROCEDURES

6.01 Submittal and Processing of Payments

A. Contractor shall submit Applications for Payment in accordance with Article 14 of the General Conditions. Applications for Payment will be processed by Engineer as provided in the General Conditions.

6.02 Progress Payments and Retainage

A. Owner shall make progress payments on account of the Contract Price on the basis of Contractor's Applications for Payment once each month during performance of the Work as provided in Paragraphs 6.02.A.1 and 6.02.A.2 below. All such payments will be measured by the schedule of values established as provided in Paragraph 2.07.A of the General Conditions

(and in the case of Unit Price Work based on the number of units completed) or, in the event there is no schedule of values, as provided in the General Requirements:

1. Prior to Substantial Completion, progress payments will be made in an amount equal to the percentage indicated below but, in each case, less the aggregate of payments previously made and less such amounts as Engineer may determine or Owner may withhold, including but not limited to liquidated damages, in accordance with Paragraph 14.02 of the General Conditions:

a. Ninety (90%) percent of Work completed (with the balance being retainage). If the Work has been 50 percent completed as determined by Engineer, and if the character and progress of the Work have been satisfactory to Owner and Engineer, Owner, on recommendation of Engineer, may determine that as long as the character and progress of the Work remain satisfactory to them, there will be no additional retainage; and

b. Ninety (90%) percent of cost of materials and equipment not incorporated in the Work (with the balance being retainage).

2. Upon Substantial Completion, Owner shall pay an amount sufficient to increase total payments to Contractor to ninety five (95%) percent of the Work completed, less such amounts as Engineer shall determine in accordance with Paragraph 14.02.B.5 of the General Conditions and less Engineer's estimate of the value of Work to be completed or corrected as shown on the tentative list of items to be completed or corrected attached to the certificate of Substantial Completion.

3. The Contractor may request that retainage be held in an interest bearing account in accordance with provisions of W. S. 16-6-704 and 16-6-705.

6.03 Final Payment

A. Upon final completion and acceptance of the Work in accordance with Paragraph 14.07 of the General Conditions, Owner shall pay the remainder of the Contract Price as recommended by Engineer as provided in said Paragraph 14.07.

ARTICLE 7 - INTEREST

7.01 All moneys not paid when due as provided in Article 14 of the General Conditions shall bear interest at the rate of eight (8%) percent per annum.

ARTICLE 8 – CONTRACTOR'S REPRESENTATIONS

8.01 In order to induce Owner to enter into this Agreement, Contractor makes the following representations:

A. Contractor has examined and carefully studied the Contract Documents and the other related data identified in the Bidding Documents.

B. Contractor has visited the Site and become familiar with and is satisfied as to the general,

local, and Site conditions that may affect cost, progress, and performance of the Work.

C. Contractor is familiar with and is satisfied as to all federal, state, and local Laws and Regulations that may affect cost, progress, and performance of the Work.

D. Contractor has carefully studied all: (1) reports of explorations and tests of subsurface conditions at or contiguous to the Site and all drawings of physical conditions in or relating to existing surface or subsurface structures at or contiguous to the Site (except Underground Facilities) which have been identified in the Supplementary Conditions as provided in Paragraph 4.02 of the General Conditions and (2) reports and drawings of a Hazardous Environmental Condition, if any, at the Site which has been identified in the Supplementary Conditions as provided in Paragraph 4.06 of the General Conditions.

E. Contractor has obtained and carefully studied (or assumes responsibility for doing so) all additional or supplementary examinations, investigations, explorations, tests, studies, and data concerning conditions (surface, subsurface, and Underground Facilities) at or contiguous to the Site which may affect cost, progress, or performance of the Work or which relate to any aspect of the means, methods, techniques, sequences, and procedures of construction to be employed by Contractor, including any specific means, methods, techniques, sequences, and procedures of construction expressly required by the Bidding Documents, and safety precautions and programs incident thereto.

F. Contractor does not consider that any further examinations, investigations, explorations, tests, studies, or data are necessary for the performance of the Work at the Contract Price, within the Contract Times, and in accordance with the other terms and conditions of the Contract Documents.

G. Contractor is aware of the general nature of work to be performed by Owner and others at the Site that relates to the Work as indicated in the Contract Documents.

H. Contractor has correlated the information known to Contractor, information and observations obtained from visits to the Site, reports and drawings identified in the Contract Documents, and all additional examinations, investigations, explorations, tests, studies, and data with the Contract Documents.

I. Contractor has given Engineer written notice of all conflicts, errors, ambiguities, or discrepancies that Contractor has discovered in the Contract Documents, and the written resolution thereof by Engineer is acceptable to Contractor.

J. The Contract Documents are generally sufficient to indicate and convey understanding of all terms and conditions for performance and furnishing of the Work.

K. Contractor warrants and guarantees to Owner and Engineer that all Work will be in accordance with the Contract Documents and will not be defective within one year of Substantial Completion or such longer period in accordance with paragraph 13.07 of the General conditions.

ARTICLE 9 - CONTRACT DOCUMENTS

9.01 Contents

A. The Contract Documents consist of the following:

1. This Agreement (pages 1 to 7, inclusive).
2. Performance bond (pages 1 to 2, inclusive).
3. Payment bond (pages 1 to 2, inclusive).
4. General Conditions (pages 1 to 42, inclusive).
5. Supplementary Conditions (pages 1 to 5, inclusive).
6. Special Provisions, which modify the Wyoming Department of Transportation Standard Specifications for Road and Bridge Construction (WYDOT SSRBC), 2003 Edition, and are set forth in the Special Provisions chapter of the Project Manual.
7. Technical Specifications: the Wyoming Department of Transportation Standard Specifications for Road and Bridge Construction (WYDOT SSRBC), 2003 Edition, which are included, with the specific exception of Division 100, General Provisions, herein by reference.
8. Geotechnical Investigation Report, prepared by Nelson Engineering, dated January 11, 2013, and included in the Geotechnical Investigation Report chapter of the Project Manual.
9. Drawings, each bearing a Path 22 Logo and making reference to a pathway/pedestrian/bicycle bridge across the Snake River, consisting of eleven (11) Civil Drawings and forty-three (43) Bridge Drawings. An index of project drawings is provided in this Project Manual.
10. Exhibits to this Agreement (enumerated as follows):
 - a. Contractor's Bid (pages 1 to 10, inclusive).
11. The following which may be delivered or issued on or after the Effective Date of the Agreement and are not attached hereto:
 - a. Notice to Proceed (pages 1 to 1, inclusive).
 - b. Work Change Directive(s).
 - c. Change Order(s).

B. The documents listed in Paragraph 9.01.A are attached to this Agreement (except as expressly noted otherwise above).

C. There are no Contract Documents other than those listed above in this Article 9.

D. The Contract Documents may only be amended, modified, or supplemented as provided in Paragraph 3.04 of the General Conditions.

ARTICLE 10 - MISCELLANEOUS

10.01 Terms

A. Terms used in this Agreement will have the meanings stated in the General Conditions and the Supplementary Conditions.

10.02 Assignment of Contract

A. No assignment by a party hereto of any rights under or interests in the Contract will be binding on another party hereto without the written consent of the party sought to be bound; and, specifically but without limitation, moneys that may become due and moneys that are due may not be assigned without such consent (except to the extent that the effect of this restriction may be limited by law), and unless specifically stated to the contrary in any written consent to an assignment, no assignment will release or discharge the assignor from any duty or responsibility under the Contract Documents.

10.03 Successors and Assigns

A. Owner and Contractor each binds itself, its partners, successors, assigns, and legal representatives to the other party hereto, its partners, successors, assigns, and legal representatives in respect to all covenants, agreements, and obligations contained in the Contract Documents.

10.04 Severability

A. Any provision or part of the Contract Documents held to be void or unenforceable under any Law or Regulation shall be deemed stricken, and all remaining provisions shall continue to be valid and binding upon Owner and Contractor, who agree that the Contract Documents shall be reformed to replace such stricken provision or part thereof with a valid and enforceable provision that comes as close as possible to expressing the intention of the stricken provision.

IN WITNESS WHEREOF, Owner and Contractor have signed this Agreement in duplicate. One counterpart each has been delivered to Owner and Contractor. All portions of the Contract Documents have been signed or identified by Owner and Contractor or on their behalf.

This Agreement will be effective on _____, 2013 (which is the Effective Date of the Agreement).

OWNER:

TETON COUNTY, WYOMING

BY _____

ITS _____

ADDRESS:

P.O. Box 3594 _____

Jackson, WY 83001 _____

ATTEST:

NAME _____

TITLE _____

CORPORATE SEAL

CONTRACTOR:

BY _____

ITS _____

ADDRESS:

ATTEST:

NAME _____

TITLE _____

CORPORATE SEAL

SECTION 00610

PERFORMANCE BOND

Any singular reference to Contractor, Surety, Owner, or other party shall be considered plural where applicable.

CONTRACTOR (Name and Address):

SURETY (Name and Address of Principal Place of Business):

OWNER (Name and Address):

CONTRACT

Date:

Amount:

Description (Name and Location):

BOND

Bond Number:

Date (Not earlier than Contract Date):

Amount:

Modifications to this Bond Form:

Surety and Contractor, intending to be legally bound hereby, subject to the terms printed on the reverse side hereof, do each cause this Performance Bond to be duly executed on its behalf by its authorized officer, agent, or representative.

CONTRACTOR AS PRINCIPAL

Company:

Signature: _____ (Seal)

Name and Title:

SURETY

(Seal)

Surety's Name and Corporate Seal

By:

Signature and Title

(Attach Power of Attorney)

(Space is provided below for signatures of additional parties, if required.)

Attest:

Signature and Title

CONTRACTOR AS PRINCIPAL

Company:

Signature: _____ (Seal)

Name and Title:

SURETY

(Seal)

Surety's Name and Corporate Seal

By:

Signature and Title

(Attach Power of Attorney)

Attest:

Signature and Title:

1. Contractor and Surety, jointly and severally, bind themselves, their heirs, executors, administrators, successors, and assigns to Owner for the performance of the Contract, which is incorporated herein by reference.
2. If Contractor performs the Contract, Surety and Contractor have no obligation under this Bond, except to participate in conferences as provided in Paragraph 3.1.
3. If there is no Owner Default, Surety's obligation under this Bond shall arise after:
 - 3.1. Owner has notified Contractor and Surety, at the addresses described in Paragraph 10 below, that Owner is considering declaring a Contractor Default and has requested and attempted to arrange a conference with Contractor and Surety to be held not later than 15 days after receipt of such notice to discuss methods of performing the Contract. If Owner, Contractor and Surety agree, Contractor shall be allowed a reasonable time to perform the Contract, but such an agreement shall not waive Owner's right, if any, subsequently to declare a Contractor Default; and
 - 3.2. Owner has declared a Contractor Default and formally terminated Contractor's right to complete the Contract. Such Contractor Default shall not be declared earlier than 20 days after Contractor and Surety have received notice as provided in Paragraph 3.1; and
 - 3.3. Owner has agreed to pay the Balance of the Contract Price to:
 1. Surety in accordance with the terms of the Contract;
 2. Another contractor selected pursuant to Paragraph 4.3 to perform the Contract.
4. When Owner has satisfied the conditions of Paragraph 3, Surety shall promptly and at Surety's expense take one of the following actions:
 - 4.1. Arrange for Contractor, with consent of Owner, to perform and complete the Contract; or
 - 4.2. Undertake to perform and complete the Contract itself, through its agents or through independent contractors; or
 - 4.3. Obtain bids or negotiated proposals from qualified contractors acceptable to Owner for a contract for performance and completion of the Contract, arrange for a contract to be prepared for execution by Owner and Contractor selected with Owner's concurrence, to be secured with performance and payment bonds executed by a qualified surety equivalent to the bonds issued on the Contract, and pay to Owner the amount of damages as described in Paragraph 6 in excess of the Balance of the Contract Price incurred by Owner resulting from Contractor Default; or
 - 4.4. Waive its right to perform and complete, arrange for completion, or obtain a new contractor and with reasonable promptness under the circumstances:
 1. After investigation, determine the amount for which it may be liable to Owner and, as soon as practicable after the amount is determined, tender payment therefor to Owner; or
 2. Deny liability in whole or in part and notify Owner citing reasons therefor.
5. If Surety does not proceed as provided in Paragraph 4 with reasonable promptness, Surety shall be deemed to be in default on this Bond 15 days after receipt of an additional written notice from Owner to Surety demanding that Surety perform its obligations under this Bond, and Owner shall be entitled to enforce any remedy available to Owner. If Surety proceeds as provided in Paragraph 4.4, and Owner refuses the payment tendered or Surety has denied liability, in whole or in part, without further notice Owner shall be entitled to enforce any remedy available to Owner.
6. After Owner has terminated Contractor's right to complete the Contract, and if Surety elects to act under Paragraph 4.1, 4.2, or 4.3 above, then the responsibilities of Surety to Owner shall not be greater than those of Contractor under the Contract, and the responsibilities of Owner to Surety shall not be greater than those of Owner under the Contract. To a limit of the amount of this Bond, but subject to commitment by Owner of the Balance of the Contract Price to mitigation of costs and damages on the Contract, Surety is obligated without duplication for:
 - 6.1. The responsibilities of Contractor for correction of defective Work and completion of the Contract;
 - 6.2. Additional legal, design professional, and delay costs resulting from Contractor's Default, and resulting from the actions or failure to act of Surety under Paragraph 4; and
 - 6.3. Liquidated damages, or if no liquidated damages are specified in the Contract, actual damages caused by delayed performance or non-performance of Contractor.
7. Surety shall not be liable to Owner or others for obligations of Contractor that are unrelated to the Contract, and the Balance of the Contract Price shall not be reduced or set off on account of any such unrelated obligations. No right of action shall accrue on this Bond to any person or entity other than Owner or its heirs, executors, administrators, or successors.
8. Surety hereby waives notice of any change, including changes of time, to Contract or to related subcontracts, purchase orders, and other obligations.
9. Any proceeding, legal or equitable, under this Bond may be instituted in any court of competent jurisdiction in the location in which the Work or part of the Work is located and shall be instituted within two years after Contractor Default or within two years after Contractor ceased working or within two years after Surety refuses or fails to perform its obligations under this Bond, whichever occurs first. If the provisions of this paragraph are void or prohibited by law, the minimum period of limitation available to sureties as a defense in the jurisdiction of the suit shall be applicable.
10. Notice to Surety, Owner, or Contractor shall be mailed or delivered to the address shown on the signature page.
11. When this Bond has been furnished to comply with a statutory requirement in the location where the Contract was to be performed, any provision in this Bond conflicting with said statutory requirement shall be deemed deleted herefrom and provisions conforming to such statutory requirement shall be deemed incorporated herein. The intent is that this Bond shall be construed as a statutory bond and not as a common law bond.
12. Definitions.
 - 12.1. Balance of the Contract Price: The total amount payable by Owner to Contractor under the Contract after all proper adjustments have been made, including allowance to Contractor of any amounts received or to be received by Owner in settlement of insurance or other Claims for damages to which Contractor is entitled, reduced by all valid and proper payments made to or on behalf of Contractor under the Contract.
 - 12.2. Contract: The agreement between Owner and Contractor identified on the signature page, including all Contract Documents and changes thereto.
 - 12.3. Contractor Default: Failure of Contractor, which has neither been remedied nor waived, to perform or otherwise to comply with the terms of the Contract.
 - 12.4. Owner Default: Failure of Owner, which has neither been remedied nor waived, to pay Contractor as required by the Contract or to perform and complete or comply with the other terms thereof.

FOR INFORMATION ONLY – Name, Address and Telephone
 Surety Agency or Broker
 Owner's Representative (engineer or other party)

SECTION 00615

PAYMENT BOND

Any singular reference to Contractor, Surety, Owner, or other party shall be considered plural where applicable.

CONTRACTOR (Name and Address):

SURETY (Name and Address of Principal Place of Business):

OWNER (Name and Address):

CONTRACT

Date:

Amount:

Description (Name and Location):

BOND

Bond Number:

Date (Not earlier than Contract Date):

Amount:

Modifications to this Bond Form:

Surety and Contractor, intending to be legally bound hereby, subject to the terms printed on the reverse side hereof, do each cause this Payment Bond to be duly executed on its behalf by its authorized officer, agent, or representative.

CONTRACTOR AS PRINCIPAL

Company:

Signature: _____ (Seal)

Name and Title:

SURETY

(Seal)

Surety's Name and Corporate Seal

By: _____

Signature and Title

(Attach Power of Attorney)

(Space is provided below for signatures of additional parties, if required.)

Attest: _____

Signature and Title

CONTRACTOR AS PRINCIPAL

Company:

Signature: _____ (Seal)

Name and Title:

SURETY

(Seal)

Surety's Name and Corporate Seal

By: _____

Signature and Title

(Attach Power of Attorney)

Attest: _____

Signature and Title:

1. Contractor and Surety, jointly and severally, bind themselves, their heirs, executors, administrators, successors, and assigns to Owner to pay for labor, materials, and equipment furnished by Claimants for use in the performance of the Contract, which is incorporated herein by reference.

2. With respect to Owner, this obligation shall be null and void if Contractor:
2.1. Promptly makes payment, directly or indirectly, for all sums due Claimants, and

2.2. Defends, indemnifies, and holds harmless Owner from all claims, demands, liens, or suits alleging non-payment by Contractor by any person or entity who furnished labor, materials, or equipment for use in the performance of the Contract, provided Owner has promptly notified Contractor and Surety (at the addresses described in Paragraph 12) of any claims, demands, liens, or suits and tendered defense of such claims, demands, liens, or suits to Contractor and Surety, and provided there is no Owner Default.

3. With respect to Claimants, this obligation shall be null and void if Contractor promptly makes payment, directly or indirectly, for all sums due.

4. Surety shall have no obligation to Claimants under this Bond until:

4.1. Claimants who are employed by or have a direct contract with Contractor have given notice to Surety (at the addresses described in Paragraph 12) and sent a copy, or notice thereof, to Owner, stating that a claim is being made under this Bond and, with substantial accuracy, the amount of the claim.

4.2. Claimants who do not have a direct contract with Contractor:

1. Have furnished written notice to Contractor and sent a copy, or notice thereof, to Owner, within 90 days after having last performed labor or last furnished materials or equipment included in the claim stating, with substantial accuracy, the amount of the claim and the name of the party to whom the materials or equipment were furnished or supplied, or for whom the labor was done or performed; and

2. Have either received a rejection in whole or in part from Contractor, or not received within 30 days of furnishing the above notice any communication from Contractor by which Contractor had indicated the claim will be paid directly or indirectly; and

3. Not having been paid within the above 30 days, have sent a written notice to Surety and sent a copy, or notice thereof, to Owner, stating that a claim is being made under this Bond and enclosing a copy of the previous written notice furnished to Contractor.

5. If a notice by a Claimant required by Paragraph 4 is provided by Owner to Contractor or to Surety, that is sufficient compliance.

6. When a Claimant has satisfied the conditions of Paragraph 4, the Surety shall promptly and at Surety's expense take the following actions:

6.1. Send an answer to that Claimant, with a copy to Owner, within 45 days after receipt of the claim, stating the amounts that are undisputed and the basis for challenging any amounts that are disputed.

6.2. Pay or arrange for payment of any undisputed amounts.

7. Surety's total obligation shall not exceed the amount of this Bond, and the amount of this Bond shall be credited for any payments made in good faith by Surety.

8. Amounts owed by Owner to Contractor under the Contract shall be used for the performance of the Contract and to satisfy claims, if any, under any performance bond. By Contractor furnishing and Owner accepting this Bond, they agree that all funds earned by Contractor in the performance of the Contract are dedicated to satisfy obligations of Contractor and Surety under this Bond, subject to Owner's priority to use the funds for the completion of the Work.

9. Surety shall not be liable to Owner, Claimants, or others for obligations of Contractor that are unrelated to the Contract. Owner shall not be liable for payment of any costs or expenses of any Claimant under this Bond, and shall have under this Bond no obligations to make payments to, give notices on behalf of, or otherwise have obligations to Claimants under this Bond.

10. Surety hereby waives notice of any change, including changes of time, to the Contract or to related Subcontracts, purchase orders and other obligations.

11. No suit or action shall be commenced by a Claimant under this Bond other than in a court of competent jurisdiction in the location in which the Work or part of the Work is located or after the expiration of one year from the date (1) on which the Claimant gave the notice required by Paragraph 4.1 or Paragraph 4.2.3, or (2) on which the last labor or service was performed by anyone or the last materials or equipment were furnished by anyone under the Construction Contract, whichever of (1) or (2) first occurs. If the provisions of this paragraph are void or prohibited by law, the minimum period of limitation available to sureties as a defense in the jurisdiction of the suit shall be applicable.

12. Notice to Surety, Owner, or Contractor shall be mailed or delivered to the addresses shown on the signature page. Actual receipt of notice by Surety, Owner, or Contractor, however accomplished, shall be sufficient compliance as of the date received at the address shown on the signature page.

13. When this Bond has been furnished to comply with a statutory requirement in the location where the Contract was to be performed, any provision in this Bond conflicting with said statutory requirement shall be deemed deleted herefrom and provisions conforming to such statutory requirement shall be deemed incorporated herein. The intent is that this Bond shall be construed as a statutory Bond and not as a common law bond.

14. Upon request of any person or entity appearing to be a potential beneficiary of this Bond, Contractor shall promptly furnish a copy of this Bond or shall permit a copy to be made.

15. DEFINITIONS

15.1. Claimant: An individual or entity having a direct contract with Contractor, or with a first-tier subcontractor of Contractor, to furnish labor, materials, or equipment for use in the performance of the Contract. The intent of this Bond shall be to include without limitation in the terms "labor, materials or equipment" that part of water, gas, power, light, heat, oil, gasoline, telephone service, or rental equipment used in the Contract, architectural and engineering services required for performance of the Work of Contractor and Contractor's Subcontractors, and all other items for which a mechanic's lien may be asserted in the jurisdiction where the labor, materials, or equipment were furnished.

15.2. Contract: The agreement between Owner and Contractor identified on the signature page, including all Contract Documents and changes thereto.

15.3. Owner Default: Failure of Owner, which has neither been remedied nor waived, to pay Contractor as required by the Contract or to perform and complete or comply with the other terms thereof.

**FOR INFORMATION ONLY – Name, Address and Telephone
Surety Agency or Broker:
Owner's Representative (engineer or other party):**

SECTION 00650

NOTICE TO PROCEED

Dated _____

Project: Path 22 West Bridge Project	Owner: Teton County, Wyoming	Owner's Contract No.:
--------------------------------------	------------------------------	-----------------------

Contract: Path 22 West Bridge Project	Engineer's Project No.: 10-124-02
---------------------------------------	-----------------------------------

Contractor: _____

Contractor's Address: _____

You are notified that the Contract Times under the above contract will commence to run on _____. On or before that date, you are to start performing your obligations under the Contract Documents. In accordance with Article 4 of the Agreement, the date of Substantial Completion is _____, and the date of readiness for final payment is _____.

Before you may start any Work at the Site, Paragraph 2.01.B of the General Conditions provides that you and Owner must each deliver to the other (with copies to Engineer and other identified additional insureds) certificates of insurance which each is required to purchase and maintain in accordance with the Contract Documents.

Also, before you may start any Work at the Site, you must:

(Contractor)
Received by:
Authorized Signature

(Title)

(Date)

Teton County, Wyoming

(Owner)
Given by:
Authorized Signature

(Title)

(Date)

Copy to Engineer

SECTION 00670

CHANGE ORDER

No. _____

Date of Issuance: _____ Effective Date: _____

Project: Path 22 West Bridge Project	Owner: Teton County, Wyoming	Owner's Contract No.:
Contract: Path 22 West Bridge Project		Date of Contract:
Contractor:		Engineer's Project No.: 10-124-02

The Contract Documents are modified as follows upon execution of this Change Order:

Description: _____

Attachments: (List documents supporting change): _____

CHANGE IN CONTRACT PRICE:	CHANGE IN CONTRACT TIMES:
----------------------------------	----------------------------------

Original Contract Price: \$ _____	Original Contract Times: <input type="checkbox"/> Working days <input type="checkbox"/> Calendar days Substantial completion (days or date): _____ Ready for final payment (days or date): _____
--------------------------------------	--

[Increase] [Decrease] from previously approved Change Orders No. _____ to No. _____: \$ _____	[Increase] [Decrease] from previously approved Change Orders No. _____ to No. _____: Substantial completion (days): _____ Ready for final payment (days): _____
--	---

Contract Price prior to this Change Order: \$ _____	Contract Times prior to this Change Order: Substantial completion (days or date): _____ Ready for final payment (days or date): _____
--	---

[Increase] [Decrease] of this Change Order: \$ _____	[Increase] [Decrease] of this Change Order: Substantial completion (days or date): _____ Ready for final payment (days or date): _____
---	--

Contract Price incorporating this Change Order: \$ _____	Contract Times with all approved Change Orders: Substantial completion (days or date): _____ Ready for final payment (days or date): _____
---	--

RECOMMENDED:	ACCEPTED:	ACCEPTED:
By: _____ Engineer (Authorized Signature)	By: _____ Owner (Authorized Signature)	By: _____ Contractor (Authorized Signature)

Date: _____ Date: _____ Date: _____

Approved by Funding Agency (if applicable): _____ Date: _____

A. GENERAL INFORMATION

This document was developed to provide a uniform format for handling contract changes that affect Contract Price or Contract Times. Changes that have been initiated by a Work Change Directive must be incorporated into a subsequent Change Order if they affect Price or Times.

Changes that affect Contract Price or Contract Times should be promptly covered by a Change Order. The practice of accumulating Change Orders to reduce the administrative burden may lead to unnecessary disputes.

If Milestones have been listed in the Agreement, any effect of a Change Order thereon should be addressed.

For supplemental instructions and minor changes not involving a change in the Contract Price or Contract Times, a Field Order should be used.

B. COMPLETING THE CHANGE ORDER FORM

Engineer normally initiates the form, including a description of the changes involved and attachments based upon documents and proposals submitted by Contractor, or requests from Owner, or both.

Once Engineer has completed and signed the form, all copies should be sent to Owner or Contractor for approval, depending on whether the Change Order is a true order to the Contractor or the formalization of a negotiated agreement for a previously performed change. After approval by one contracting party, all copies should be sent to the other party for approval. Engineer should make distribution of executed copies after approval by both parties.

If a change only applies to price or to times, cross out the part of the tabulation that does not apply.

SECTION 00675

WORK CHANGE DIRECTIVE

No. _____

Date of Issuance: _____ Effective Date: _____

Project: Path 22 West Bridge Project	Owner: Teton County, Wyoming	Owner's Contract No.:
Contract: Path 22 West Bridge Project		Date of Contract:
Contractor:		Engineer's Project No.: 10-124-02

You are directed to proceed promptly with the following change(s):

Item No.	Description

Attachments (list documents supporting change):

Purpose for Work Change Directive:

- Authorization for Work described herein to proceed on the basis of Cost of the Work due to:
 - Nonagreement on pricing of proposed change.
 - Necessity to expedite Work described herein prior to agreeing to changes on Contract Price and Contract Time.

Estimated change in Contract Price and Contract Times:

Contract Price \$ _____ (increase/decrease) Contract Time _____ days (increase/decrease)

If the change involves an increase, the estimated amounts are not to be exceeded without further authorization.

Recommended for Approval by Engineer:	Date
Authorized for Owner by:	Date
Accepted for Contractor by:	Date
Approved by Funding Agency (if applicable):	Date:

SECTION 00680

EVIDENCE OF PAYMENT AND WAIVER OF CLAIMS

THE STATE _____)
)
COUNTY OF _____)

KNOW ALL MEN BY THESE PRESENT

That whereas, _____
(***Subcontractor, ***Supplier), a _____, having its principal offices
At _____ (Address),
Have heretofore entered into a certain subcontract dated _____, 20____, relating to
the furnishing of materials, labor, and/or equipment for the construction of _____

(Description of Subcontractor’s Work or Supplier’s material and/or equipment) in connection
with a contract performed by _____ (Contractor)
for Teton County, Wyoming (Owner) for Owner’s Path 22 West Bridge Project (Project),
located in Teton County, Wyoming.

1. The undersigned does hereby release all persons, firms, associations, corporations, or other entities from labor and/or materials, subcontract work, equipment or other work, rents, services, or supplies heretofore furnished in and for the construction design, improvement, alteration, additions to, or repair of the above-described project.
2. This waiver is given for and inconsideration upon payment of the sum of \$ _____ and other good and valuable consideration paid by Contractor to ***Subcontractor ***Supplier. If no dollar consideration is herein recited, it is acknowledged that other adequate consideration has been received by the undersigned for this waiver.
3. In further consideration of the payment made or to be made as above set forth, and to induce the Contractor to make said payment, the undersigned agrees to defend and hold harmless the Owner, Contractor, successors and assigns, and/or lender, and/or the principal and surety from any claim or claims hereinafter made by the undersigned and/or its material/equipment suppliers, subcontractors, or employees, servants, agents, or assigns of such persons against the Project. The undersigned agrees to indemnify or reimburse all persons so relying upon this waiver for any and all sums, including attorney’s fees and costs, which may be incurred as the result of any such claims.
4. It is acknowledged that the designation of the above Project constitutes an adequate description of the property and improvements for which the undersigned has received consideration for this waiver.

5. It is further warranted and represented that all such claims against the undersigned or the undersigned's subcontractors and/or material/equipment suppliers have been paid or that arrangements, satisfactory to the Owner and Contractor, have been made for such payments.
6. It is acknowledged that this waiver is for the benefit of and may be relied upon by the Owner, the Contractor, any construction lender, and the principal and surety on any labor and material bond for the Project.
7. In addition to the foregoing, this instrument shall constitute a ~~***(full, final, and complete) ***~~(partial) waiver of all rights, claims, and demands of the undersigned against the Contractor arising out of or pertaining to the above-referenced Project. If partial, all rights and claims on the Project are waived up to and including the _____ day of _____, 20____.

In witness whereof, ~~***Subcontractor ***~~Supplier has duly caused and these present to be signed and attested by its duly authorized Owner, partner, or office (and, if a corporation, its corporate seal to be hereunto affixed).

Signed and sealed this _____ day of _____, 20____.

FIRM _____
(Name of person or firm giving waiver)

By _____

Title _____

The foregoing waiver was subscribed and sworn to before me this _____ day of _____, 20____, by _____
(as _____ of _____).

My commission expires: _____
Notary Public

~~***Strike when not applicable~~

GENERAL CONDITIONS

The General Conditions bound herewith are the only general conditions applicable to this project. The inclusion by reference of some portions of the Wyoming Department of Transportation Standard Specifications for Road and Bridge Construction (WYDOT SSRBC), 2003 Edition, into this Project Manual specifically DOES NOT APPLY to the General Conditions.

This document has important legal consequences; consultation with an attorney is encouraged with respect to its use or modification. This document should be adapted to the particular circumstances of the contemplated Project and the Controlling Law.

SECTION 00700

STANDARD
GENERAL CONDITIONS
OF THE
CONSTRUCTION CONTRACT

Prepared by

ENGINEERS JOINT CONTRACT DOCUMENTS COMMITTEE

and

Issued and Published Jointly By



PROFESSIONAL ENGINEERS IN PRIVATE PRACTICE
a practice division of the
NATIONAL SOCIETY OF PROFESSIONAL ENGINEERS

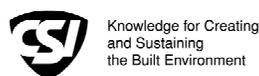
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This document has been approved and endorsed by



The Associated General Contractors of America



Construction Specifications Institute

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1420 King Street, Alexandria, VA 22314

American Council of Engineering Companies
1015 15th Street, N.W., Washington, DC 20005

American Society of Civil Engineers
1801 Alexander Bell Drive, Reston, VA 20191-4400

These General Conditions have been prepared for use with the Suggested Forms of Agreement Between Owner and Contractor Nos. C-520 or C-525 (2002 Editions). Their provisions are interrelated and a change in one may necessitate a change in the other. Comments concerning their usage are contained in the EJCDC Construction Documents, General and Instructions (No. C-001) (2002 Edition). For guidance in the preparation of Supplementary Conditions, see Guide to the Preparation of Supplementary Conditions (No. C-800) (2002 Edition).

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GENERAL CONDITIONS

ARTICLE 1 - DEFINITIONS AND TERMINOLOGY

1.01 *Defined Terms*

A. Wherever used in the Bidding Requirements or Contract Documents and printed with initial capital letters, the terms listed below will have the meanings indicated which are applicable to both the singular and plural thereof. In addition to terms specifically defined, terms with initial capital letters in the Contract Documents include references to identified articles and paragraphs, and the titles of other documents or forms.

1. *Addenda*--Written or graphic instruments issued prior to the opening of Bids which clarify, correct, or change the Bidding Requirements or the proposed Contract Documents.

2. *Agreement*--The written instrument which is evidence of the agreement between Owner and Contractor covering the Work.

3. *Application for Payment*--The form acceptable to Engineer which is to be used by Contractor during the course of the Work in requesting progress or final payments and which is to be accompanied by such supporting documentation as is required by the Contract Documents.

4. *Asbestos*--Any material that contains more than one percent asbestos and is friable or is releasing asbestos fibers into the air above current action levels established by the United States Occupational Safety and Health Administration.

5. *Bid*--The offer or proposal of a Bidder submitted on the prescribed form setting forth the prices for the Work to be performed.

6. *Bidder*--The individual or entity who submits a Bid directly to Owner.

7. *Bidding Documents*--The Bidding Requirements and the proposed Contract Documents (including all Addenda).

8. *Bidding Requirements*--The Advertisement or Invitation to Bid, Instructions to Bidders, bid security of acceptable form, if any, and the Bid Form with any supplements.

9. *Change Order*--A document recommended by Engineer which is signed by Contractor and Owner and authorizes an addition, deletion, or revision in the Work or an adjustment in the Contract Price or the Contract Times, issued on or after the Effective Date of the Agreement.

10. *Claim*--A demand or assertion by Owner or Contractor seeking an adjustment of Contract Price or Contract Times, or both, or other relief with respect to the terms of the Contract. A demand for money or services by a third party is not a Claim.

11. *Contract*--The entire and integrated written agreement between the Owner and Contractor concerning the Work. The Contract supersedes prior negotiations, representations, or agreements, whether written or oral.

12. *Contract Documents*-- Those items so designated in the Agreement. Only printed or hard copies of the items listed in the Agreement are Contract Documents. Approved Shop Drawings, other Contractor's submittals, and the reports and drawings of subsurface and physical conditions are not Contract Documents.

13. *Contract Price*--The moneys payable by Owner to Contractor for completion of the Work in accordance with the Contract Documents as stated in the Agreement (subject to the provisions of Paragraph 11.03 in the case of Unit Price Work).

14. *Contract Times*--The number of days or the dates stated in the Agreement to: (i) achieve Milestones, if any, (ii) achieve Substantial Completion; and (iii) complete the Work so that it is ready for final payment as evidenced by Engineer's written recommendation of final payment.

15. *Contractor*--The individual or entity with whom Owner has entered into the Agreement.

16. *Cost of the Work*--See Paragraph 11.01.A for definition.

17. *Drawings*--That part of the Contract Documents prepared or approved by Engineer which graphically shows the scope, extent, and character of the Work to be performed by Contractor. Shop Drawings and other Contractor submittals are not Drawings as so defined.

18. *Effective Date of the Agreement*--The date indicated in the Agreement on which it becomes effective, but if no such date is indicated, it means the date on which the Agreement is signed and delivered by the last of the two parties to sign and deliver.

19. *Engineer*--The individual or entity named as such in the Agreement.

20. *Field Order*--A written order issued by Engineer which requires minor changes in the Work but which does not involve a change in the Contract Price or the Contract Times.

21. *General Requirements*--Sections of Division 1 of the Specifications. The General Requirements pertain to all sections of the Specifications.

22. *Hazardous Environmental Condition*--The presence at the Site of Asbestos, PCBs, Petroleum, Hazardous Waste, or Radioactive Material in such quantities or circumstances that may present a substantial danger to persons or property exposed thereto in connection with the Work.

23. *Hazardous Waste*--The term Hazardous Waste shall have the meaning provided in Section 1004 of the Solid Waste Disposal Act (42 USC Section 6903) as amended from time to time.

24. *Laws and Regulations; Laws or Regulations*--Any and all applicable laws, rules, regulations, ordinances, codes, and orders of any and all governmental bodies, agencies, authorities, and courts having jurisdiction.

25. *Liens*--Charges, security interests, or encumbrances upon Project funds, real property, or personal property.

26. *Milestone*--A principal event specified in the Contract Documents relating to an intermediate completion date or time prior to Substantial Completion of all the Work.

27. *Notice of Award*--The written notice by Owner to the Successful Bidder stating that upon timely compliance by the Successful Bidder with the conditions precedent listed therein, Owner will sign and deliver the Agreement.

28. *Notice to Proceed*--A written notice given by Owner to Contractor fixing the date on which the Contract Times will commence to run and on which Contractor shall start to perform the Work under the Contract Documents.

29. *Owner*--The individual or entity with whom Contractor has entered into the Agreement and for whom the Work is to be performed.

30. *PCBs*--Polychlorinated biphenyls.

31. *Petroleum*--Petroleum, including crude oil or any fraction thereof which is liquid at standard conditions of temperature and pressure (60 degrees Fahrenheit and 14.7 pounds per square inch absolute), such as oil, petroleum, fuel oil, oil sludge, oil refuse, gasoline, kerosene, and oil mixed with other non-Hazardous Waste and crude oils.

32. *Progress Schedule*--A schedule, prepared and maintained by Contractor, describing the sequence and duration of the activities comprising the Contractor's plan to accomplish the Work within the Contract Times.

33. *Project*--The total construction of which the Work to be performed under the Contract Documents may be the whole, or a part.

34. *Project Manual*--The bound documentary information prepared for bidding and constructing the Work. A listing of the contents of the Project Manual, which may be bound in one or more volumes, is contained in the table(s) of contents.

35. *Radioactive Material*--Source, special nuclear, or byproduct material as defined by the Atomic Energy Act of 1954 (42 USC Section 2011 et seq.) as amended from time to time.

36. *Related Entity* -- An officer, director, partner, employee, agent, consultant, or subcontractor.

37. *Resident Project Representative*--The authorized representative of Engineer who may be assigned to the Site or any part thereof.

38. *Samples*--Physical examples of materials, equipment, or workmanship that are representative of some portion of the Work and which establish the standards by which such portion of the Work will be judged.

39. *Schedule of Submittals*--A schedule, prepared and maintained by Contractor, of required submittals and the time requirements to support scheduled performance of related construction activities.

40. *Schedule of Values*--A schedule, prepared and maintained by Contractor, allocating portions of the Contract Price to various portions of the Work and used as the basis for reviewing Contractor's Applications for Payment.

41. *Shop Drawings*--All drawings, diagrams, illustrations, schedules, and other data or information which are specifically prepared or assembled by or for Contractor and submitted by Contractor to illustrate some portion of the Work.

42. *Site*--Lands or areas indicated in the Contract Documents as being furnished by Owner upon which the Work is to be performed, including rights-of-way and easements for access thereto, and such other lands furnished by Owner which are designated for the use of Contractor.

43. *Specifications*--That part of the Contract Documents consisting of written requirements for materials, equipment, systems, standards and workmanship as applied to the Work, and certain

administrative requirements and procedural matters applicable thereto.

44. *Subcontractor*--An individual or entity having a direct contract with Contractor or with any other Subcontractor for the performance of a part of the Work at the Site.

45. *Substantial Completion*--The time at which the Work (or a specified part thereof) has progressed to the point where, in the opinion of Engineer, the Work (or a specified part thereof) is sufficiently complete, in accordance with the Contract Documents, so that the Work (or a specified part thereof) can be utilized for the purposes for which it is intended. The terms "substantially complete" and "substantially completed" as applied to all or part of the Work refer to Substantial Completion thereof.

46. *Successful Bidder*--The Bidder submitting a responsive Bid to whom Owner makes an award.

47. *Supplementary Conditions*--That part of the Contract Documents which amends or supplements these General Conditions.

48. *Supplier*--A manufacturer, fabricator, supplier, distributor, materialman, or vendor having a direct contract with Contractor or with any Subcontractor to furnish materials or equipment to be incorporated in the Work by Contractor or any Subcontractor.

49. *Underground Facilities*--All underground pipelines, conduits, ducts, cables, wires, manholes, vaults, tanks, tunnels, or other such facilities or attachments, and any encasements containing such facilities, including those that convey electricity, gases, steam, liquid petroleum products, telephone or other communications, cable television, water, wastewater, storm water, other liquids or chemicals, or traffic or other control systems.

50. *Unit Price Work*--Work to be paid for on the basis of unit prices.

51. *Work*--The entire construction or the various separately identifiable parts thereof required to be provided under the Contract Documents. Work includes and is the result of performing or providing all labor, services, and documentation necessary to produce such construction, and furnishing, installing, and incorporating all materials and equipment into such construction, all as required by the Contract Documents.

52. *Work Change Directive*--A written statement to Contractor issued on or after the Effective Date of the Agreement and signed by Owner and recommended by Engineer ordering an addition, deletion, or revision in the Work, or responding to differing or unforeseen subsurface or physical conditions under which the Work is to be performed or to emergencies. A Work Change Directive will not change the Contract Price or the Contract Times

but is evidence that the parties expect that the change ordered or documented by a Work Change Directive will be incorporated in a subsequently issued Change Order following negotiations by the parties as to its effect, if any, on the Contract Price or Contract Times.

1.02 Terminology

A. The following words or terms are not defined but, when used in the Bidding Requirements or Contract Documents, have the following meaning.

B. Intent of Certain Terms or Adjectives

1. The Contract Documents include the terms "as allowed," "as approved," "as ordered," "as directed" or terms of like effect or import to authorize an exercise of professional judgment by Engineer. In addition, the adjectives "reasonable," "suitable," "acceptable," "proper," "satisfactory," or adjectives of like effect or import are used to describe an action or determination of Engineer as to the Work. It is intended that such exercise of professional judgment, action or determination will be solely to evaluate, in general, the Work for compliance with the requirements of and information in the Contract Documents and conformance with the design concept of the completed Project as a functioning whole as shown or indicated in the Contract Documents (unless there is a specific statement indicating otherwise). The use of any such term or adjective is not intended to and shall not be effective to assign to Engineer any duty or authority to supervise or direct the performance of the Work or any duty or authority to undertake responsibility contrary to the provisions of Paragraph 9.09 or any other provision of the Contract Documents.

C. Day

1. The word "day" means a calendar day of 24 hours measured from midnight to the next midnight.

D. Defective

1. The word "defective," when modifying the word "Work," refers to Work that is unsatisfactory, faulty, or deficient in that it:

- a. does not conform to the Contract Documents, or
- b. does not meet the requirements of any applicable inspection, reference standard, test, or approval referred to in the Contract Documents, or
- c. has been damaged prior to Engineer's - recommendation of final payment (unless responsibility for the protection thereof has been assumed by Owner at Substantial Completion in accordance with Paragraph 14.04 or 14.05).

E. Furnish, Install, Perform, Provide

1. The word “furnish,” when used in connection with services, materials, or equipment, shall mean to supply and deliver said services, materials, or equipment to the Site (or some other specified location) ready for use or installation and in usable or operable condition.

2. The word “install,” when used in connection with services, materials, or equipment, shall mean to put into use or place in final position said services, materials, or equipment complete and ready for intended use.

3. The words “perform” or “provide,” when used in connection with services, materials, or equipment, shall mean to furnish and install said services, materials, or equipment complete and ready for intended use.

4. When “furnish,” “install,” “perform,” or “provide” is not used in connection with services, materials, or equipment in a context clearly requiring an obligation of Contractor, “provide” is implied.

F. Unless stated otherwise in the Contract Documents, words or phrases which have a well-known technical or construction industry or trade meaning are used in the Contract Documents in accordance with such recognized meaning.

ARTICLE 2 - PRELIMINARY MATTERS

2.01 Delivery of Bonds and Evidence of Insurance

A. When Contractor delivers the executed counterparts of the Agreement to Owner, Contractor shall also deliver to Owner such bonds as Contractor may be required to furnish.

B. *Evidence of Insurance:* Before any Work at the Site is started, Contractor and Owner shall each deliver to the other, with copies to each additional insured identified in the Supplementary Conditions, certificates of insurance (and other evidence of insurance which either of them or any additional insured may reasonably request) which Contractor and Owner respectively are required to purchase and maintain in accordance with Article 5.

2.02 Copies of Documents

A. Owner shall furnish to Contractor up to ten printed or hard copies of the Drawings and Project Manual. Additional copies will be furnished upon request at the cost of reproduction.

2.03 Commencement of Contract Times; Notice to Proceed

A. The Contract Times will commence to run on the thirtieth day after the Effective Date of the Agreement

or, if a Notice to Proceed is given, on the day indicated in the Notice to Proceed. A Notice to Proceed may be given at any time within 30 days after the Effective Date of the Agreement. In no event will the Contract Times commence to run later than the sixtieth day after the day of Bid opening or the thirtieth day after the Effective Date of the Agreement, whichever date is earlier.

2.04 Starting the Work

A. Contractor shall start to perform the Work on the date when the Contract Times commence to run. No Work shall be done at the Site prior to the date on which the Contract Times commence to run.

2.05 Before Starting Construction

A. *Preliminary Schedules:* Within 10 days after the Effective Date of the Agreement (unless otherwise specified in the General Requirements), Contractor shall submit to Engineer for timely review:

1. a preliminary Progress Schedule; indicating the times (numbers of days or dates) for starting and completing the various stages of the Work, including any Milestones specified in the Contract Documents;

2. a preliminary Schedule of Submittals; and

3. a preliminary Schedule of Values for all of the Work which includes quantities and prices of items which when added together equal the Contract Price and subdivides the Work into component parts in sufficient detail to serve as the basis for progress payments during performance of the Work. Such prices will include an appropriate amount of overhead and profit applicable to each item of Work.

2.06 Preconstruction Conference

A. Before any Work at the Site is started, a conference attended by Owner, Contractor, Engineer, and others as appropriate will be held to establish a working understanding among the parties as to the Work and to discuss the schedules referred to in Paragraph 2.05.A, procedures for handling Shop Drawings and other submittals, processing Applications for Payment, and maintaining required records.

2.07 Initial Acceptance of Schedules

A. At least 10 days before submission of the first Application for Payment a conference attended by Contractor, Engineer, and others as appropriate will be held to review for acceptability to Engineer as provided below the schedules submitted in accordance with Paragraph 2.05.A. Contractor shall have an additional 10 days to make corrections and adjustments and to complete and resubmit the schedules. No progress payment shall be made to Contractor until acceptable schedules are submitted to Engineer.

1. The Progress Schedule will be acceptable to Engineer if it provides an orderly progression of the Work to completion within the Contract Times. Such acceptance will not impose on Engineer responsibility for the Progress Schedule, for sequencing, scheduling, or progress of the Work nor interfere with or relieve Contractor from Contractor's full responsibility therefor.

2. Contractor's Schedule of Submittals will be acceptable to Engineer if it provides a workable arrangement for reviewing and processing the required submittals.

3. Contractor's Schedule of Values will be acceptable to Engineer as to form and substance if it provides a reasonable allocation of the Contract Price to component parts of the Work.

ARTICLE 3 - CONTRACT DOCUMENTS: INTENT, AMENDING, REUSE

3.01 *Intent*

A. The Contract Documents are complementary; what is required by one is as binding as if required by all.

B. It is the intent of the Contract Documents to describe a functionally complete Project (or part thereof) to be constructed in accordance with the Contract Documents. Any labor, documentation, services, materials, or equipment that may reasonably be inferred from the Contract Documents or from prevailing custom or trade usage as being required to produce the intended result will be provided whether or not specifically called for at no additional cost to Owner.

C. Clarifications and interpretations of the Contract Documents shall be issued by Engineer as provided in Article 9.

3.02 *Reference Standards*

A. Standards, Specifications, Codes, Laws, and Regulations

1. Reference to standards, specifications, manuals, or codes of any technical society, organization, or association, or to Laws or Regulations, whether such reference be specific or by implication, shall mean the standard, specification, manual, code, or Laws or Regulations in effect at the time of opening of Bids (or on the Effective Date of the Agreement if there were no Bids), except as may be otherwise specifically stated in the Contract Documents.

2. No provision of any such standard, specification, manual or code, or any instruction of a

Supplier shall be effective to change the duties or responsibilities of Owner, Contractor, or Engineer, or any of their subcontractors, consultants, agents, or employees from those set forth in the Contract Documents. No such provision or instruction shall be effective to assign to Owner, or Engineer, or any of, their Related Entities, any duty or authority to supervise or direct the performance of the Work or any duty or authority to undertake responsibility inconsistent with the provisions of the Contract Documents.

3.03 *Reporting and Resolving Discrepancies*

A. Reporting Discrepancies

1. *Contractor's Review of Contract Documents Before Starting Work:* Before undertaking each part of the Work, Contractor shall carefully study and compare the Contract Documents and check and verify pertinent figures therein and all applicable field measurements. Contractor shall promptly report in writing to Engineer any conflict, error, ambiguity, or discrepancy which Contractor may discover and shall obtain a written interpretation or clarification from Engineer before proceeding with any Work affected thereby.

2. *Contractor's Review of Contract Documents During Performance of Work:* If, during the performance of the Work, Contractor discovers any conflict, error, ambiguity, or discrepancy within the Contract Documents or between the Contract Documents and any provision of any Law or Regulation applicable to the performance of the Work or of any standard, specification, manual or code, or of any instruction of any Supplier, Contractor shall promptly report it to Engineer in writing. Contractor shall not proceed with the Work affected thereby (except in an emergency as required by Paragraph 6.16.A) until an amendment or supplement to the Contract Documents has been issued by one of the methods indicated in Paragraph 3.04.

3. Contractor shall not be liable to Owner or Engineer for failure to report any conflict, error, ambiguity, or discrepancy in the Contract Documents unless Contractor knew or reasonably should have known thereof.

B. Resolving Discrepancies

1. Except as may be otherwise specifically stated in the Contract Documents, the provisions of the Contract Documents shall take precedence in resolving any conflict, error, ambiguity, or discrepancy between the provisions of the Contract Documents and:

a. the provisions of any standard, specification, manual, code, or instruction (whether or not specifically incorporated by reference in the Contract Documents); or

b. the provisions of any Laws or Regulations applicable to the performance of the Work (unless such an interpretation of the provisions of the Contract Documents would result in violation of such Law or Regulation).

3.04 *Amending and Supplementing Contract Documents*

A. The Contract Documents may be amended to provide for additions, deletions, and revisions in the Work or to modify the terms and conditions thereof by either a Change Order or a Work Change Directive.

B. The requirements of the Contract Documents may be supplemented, and minor variations and deviations in the Work may be authorized, by one or more of the following ways:

1. A Field Order;

2. Engineer's approval of a Shop Drawing or Sample; (Subject to the provisions of Paragraph 6.17.D.3); or

3. Engineer's written interpretation or clarification.

3.05 *Reuse of Documents*

A. Contractor and any Subcontractor or Supplier or other individual or entity performing or furnishing all of the Work under a direct or indirect contract with Contractor, shall not:

1. have or acquire any title to or ownership rights in any of the Drawings, Specifications, or other documents (or copies of any thereof) prepared by or bearing the seal of Engineer or Engineer's consultants, including electronic media editions; or

2. reuse any of such Drawings, Specifications, other documents, or copies thereof on extensions of the Project or any other project without written consent of Owner and Engineer and specific written verification or adaptation by Engineer.

B. The prohibition of this Paragraph 3.05 will survive final payment, or termination of the Contract. Nothing herein shall preclude Contractor from retaining copies of the Contract Documents for record purposes.

3.06 *Electronic Data*

A. Copies of data furnished by Owner or Engineer to Contractor or Contractor to Owner or Engineer that may be relied upon are limited to the printed copies (also known as hard copies). Files in electronic media format of text, data, graphics, or other types are furnished only for the convenience of the receiving party. Any conclusion or information obtained

or derived from such electronic files will be at the user's sole risk. If there is a discrepancy between the electronic files and the hard copies, the hard copies govern.

B. Because data stored in electronic media format can deteriorate or be modified inadvertently or otherwise without authorization of the data's creator, the party receiving electronic files agrees that it will perform acceptance tests or procedures within 60 days, after which the receiving party shall be deemed to have accepted the data thus transferred. Any errors detected within the 60-day acceptance period will be corrected by the transferring party..

C. When transferring documents in electronic media format, the transferring party makes no representations as to long term compatibility, usability, or readability of documents resulting from the use of software application packages, operating systems, or computer hardware differing from those used by the data's creator.

ARTICLE 4 - AVAILABILITY OF LANDS; SUBSURFACE AND PHYSICAL CONDITIONS; HAZARDOUS ENVIRONMENTAL CONDITIONS; REFERENCE POINTS

4.01 *Availability of Lands*

A. Owner shall furnish the Site. Owner shall notify Contractor of any encumbrances or restrictions not of general application but specifically related to use of the Site with which Contractor must comply in performing the Work. Owner will obtain in a timely manner and pay for easements for permanent structures or permanent changes in existing facilities. If Contractor and Owner are unable to agree on entitlement to or on the amount or extent, if any, of any adjustment in the Contract Price or Contract Times, or both, as a result of any delay in Owner's furnishing the Site or a part thereof, Contractor may make a Claim therefor as provided in Paragraph 10.05.

B. Upon reasonable written request, Owner shall furnish Contractor with a current statement of record legal title and legal description of the lands upon which the Work is to be performed and Owner's interest therein as necessary for giving notice of or filing a mechanic's or construction lien against such lands in accordance with applicable Laws and Regulations.

C. Contractor shall provide for all additional lands and access thereto that may be required for temporary construction facilities or storage of materials and equipment.

4.02 *Subsurface and Physical Conditions*

A. *Reports and Drawings*: The Supplementary Conditions identify:

1. those reports of explorations and tests of subsurface conditions at or contiguous to the Site that Engineer has used in preparing the Contract Documents; and

2. those drawings of physical conditions in or relating to existing surface or subsurface structures at or contiguous to the Site (except Underground Facilities) that Engineer has used in preparing the Contract Documents.

B. *Limited Reliance by Contractor on Technical Data Authorized*: Contractor may rely upon the general accuracy of the "technical data" contained in such reports and drawings, but such reports and drawings are not Contract Documents. Such "technical data" is identified in the Supplementary Conditions. Except for such reliance on such "technical data," Contractor may not rely upon or make any claim against Owner or Engineer, or any of their Related Entities with respect to:

1. the completeness of such reports and drawings for Contractor's purposes, including, but not limited to, any aspects of the means, methods, techniques, sequences, and procedures of construction to be employed by Contractor, and safety precautions and programs incident thereto; or

2. other data, interpretations, opinions, and information contained in such reports or shown or indicated in such drawings; or

3. any Contractor interpretation of or conclusion drawn from any "technical data" or any such other data, interpretations, opinions, or information.

4.03 *Differing Subsurface or Physical Conditions*

A. *Notice*: If Contractor believes that any subsurface or physical condition at or contiguous to the Site that is uncovered or revealed either:

1. is of such a nature as to establish that any "technical data" on which Contractor is entitled to rely as provided in Paragraph 4.02 is materially inaccurate; or

2. is of such a nature as to require a change in the Contract Documents; or

3. differs materially from that shown or indicated in the Contract Documents; or

4. is of an unusual nature, and differs materially from conditions ordinarily encountered and generally recognized as inherent in work of the character provided for in the Contract Documents;

then Contractor shall, promptly after becoming aware thereof and before further disturbing the subsurface or physical conditions or performing any Work in connection therewith (except in an emergency as required by Paragraph 6.16.A), notify Owner and Engineer in writing about such condition. Contractor shall not further disturb such condition or perform any Work in connection therewith (except as aforesaid) until receipt of written order to do so.

B. *Engineer's Review*: After receipt of written notice as required by Paragraph 4.03.A, Engineer will promptly review the pertinent condition, determine the necessity of Owner's obtaining additional exploration or tests with respect thereto, and advise Owner in writing (with a copy to Contractor) of Engineer's findings and conclusions.

C. Possible Price and Times Adjustments

1. The Contract Price or the Contract Times, or both, will be equitably adjusted to the extent that the existence of such differing subsurface or physical condition causes an increase or decrease in Contractor's cost of, or time required for, performance of the Work; subject, however, to the following:

a. such condition must meet any one or more of the categories described in Paragraph 4.03.A; and

b. with respect to Work that is paid for on a Unit Price Basis, any adjustment in Contract Price will be subject to the provisions of Paragraphs 9.07 and 11.03.

2. Contractor shall not be entitled to any adjustment in the Contract Price or Contract Times if:

a. Contractor knew of the existence of such conditions at the time Contractor made a final commitment to Owner with respect to Contract Price and Contract Times by the submission of a Bid or becoming bound under a negotiated contract; or

b. the existence of such condition could reasonably have been discovered or revealed as a result of any examination, investigation, exploration, test, or study of the Site and contiguous areas required by the Bidding Requirements or Contract Documents to be conducted by or for Contractor prior to Contractor's making such final commitment; or

c. Contractor failed to give the written notice as required by Paragraph 4.03.A.

3. If Owner and Contractor are unable to agree on entitlement to or on the amount or extent, if any, of any adjustment in the Contract Price or Contract Times, or both, a Claim may be made therefor as provided in Paragraph 10.05. However, Owner and Engineer, and any of their Related Entities shall not be liable to Contractor for any claims, costs, losses, or damages (including but not limited to all fees and charges of engineers, architects, attorneys, and other professionals and all court or arbitration or other dispute resolution costs) sustained by Contractor on or in connection with any other project or anticipated project.

4.04 *Underground Facilities*

A. *Shown or Indicated:* The information and data shown or indicated in the Contract Documents with respect to existing Underground Facilities at or contiguous to the Site is based on information and data furnished to Owner or Engineer by the owners of such Underground Facilities, including Owner, or by others. Unless it is otherwise expressly provided in the Supplementary Conditions:

1. Owner and Engineer shall not be responsible for the accuracy or completeness of any such information or data; and

2. the cost of all of the following will be included in the Contract Price, and Contractor shall have full responsibility for:

- a. reviewing and checking all such information and data,
- b. locating all Underground Facilities shown or indicated in the Contract Documents,
- c. coordination of the Work with the owners of such Underground Facilities, including Owner, during construction, and
- d. the safety and protection of all such Underground Facilities and repairing any damage thereto resulting from the Work.

B. *Not Shown or Indicated*

1. If an Underground Facility is uncovered or revealed at or contiguous to the Site which was not shown or indicated, or not shown or indicated with reasonable accuracy in the Contract Documents, Contractor shall, promptly after becoming aware thereof and before further disturbing conditions affected thereby or performing any Work in connection therewith (except in an emergency as required by Paragraph 6.16.A), identify the owner of such Underground Facility and give written notice to that owner and to Owner and Engineer. Engineer will

promptly review the Underground Facility and determine the extent, if any, to which a change is required in the Contract Documents to reflect and document the consequences of the existence or location of the Underground Facility. During such time, Contractor shall be responsible for the safety and protection of such Underground Facility.

2. If Engineer concludes that a change in the Contract Documents is required, a Work Change Directive or a Change Order will be issued to reflect and document such consequences. An equitable adjustment shall be made in the Contract Price or Contract Times, or both, to the extent that they are attributable to the existence or location of any Underground Facility that was not shown or indicated or not shown or indicated with reasonable accuracy in the Contract Documents and that Contractor did not know of and could not reasonably have been expected to be aware of or to have anticipated. If Owner and Contractor are unable to agree on entitlement to or on the amount or extent, if any, of any such adjustment in Contract Price or Contract Times, Owner or Contractor may make a Claim therefor as provided in Paragraph 10.05.

4.05 *Reference Points*

A. Owner shall provide engineering surveys to establish reference points for construction which in Engineer's judgment are necessary to enable Contractor to proceed with the Work. Contractor shall be responsible for laying out the Work, shall protect and preserve the established reference points and property monuments, and shall make no changes or relocations without the prior written approval of Owner. Contractor shall report to Engineer whenever any reference point or property monument is lost or destroyed or requires relocation because of necessary changes in grades or locations, and shall be responsible for the accurate replacement or relocation of such reference points or property monuments by professionally qualified personnel.

4.06 *Hazardous Environmental Condition at Site*

A. *Reports and Drawings:* Reference is made to the Supplementary Conditions for the identification of those reports and drawings relating to a Hazardous Environmental Condition identified at the Site, if any, that have been utilized by the Engineer in the preparation of the Contract Documents.

B. *Limited Reliance by Contractor on Technical Data Authorized:* Contractor may rely upon the general accuracy of the "technical data" contained in such reports and drawings, but such reports and drawings are not Contract Documents. Such "technical data" is identified in the Supplementary Conditions. Except for such reliance on such "technical data," Contractor may not rely upon or make any claim against Owner or Engineer, or any of their Related Entities with respect to:

1. the completeness of such reports and drawings for Contractor's purposes, including, but not limited to, any aspects of the means, methods, techniques, sequences and procedures of construction to be employed by Contractor and safety precautions and programs incident thereto; or

2. other data, interpretations, opinions and information contained in such reports or shown or indicated in such drawings; or

3. any Contractor interpretation of or conclusion drawn from any "technical data" or any such other data, interpretations, opinions or information.

C. Contractor shall not be responsible for any Hazardous Environmental Condition uncovered or revealed at the Site which was not shown or indicated in Drawings or Specifications or identified in the Contract Documents to be within the scope of the Work. Contractor shall be responsible for a Hazardous Environmental Condition created with any materials brought to the Site by Contractor, Subcontractors, Suppliers, or anyone else for whom Contractor is responsible.

D. If Contractor encounters a Hazardous Environmental Condition or if Contractor or anyone for whom Contractor is responsible creates a Hazardous Environmental Condition, Contractor shall immediately: (i) secure or otherwise isolate such condition; (ii) stop all Work in connection with such condition and in any area affected thereby (except in an emergency as required by Paragraph 6.16.A); and (iii) notify Owner and Engineer (and promptly thereafter confirm such notice in writing). Owner shall promptly consult with Engineer concerning the necessity for Owner to retain a qualified expert to evaluate such condition or take corrective action, if any.

E. Contractor shall not be required to resume Work in connection with such condition or in any affected area until after Owner has obtained any required permits related thereto and delivered to Contractor written notice: (i) specifying that such condition and any affected area is or has been rendered safe for the resumption of Work; or (ii) specifying any special conditions under which such Work may be resumed safely. If Owner and Contractor cannot agree as to entitlement to or on the amount or extent, if any, of any adjustment in Contract Price or Contract Times, or both, as a result of such Work stoppage or such special conditions under which Work is agreed to be resumed by Contractor, either party may make a Claim therefor as provided in Paragraph 10.05.

F. If after receipt of such written notice Contractor does not agree to resume such Work based on a reasonable belief it is unsafe, or does not agree to resume such Work under such special conditions, then Owner may order the portion of the Work that is in the area affected by such condition to be deleted from the Work. If Owner and Contractor cannot agree as to

entitlement to or on the amount or extent, if any, of an adjustment in Contract Price or Contract Times as a result of deleting such portion of the Work, then either party may make a Claim therefor as provided in Paragraph 10.05. Owner may have such deleted portion of the Work performed by Owner's own forces or others in accordance with Article 7.

G. To the fullest extent permitted by Laws and Regulations, Owner shall indemnify and hold harmless Contractor, Subcontractors, and Engineer, and the officers, directors, partners, employees, agents, consultants, and subcontractors of each and any of them from and against all claims, costs, losses, and damages (including but not limited to all fees and charges of engineers, architects, attorneys, and other professionals and all court or arbitration or other dispute resolution costs) arising out of or relating to a Hazardous Environmental Condition, provided that such Hazardous Environmental Condition: (i) was not shown or indicated in the Drawings or Specifications or identified in the Contract Documents to be included within the scope of the Work, and (ii) was not created by Contractor or by anyone for whom Contractor is responsible. Nothing in this Paragraph 4.06. G shall obligate Owner to indemnify any individual or entity from and against the consequences of that individual's or entity's own negligence.

H. To the fullest extent permitted by Laws and Regulations, Contractor shall indemnify and hold harmless Owner and Engineer, and the officers, directors, partners, employees, agents, consultants, and subcontractors of each and any of them from and against all claims, costs, losses, and damages (including but not limited to all fees and charges of engineers, architects, attorneys, and other professionals and all court or arbitration or other dispute resolution costs) arising out of or relating to a Hazardous Environmental Condition created by Contractor or by anyone for whom Contractor is responsible. Nothing in this Paragraph 4.06.H shall obligate Contractor to indemnify any individual or entity from and against the consequences of that individual's or entity's own negligence.

I. The provisions of Paragraphs 4.02, 4.03, and 4.04 do not apply to a Hazardous Environmental Condition uncovered or revealed at the Site.

ARTICLE 5 - BONDS AND INSURANCE

5.01 *Performance, Payment, and Other Bonds*

A. Contractor shall furnish performance and payment bonds, each in an amount at least equal to the Contract Price as security for the faithful performance and payment of all of Contractor's obligations under the Contract Documents. These bonds shall remain in effect until one year after the date when final payment becomes due or until completion of the correction period specified

in Paragraph 13.07, whichever is later, except as provided otherwise by Laws or Regulations or by the Contract Documents. Contractor shall also furnish such other bonds as are required by the Contract Documents.

B. All bonds shall be in the form prescribed by the Contract Documents except as provided otherwise by Laws or Regulations, and shall be executed by such sureties as are named in the current list of "Companies Holding Certificates of Authority as Acceptable Sureties on Federal Bonds and as Acceptable Reinsuring Companies" as published in Circular 570 (amended) by the Financial Management Service, Surety Bond Branch, U.S. Department of the Treasury. All bonds signed by an agent must be accompanied by a certified copy of the agent's authority to act.

C. If the surety on any bond furnished by Contractor is declared bankrupt or becomes insolvent or its right to do business is terminated in any state where any part of the Project is located or it ceases to meet the requirements of Paragraph 5.01.B, Contractor shall promptly notify Owner and Engineer and shall, within 20 days after the event giving rise to such notification, provide another bond and surety, both of which shall comply with the requirements of Paragraphs 5.01.B and 5.02.

5.02 *Licensed Sureties and Insurers*

A. All bonds and insurance required by the Contract Documents to be purchased and maintained by Owner or Contractor shall be obtained from surety or insurance companies that are duly licensed or authorized in the jurisdiction in which the Project is located to issue bonds or insurance policies for the limits and coverages so required. Such surety and insurance companies shall also meet such additional requirements and qualifications as may be provided in the Supplementary Conditions.

5.03 *Certificates of Insurance*

A. Contractor shall deliver to Owner, with copies to each additional insured identified in the Supplementary Conditions, certificates of insurance (and other evidence of insurance requested by Owner or any other additional insured) which Contractor is required to purchase and maintain.

B. Owner shall deliver to Contractor, with copies to each additional insured identified in the Supplementary Conditions, certificates of insurance (and other evidence of insurance requested by Contractor or any other additional insured) which Owner is required to purchase and maintain.

5.04 *Contractor's Liability Insurance*

A. Contractor shall purchase and maintain such liability and other insurance as is appropriate for the Work being performed and as will provide protection

from claims set forth below which may arise out of or result from Contractor's performance of the Work and Contractor's other obligations under the Contract Documents, whether it is to be performed by Contractor, any Subcontractor or Supplier, or by anyone directly or indirectly employed by any of them to perform any of the Work, or by anyone for whose acts any of them may be liable:

1. claims under workers' compensation, disability benefits, and other similar employee benefit acts;

2. claims for damages because of bodily injury, occupational sickness or disease, or death of Contractor's employees;

3. claims for damages because of bodily injury, sickness or disease, or death of any person other than Contractor's employees;

4. claims for damages insured by reasonably available personal injury liability coverage which are sustained:

a. by any person as a result of an offense directly or indirectly related to the employment of such person by Contractor, or

b. by any other person for any other reason;

5. claims for damages, other than to the Work itself, because of injury to or destruction of tangible property wherever located, including loss of use resulting therefrom; and

6. claims for damages because of bodily injury or death of any person or property damage arising out of the ownership, maintenance or use of any motor vehicle.

B. The policies of insurance required by this Paragraph 5.04 shall:

1. with respect to insurance required by Paragraphs 5.04.A.3 through 5.04.A.6 inclusive, include as additional insured (subject to any customary exclusion regarding professional liability) Owner and Engineer, and any other individuals or entities identified in the Supplementary Conditions, all of whom shall be listed as additional insureds, and include coverage for the respective officers, directors, partners, employees, agents, consultants and subcontractors of each and any of all such additional insureds, and the insurance afforded to these additional insureds shall provide primary coverage for all claims covered thereby;

2. include at least the specific coverages and be written for not less than the limits of liability provided in the Supplementary Conditions or required by Laws or Regulations, whichever is greater;

3. include completed operations insurance;

4. include contractual liability insurance covering Contractor's indemnity obligations under Paragraphs 6.11 and 6.20;

5. contain a provision or endorsement that the coverage afforded will not be canceled, materially changed or renewal refused until at least 30 days prior written notice has been given to Owner and Contractor and to each other additional insured identified in the Supplementary Conditions to whom a certificate of insurance has been issued (and the certificates of insurance furnished by the Contractor pursuant to Paragraph 5.03 will so provide);

6. remain in effect at least until final payment and at all times thereafter when Contractor may be correcting, removing, or replacing defective Work in accordance with Paragraph 13.07; and

7. with respect to completed operations insurance, and any insurance coverage written on a claims-made basis, remain in effect for at least two years after final payment.

a. Contractor shall furnish Owner and each other additional insured identified in the Supplementary Conditions, to whom a certificate of insurance has been issued, evidence satisfactory to Owner and any such additional insured of continuation of such insurance at final payment and one year thereafter.

5.05 *Owner's Liability Insurance*

A. In addition to the insurance required to be provided by Contractor under Paragraph 5.04, Owner, at Owner's option, may purchase and maintain at Owner's expense Owner's own liability insurance as will protect Owner against claims which may arise from operations under the Contract Documents.

5.06 *Property Insurance*

A. Unless otherwise provided in the Supplementary Conditions, Owner shall purchase and maintain property insurance upon the Work at the Site in the amount of the full replacement cost thereof (subject to such deductible amounts as may be provided in the Supplementary Conditions or required by Laws and Regulations). This insurance shall:

1. include the interests of Owner, Contractor, Subcontractors, and Engineer, and any other individuals or entities identified in the Supplementary Conditions, and the officers, directors, partners, employees, agents, consultants and subcontractors of each and any of them, each of whom is deemed to have an insurable interest and shall be listed as an insured or additional insured;

2. be written on a Builder's Risk "all-risk" or open peril or special causes of loss policy form that shall at least include insurance for physical loss or damage to the Work, temporary buildings, false work, and materials and equipment in transit, and shall insure against at least the following perils or causes of loss: fire, lightning, extended coverage, theft, vandalism and malicious mischief, earthquake, collapse, debris removal, demolition occasioned by enforcement of Laws and Regulations, water damage, (other than caused by flood) and such other perils or causes of loss as may be specifically required by the Supplementary Conditions;

3. include expenses incurred in the repair or replacement of any insured property (including but not limited to fees and charges of engineers and architects);

4. cover materials and equipment stored at the Site or at another location that was agreed to in writing by Owner prior to being incorporated in the Work, provided that such materials and equipment have been included in an Application for Payment recommended by Engineer;

5. allow for partial utilization of the Work by Owner;

6. include testing and startup; and

7. be maintained in effect until final payment is made unless otherwise agreed to in writing by Owner, Contractor, and Engineer with 30 days written notice to each other additional insured to whom a certificate of insurance has been issued.

B. Owner shall purchase and maintain such boiler and machinery insurance or additional property insurance as may be required by the Supplementary Conditions or Laws and Regulations which will include the interests of Owner, Contractor, Subcontractors, and Engineer, and any other individuals or entities identified in the Supplementary Conditions, and the officers, directors, partners, employees, agents, consultants and subcontractors of each and any of them, each of whom is deemed to have an insurable interest and shall be listed as an insured or additional insured.

C. All the policies of insurance (and the certificates or other evidence thereof) required to be purchased and maintained in accordance with Paragraph 5.06 will contain a provision or endorsement that the coverage afforded will not be canceled or materially changed or renewal refused until at least 30 days prior written notice has been given to Owner and Contractor and to each other additional insured to whom a certificate of insurance has been issued and will contain waiver provisions in accordance with Paragraph 5.07.

D. Owner shall not be responsible for purchasing and maintaining any property insurance specified in this Paragraph 5.06 to protect the interests of Contractor, Subcontractors, or others in the Work to the extent of any

deductible amounts that are identified in the Supplementary Conditions. The risk of loss within such identified deductible amount will be borne by Contractor, Subcontractors, or others suffering any such loss, and if any of them wishes property insurance coverage within the limits of such amounts, each may purchase and maintain it at the purchaser's own expense.

E. If Contractor requests in writing that other special insurance be included in the property insurance policies provided under Paragraph 5.06, Owner shall, if possible, include such insurance, and the cost thereof will be charged to Contractor by appropriate Change Order. Prior to commencement of the Work at the Site, Owner shall in writing advise Contractor whether or not such other insurance has been procured by Owner.

5.07 *Waiver of Rights*

A. Owner and Contractor intend that all policies purchased in accordance with Paragraph 5.06 will protect Owner, Contractor, Subcontractors, and Engineer, and all other individuals or entities identified in the Supplementary Conditions to be listed as insureds or additional insureds (and the officers, directors, partners, employees, agents, consultants and subcontractors of each and any of them) in such policies and will provide primary coverage for all losses and damages caused by the perils or causes of loss covered thereby. All such policies shall contain provisions to the effect that in the event of payment of any loss or damage the insurers will have no rights of recovery against any of the insureds or additional insureds thereunder. Owner and Contractor waive all rights against each other and their respective officers, directors, partners, employees, agents, consultants and subcontractors of each and any of them for all losses and damages caused by, arising out of or resulting from any of the perils or causes of loss covered by such policies and any other property insurance applicable to the Work; and, in addition, waive all such rights against Subcontractors, and Engineer, and all other individuals or entities identified in the Supplementary Conditions to be listed as insured or additional insured (and the officers, directors, partners, employees, agents, consultants and subcontractors of each and any of them) under such policies for losses and damages so caused. None of the above waivers shall extend to the rights that any party making such waiver may have to the proceeds of insurance held by Owner as trustee or otherwise payable under any policy so issued.

B. Owner waives all rights against Contractor, Subcontractors, and Engineer, and the officers, directors, partners, employees, agents, consultants and subcontractors of each and any of them for:

1. loss due to business interruption, loss of use, or other consequential loss extending beyond direct physical loss or damage to Owner's property or the Work caused by, arising out of, or resulting from fire or other perils whether or not insured by Owner; and

2. loss or damage to the completed Project or part thereof caused by, arising out of, or resulting from fire or other insured peril or cause of loss covered by any property insurance maintained on the completed Project or part thereof by Owner during partial utilization pursuant to Paragraph 14.05, after Substantial Completion pursuant to Paragraph 14.04, or after final payment pursuant to Paragraph 14.07.

C. Any insurance policy maintained by Owner covering any loss, damage or consequential loss referred to in Paragraph 5.07.B shall contain provisions to the effect that in the event of payment of any such loss, damage, or consequential loss, the insurers will have no rights of recovery against Contractor, Subcontractors, or Engineer, and the officers, directors, partners, employees, agents, consultants and subcontractors of each and any of them.

5.08 *Receipt and Application of Insurance Proceeds*

A. Any insured loss under the policies of insurance required by Paragraph 5.06 will be adjusted with Owner and made payable to Owner as fiduciary for the insureds, as their interests may appear, subject to the requirements of any applicable mortgage clause and of Paragraph 5.08.B. Owner shall deposit in a separate account any money so received and shall distribute it in accordance with such agreement as the parties in interest may reach. If no other special agreement is reached, the damaged Work shall be repaired or replaced, the moneys so received applied on account thereof, and the Work and the cost thereof covered by an appropriate Change Order .

B. Owner as fiduciary shall have power to adjust and settle any loss with the insurers unless one of the parties in interest shall object in writing within 15 days after the occurrence of loss to Owner's exercise of this power. If such objection be made, Owner as fiduciary shall make settlement with the insurers in accordance with such agreement as the parties in interest may reach. If no such agreement among the parties in interest is reached, Owner as fiduciary shall adjust and settle the loss with the insurers and, if required in writing by any party in interest, Owner as fiduciary shall give bond for the proper performance of such duties.

5.09 *Acceptance of Bonds and Insurance; Option to Replace*

A. If either Owner or Contractor has any objection to the coverage afforded by or other provisions of the bonds or insurance required to be purchased and maintained by the other party in accordance with Article 5 on the basis of non-conformance with the Contract

Documents, the objecting party shall so notify the other party in writing within 10 days after receipt of the certificates (or other evidence requested) required by Paragraph 2.01.B. Owner and Contractor shall each provide to the other such additional information in respect of insurance provided as the other may reasonably request. If either party does not purchase or maintain all of the bonds and insurance required of such party by the Contract Documents, such party shall notify the other party in writing of such failure to purchase prior to the start of the Work, or of such failure to maintain prior to any change in the required coverage. Without prejudice to any other right or remedy, the other party may elect to obtain equivalent bonds or insurance to protect such other party's interests at the expense of the party who was required to provide such coverage, and a Change Order shall be issued to adjust the Contract Price accordingly.

5.10 *Partial Utilization, Acknowledgment of Property Insurer*

A. If Owner finds it necessary to occupy or use a portion or portions of the Work prior to Substantial Completion of all the Work as provided in Paragraph 14.05, no such use or occupancy shall commence before the insurers providing the property insurance pursuant to Paragraph 5.06 have acknowledged notice thereof and in writing effected any changes in coverage necessitated thereby. The insurers providing the property insurance shall consent by endorsement on the policy or policies, but the property insurance shall not be canceled or permitted to lapse on account of any such partial use or occupancy.

ARTICLE 6 - CONTRACTOR'S RESPONSIBILITIES

6.01 *Supervision and Superintendence*

A. Contractor shall supervise, inspect, and direct the Work competently and efficiently, devoting such attention thereto and applying such skills and expertise as may be necessary to perform the Work in accordance with the Contract Documents. Contractor shall be solely responsible for the means, methods, techniques, sequences, and procedures of construction. Contractor shall not be responsible for the negligence of Owner or Engineer in the design or specification of a specific means, method, technique, sequence, or procedure of construction which is shown or indicated in and expressly required by the Contract Documents.

B. At all times during the progress of the Work, Contractor shall assign a competent resident superintendent who shall not be replaced without written notice to Owner and Engineer except under extraordinary circumstances. The superintendent will be Contractor's representative at the Site and shall have authority to act on behalf of Contractor. All communications given to or

received from the superintendent shall be binding on Contractor.

6.02 *Labor; Working Hours*

A. Contractor shall provide competent, suitably qualified personnel to survey and lay out the Work and perform construction as required by the Contract Documents. Contractor shall at all times maintain good discipline and order at the Site.

B. Except as otherwise required for the safety or protection of persons or the Work or property at the Site or adjacent thereto, and except as otherwise stated in the Contract Documents, all Work at the Site shall be performed during regular working hours. Contractor will not permit the performance of Work on a Saturday, Sunday, or any legal holiday without Owner's written consent (which will not be unreasonably withheld) given after prior written notice to Engineer.

6.03 *Services, Materials, and Equipment*

A. Unless otherwise specified in the Contract Documents, Contractor shall provide and assume full responsibility for all services, materials, equipment, labor, transportation, construction equipment and machinery, tools, appliances, fuel, power, light, heat, telephone, water, sanitary facilities, temporary facilities, and all other facilities and incidentals necessary for the performance, testing, start-up, and completion of the Work.

B. All materials and equipment incorporated into the Work shall be as specified or, if not specified, shall be of good quality and new, except as otherwise provided in the Contract Documents. All special warranties and guarantees required by the Specifications shall expressly run to the benefit of Owner. If required by Engineer, Contractor shall furnish satisfactory evidence (including reports of required tests) as to the source, kind, and quality of materials and equipment.

C. All materials and equipment shall be stored, applied, installed, connected, erected, protected, used, cleaned, and conditioned in accordance with instructions of the applicable Supplier, except as otherwise may be provided in the Contract Documents.

6.04 *Progress Schedule*

A. Contractor shall adhere to the Progress Schedule established in accordance with Paragraph 2.07 as it may be adjusted from time to time as provided below.

1. Contractor shall submit to Engineer for acceptance (to the extent indicated in Paragraph 2.07) proposed adjustments in the Progress Schedule that will not result in changing the Contract Times. Such adjustments will comply with any provisions of the General Requirements applicable thereto.

2. Proposed adjustments in the Progress Schedule that will change the Contract Times shall be submitted in accordance with the requirements of Article 12. Adjustments in Contract Times may only be made by a Change Order.

6.05 *Substitutes and "Or-Equals"*

A. Whenever an item of material or equipment is specified or described in the Contract Documents by using the name of a proprietary item or the name of a particular Supplier, the specification or description is intended to establish the type, function, appearance, and quality required. Unless the specification or description contains or is followed by words reading that no like, equivalent, or "or-equal" item or no substitution is permitted, other items of material or equipment or material or equipment of other Suppliers may be submitted to Engineer for review under the circumstances described below.

1. *"Or-Equal" Items:* If in Engineer's sole discretion an item of material or equipment proposed by Contractor is functionally equal to that named and sufficiently similar so that no change in related Work will be required, it may be considered by Engineer as an "or-equal" item, in which case review and approval of the proposed item may, in Engineer's sole discretion, be accomplished without compliance with some or all of the requirements for approval of proposed substitute items. For the purposes of this Paragraph 6.05.A.1, a proposed item of material or equipment will be considered functionally equal to an item so named if:

a. in the exercise of reasonable judgment Engineer determines that:

1) it is at least equal in materials of construction, quality, durability, appearance, strength, and design characteristics;

2) it will reliably perform at least equally well the function and achieve the results imposed by the design concept of the completed Project as a functioning whole,

3) it has a proven record of performance and availability of responsive service; and

b. Contractor certifies that, if approved and incorporated into the Work:

1) there will be no increase in cost to the Owner or increase in Contract Times, and

2) it will conform substantially to the detailed requirements of the item named in the Contract Documents.

2. Substitute Items

a. If in Engineer's sole discretion an item of material or equipment proposed by Contractor does not qualify as an "or-equal" item under Paragraph 6.05.A.1, it will be considered a proposed substitute item.

b. Contractor shall submit sufficient information as provided below to allow Engineer to determine that the item of material or equipment proposed is essentially equivalent to that named and an acceptable substitute therefor. Requests for review of proposed substitute items of material or equipment will not be accepted by Engineer from anyone other than Contractor.

c. The requirements for review by Engineer will be as set forth in Paragraph 6.05.A.2.d, as supplemented in the General Requirements and as Engineer may decide is appropriate under the circumstances.

d. Contractor shall make written application to Engineer for review of a proposed substitute item of material or equipment that Contractor seeks to furnish or use. The application:

1) shall certify that the proposed substitute item will:

a) perform adequately the functions and achieve the results called for by the general design,

b) be similar in substance to that specified, and

c) be suited to the same use as that specified;

2) will state:

a) the extent, if any, to which the use of the proposed substitute item will prejudice Contractor's achievement of Substantial Completion on time;

b) whether or not use of the proposed substitute item in the Work will require a change in any of the Contract Documents (or in the provisions of any other direct contract with Owner for other work on the Project) to adapt the design to the proposed substitute item; and

c) whether or not incorporation or use of the proposed substitute item in connection with the Work is subject to payment of any license fee or royalty;

3) will identify:

a) all variations of the proposed substitute item from that specified, and

b) available engineering, sales, maintenance, repair, and replacement services;

4) and shall contain an itemized estimate of all costs or credits that will result directly or indirectly from use of such substitute item, including costs of redesign and claims of other contractors affected by any resulting change,

B. Substitute Construction Methods or Procedures: If a specific means, method, technique, sequence, or procedure of construction is expressly required by the Contract Documents, Contractor may furnish or utilize a substitute means, method, technique, sequence, or procedure of construction approved by Engineer. Contractor shall submit sufficient information to allow Engineer, in Engineer's sole discretion, to determine that the substitute proposed is equivalent to that expressly called for by the Contract Documents. The requirements for review by Engineer will be similar to those provided in Paragraph 6.05.A.2.

C. Engineer's Evaluation: Engineer will be allowed a reasonable time within which to evaluate each proposal or submittal made pursuant to Paragraphs 6.05.A and 6.05.B. Engineer may require Contractor to furnish additional data about the proposed substitute item. Engineer will be the sole judge of acceptability. No "or equal" or substitute will be ordered, installed or utilized until Engineer's review is complete, which will be evidenced by either a Change Order for a substitute or an approved Shop Drawing for an "or equal." Engineer will advise Contractor in writing of any negative determination.

D. Special Guarantee: Owner may require Contractor to furnish at Contractor's expense a special performance guarantee or other surety with respect to any substitute.

E. Engineer's Cost Reimbursement: Engineer will record Engineer's costs in evaluating a substitute proposed or submitted by Contractor pursuant to Paragraphs 6.05.A.2 and 6.05.B. Whether or not Engineer approves a substitute item so proposed or submitted by Contractor, Contractor shall reimburse Owner for the charges of Engineer for evaluating each such proposed substitute. Contractor shall also reimburse Owner for the charges of Engineer for making changes in the Contract

Documents (or in the provisions of any other direct contract with Owner) resulting from the acceptance of each proposed substitute.

F. Contractor's Expense: Contractor shall provide all data in support of any proposed substitute or "or-equal" at Contractor's expense.

6.06 Concerning Subcontractors, Suppliers, and Others

A. Contractor shall not employ any Subcontractor, Supplier, or other individual or entity (including those acceptable to Owner as indicated in Paragraph 6.06.B), whether initially or as a replacement, against whom Owner may have reasonable objection. Contractor shall not be required to employ any Subcontractor, Supplier, or other individual or entity to furnish or perform any of the Work against whom Contractor has reasonable objection.

B. If the Supplementary Conditions require the identity of certain Subcontractors, Suppliers, or other individuals or entities to be submitted to Owner in advance for acceptance by Owner by a specified date prior to the Effective Date of the Agreement, and if Contractor has submitted a list thereof in accordance with the Supplementary Conditions, Owner's acceptance (either in writing or by failing to make written objection thereto by the date indicated for acceptance or objection in the Bidding Documents or the Contract Documents) of any such Subcontractor, Supplier, or other individual or entity so identified may be revoked on the basis of reasonable objection after due investigation. Contractor shall submit an acceptable replacement for the rejected Subcontractor, Supplier, or other individual or entity, and the Contract Price will be adjusted by the difference in the cost occasioned by such replacement, and an appropriate Change Order will be issued. No acceptance by Owner of any such Subcontractor, Supplier, or other individual or entity, whether initially or as a replacement, shall constitute a waiver of any right of Owner or Engineer to reject defective Work.

C. Contractor shall be fully responsible to Owner and Engineer for all acts and omissions of the Subcontractors, Suppliers, and other individuals or entities performing or furnishing any of the Work just as Contractor is responsible for Contractor's own acts and omissions. Nothing in the Contract Documents:

1. shall create for the benefit of any such Subcontractor, Supplier, or other individual or entity any contractual relationship between Owner or Engineer and any such Subcontractor, Supplier or other individual or entity, nor

2. shall anything in the Contract Documents create any obligation on the part of Owner or Engineer to pay or to see to the payment of any moneys due any such Subcontractor, Supplier, or other individual

or entity except as may otherwise be required by Laws and Regulations.

D. Contractor shall be solely responsible for scheduling and coordinating the Work of Subcontractors, Suppliers, and other individuals or entities performing or furnishing any of the Work under a direct or indirect contract with Contractor.

E. Contractor shall require all Subcontractors, Suppliers, and such other individuals or entities performing or furnishing any of the Work to communicate with Engineer through Contractor.

F. The divisions and sections of the Specifications and the identifications of any Drawings shall not control Contractor in dividing the Work among Subcontractors or Suppliers or delineating the Work to be performed by any specific trade.

G. All Work performed for Contractor by a Subcontractor or Supplier will be pursuant to an appropriate agreement between Contractor and the Subcontractor or Supplier which specifically binds the Subcontractor or Supplier to the applicable terms and conditions of the Contract Documents for the benefit of Owner and Engineer. Whenever any such agreement is with a Subcontractor or Supplier who is listed as an additional insured on the property insurance provided in Paragraph 5.06, the agreement between the Contractor and the Subcontractor or Supplier will contain provisions whereby the Subcontractor or Supplier waives all rights against Owner, Contractor, and Engineer, and all other individuals or entities identified in the Supplementary Conditions to be listed as insureds or additional insureds (and the officers, directors, partners, employees, agents, consultants and subcontractors of each and any of them) for all losses and damages caused by, arising out of, relating to, or resulting from any of the perils or causes of loss covered by such policies and any other property insurance applicable to the Work. If the insurers on any such policies require separate waiver forms to be signed by any Subcontractor or Supplier, Contractor will obtain the same.

6.07 *Patent Fees and Royalties*

A. Contractor shall pay all license fees and royalties and assume all costs incident to the use in the performance of the Work or the incorporation in the Work of any invention, design, process, product, or device which is the subject of patent rights or copyrights held by others. If a particular invention, design, process, product, or device is specified in the Contract Documents for use in the performance of the Work and if to the actual knowledge of Owner or Engineer its use is subject to patent rights or copyrights calling for the payment of any license fee or royalty to others, the existence of such rights shall be disclosed by Owner in the Contract Documents.

B. To the fullest extent permitted by Laws and Regulations, Contractor shall indemnify and hold harmless Owner and Engineer, and the officers, directors, partners, employees, agents, consultants and subcontractors of each and any of them from and against all claims, costs, losses, and damages (including but not limited to all fees and charges of engineers, architects, attorneys, and other professionals and all court or arbitration or other dispute resolution costs) arising out of or relating to any infringement of patent rights or copyrights incident to the use in the performance of the Work or resulting from the incorporation in the Work of any invention, design, process, product, or device not specified in the Contract Documents.

6.08 *Permits*

A. Unless otherwise provided in the Supplementary Conditions, Contractor shall obtain and pay for all construction permits and licenses. Owner shall assist Contractor, when necessary, in obtaining such permits and licenses. Contractor shall pay all governmental charges and inspection fees necessary for the prosecution of the Work which are applicable at the time of opening of Bids, or, if there are no Bids, on the Effective Date of the Agreement. Owner shall pay all charges of utility owners for connections for providing permanent service to the Work.

6.09 *Laws and Regulations*

A. Contractor shall give all notices required by and shall comply with all Laws and Regulations applicable to the performance of the Work. Except where otherwise expressly required by applicable Laws and Regulations, neither Owner nor Engineer shall be responsible for monitoring Contractor's compliance with any Laws or Regulations.

B. If Contractor performs any Work knowing or having reason to know that it is contrary to Laws or Regulations, Contractor shall bear all claims, costs, losses, and damages (including but not limited to all fees and charges of engineers, architects, attorneys, and other professionals and all court or arbitration or other dispute resolution costs) arising out of or relating to such Work. However, it shall not be Contractor's primary responsibility to make certain that the Specifications and Drawings are in accordance with Laws and Regulations, but this shall not relieve Contractor of Contractor's obligations under Paragraph 3.03.

C. Changes in Laws or Regulations not known at the time of opening of Bids (or, on the Effective Date of the Agreement if there were no Bids) having an effect on the cost or time of performance of the Work shall be the subject of an adjustment in Contract Price or Contract Times. If Owner and Contractor are unable to agree on entitlement to or on the amount or extent, if any, of any such adjustment, a Claim may be made therefor as provided in Paragraph 10.05.

6.10 Taxes

A. Contractor shall pay all sales, consumer, use, and other similar taxes required to be paid by Contractor in accordance with the Laws and Regulations of the place of the Project which are applicable during the performance of the Work.

6.11 Use of Site and Other Areas

A. Limitation on Use of Site and Other Areas

1. Contractor shall confine construction equipment, the storage of materials and equipment, and the operations of workers to the Site and other areas permitted by Laws and Regulations, and shall not unreasonably encumber the Site and other areas with construction equipment or other materials or equipment. Contractor shall assume full responsibility for any damage to any such land or area, or to the owner or occupant thereof, or of any adjacent land or areas resulting from the performance of the Work.

2. Should any claim be made by any such owner or occupant because of the performance of the Work, Contractor shall promptly settle with such other party by negotiation or otherwise resolve the claim by arbitration or other dispute resolution proceeding or at law.

3. To the fullest extent permitted by Laws and Regulations, Contractor shall indemnify and hold harmless Owner and Engineer, and the officers, directors, partners, employees, agents, consultants and subcontractors of each and any of them from and against all claims, costs, losses, and damages (including but not limited to all fees and charges of engineers, architects, attorneys, and other professionals and all court or arbitration or other dispute resolution costs) arising out of or relating to any claim or action, legal or equitable, brought by any such owner or occupant against Owner, Engineer, or any other party indemnified hereunder to the extent caused by or based upon Contractor's performance of the Work.

B. Removal of Debris During Performance of the Work: During the progress of the Work Contractor shall keep the Site and other areas free from accumulations of waste materials, rubbish, and other debris. Removal and disposal of such waste materials, rubbish, and other debris shall conform to applicable Laws and Regulations.

C. Cleaning: Prior to Substantial Completion of the Work Contractor shall clean the Site and the Work and make it ready for utilization by Owner. At the completion of the Work Contractor shall remove from the Site all tools, appliances, construction equipment and machinery, and surplus materials and shall restore to original condition all property not designated for alteration by the Contract Documents.

D. Loading Structures: Contractor shall not load nor permit any part of any structure to be loaded in any manner that will endanger the structure, nor shall Contractor subject any part of the Work or adjacent property to stresses or pressures that will endanger it.

6.12 Record Documents

A. Contractor shall maintain in a safe place at the Site one record copy of all Drawings, Specifications, Addenda, Change Orders, Work Change Directives, Field Orders, and written interpretations and clarifications in good order and annotated to show changes made during construction. These record documents together with all approved Samples and a counterpart of all approved Shop Drawings will be available to Engineer for reference. Upon completion of the Work, these record documents, Samples, and Shop Drawings will be delivered to Engineer for Owner.

6.13 Safety and Protection

A. Contractor shall be solely responsible for initiating, maintaining and supervising all safety precautions and programs in connection with the Work. Contractor shall take all necessary precautions for the safety of, and shall provide the necessary protection to prevent damage, injury or loss to:

1. all persons on the Site or who may be affected by the Work;

2. all the Work and materials and equipment to be incorporated therein, whether in storage on or off the Site; and

3. other property at the Site or adjacent thereto, including trees, shrubs, lawns, walks, pavements, roadways, structures, utilities, and Underground Facilities not designated for removal, relocation, or replacement in the course of construction.

B. Contractor shall comply with all applicable Laws and Regulations relating to the safety of persons or property, or to the protection of persons or property from damage, injury, or loss; and shall erect and maintain all necessary safeguards for such safety and protection. Contractor shall notify owners of adjacent property and of Underground Facilities and other utility owners when prosecution of the Work may affect them, and shall cooperate with them in the protection, removal, relocation, and replacement of their property.

C. All damage, injury, or loss to any property referred to in Paragraph 6.13.A.2 or 6.13.A.3 caused, directly or indirectly, in whole or in part, by Contractor, any Subcontractor, Supplier, or any other individual or entity directly or indirectly employed by any of them to perform any of the Work, or anyone for whose acts any of them may be liable, shall be remedied by Contractor (except damage or loss attributable to the fault of Draw-

ings or Specifications or to the acts or omissions of Owner or Engineer or , or anyone employed by any of them, or anyone for whose acts any of them may be liable, and not attributable, directly or indirectly, in whole or in part, to the fault or negligence of Contractor or any Subcontractor, Supplier, or other individual or entity directly or indirectly employed by any of them).

D. Contractor's duties and responsibilities for safety and for protection of the Work shall continue until such time as all the Work is completed and Engineer has issued a notice to Owner and Contractor in accordance with Paragraph 14.07.B that the Work is acceptable (except as otherwise expressly provided in connection with Substantial Completion).

6.14 *Safety Representative*

A. Contractor shall designate a qualified and experienced safety representative at the Site whose duties and responsibilities shall be the prevention of accidents and the maintaining and supervising of safety precautions and programs.

6.15 *Hazard Communication Programs*

A. Contractor shall be responsible for coordinating any exchange of material safety data sheets or other hazard communication information required to be made available to or exchanged between or among employers at the Site in accordance with Laws or Regulations.

6.16 *Emergencies*

A. In emergencies affecting the safety or protection of persons or the Work or property at the Site or adjacent thereto, Contractor is obligated to act to prevent threatened damage, injury, or loss. Contractor shall give Engineer prompt written notice if Contractor believes that any significant changes in the Work or variations from the Contract Documents have been caused thereby or are required as a result thereof. If Engineer determines that a change in the Contract Documents is required because of the action taken by Contractor in response to such an emergency, a Work Change Directive or Change Order will be issued.

6.17 *Shop Drawings and Samples*

A. Contractor shall submit Shop Drawings and Samples to Engineer for review and approval in accordance with the acceptable Schedule of Submittals (as required by Paragraph 2.07). Each submittal will be identified as Engineer may require.

1. Shop Drawings

a. Submit number of copies specified in the General Requirements.

b. Data shown on the Shop Drawings will be complete with respect to quantities, dimensions, specified performance and design criteria, materials, and similar data to show Engineer the services, materials, and equipment Contractor proposes to provide and to enable Engineer to review the information for the limited purposes required by Paragraph 6.17.D.

2. *Samples*: Contractor shall also submit Samples to Engineer for review and approval in accordance with the acceptable schedule of Shop Drawings and Sample submittals.

a. Submit number of Samples specified in the Specifications.

b. Clearly identify each Sample as to material, Supplier, pertinent data such as catalog numbers, the use for which intended and other data as Engineer may require to enable Engineer to review the submittal for the limited purposes required by Paragraph 6.17.D.

B. Where a Shop Drawing or Sample is required by the Contract Documents or the Schedule of Submittals , any related Work performed prior to Engineer's review and approval of the pertinent submittal will be at the sole expense and responsibility of Contractor.

C. Submittal Procedures

1. Before submitting each Shop Drawing or Sample, Contractor shall have determined and verified:

a. all field measurements, quantities, dimensions, specified performance and design criteria, installation requirements, materials, catalog numbers, and similar information with respect thereto;

b. the suitability of all materials with respect to intended use, fabrication, shipping, handling, storage, assembly, and installation pertaining to the performance of the Work;

c. all information relative to Contractor's responsibilities for means, methods, techniques, sequences, and procedures of construction, and safety precautions and programs incident thereto; and

d. shall also have reviewed and coordinated each Shop Drawing or Sample with other Shop Drawings and Samples and with the requirements of the Work and the Contract Documents.

2. Each submittal shall bear a stamp or specific written certification that Contractor has satisfied Contractor's obligations under the Contract Documents

with respect to Contractor's review and approval of that submittal.

3. With each submittal, Contractor shall give Engineer specific written notice of any variations, that the Shop Drawing or Sample may have from the requirements of the Contract Documents. This notice shall be both a written communication separate from the Shop Drawing's or Sample Submittal; and, in addition, by a specific notation made on each Shop Drawing or Sample submitted to Engineer for review and approval of each such variation.

D. Engineer's Review

1. Engineer will provide timely review of Shop Drawings and Samples in accordance with the Schedule of Submittals acceptable to Engineer. Engineer's review and approval will be only to determine if the items covered by the submittals will, after installation or incorporation in the Work, conform to the information given in the Contract Documents and be compatible with the design concept of the completed Project as a functioning whole as indicated by the Contract Documents.

2. Engineer's review and approval will not extend to means, methods, techniques, sequences, or procedures of construction (except where a particular means, method, technique, sequence, or procedure of construction is specifically and expressly called for by the Contract Documents) or to safety precautions or programs incident thereto. The review and approval of a separate item as such will not indicate approval of the assembly in which the item functions.

3. Engineer's review and approval shall not relieve Contractor from responsibility for any variation from the requirements of the Contract Documents unless Contractor has complied with the requirements of Paragraph 6.17.C.3 and Engineer has given written approval of each such variation by specific written notation thereof incorporated in or accompanying the Shop Drawing or Sample. Engineer's review and approval shall not relieve Contractor from responsibility for complying with the requirements of Paragraph 6.17.C.1.

E. Resubmittal Procedures

1. Contractor shall make corrections required by Engineer and shall return the required number of corrected copies of Shop Drawings and submit, as required, new Samples for review and approval. Contractor shall direct specific attention in writing to revisions other than the corrections called for by Engineer on previous submittals.

6.18 Continuing the Work

A. Contractor shall carry on the Work and adhere to the Progress Schedule during all disputes or

disagreements with Owner. No Work shall be delayed or postponed pending resolution of any disputes or disagreements, except as permitted by Paragraph 15.04 or as Owner and Contractor may otherwise agree in writing.

6.19 Contractor's General Warranty and Guarantee

A. Contractor warrants and guarantees to Owner that all Work will be in accordance with the Contract Documents and will not be defective. Engineer and its Related Entities shall be entitled to rely on representation of Contractor's warranty and guarantee.

B. Contractor's warranty and guarantee hereunder excludes defects or damage caused by:

1. abuse, modification, or improper maintenance or operation by persons other than Contractor, Subcontractors, Suppliers, or any other individual or entity for whom Contractor is responsible; or

2. normal wear and tear under normal usage.

C. Contractor's obligation to perform and complete the Work in accordance with the Contract Documents shall be absolute. None of the following will constitute an acceptance of Work that is not in accordance with the Contract Documents or a release of Contractor's obligation to perform the Work in accordance with the Contract Documents:

1. observations by Engineer;

2. recommendation by Engineer or payment by Owner of any progress or final payment;

3. the issuance of a certificate of Substantial Completion by Engineer or any payment related thereto by Owner;

4. use or occupancy of the Work or any part thereof by Owner;

5. any review and approval of a Shop Drawing or Sample submittal or the issuance of a notice of acceptability by Engineer;

6. any inspection, test, or approval by others; or

7. any correction of defective Work by Owner.

6.20 Indemnification

A. To the fullest extent permitted by Laws and Regulations, Contractor shall indemnify and hold harmless Owner and Engineer, and the officers, directors, partners, employees, agents, consultants and subcontractors of each and any of them from and against all claims, costs, losses, and damages (including but not limited to all fees and charges of engineers, architects, attorneys, and other professionals and all court or

arbitration or other dispute resolution costs) arising out of or relating to the performance of the Work, provided that any such claim, cost, loss, or damage is attributable to bodily injury, sickness, disease, or death, or to injury to or destruction of tangible property (other than the Work itself), including the loss of use resulting therefrom but only to the extent caused by any negligent act or omission of Contractor, any Subcontractor, any Supplier, or any individual or entity directly or indirectly employed by any of them to perform any of the Work or anyone for whose acts any of them may be liable .

B. In any and all claims against Owner or Engineer or any of their respective consultants, agents, officers, directors, partners, or employees by any employee (or the survivor or personal representative of such employee) of Contractor, any Subcontractor, any Supplier, or any individual or entity directly or indirectly employed by any of them to perform any of the Work, or anyone for whose acts any of them may be liable, the indemnification obligation under Paragraph 6.20.A shall not be limited in any way by any limitation on the amount or type of damages, compensation, or benefits payable by or for Contractor or any such Subcontractor, Supplier, or other individual or entity under workers' compensation acts, disability benefit acts, or other employee benefit acts.

C. The indemnification obligations of Contractor under Paragraph 6.20.A shall not extend to the liability of Engineer and Engineer's officers, directors, partners, employees, agents, consultants and subcontractors arising out of:

1. the preparation or approval of, or the failure to prepare or approve, maps, Drawings, opinions, reports, surveys, Change Orders, designs, or Specifications; or
2. giving directions or instructions, or failing to give them, if that is the primary cause of the injury or damage.

6.21 *Delegation of Professional Design Services*

A. Contractor will not be required to provide professional design services unless such services are specifically required by the Contract Documents for a portion of the Work or unless such services are required to carry out Contractor's responsibilities for construction means, methods, techniques, sequences and procedures. Contractor shall not be required to provide professional services in violation of applicable law.

B. If professional design services or certifications by a design professional related to systems, materials or equipment are specifically required of Contractor by the Contract Documents, Owner and Engineer will specify all performance and design criteria that such services must satisfy. Contractor shall cause such services or certifications to be provided by a properly licensed professional, whose signature and seal

shall appear on all drawings, calculations, specifications, certifications, Shop Drawings and other submittals prepared by such professional. Shop Drawings and other submittals related to the Work designed or certified by such professional, if prepared by others, shall bear such professional's written approval when submitted to Engineer.

C. Owner and Engineer shall be entitled to rely upon the adequacy, accuracy and completeness of the services, certifications or approvals performed by such design professionals, provided Owner and Engineer have specified to Contractor all performance and design criteria that such services must satisfy.

D. Pursuant to this Paragraph 6.21, Engineer's review and approval of design calculations and design drawings will be only for the limited purpose of checking for conformance with performance and design criteria given and the design concept expressed in the Contract Documents. Engineer's review and approval of Shop Drawings and other submittals (except design calculations and design drawings) will be only for the purpose stated in Paragraph 6.17.D.1.

E. Contractor shall not be responsible for the adequacy of the performance or design criteria required by the Contract Documents.

ARTICLE 7 - OTHER WORK AT THE SITE

7.01 *Related Work at Site*

A. Owner may perform other work related to the Project at the Site with Owner's employees, or via other direct contracts therefor, or have other work performed by utility owners. If such other work is not noted in the Contract Documents, then:

1. written notice thereof will be given to Contractor prior to starting any such other work; and
2. if Owner and Contractor are unable to agree on entitlement to or on the amount or extent, if any, of any adjustment in the Contract Price or Contract Times that should be allowed as a result of such other work, a Claim may be made therefor as provided in Paragraph 10.05.

B. Contractor shall afford each other contractor who is a party to such a direct contract, each utility owner and Owner, if Owner is performing other work with Owner's employees, proper and safe access to the Site, a reasonable opportunity for the introduction and storage of materials and equipment and the execution of such other work, and shall properly coordinate the Work with theirs. Contractor shall do all cutting, fitting, and patching of the Work that may be required to properly connect or otherwise make its several parts come together and

properly integrate with such other work. Contractor shall not endanger any work of others by cutting, excavating, or otherwise altering their work and will only cut or alter their work with the written consent of Engineer and the others whose work will be affected. The duties and responsibilities of Contractor under this Paragraph are for the benefit of such utility owners and other contractors to the extent that there are comparable provisions for the benefit of Contractor in said direct contracts between Owner and such utility owners and other contractors.

C. If the proper execution or results of any part of Contractor's Work depends upon work performed by others under this Article 7, Contractor shall inspect such other work and promptly report to Engineer in writing any delays, defects, or deficiencies in such other work that render it unavailable or unsuitable for the proper execution and results of Contractor's Work. Contractor's failure to so report will constitute an acceptance of such other work as fit and proper for integration with Contractor's Work except for latent defects and deficiencies in such other work.

7.02 *Coordination*

A. If Owner intends to contract with others for the performance of other work on the Project at the Site, the following will be set forth in Supplementary Conditions:

1. the individual or entity who will have authority and responsibility for coordination of the activities among the various contractors will be identified;
2. the specific matters to be covered by such authority and responsibility will be itemized; and
3. the extent of such authority and responsibilities will be provided.

B. Unless otherwise provided in the Supplementary Conditions, Owner shall have sole authority and responsibility for such coordination.

7.03 *Legal Relationships*

A. Paragraphs 7.01.A and 7.02 are not applicable for utilities not under the control of Owner.

B. Each other direct contract of Owner under Paragraph 7.01.A shall provide that the other contractor is liable to Owner and Contractor for the reasonable direct delay and disruption costs incurred by Contractor as a result of the other contractor's actions or inactions.

C. Contractor shall be liable to Owner and any other contractor for the reasonable direct delay and disruption costs incurred by such other contractor as a result of Contractor's action or inactions.

ARTICLE 8 - OWNER'S RESPONSIBILITIES

8.01 *Communications to Contractor*

A. Except as otherwise provided in these General Conditions, Owner shall issue all communications to Contractor through Engineer.

8.02 *Replacement of Engineer*

A. In case of termination of the employment of Engineer, Owner shall appoint an engineer to whom Contractor makes no reasonable objection, whose status under the Contract Documents shall be that of the former Engineer.

8.03 *Furnish Data*

A. Owner shall promptly furnish the data required of Owner under the Contract Documents.

8.04 *Pay When Due*

A. Owner shall make payments to Contractor when they are due as provided in Paragraphs 14.02.C and 14.07.C.

8.05 *Lands and Easements; Reports and Tests*

A. Owner's duties in respect of providing lands and easements and providing engineering surveys to establish reference points are set forth in Paragraphs 4.01 and 4.05. Paragraph 4.02 refers to Owner's identifying and making available to Contractor copies of reports of explorations and tests of subsurface conditions and drawings of physical conditions in or relating to existing surface or subsurface structures at or contiguous to the Site that have been utilized by Engineer in preparing the Contract Documents.

8.06 *Insurance*

A. Owner's responsibilities, if any, in respect to purchasing and maintaining liability and property insurance are set forth in Article 5.

8.07 *Change Orders*

A. Owner is obligated to execute Change Orders as indicated in Paragraph 10.03.

8.08 *Inspections, Tests, and Approvals*

A. Owner's responsibility in respect to certain inspections, tests, and approvals is set forth in Paragraph 13.03.B.

8.09 *Limitations on Owner's Responsibilities*

A. The Owner shall not supervise, direct, or have control or authority over, nor be responsible for, Contractor's means, methods, techniques, sequences, or procedures of construction, or the safety precautions and programs incident thereto, or for any failure of Contractor to comply with Laws and Regulations applicable to the performance of the Work. Owner will not be responsible for Contractor's failure to perform the Work in accordance with the Contract Documents.

8.10 *Undisclosed Hazardous Environmental Condition*

A. Owner's responsibility in respect to an undisclosed Hazardous Environmental Condition is set forth in Paragraph 4.06.

8.11 *Evidence of Financial Arrangements*

A. If and to the extent Owner has agreed to furnish Contractor reasonable evidence that financial arrangements have been made to satisfy Owner's obligations under the Contract Documents, Owner's responsibility in respect thereof will be as set forth in the Supplementary Conditions.

ARTICLE 9 - ENGINEER'S STATUS DURING CONSTRUCTION

9.01 *Owner's Representative*

A. Engineer will be Owner's representative during the construction period. The duties and responsibilities and the limitations of authority of Engineer as Owner's representative during construction are set forth in the Contract Documents and will not be changed without written consent of Owner and Engineer.

9.02 *Visits to Site*

A. Engineer will make visits to the Site at intervals appropriate to the various stages of construction as Engineer deems necessary in order to observe as an experienced and qualified design professional the progress that has been made and the quality of the various aspects of Contractor's executed Work. Based on information obtained during such visits and observations, Engineer, for the benefit of Owner, will determine, in general, if the Work is proceeding in accordance with the Contract Documents. Engineer will not be required to make exhaustive or continuous inspections on the Site to check the quality or quantity of the Work. Engineer's efforts will be directed toward providing for Owner a greater degree of confidence that the completed Work will conform generally to the Contract Documents. On the basis of such visits and observations, Engineer will keep

Owner informed of the progress of the Work and will endeavor to guard Owner against defective Work.

B. Engineer's visits and observations are subject to all the limitations on Engineer's authority and responsibility set forth in Paragraph 9.09. Particularly, but without limitation, during or as a result of Engineer's visits or observations of Contractor's Work Engineer will not supervise, direct, control, or have authority over or be responsible for Contractor's means, methods, techniques, sequences, or procedures of construction, or the safety precautions and programs incident thereto, or for any failure of Contractor to comply with Laws and Regulations applicable to the performance of the Work.

9.03 *Project Representative*

A. If Owner and Engineer agree, Engineer will furnish a Resident Project Representative to assist Engineer in providing more extensive observation of the Work. The authority and responsibilities of any such Resident Project Representative and assistants will be as provided in the Supplementary Conditions, and limitations on the responsibilities thereof will be as provided in Paragraph 9.09. If Owner designates another representative or agent to represent Owner at the Site who is not Engineer's consultant, agent or employee, the responsibilities and authority and limitations thereon of such other individual or entity will be as provided in the Supplementary Conditions.

9.04 *Authorized Variations in Work*

A. Engineer may authorize minor variations in the Work from the requirements of the Contract Documents which do not involve an adjustment in the Contract Price or the Contract Times and are compatible with the design concept of the completed Project as a functioning whole as indicated by the Contract Documents. These may be accomplished by a Field Order and will be binding on Owner and also on Contractor, who shall perform the Work involved promptly. If Owner or Contractor believes that a Field Order justifies an adjustment in the Contract Price or Contract Times, or both, and the parties are unable to agree on entitlement to or on the amount or extent, if any, of any such adjustment, a Claim may be made therefor as provided in Paragraph 10.05.

9.05 *Rejecting Defective Work*

A. Engineer will have authority to reject Work which Engineer believes to be defective, or that Engineer believes will not produce a completed Project that conforms to the Contract Documents or that will prejudice the integrity of the design concept of the completed Project as a functioning whole as indicated by the Contract Documents. Engineer will also have authority to require special inspection or testing of the Work as provided in Paragraph 13.04, whether or not the Work is fabricated, installed, or completed.

9.06 *Shop Drawings, Change Orders and Payments*

A. In connection with Engineer's authority, and limitations thereof, as to Shop Drawings and Samples, see Paragraph 6.17.

B. In connection with Engineer's authority, and limitations thereof, as to design calculations and design drawings submitted in response to a delegation of professional design services, if any, see Paragraph 6.21.

C. In connection with Engineer's authority as to Change Orders, see Articles 10, 11, and 12.

D. In connection with Engineer's authority as to Applications for Payment, see Article 14.

9.07 *Determinations for Unit Price Work*

A. Engineer will determine the actual quantities and classifications of Unit Price Work performed by Contractor. Engineer will review with Contractor the Engineer's preliminary determinations on such matters before rendering a written decision thereon (by recommendation of an Application for Payment or otherwise). Engineer's written decision thereon will be final and binding (except as modified by Engineer to reflect changed factual conditions or more accurate data) upon Owner and Contractor, subject to the provisions of Paragraph 10.05.

9.08 *Decisions on Requirements of Contract Documents and Acceptability of Work*

A. Engineer will be the initial interpreter of the requirements of the Contract Documents and judge of the acceptability of the Work thereunder. All matters in question and other matters between Owner and Contractor arising prior to the date final payment is due relating to the acceptability of the Work, and the interpretation of the requirements of the Contract Documents pertaining to the performance of the Work, will be referred initially to Engineer in writing within 30 days of the event giving rise to the question

B. Engineer will, with reasonable promptness, render a written decision on the issue referred. If Owner or Contractor believe that any such decision entitles them to an adjustment in the Contract Price or Contract Times or both, a Claim may be made under Paragraph 10.05. The date of Engineer's decision shall be the date of the event giving rise to the issues referenced for the purposes of Paragraph 10.05.B.

C. Engineer's written decision on the issue referred will be final and binding on Owner and Contractor, subject to the provisions of Paragraph 10.05.

D. When functioning as interpreter and judge under this Paragraph 9.08, Engineer will not show

partiality to Owner or Contractor and will not be liable in connection with any interpretation or decision rendered in good faith in such capacity.

9.09 *Limitations on Engineer's Authority and Responsibilities*

A. Neither Engineer's authority or responsibility under this Article 9 or under any other provision of the Contract Documents nor any decision made by Engineer in good faith either to exercise or not exercise such authority or responsibility or the undertaking, exercise, or performance of any authority or responsibility by Engineer shall create, impose, or give rise to any duty in contract, tort, or otherwise owed by Engineer to Contractor, any Subcontractor, any Supplier, any other individual or entity, or to any surety for or employee or agent of any of them.

B. Engineer will not supervise, direct, control, or have authority over or be responsible for Contractor's means, methods, techniques, sequences, or procedures of construction, or the safety precautions and programs incident thereto, or for any failure of Contractor to comply with Laws and Regulations applicable to the performance of the Work. Engineer will not be responsible for Contractor's failure to perform the Work in accordance with the Contract Documents.

C. Engineer will not be responsible for the acts or omissions of Contractor or of any Subcontractor, any Supplier, or of any other individual or entity performing any of the Work.

D. Engineer's review of the final Application for Payment and accompanying documentation and all maintenance and operating instructions, schedules, guarantees, bonds, certificates of inspection, tests and approvals, and other documentation required to be delivered by Paragraph 14.07.A will only be to determine generally that their content complies with the requirements of, and in the case of certificates of inspections, tests, and approvals that the results certified indicate compliance with the Contract Documents.

E. The limitations upon authority and responsibility set forth in this Paragraph 9.09 shall also apply to, the Resident Project Representative, if any, and assistants, if any.

ARTICLE 10 - CHANGES IN THE WORK; CLAIMS

10.01 *Authorized Changes in the Work*

A. Without invalidating the Contract and without notice to any surety, Owner may, at any time or from time to time, order additions, deletions, or revisions in the Work by a Change Order, or a Work Change Directive. Upon receipt of any such document, Contractor shall

promptly proceed with the Work involved which will be performed under the applicable conditions of the Contract Documents (except as otherwise specifically provided).

B. If Owner and Contractor are unable to agree on entitlement to, or on the amount or extent, if any, of an adjustment in the Contract Price or Contract Times, or both, that should be allowed as a result of a Work Change Directive, a Claim may be made therefor as provided in Paragraph 10.05.

10.02 *Unauthorized Changes in the Work*

A. Contractor shall not be entitled to an increase in the Contract Price or an extension of the Contract Times with respect to any work performed that is not required by the Contract Documents as amended, modified, or supplemented as provided in Paragraph 3.04, except in the case of an emergency as provided in Paragraph 6.16 or in the case of uncovering Work as provided in Paragraph 13.04.B.

10.03 *Execution of Change Orders*

A. Owner and Contractor shall execute appropriate Change Orders recommended by Engineer covering:

1. changes in the Work which are: (i) ordered by Owner pursuant to Paragraph 10.01.A, (ii) required because of acceptance of defective Work under Paragraph 13.08.A or Owner's correction of defective Work under Paragraph 13.09, or (iii) agreed to by the parties;

2. changes in the Contract Price or Contract Times which are agreed to by the parties, including any undisputed sum or amount of time for Work actually performed in accordance with a Work Change Directive; and

3. changes in the Contract Price or Contract Times which embody the substance of any written decision rendered by Engineer pursuant to Paragraph 10.05; provided that, in lieu of executing any such Change Order, an appeal may be taken from any such decision in accordance with the provisions of the Contract Documents and applicable Laws and Regulations, but during any such appeal, Contractor shall carry on the Work and adhere to the Progress Schedule as provided in Paragraph 6.18.A.

10.04 *Notification to Surety*

A. If notice of any change affecting the general scope of the Work or the provisions of the Contract Documents (including, but not limited to, Contract Price or Contract Times) is required by the provisions of any bond to be given to a surety, the giving of any such notice will be Contractor's responsibility. The amount of each applicable bond will be adjusted to reflect the effect of any such change.

10.05 *Claims*

A. *Engineer's Decision Required:* All Claims, except those waived pursuant to Paragraph 14.09, shall be referred to the Engineer for decision. A decision by Engineer shall be required as a condition precedent to any exercise by Owner or Contractor of any rights or remedies either may otherwise have under the Contract Documents or by Laws and Regulations in respect of such Claims.

B. *Notice:* Written notice stating the general nature of each Claim, shall be delivered by the claimant to Engineer and the other party to the Contract promptly (but in no event later than 30 days) after the start of the event giving rise thereto. The responsibility to substantiate a Claim shall rest with the party making the Claim. Notice of the amount or extent of the Claim, with supporting data shall be delivered to the Engineer and the other party to the Contract within 60 days after the start of such event (unless Engineer allows additional time for claimant to submit additional or more accurate data in support of such Claim). A Claim for an adjustment in Contract Price shall be prepared in accordance with the provisions of Paragraph 12.01.B. A Claim for an adjustment in Contract Time shall be prepared in accordance with the provisions of Paragraph 12.02.B. Each Claim shall be accompanied by claimant's written statement that the adjustment claimed is the entire adjustment to which the claimant believes it is entitled as a result of said event. The opposing party shall submit any response to Engineer and the claimant within 30 days after receipt of the claimant's last submittal (unless Engineer allows additional time).

C. *Engineer's Action:* Engineer will review each Claim and, within 30 days after receipt of the last submittal of the claimant or the last submittal of the opposing party, if any, take one of the following actions in writing:

1. deny the Claim in whole or in part,

2. approve the Claim, or

3. notify the parties that the Engineer is unable to resolve the Claim if, in the Engineer's sole discretion, it would be inappropriate for the Engineer to do so. For purposes of further resolution of the Claim, such notice shall be deemed a denial.

D. In the event that Engineer does not take action on a Claim within said 30 days, the Claim shall be deemed denied.

E. Engineer's written action under Paragraph 10.05.C or denial pursuant to Paragraphs 10.05.C.3 or 10.05.D will be final and binding upon Owner and Contractor, unless Owner or Contractor invoke the dispute resolution procedure set forth in Article 16 within 30 days of such action or denial.

F. No Claim for an adjustment in Contract Price or Contract Times will be valid if not submitted in accordance with this Paragraph 10.05.

ARTICLE 11 - COST OF THE WORK; ALLOWANCES; UNIT PRICE WORK

11.01 *Cost of the Work*

A. *Costs Included:* The term Cost of the Work means the sum of all costs, except those excluded in Paragraph 11.01.B, necessarily incurred and paid by Contractor in the proper performance of the Work. When the value of any Work covered by a Change Order or when a Claim for an adjustment in Contract Price is determined on the basis of Cost of the Work, the costs to be reimbursed to Contractor will be only those additional or incremental costs required because of the change in the Work or because of the event giving rise to the Claim. Except as otherwise may be agreed to in writing by Owner, such costs shall be in amounts no higher than those prevailing in the locality of the Project, shall include only the following items, and shall not include any of the costs itemized in Paragraph 11.01.B.

1. Payroll costs for employees in the direct employ of Contractor in the performance of the Work under schedules of job classifications agreed upon by Owner and Contractor. Such employees shall include, without limitation, superintendents, foremen, and other personnel employed full time at the Site. Payroll costs for employees not employed full time on the Work shall be apportioned on the basis of their time spent on the Work. Payroll costs shall include, but not be limited to, salaries and wages plus the cost of fringe benefits, which shall include social security contributions, unemployment, excise, and payroll taxes, workers' compensation, health and retirement benefits, bonuses, sick leave, vacation and holiday pay applicable thereto. The expenses of performing Work outside of regular working hours, on Saturday, Sunday, or legal holidays, shall be included in the above to the extent authorized by Owner.

2. Cost of all materials and equipment furnished and incorporated in the Work, including costs of transportation and storage thereof, and Suppliers' field services required in connection therewith. All cash discounts shall accrue to Contractor unless Owner deposits funds with Contractor with which to make payments, in which case the cash discounts shall accrue to Owner. All trade discounts, rebates and refunds and returns from sale of surplus materials and equipment shall accrue to Owner, and Contractor shall make provisions so that they may be obtained.

3. Payments made by Contractor to Subcontractors for Work performed by Subcontractors. If required by Owner, Contractor shall obtain competitive

bids from subcontractors acceptable to Owner and Contractor and shall deliver such bids to Owner, who will then determine, with the advice of Engineer, which bids, if any, will be acceptable. If any subcontract provides that the Subcontractor is to be paid on the basis of Cost of the Work plus a fee, the Subcontractor's Cost of the Work and fee shall be determined in the same manner as Contractor's Cost of the Work and fee as provided in this Paragraph 11.01.

4. Costs of special consultants (including but not limited to Engineers, architects, testing laboratories, surveyors, attorneys, and accountants) employed for services specifically related to the Work.

5. Supplemental costs including the following:

a. The proportion of necessary transportation, travel, and subsistence expenses of Contractor's employees incurred in discharge of duties connected with the Work.

b. Cost, including transportation and maintenance, of all materials, supplies, equipment, machinery, appliances, office, and temporary facilities at the Site, and hand tools not owned by the workers, which are consumed in the performance of the Work, and cost, less market value, of such items used but not consumed which remain the property of Contractor.

c. Rentals of all construction equipment and machinery, and the parts thereof whether rented from Contractor or others in accordance with rental agreements approved by Owner with the advice of Engineer, and the costs of transportation, loading, unloading, assembly, dismantling, and removal thereof. All such costs shall be in accordance with the terms of said rental agreements. The rental of any such equipment, machinery, or parts shall cease when the use thereof is no longer necessary for the Work.

d. Sales, consumer, use, and other similar taxes related to the Work, and for which Contractor is liable, imposed by Laws and Regulations.

e. Deposits lost for causes other than negligence of Contractor, any Subcontractor, or anyone directly or indirectly employed by any of them or for whose acts any of them may be liable, and royalty payments and fees for permits and licenses.

f. Losses and damages (and related expenses) caused by damage to the Work, not compensated by insurance or otherwise, sustained by Contractor in connection with the performance of the Work (except losses and damages within the deductible amounts of property insurance established in accordance with Paragraph

5.06.D), provided such losses and damages have resulted from causes other than the negligence of Contractor, any Subcontractor, or anyone directly or indirectly employed by any of them or for whose acts any of them may be liable. Such losses shall include settlements made with the written consent and approval of Owner. No such losses, damages, and expenses shall be included in the Cost of the Work for the purpose of determining Contractor's fee.

g. The cost of utilities, fuel, and sanitary facilities at the Site.

h. Minor expenses such as telegrams, long distance telephone calls, telephone service at the Site, expresses, and similar petty cash items in connection with the Work.

i. The costs of premiums for all bonds and insurance Contractor is required by the Contract Documents to purchase and maintain.

B. Costs Excluded: The term Cost of the Work shall not include any of the following items:

1. Payroll costs and other compensation of Contractor's officers, executives, principals (of partnerships and sole proprietorships), general managers, safety managers, engineers, architects, estimators, attorneys, auditors, accountants, purchasing and contracting agents, expeditors, timekeepers, clerks, and other personnel employed by Contractor, whether at the Site or in Contractor's principal or branch office for general administration of the Work and not specifically included in the agreed upon schedule of job classifications referred to in Paragraph 11.01.A.1 or specifically covered by Paragraph 11.01.A.4, all of which are to be considered administrative costs covered by the Contractor's fee.

2. Expenses of Contractor's principal and branch offices other than Contractor's office at the Site.

3. Any part of Contractor's capital expenses, including interest on Contractor's capital employed for the Work and charges against Contractor for delinquent payments.

4. Costs due to the negligence of Contractor, any Subcontractor, or anyone directly or indirectly employed by any of them or for whose acts any of them may be liable, including but not limited to, the correction of defective Work, disposal of materials or equipment wrongly supplied, and making good any damage to property.

5. Other overhead or general expense costs of any kind and the costs of any item not specifically and expressly included in Paragraphs 11.01.A and 11.01.B.

C. Contractor's Fee: When all the Work is performed on the basis of cost-plus, Contractor's fee shall be determined as set forth in the Agreement. When the value of any Work covered by a Change Order or when a Claim for an adjustment in Contract Price is determined on the basis of Cost of the Work, Contractor's fee shall be determined as set forth in Paragraph 12.01.C.

D. Documentation: Whenever the Cost of the Work for any purpose is to be determined pursuant to Paragraphs 11.01.A and 11.01.B, Contractor will establish and maintain records thereof in accordance with generally accepted accounting practices and submit in a form acceptable to Engineer an itemized cost breakdown together with supporting data.

11.02 Allowances

A. It is understood that Contractor has included in the Contract Price all allowances so named in the Contract Documents and shall cause the Work so covered to be performed for such sums and by such persons or entities as may be acceptable to Owner and Engineer.

B. Cash Allowances

1. Contractor agrees that:

a. the cash allowances include the cost to Contractor (less any applicable trade discounts) of materials and equipment required by the allowances to be delivered at the Site, and all applicable taxes; and

b. Contractor's costs for unloading and handling on the Site, labor, installation, overhead, profit, and other expenses contemplated for the cash allowances have been included in the Contract Price and not in the allowances, and no demand for additional payment on account of any of the foregoing will be valid.

C. Contingency Allowance

1. Contractor agrees that a contingency allowance, if any, is for the sole use of Owner to cover unanticipated costs.

D. Prior to final payment, an appropriate Change Order will be issued as recommended by Engineer to reflect actual amounts due Contractor on account of Work covered by allowances, and the Contract Price shall be correspondingly adjusted.

11.03 Unit Price Work

A. Where the Contract Documents provide that all or part of the Work is to be Unit Price Work, initially the Contract Price will be deemed to include for all Unit Price Work an amount equal to the sum of the unit price for each separately identified item of Unit Price Work

times the estimated quantity of each item as indicated in the Agreement.

B. The estimated quantities of items of Unit Price Work are not guaranteed and are solely for the purpose of comparison of Bids and determining an initial Contract Price. Determinations of the actual quantities and classifications of Unit Price Work performed by Contractor will be made by Engineer subject to the provisions of Paragraph 9.07.

C. Each unit price will be deemed to include an amount considered by Contractor to be adequate to cover Contractor's overhead and profit for each separately identified item.

D. Owner or Contractor may make a Claim for an adjustment in the Contract Price in accordance with Paragraph 10.05 if:

1. the quantity of any item of Unit Price Work performed by Contractor differs materially and significantly from the estimated quantity of such item indicated in the Agreement; and

2. there is no corresponding adjustment with respect any other item of Work; and

3. Contractor believes that Contractor is entitled to an increase in Contract Price as a result of having incurred additional expense or Owner believes that Owner is entitled to a decrease in Contract Price and the parties are unable to agree as to the amount of any such increase or decrease.

ARTICLE 12 - CHANGE OF CONTRACT PRICE; CHANGE OF CONTRACT TIMES

12.01 *Change of Contract Price*

A. The Contract Price may only be changed by a Change Order. Any Claim for an adjustment in the Contract Price shall be based on written notice submitted by the party making the Claim to the Engineer and the other party to the Contract in accordance with the provisions of Paragraph 10.05.

B. The value of any Work covered by a Change Order or of any Claim for an adjustment in the Contract Price will be determined as follows:

1. where the Work involved is covered by unit prices contained in the Contract Documents, by application of such unit prices to the quantities of the items involved (subject to the provisions of Paragraph 11.03); or

2. where the Work involved is not covered by unit prices contained in the Contract Documents, by a mutually agreed lump sum (which may include an allowance for overhead and profit not necessarily in accordance with Paragraph 12.01.C.2); or

3. where the Work involved is not covered by unit prices contained in the Contract Documents and agreement to a lump sum is not reached under Paragraph 12.01.B.2, on the basis of the Cost of the Work (determined as provided in Paragraph 11.01) plus a Contractor's fee for overhead and profit (determined as provided in Paragraph 12.01.C).

C. *Contractor's Fee:* The Contractor's fee for overhead and profit shall be determined as follows:

1. a mutually acceptable fixed fee; or

2. if a fixed fee is not agreed upon, then a fee based on the following percentages of the various portions of the Cost of the Work:

a. for costs incurred under Paragraphs 11.01.A.1 and 11.01.A.2, the Contractor's fee shall be 15 percent;

b. for costs incurred under Paragraph 11.01.A.3, the Contractor's fee shall be five percent;

c. where one or more tiers of subcontracts are on the basis of Cost of the Work plus a fee and no fixed fee is agreed upon, the intent of Paragraph 12.01.C.2.a is that the Subcontractor who actually performs the Work, at whatever tier, will be paid a fee of 15 percent of the costs incurred by such Subcontractor under Paragraphs 11.01.A.1 and 11.01.A.2 and that any higher tier Subcontractor and Contractor will each be paid a fee of five percent of the amount paid to the next lower tier Subcontractor;

d. no fee shall be payable on the basis of costs itemized under Paragraphs 11.01.A.4, 11.01.A.5, and 11.01.B;

e. the amount of credit to be allowed by Contractor to Owner for any change which results in a net decrease in cost will be the amount of the actual net decrease in cost plus a deduction in Contractor's fee by an amount equal to five percent of such net decrease; and

f. when both additions and credits are involved in any one change, the adjustment in Contractor's fee shall be computed on the basis of the net change in accordance with Paragraphs 12.01.C.2.a through 12.01.C.2.e, inclusive.

12.02 *Change of Contract Times*

A. The Contract Times may only be changed by a Change Order. Any Claim for an adjustment in the Contract Times shall be based on written notice submitted by the party making the Claim to the Engineer and the other party to the Contract in accordance with the provisions of Paragraph 10.05.

B. Any adjustment of the Contract Times covered by a Change Order or any Claim for an adjustment in the Contract Times will be determined in accordance with the provisions of this Article 12.

12.03 *Delays*

A. Where Contractor is prevented from completing any part of the Work within the Contract Times due to delay beyond the control of Contractor, the Contract Times will be extended in an amount equal to the time lost due to such delay if a Claim is made therefor as provided in Paragraph 12.02.A. Delays beyond the control of Contractor shall include, but not be limited to, acts or neglect by Owner, acts or neglect of utility owners or other contractors performing other work as contemplated by Article 7, fires, floods, epidemics, abnormal weather conditions, or acts of God.

B. If Owner, Engineer, or other contractors or utility owners performing other work for Owner as contemplated by Article 7, or anyone for whom Owner is responsible, delays, disrupts, or interferes with the performance or progress of the Work, then Contractor shall be entitled to an equitable adjustment in the Contract Price or the Contract Times, or both. Contractor's entitlement to an adjustment of the Contract Times is conditioned on such adjustment being essential to Contractor's ability to complete the Work within the Contract Times.

C. If Contractor is delayed in the performance or progress of the Work by fire, flood, epidemic, abnormal weather conditions, acts of God, acts or failures to act of utility owners not under the control of Owner, or other causes not the fault of and beyond control of Owner and Contractor, then Contractor shall be entitled to an equitable adjustment in Contract Times, if such adjustment is essential to Contractor's ability to complete the Work within the Contract Times. Such an adjustment shall be Contractor's sole and exclusive remedy for the delays described in this Paragraph 12.03.C.

D. Owner, Engineer and the Related Entities of each of them shall not be liable to Contractor for any claims, costs, losses, or damages (including but not limited to all fees and charges of Engineers, architects, attorneys, and other professionals and all court or arbitration or other dispute resolution costs) sustained by Contractor on or in connection with any other project or anticipated project.

E. Contractor shall not be entitled to an adjustment in Contract Price or Contract Times for delays within the control of Contractor. Delays attributable to and within the control of a Subcontractor or Supplier shall be deemed to be delays within the control of Contractor.

ARTICLE 13 - TESTS AND INSPECTIONS; CORRECTION, REMOVAL OR ACCEPTANCE OF DEFECTIVE WORK

13.01 *Notice of Defects*

A. Prompt notice of all defective Work of which Owner or Engineer has actual knowledge will be given to Contractor. All defective Work may be rejected, corrected, or accepted as provided in this Article 13.

13.02 *Access to Work*

A. Owner, Engineer, their consultants and other representatives and personnel of Owner, independent testing laboratories, and governmental agencies with jurisdictional interests will have access to the Site and the Work at reasonable times for their observation, inspecting, and testing. Contractor shall provide them proper and safe conditions for such access and advise them of Contractor's Site safety procedures and programs so that they may comply therewith as applicable.

13.03 *Tests and Inspections*

A. Contractor shall give Engineer timely notice of readiness of the Work for all required inspections, tests, or approvals and shall cooperate with inspection and testing personnel to facilitate required inspections or tests.

B. Owner shall employ and pay for the services of an independent testing laboratory to perform all inspections, tests, or approvals required by the Contract Documents except:

1. for inspections, tests, or approvals covered by Paragraphs 13.03.C and 13.03.D below;

2. that costs incurred in connection with tests or inspections conducted pursuant to Paragraph 13.04.B shall be paid as provided in said Paragraph 13.04.C; and

3. as otherwise specifically provided in the Contract Documents.

C. If Laws or Regulations of any public body having jurisdiction require any Work (or part thereof) specifically to be inspected, tested, or approved by an employee or other representative of such public body, Contractor shall assume full responsibility for arranging and obtaining such inspections, tests, or approvals, pay all

costs in connection therewith, and furnish Engineer the required certificates of inspection or approval.

D. Contractor shall be responsible for arranging and obtaining and shall pay all costs in connection with any inspections, tests, or approvals required for Owner's and Engineer's acceptance of materials or equipment to be incorporated in the Work; or acceptance of materials, mix designs, or equipment submitted for approval prior to Contractor's purchase thereof for incorporation in the Work. Such inspections, tests, or approvals shall be performed by organizations acceptable to Owner and Engineer.

E. If any Work (or the work of others) that is to be inspected, tested, or approved is covered by Contractor without written concurrence of Engineer, it must, if requested by Engineer, be uncovered for observation.

F. Uncovering Work as provided in Paragraph 13.03.E shall be at Contractor's expense unless Contractor has given Engineer timely notice of Contractor's intention to cover the same and Engineer has not acted with reasonable promptness in response to such notice.

13.04 *Uncovering Work*

A. If any Work is covered contrary to the written request of Engineer, it must, if requested by Engineer, be uncovered for Engineer's observation and replaced at Contractor's expense.

B. If Engineer considers it necessary or advisable that covered Work be observed by Engineer or inspected or tested by others, Contractor, at Engineer's request, shall uncover, expose, or otherwise make available for observation, inspection, or testing as Engineer may require, that portion of the Work in question, furnishing all necessary labor, material, and equipment.

C. If it is found that the uncovered Work is defective, Contractor shall pay all claims, costs, losses, and damages (including but not limited to all fees and charges of engineers, architects, attorneys, and other professionals and all court or arbitration or other dispute resolution costs) arising out of or relating to such uncovering, exposure, observation, inspection, and testing, and of satisfactory replacement or reconstruction (including but not limited to all costs of repair or replacement of work of others); and Owner shall be entitled to an appropriate decrease in the Contract Price. If the parties are unable to agree as to the amount thereof, Owner may make a Claim therefor as provided in Paragraph 10.05.

D. If, the uncovered Work is not found to be defective, Contractor shall be allowed an increase in the Contract Price or an extension of the Contract Times, or both, directly attributable to such uncovering, exposure, observation, inspection, testing, replacement, and

reconstruction. If the parties are unable to agree as to the amount or extent thereof, Contractor may make a Claim therefor as provided in Paragraph 10.05.

13.05 *Owner May Stop the Work*

A. If the Work is defective, or Contractor fails to supply sufficient skilled workers or suitable materials or equipment, or fails to perform the Work in such a way that the completed Work will conform to the Contract Documents, Owner may order Contractor to stop the Work, or any portion thereof, until the cause for such order has been eliminated; however, this right of Owner to stop the Work shall not give rise to any duty on the part of Owner to exercise this right for the benefit of Contractor, any Subcontractor, any Supplier, any other individual or entity, or any surety for, or employee or agent of any of them.

13.06 *Correction or Removal of Defective Work*

A. Promptly after receipt of notice, Contractor shall correct all defective Work, whether or not fabricated, installed, or completed, or, if the Work has been rejected by Engineer, remove it from the Project and replace it with Work that is not defective. Contractor shall pay all claims, costs, losses, and damages (including but not limited to all fees and charges of engineers, architects, attorneys, and other professionals and all court or arbitration or other dispute resolution costs) arising out of or relating to such correction or removal (including but not limited to all costs of repair or replacement of work of others).

B. When correcting defective Work under the terms of this Paragraph 13.06 or Paragraph 13.07, Contractor shall take no action that would void or otherwise impair Owner's special warranty and guarantee, if any, on said Work.

13.07 *Correction Period*

A. If within one year after the date of Substantial Completion (or such longer period of time as may be prescribed by the terms of any applicable special guarantee required by the Contract Documents) or by any specific provision of the Contract Documents, any Work is found to be defective, or if the repair of any damages to the land or areas made available for Contractor's use by Owner or permitted by Laws and Regulations as contemplated in Paragraph 6.11.A is found to be defective, Contractor shall promptly, without cost to Owner and in accordance with Owner's written instructions:

1. repair such defective land or areas; or
2. correct such defective Work; or

3. if the defective Work has been rejected by Owner, remove it from the Project and replace it with Work that is not defective, and

4. satisfactorily correct or repair or remove and replace any damage to other Work, to the work of others or other land or areas resulting therefrom.

B. If Contractor does not promptly comply with the terms of Owner's written instructions, or in an emergency where delay would cause serious risk of loss or damage, Owner may have the defective Work corrected or repaired or may have the rejected Work removed and replaced. All claims, costs, losses, and damages (including but not limited to all fees and charges of engineers, architects, attorneys, and other professionals and all court or arbitration or other dispute resolution costs) arising out of or relating to such correction or repair or such removal and replacement (including but not limited to all costs of repair or replacement of work of others) will be paid by Contractor.

C. In special circumstances where a particular item of equipment is placed in continuous service before Substantial Completion of all the Work, the correction period for that item may start to run from an earlier date if so provided in the Specifications .

D. Where defective Work (and damage to other Work resulting therefrom) has been corrected or removed and replaced under this Paragraph 13.07, the correction period hereunder with respect to such Work will be extended for an additional period of one year after such correction or removal and replacement has been satisfactorily completed.

E. Contractor's obligations under this Paragraph 13.07 are in addition to any other obligation or warranty. The provisions of this Paragraph 13.07 shall not be construed as a substitute for or a waiver of the provisions of any applicable statute of limitation or repose.

13.08 *Acceptance of Defective Work*

A. If, instead of requiring correction or removal and replacement of defective Work, Owner (and, prior to Engineer's recommendation of final payment, Engineer) prefers to accept it, Owner may do so. Contractor shall pay all claims, costs, losses, and damages (including but not limited to all fees and charges of engineers, architects, attorneys, and other professionals and all court or arbitration or other dispute resolution costs) attributable to Owner's evaluation of and determination to accept such defective Work (such costs to be approved by Engineer as to reasonableness) and the diminished value of the Work to the extent not otherwise paid by Contractor pursuant to this sentence. If any such acceptance occurs prior to Engineer's recommendation of final payment, a Change Order will be issued incorporating the necessary revisions in the Contract Documents with respect to the Work, and Owner shall be entitled to an appropriate decrease in the

Contract Price, reflecting the diminished value of Work so accepted. If the parties are unable to agree as to the amount thereof, Owner may make a Claim therefor as provided in Paragraph 10.05. If the acceptance occurs after such recommendation, an appropriate amount will be paid by Contractor to Owner.

13.09 *Owner May Correct Defective Work*

A. If Contractor fails within a reasonable time after written notice from Engineer to correct defective Work or to remove and replace rejected Work as required by Engineer in accordance with Paragraph 13.06.A, or if Contractor fails to perform the Work in accordance with the Contract Documents, or if Contractor fails to comply with any other provision of the Contract Documents, Owner may, after seven days written notice to Contractor, correct or remedy any such deficiency.

B. In exercising the rights and remedies under this Paragraph 13.09, Owner shall proceed expeditiously. In connection with such corrective or remedial action, Owner may exclude Contractor from all or part of the Site, take possession of all or part of the Work and suspend Contractor's services related thereto, take possession of Contractor's tools, appliances, construction equipment and machinery at the Site, and incorporate in the Work all materials and equipment stored at the Site or for which Owner has paid Contractor but which are stored elsewhere. Contractor shall allow Owner, Owner's representatives, agents and employees, Owner's other contractors, and Engineer and Engineer's consultants access to the Site to enable Owner to exercise the rights and remedies under this Paragraph.

C. All claims, costs, losses, and damages (including but not limited to all fees and charges of engineers, architects, attorneys, and other professionals and all court or arbitration or other dispute resolution costs) incurred or sustained by Owner in exercising the rights and remedies under this Paragraph 13.09 will be charged against Contractor, and a Change Order will be issued incorporating the necessary revisions in the Contract Documents with respect to the Work; and Owner shall be entitled to an appropriate decrease in the Contract Price. If the parties are unable to agree as to the amount of the adjustment, Owner may make a Claim therefor as provided in Paragraph 10.05. Such claims, costs, losses and damages will include but not be limited to all costs of repair, or replacement of work of others destroyed or damaged by correction, removal, or replacement of Contractor's defective Work.

D. Contractor shall not be allowed an extension of the Contract Times because of any delay in the performance of the Work attributable to the exercise by Owner of Owner's rights and remedies under this Paragraph 13.09.

ARTICLE 14 - PAYMENTS TO CONTRACTOR AND COMPLETION

14.01 *Schedule of Values*

A. The Schedule of Values established as provided in Paragraph 2.07.A will serve as the basis for progress payments and will be incorporated into a form of Application for Payment acceptable to Engineer. Progress payments on account of Unit Price Work will be based on the number of units completed.

14.02 *Progress Payments*

A. Applications for Payments

1. At least 20 days before the date established in the Agreement for each progress payment (but not more often than once a month), Contractor shall submit to Engineer for review an Application for Payment filled out and signed by Contractor covering the Work completed as of the date of the Application and accompanied by such supporting documentation as is required by the Contract Documents. If payment is requested on the basis of materials and equipment not incorporated in the Work but delivered and suitably stored at the Site or at another location agreed to in writing, the Application for Payment shall also be accompanied by a bill of sale, invoice, or other documentation warranting that Owner has received the materials and equipment free and clear of all Liens and evidence that the materials and equipment are covered by appropriate property insurance or other arrangements to protect Owner's interest therein, all of which must be satisfactory to Owner.

2. Beginning with the second Application for Payment, each Application shall include an affidavit of Contractor stating that all previous progress payments received on account of the Work have been applied on account to discharge Contractor's legitimate obligations associated with prior Applications for Payment.

3. The amount of retainage with respect to progress payments will be as stipulated in the Agreement.

B. *Review of Applications*

1. Engineer will, within 10 days after receipt of each Application for Payment, either indicate in writing a recommendation of payment and present the Application to Owner or return the Application to Contractor indicating in writing Engineer's reasons for refusing to recommend payment. In the latter case, Contractor may make the necessary corrections and resubmit the Application.

2. Engineer's recommendation of any payment requested in an Application for Payment will constitute a representation by Engineer to Owner, based on Engineer's

observations on the Site of the executed Work as an experienced and qualified design professional and on Engineer's review of the Application for Payment and the accompanying data and schedules, that to the best of Engineer's knowledge, information and belief:

a. the Work has progressed to the point indicated;

b. the quality of the Work is generally in accordance with the Contract Documents (subject to an evaluation of the Work as a functioning whole prior to or upon Substantial Completion, to the results of any subsequent tests called for in the Contract Documents, to a final determination of quantities and classifications for Unit Price Work under Paragraph 9.07, and to any other qualifications stated in the recommendation); and

c. the conditions precedent to Contractor's being entitled to such payment appear to have been fulfilled in so far as it is Engineer's responsibility to observe the Work.

3. By recommending any such payment Engineer will not thereby be deemed to have represented that:

a. inspections made to check the quality or the quantity of the Work as it has been performed have been exhaustive, extended to every aspect of the Work in progress, or involved detailed inspections of the Work beyond the responsibilities specifically assigned to Engineer in the Contract Documents; or

b. that there may not be other matters or issues between the parties that might entitle Contractor to be paid additionally by Owner or entitle Owner to withhold payment to Contractor.

4. Neither Engineer's review of Contractor's Work for the purposes of recommending payments nor Engineer's recommendation of any payment, including final payment, will impose responsibility on Engineer:

a. to supervise, direct, or control the Work, or

b. for the means, methods, techniques, sequences, or procedures of construction, or the safety precautions and programs incident thereto, or

c. for Contractor's failure to comply with Laws and Regulations applicable to Contractor's performance of the Work, or

d. to make any examination to ascertain how or for what purposes Contractor has used the moneys paid on account of the Contract Price, or

e. to determine that title to any of the Work, materials, or equipment has passed to Owner free and clear of any Liens.

5. Engineer may refuse to recommend the whole or any part of any payment if, in Engineer's opinion, it would be incorrect to make the representations to Owner stated in Paragraph 14.02.B.2. Engineer may also refuse to recommend any such payment or, because of subsequently discovered evidence or the results of subsequent inspections or tests, revise or revoke any such payment recommendation previously made, to such extent as may be necessary in Engineer's opinion to protect Owner from loss because:

a. the Work is defective, or completed Work has been damaged, requiring correction or replacement;

b. the Contract Price has been reduced by Change Orders;

c. Owner has been required to correct defective Work or complete Work in accordance with Paragraph 13.09; or

d. Engineer has actual knowledge of the occurrence of any of the events enumerated in Paragraph 15.02.A.

C. Payment Becomes Due

1. Ten days after presentation of the Application for Payment to Owner with Engineer's recommendation, the amount recommended will (subject to the provisions of Paragraph 14.02.D) become due, and when due will be paid by Owner to Contractor.

D. Reduction in Payment

1. Owner may refuse to make payment of the full amount recommended by Engineer because:

a. claims have been made against Owner on account of Contractor's performance or furnishing of the Work;

b. Liens have been filed in connection with the Work, except where Contractor has delivered a specific bond satisfactory to Owner to secure the satisfaction and discharge of such Liens;

c. there are other items entitling Owner to a set-off against the amount recommended; or

d. Owner has actual knowledge of the occurrence of any of the events enumerated in Paragraphs 14.02.B.5.a through 14.02.B.5.c or Paragraph 15.02.A.

2. If Owner refuses to make payment of the full amount recommended by Engineer, Owner will give Contractor immediate written notice (with a copy to Engineer) stating the reasons for such action and promptly pay Contractor any amount remaining after deduction of the amount so withheld. Owner shall promptly pay Contractor the amount so withheld, or any adjustment thereto agreed to by Owner and Contractor, when Contractor corrects to Owner's satisfaction the reasons for such action.

3. If it is subsequently determined that Owner's refusal of payment was not justified, the amount wrongfully withheld shall be treated as an amount due as determined by Paragraph 14.02.C.1.

14.03 Contractor's Warranty of Title

A. Contractor warrants and guarantees that title to all Work, materials, and equipment covered by any Application for Payment, whether incorporated in the Project or not, will pass to Owner no later than the time of payment free and clear of all Liens.

14.04 Substantial Completion

A. When Contractor considers the entire Work ready for its intended use Contractor shall notify Owner and Engineer in writing that the entire Work is substantially complete (except for items specifically listed by Contractor as incomplete) and request that Engineer issue a certificate of Substantial Completion.

B. Promptly after Contractor's notification, , Owner, Contractor, and Engineer shall make an inspection of the Work to determine the status of completion. If Engineer does not consider the Work substantially complete, Engineer will notify Contractor in writing giving the reasons therefor.

C. If Engineer considers the Work substantially complete, Engineer will deliver to Owner a tentative certificate of Substantial Completion which shall fix the date of Substantial Completion. There shall be attached to the certificate a tentative list of items to be completed or corrected before final payment. Owner shall have seven days after receipt of the tentative certificate during which to make written objection to Engineer as to any provisions of the certificate or attached list. If, after considering such objections, Engineer concludes that the Work is not substantially complete, Engineer will within 14 days after submission of the tentative certificate to Owner notify Contractor in writing, stating the reasons therefor. If, after consideration of Owner's objections, Engineer considers the Work substantially complete, Engineer will within said 14 days execute and deliver to Owner and Contractor a definitive certificate of Substantial Completion (with a revised tentative list of items to be completed or corrected) reflecting such changes from the tentative certificate as Engineer believes justified after consideration of any objections from Owner.

D. At the time of delivery of the tentative certificate of Substantial Completion, Engineer will deliver to Owner and Contractor a written recommendation as to division of responsibilities pending final payment between Owner and Contractor with respect to security, operation, safety, and protection of the Work, maintenance, heat, utilities, insurance, and warranties and guarantees. Unless Owner and Contractor agree otherwise in writing and so inform Engineer in writing prior to Engineer's issuing the definitive certificate of Substantial Completion, Engineer's aforesaid recommendation will be binding on Owner and Contractor until final payment.

E. Owner shall have the right to exclude Contractor from the Site after the date of Substantial Completion subject to allowing Contractor reasonable access to complete or correct items on the tentative list.

14.05 *Partial Utilization*

A. Prior to Substantial Completion of all the Work, Owner may use or occupy any substantially completed part of the Work which has specifically been identified in the Contract Documents, or which Owner, Engineer, and Contractor agree constitutes a separately functioning and usable part of the Work that can be used by Owner for its intended purpose without significant interference with Contractor's performance of the remainder of the Work, subject to the following conditions.

1. Owner at any time may request Contractor in writing to permit Owner to use or occupy any such part of the Work which Owner believes to be ready for its intended use and substantially complete. If and when Contractor agrees that such part of the Work is substantially complete, Contractor will certify to Owner and Engineer that such part of the Work is substantially complete and request Engineer to issue a certificate of Substantial Completion for that part of the Work.

2. Contractor at any time may notify Owner and Engineer in writing that Contractor considers any such part of the Work ready for its intended use and substantially complete and request Engineer to issue a certificate of Substantial Completion for that part of the Work.

3. Within a reasonable time after either such request, Owner, Contractor, and Engineer shall make an inspection of that part of the Work to determine its status of completion. If Engineer does not consider that part of the Work to be substantially complete, Engineer will notify Owner and Contractor in writing giving the reasons therefor. If Engineer considers that part of the Work to be substantially complete, the provisions of Paragraph 14.04 will apply with respect to certification of Substantial Completion of that part of the Work and the division of responsibility in respect thereof and access thereto.

4. No use or occupancy or separate operation of part of the Work may occur prior to compliance with the requirements of Paragraph 5.10 regarding property insurance.

14.06 *Final Inspection*

A. Upon written notice from Contractor that the entire Work or an agreed portion thereof is complete, Engineer will promptly make a final inspection with Owner and Contractor and will notify Contractor in writing of all particulars in which this inspection reveals that the Work is incomplete or defective. Contractor shall immediately take such measures as are necessary to complete such Work or remedy such deficiencies.

14.07 *Final Payment*

A. Application for Payment

1. After Contractor has, in the opinion of Engineer, satisfactorily completed all corrections identified during the final inspection and has delivered, in accordance with the Contract Documents, all maintenance and operating instructions, schedules, guarantees, bonds, certificates or other evidence of insurance certificates of inspection, marked-up record documents (as provided in Paragraph 6.12), and other documents, Contractor may make application for final payment following the procedure for progress payments.

2. The final Application for Payment shall be accompanied (except as previously delivered) by:

a. all documentation called for in the Contract Documents, including but not limited to the evidence of insurance required by Paragraph 5.04.B.7;

b. consent of the surety, if any, to final payment;

c. a list of all Claims against Owner that Contractor believes are unsettled; and

d. complete and legally effective releases or waivers (satisfactory to Owner) of all Lien rights arising out of or Liens filed in connection with the Work.

3. In lieu of the releases or waivers of Liens specified in Paragraph 14.07.A.2 and as approved by Owner, Contractor may furnish receipts or releases in full and an affidavit of Contractor that: (i) the releases and receipts include all labor, services, material, and equipment for which a Lien could be filed; and (ii) all payrolls, material and equipment bills, and other indebtedness connected with the Work for which Owner or Owner's property might in any way be responsible have been paid or otherwise satisfied. If any Subcontractor or Supplier fails to furnish such a release or receipt in full, Contractor may furnish a bond or other collateral

satisfactory to Owner to indemnify Owner against any Lien.

B. Engineer's Review of Application and Acceptance

1. If, on the basis of Engineer's observation of the Work during construction and final inspection, and Engineer's review of the final Application for Payment and accompanying documentation as required by the Contract Documents, Engineer is satisfied that the Work has been completed and Contractor's other obligations under the Contract Documents have been fulfilled, Engineer will, within ten days after receipt of the final Application for Payment, indicate in writing Engineer's recommendation of payment and present the Application for Payment to Owner for payment. At the same time Engineer will also give written notice to Owner and Contractor that the Work is acceptable subject to the provisions of Paragraph 14.09. Otherwise, Engineer will return the Application for Payment to Contractor, indicating in writing the reasons for refusing to recommend final payment, in which case Contractor shall make the necessary corrections and resubmit the Application for Payment.

C. Payment Becomes Due

1. Thirty days after the presentation to Owner of the Application for Payment and accompanying documentation, the amount recommended by Engineer, less any sum Owner is entitled to set off against Engineer's recommendation, including but not limited to liquidated damages, will become due and , will be paid by Owner to Contractor.

14.08 Final Completion Delayed

A. If, through no fault of Contractor, final completion of the Work is significantly delayed, and if Engineer so confirms, Owner shall, upon receipt of Contractor's final Application for Payment (for Work fully completed and accepted) and recommendation of Engineer, and without terminating the Contract, make payment of the balance due for that portion of the Work fully completed and accepted. If the remaining balance to be held by Owner for Work not fully completed or corrected is less than the retainage stipulated in the Agreement, and if bonds have been furnished as required in Paragraph 5.01, the written consent of the surety to the payment of the balance due for that portion of the Work fully completed and accepted shall be submitted by Contractor to Engineer with the Application for such payment. Such payment shall be made under the terms and conditions governing final payment, except that it shall not constitute a waiver of Claims.

14.09 Waiver of Claims

A. The making and acceptance of final payment will constitute:

1. a waiver of all Claims by Owner against Contractor, except Claims arising from unsettled Liens, from defective Work appearing after final inspection pursuant to Paragraph 14.06, from failure to comply with the Contract Documents or the terms of any special guarantees specified therein, or from Contractor's continuing obligations under the Contract Documents; and

2. a waiver of all Claims by Contractor against Owner other than those previously made in accordance with the requirements herein and expressly acknowledged by Owner in writing as still unsettled.

ARTICLE 15 - SUSPENSION OF WORK AND TERMINATION

15.01 Owner May Suspend Work

A. At any time and without cause, Owner may suspend the Work or any portion thereof for a period of not more than 90 consecutive days by notice in writing to Contractor and Engineer which will fix the date on which Work will be resumed. Contractor shall resume the Work on the date so fixed. Contractor shall be granted an adjustment in the Contract Price or an extension of the Contract Times, or both, directly attributable to any such suspension if Contractor makes a Claim therefor as provided in Paragraph 10.05.

15.02 Owner May Terminate for Cause

A. The occurrence of any one or more of the following events will justify termination for cause:

1. Contractor's persistent failure to perform the Work in accordance with the Contract Documents (including, but not limited to, failure to supply sufficient skilled workers or suitable materials or equipment or failure to adhere to the Progress Schedule established under Paragraph 2.07 as adjusted from time to time pursuant to Paragraph 6.04);

2. Contractor's disregard of Laws or Regulations of any public body having jurisdiction;

3. Contractor's disregard of the authority of Engineer; or

4. Contractor's violation in any substantial way of any provisions of the Contract Documents.

B. If one or more of the events identified in Paragraph 15.02.A occur, Owner may, after giving Contractor (and surety) seven days written notice of its intent to terminate the services of Contractor:

1. exclude Contractor from the Site, and take possession of the Work and of all Contractor's tools, appliances, construction equipment, and machinery at the Site, and use the same to the full extent they could be used by Contractor (without liability to Contractor for trespass or conversion),

2. incorporate in the Work all materials and equipment stored at the Site or for which Owner has paid Contractor but which are stored elsewhere, and

3. complete the Work as Owner may deem expedient.

C. If Owner proceeds as provided in Paragraph 15.02.B, Contractor shall not be entitled to receive any further payment until the Work is completed. If the unpaid balance of the Contract Price exceeds all claims, costs, losses, and damages (including but not limited to all fees and charges of engineers, architects, attorneys, and other professionals and all court or arbitration or other dispute resolution costs) sustained by Owner arising out of or relating to completing the Work, such excess will be paid to Contractor. If such claims, costs, losses, and damages exceed such unpaid balance, Contractor shall pay the difference to Owner. Such claims, costs, losses, and damages incurred by Owner will be reviewed by Engineer as to their reasonableness and, when so approved by Engineer, incorporated in a Change Order. When exercising any rights or remedies under this Paragraph Owner shall not be required to obtain the lowest price for the Work performed.

D. Notwithstanding Paragraphs 15.02.B and 15.02.C, Contractor's services will not be terminated if Contractor begins within seven days of receipt of notice of intent to terminate to correct its failure to perform and proceeds diligently to cure such failure within no more than 30 days of receipt of said notice.

E. Where Contractor's services have been so terminated by Owner, the termination will not affect any rights or remedies of Owner against Contractor then existing or which may thereafter accrue. Any retention or payment of moneys due Contractor by Owner will not release Contractor from liability.

F. If and to the extent that Contractor has provided a performance bond under the provisions of Paragraph 5.01.A, the termination procedures of that bond shall supersede the provisions of Paragraphs 15.02.B, and 15.02.C.

15.03 *Owner May Terminate For Convenience*

A. Upon seven days written notice to Contractor and Engineer, Owner may, without cause and without prejudice to any other right or remedy of Owner, terminate the Contract. In such case, Contractor shall be paid for (without duplication of any items):

1. completed and acceptable Work executed in accordance with the Contract Documents prior to the effective date of termination, including fair and reasonable sums for overhead and profit on such Work;

2. expenses sustained prior to the effective date of termination in performing services and furnishing labor, materials, or equipment as required by the Contract Documents in connection with uncompleted Work, plus fair and reasonable sums for overhead and profit on such expenses;

3. all claims, costs, losses, and damages (including but not limited to all fees and charges of engineers, architects, attorneys, and other professionals and all court or arbitration or other dispute resolution costs) incurred in settlement of terminated contracts with Subcontractors, Suppliers, and others; and

4. reasonable expenses directly attributable to termination.

B. Contractor shall not be paid on account of loss of anticipated profits or revenue or other economic loss arising out of or resulting from such termination.

15.04 *Contractor May Stop Work or Terminate*

A. If, through no act or fault of Contractor, (i) the Work is suspended for more than 90 consecutive days by Owner or under an order of court or other public authority, or (ii) Engineer fails to act on any Application for Payment within 30 days after it is submitted, or (iii) Owner fails for 30 days to pay Contractor any sum finally determined to be due, then Contractor may, upon seven days written notice to Owner and Engineer, and provided Owner or Engineer do not remedy such suspension or failure within that time, terminate the Contract and recover from Owner payment on the same terms as provided in Paragraph 15.03.

B. In lieu of terminating the Contract and without prejudice to any other right or remedy, if Engineer has failed to act on an Application for Payment within 30 days after it is submitted, or Owner has failed for 30 days to pay Contractor any sum finally determined to be due, Contractor may, seven days after written notice to Owner and Engineer, stop the Work until payment is made of all such amounts due Contractor, including interest thereon. The provisions of this Paragraph 15.04 are not intended to preclude Contractor from making a Claim under Paragraph 10.05 for an adjustment in Contract Price or Contract Times or otherwise for expenses or damage directly attributable to Contractor's stopping the Work as permitted by this Paragraph.

ARTICLE 16 - DISPUTE RESOLUTION

16.01 *Methods and Procedures*

A. Either Owner or Contractor may request mediation of any Claim submitted to Engineer for a decision under Paragraph 10.05 before such decision becomes final and binding. The mediation will be governed by the Construction Industry Mediation Rules of the American Arbitration Association in effect as of the Effective Date of the Agreement. The request for mediation shall be submitted in writing to the American Arbitration Association and the other party to the Contract. Timely submission of the request shall stay the effect of Paragraph 10.05.E.

B. Owner and Contractor shall participate in the mediation process in good faith. The process shall be concluded within 60 days of filing of the request. The date of termination of the mediation shall be determined by application of the mediation rules referenced above.

C. If the Claim is not resolved by mediation, Engineer's action under Paragraph 10.05.C or a denial pursuant to Paragraphs 10.05.C.3 or 10.05.D shall become final and binding 30 days after termination of the mediation unless, within that time period, Owner or Contractor:

1. elects in writing to invoke any dispute resolution process provided for in the Supplementary Conditions, or
2. agrees with the other party to submit the Claim to another dispute resolution process, or
3. gives written notice to the other party of their intent to submit the Claim to a court of competent jurisdiction.

ARTICLE 17 - MISCELLANEOUS

17.01 *Giving Notice*

A. Whenever any provision of the Contract Documents requires the giving of written notice, it will be deemed to have been validly given if:

1. delivered in person to the individual or to a member of the firm or to an officer of the corporation for whom it is intended, or

2. delivered at or sent by registered or certified mail, postage prepaid, to the last business address known to the giver of the notice.

17.02 *Computation of Times*

A. When any period of time is referred to in the Contract Documents by days, it will be computed to exclude the first and include the last day of such period. If the last day of any such period falls on a Saturday or Sunday or on a day made a legal holiday by the law of the applicable jurisdiction, such day will be omitted from the computation.

17.03 *Cumulative Remedies*

A. The duties and obligations imposed by these General Conditions and the rights and remedies available hereunder to the parties hereto are in addition to, and are not to be construed in any way as a limitation of, any rights and remedies available to any or all of them which are otherwise imposed or available by Laws or Regulations, by special warranty or guarantee, or by other provisions of the Contract Documents. The provisions of this Paragraph will be as effective as if repeated specifically in the Contract Documents in connection with each particular duty, obligation, right, and remedy to which they apply.

17.04 *Survival of Obligations*

A. All representations, indemnifications, warranties, and guarantees made in, required by, or given in accordance with the Contract Documents, as well as all continuing obligations indicated in the Contract Documents, will survive final payment, completion, and acceptance of the Work or termination or completion of the Contract or termination of the services of Contractor.

17.05 *Controlling Law*

A. This Contract is to be governed by the law of the state in which the Project is located.

17.06 *Headings*

A. Article and paragraph headings are inserted for convenience only and do not constitute parts of these General Conditions.

SUPPLEMENTARY CONDITIONS

SECTION 00800

SUPPLEMENTARY CONDITIONS

These Supplementary Conditions amend or supplement the Standard General Conditions of the Construction Contract (EJCDC C-700, 2002 Edition) and other provisions of the Contract Documents as indicated below. All provisions which are not so amended or supplemented remain in full force and effect.

The terms used in these Supplementary Conditions will have the meanings indicated in the General Conditions. Additional terms used in these Supplementary Conditions have the meanings indicated below, which are applicable to both the singular and plural thereof.

SC-1.01 *Defined Terms* The following additional terms used in these Contract Documents shall have the meanings indicated below, which are applicable to both the singular and plural thereof:

53. *Product*—Materials, systems, and/or equipment provided by CONTRACTOR.

54. *Architect*—Refers to ENGINEER in this Contract.

55. “Or equal”—Refers to “Or accepted equal” or “Or approved equal.” Use of the term “or equal” or similar language is intended to mean that ENGINEER will consider proposed equal items as in compliance with the Contract Documents upon review of submission or upon receipt of a “Certificate of Compliance” from the CONTRACTOR under provisions of the Contract Documents.

56. “Or substitute”—Refers to “Or accepted substitution” or “Or accepted substitute.” Use of the term “or substitution” or similar language is intended to mean that the ENGINEER will consider proposed substitutions as deviations from the Contract Documents and will review proposed substitutions under provisions of the Contract Documents.

57. Change (Cost) Proposal Request (CPR) and Procedure: Document prepared by ENGINEER

that requests an addition, deletion, or revision to the Work or adjustment to Contract Price or Contract Time on behalf of the OWNER. CONTRACTOR shall submit supporting data for any change in contract price and change in contract time in accordance with CONTRACTOR certification requirements. Supporting data shall be reviewed by ENGINEER and recommendation for approval will then be made to OWNER. If approved by OWNER, approved CPR, including other approved CPRs, will be incorporated into a single Change Order for further processing.

SC-1.01.A.3. Add the following language to the end of paragraph 1.01.A.3:

The Application for Payment form to be used on this Project is included in Section 00660.

SC-1.01.A.9. Add the following language to the end of paragraph 1.01.A.9:

The Change Order form to be used on this Project is included in Section 00670.

SC-1.01.A.25. Delete paragraph 1.01.A.25 in its entirety and insert the following language in its place:

Liens—Verified statements of claim filed with OWNER pursuant to the Wyoming Revised Statutes.

SC-1.01.A.34. Add the following language at the end of the paragraph:

It may include, but not be limited to: Bidding Requirements, Contract Forms, General Conditions of the Contract, Supplementary Conditions, the Wyoming Public Works Standard Specifications (by reference), the Wyoming Department of Transportation Standard Specifications for Road and Bridge Construction (by reference), Special Provisions, and Technical Specifications.

SC-1.01.A.45. Add the following language to the end of paragraph 1.01.A.45:

The Certificate of Substantial Completion form to be used on this Project is included in Section 00680.

SC-1.01.A.52. Add the following language to the end of paragraph 1.01.A.52:

The Work Change Directive form to be used on this Project is included in Section 00675.

SC-2.02.A. D Delete paragraph 2.02.A in its entirety and insert the following in its place:

A. OWNER shall furnish to CONTRACTOR four complete sets of the Contract Documents for use in the execution of the Work. Additional copies will be furnished, upon request, at the cost of the reproduction, which is:

Complete set of Project Manual and Project Drawings	\$200
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SC-2.03.A. Delete paragraph 2.03.A in its entirety and insert the following in its place:

A. The Contract Times will commence to run on the thirtieth day after the Effective Date of the Agreement or, if a Notice to Proceed is given, on the day indicated in the Notice to Proceed. A Notice to Proceed may be given at any time within thirty (30) days after the Effective Date of the Agreement.

SC-2.05.A.4. Add a new paragraph immediately after paragraph 2.05.A.3 of the General Conditions which is to read as follows:

4. a preliminary list of construction equipment with hourly rates, owned or rented by the CONTRACTOR that will be used in the performance of the Work. The equipment list will include information necessary to confirm the hourly rates per Paragraph 11.01.5.c of the General Conditions and these Supplementary Conditions including: make, model, and year of manufacture, as well as the horse power, capacity or weight, and accessories.

SC-3.02. Add the following new paragraph immediately after paragraph 3.02.A.:

B. Specifications Cross-referencing

1. The cross-referencing of specifications sections under the heading "Related Sections"

and elsewhere within each specification section is intended as an aid to the CONTRACTOR and shall not relieve the CONTRACTOR from his responsibility to coordinate the Work under the Contract Documents.

2. Listings of cross-references are not intended to be comprehensive. The omission of a cross-reference to an additional or related requirement shall not relieve the CONTRACTOR of the obligation to provide a complete Project.

SC-3.04.B. Delete paragraph 3.04.B in its entirety and insert the following in its place:

B. So long as no change to the Contract Price or the Contract Times results, the requirements of the Contract Documents may be supplemented, and minor variations and deviations in the work may be authorized, by one or more of the following ways:

1. A Field Order,

2. ENGINEER's approval of a Shop Drawing or Sample, subject to the provisions of Paragraph 6.17.D.3, or

3. ENGINEER's written interpretation or clarification.

SC-4.02.1.a. Add a new sub-paragraph after 4.02.1. to read as follows:

a. one geotechnical investigation report, "Snake River Pathway Bridge," dated January 11, 2013, prepared by Nelson Engineering and documenting a geotechnical investigation at the site of the proposed Project, is contained within the Project Manual and is, thus, available for review by prospective Bidders and the eventual selected CONTRACTOR.

SC-4.06 Delete Paragraphs 4.06.A. and 4.06.B. in their entirety and insert the following:

A. No reports or drawings related to Hazardous Environmental Conditions at the Site are known to Owner.

B. Not Used.

SC-5.01 Add the following new paragraph immediately after paragraph 5.01.C.:

D. All bonds furnished in compliance with Instructions to Bidders or Article 5 of the General Conditions shall be signed by a registered Wyoming agent having legal authority to act on behalf of the surety.

SC-5.04. Add the following new paragraph immediately after paragraph 5.04.B:

C. The limits of liability for insurance required by paragraph 5.04 of the General Conditions shall provide coverage for not less than the following amounts or greater where required by Laws and Regulations:

1. Workers' Compensation, and related coverages under paragraphs 5.04.A.1 and A.2 of the General Conditions:

- a. State: Statutory
- b. Applicable Federal (e.g., Longshoremen's) Statutory
- c. Employer's Liability \$ 500,000

2. Contractor's General Liability under paragraphs 5.04.A.3 and A.6 of the General Conditions, which shall include completed operations and product liability coverages and eliminate the exclusion with respect to property under the care, custody, and control of the Contractor:

- a. General Aggregate \$ 2,000,000
- b. Products - Completed Operations Aggregate \$ 1,000,000
- c. Personal and Advertising Injury \$ 1,000,000
- d. Each Occurrence (Bodily Injury and Property Damage) \$ 1,000,000
- e. Property Damage liability insurance will provide Explosion, Collapse, and Underground coverages where applicable.

3. Automobile Liability under Paragraph 5.04.A.6 of the General Conditions:

- a. Bodily Injury:
 - Each person \$ 500,000
 - Each Accident \$ 1,000,000
- b. Property Damage:
 - Each Accident \$ 500,000
- c. Combined Single Limit of \$ 1,000,000

4. The Contractual Liability coverage required by Paragraph 5.04.B.4 of the General Conditions shall provide coverage for not less than the following amounts:

- a. Bodily Injury:
 - Each Accident \$ 500,000
 - Annual Aggregate \$ 1,000,000
- b. Property Damage:
 - Each Accident \$ 500,000
 - Annual Aggregate \$ 1,000,000

5. Teton County, Wyoming, Nelson Engineering, and HNTB shall be included as an additional insured under the General Liability Policy for this project.

SC-6.06.B.2. Add a new paragraph immediately after paragraph 6.06.B of the General Conditions which is to read as follows:

The CONTRACTOR shall not award Work to Subcontractor(s) in excess of 50% of the Contract Price, without prior written approval of OWNER.

SC-6.06.C. Add a new sentence at the end of paragraph 6.06.C.2. which is to read as follows:

However, Owner or Engineer may furnish to any such Subcontractor, Supplier, or other individual or entity, to the extent practicable, evidence of amounts paid in response to Contractor's Applications for Payment.

SC-6.12.B. Add the following new paragraph immediately after paragraph 6.12.A.:

B. The CONTRACTOR shall keep an updated set of construction drawings and specifications showing as-built conditions.. This set of drawings shall be updated each day to indicate construction work accomplished that day.

SC-6.17.A.1.a. Delete in its entirety paragraph 6.17.A.1.a. of the General Conditions and insert the following in its place:

- a. Submit number of copies specified in the Specifications.

SC-9.03.A. Add the following language at the end of paragraph 9.03:

The Duties, Responsibilities, and Limitations of Authority of the Resident Project Representative will be as stated in the OWNER-ENGINEER Agreement, as amended and executed for this specific Project.

SC-9.09.E. Amend the first sentence of paragraph 9.09.E to read as follows:

E. The limitations upon authority and responsibility set forth in this paragraph 9.09 shall also apply to the Resident Project Representative, if any, and assistants, if any, as well as ENGINEER's Consultants and assistants.

SC-11.01.A.5.c. Delete paragraph 11.01.A.5.c of the General Conditions in its entirety and insert the following in its place:

c. Use of all construction equipment and machinery and parts thereof whether owned by the CONTRACTOR or rented in accordance with rental agreements approved by Owner with the advice of ENGINEER. Cost will include the costs of transportation, loading, unloading, assembly, dismantling, and removal thereof for equipment involved only in this portion of the Work. Transportation costs will not be included for equipment already on the Site which is being used for other portions of the Work. The rental of any such equipment, machinery, or parts shall cease when the use thereof is no longer necessary for the Work. Hourly equipment and machinery rates shall be calculated from the Rental Rate Blue Book for Construction Equipment, the Equipment List submitted according to SC 2.05, and as follows:

1. For working equipment, the hourly rate shall be the monthly rate divided by 176 hours per month plus the hourly operating cost.
2. For equipment on standby, the hourly rate shall be 50% of the monthly rental hourly rate divided by 176 hours per month, and the hourly operating cost shall not be applied.
3. For specialized equipment rented for a short duration used for change order work or additional work not part of the scope of

the Work bid, the equipment rental rates will be negotiated prior to the Work being performed.

SC-11.03.D Delete Paragraph 11.03.D in its entirety and insert the following in its place:

D. The unit price of an item of Unit Price Work shall be subject to reevaluation and adjustment under the following conditions:

1. If the Bid price of a particular item of Unit Price Work amounts to fifteen (15%) percent or more of the Contract Price and the variation in the quantity of that particular item of Unit Price Work performed by Contractor differs by more than thirty (30%) percent from the estimated quantity of such item indicated in the Agreement, and
2. If there is no corresponding adjustment with respect to any other item of Work, and
3. If Contractor believes that Contractor has incurred additional expense as a result thereof or if Owner believes that the quantity variation entitles Owner to an adjustment in the unit price, either Owner or Contractor may make a Claim for an adjustment in the Contract Price in accordance with Article 10 if the parties are unable to agree as to the effect of any such variations in the quantity of Unit Price Work performed.

SC-13.03.A.1. Add the following paragraph to the end of 13.03.A.:

1. The authorized representative and agents of the Owner and Engineer shall have the right at any time to inspect all work, materials, invoices of materials, and other relevant data and records and to perform, or cause to be performed, any test that they deem necessary. Such tests, however, shall be subject to paragraph 13.03.B. below.

SC-14.02.A.1. Delete the first sentence of paragraph 14.02.A.1 of the General Conditions in its entirety and insert the following in its place:

1. On the last Friday of each month, the CONTRACTOR shall submit to the ENGINEER for review an Application for Payment filled out and signed by the CONTRACTOR covering the work completed as of the date of application and accompanied by such supporting documentation as

is required by the Contract Documents and also as ENGINEER may reasonably require.

END OF SECTION 00800

SC-14.02.C.1. Delete paragraph 14.02.C.1 of the General Conditions in its entirety and insert the following in its place:

1. Thirty days after presentation of the Application for Payment to Owner with Engineer's recommendation, the amount recommended will (subject to the provisions of Paragraph 14.02.D) become due, and when due will be paid by OWNER to CONTRACTOR.

SC-14.07.C.1. Delete paragraph 14.07.C.1 of the General Conditions in its entirety and insert the following in its place:

1. Ten days after presentation to OWNER of the Final Application for Payment and accompanying documentation, the amount recommended by ENGINEER, less any sum OWNER is entitled to set off against ENGINEER's recommendation including but not limited to liquidated damages, the OWNER shall, in accordance with Wyoming Statute 16-6-116, publish once a week for three consecutive weeks and post in three conspicuous places on the project, a notice stating that the OWNER has accepted the work as completed in accordance with the plans and specifications and rules set forth in this contract and that the CONTRACTOR is entitled to final payment therefore. Notice shall set forth that subsequent to the 41st day after the first publication of the notice the OWNER will make final payment to the CONTRACTOR. If there are no claims against the project payment will become due on the 42nd day after the first publication of the notice and will, within ten days thereafter be paid by the OWNER to CONTRACTOR.

SC-16.01. Add a new paragraph immediately after paragraph 16.01.C of the General Conditions which is to read as follows:

D. If a dispute resolution agreement has not been reached, then all claims, counterclaims, disputes, and other matters in question between the OWNER and CONTRACTOR arising out of or relating to the Contract Documents or the breach thereof, will be decided in a court of competent jurisdiction in Teton County in the State of Wyoming.

SPECIAL PROVISIONS

SPECIAL PROVISIONS

These Special Provisions replace, expand upon, modify, amend, supplement, clarify, and, where in conflict, supersede the Wyoming Department of Transportation Standard Specifications for Road and Bridge Construction (WYDOT SSRBC), 2003 Edition.

INDEX

WYDOT SSRBC SECTION

SPECIFICATION

SP-203	BORROW SPECIAL EXCAVATION
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SP-301	CRUSHED BASE
SP-503	BRIDGE PEDESTRIAN RAILING
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PATH 22 WEST BRIDGE PROJECT
SPECIAL PROVISION

FOR

BORROW SPECIAL EXCAVATION

Project No. 10-124-02

REFERENCES: The 2003 Edition of the Wyoming Department of Transportation's *Standard Specification for Road and Bridge Construction*.

This Special Provision supplements, amends, and where in conflict therewith, supersedes Section 203, Excavation and Embankment.

DESCRIPTION: This special provision describes the requirements for Borrow Special Excavation.

MATERIALS: Borrow Special Excavation, either Owner furnished or contractor furnished, is a pit-run, granular material containing rock no larger than 8 inches in maximum dimension.

Borrow Special Excavation (Owner Furnished) will be material obtained from the Rendezvous Lands Project. The Borrow Special Excavation (Owner Furnished) source is a stockpile of material accessed approximately 1000 feet from the start of the approach located at station 22+60 of the project alignment.

Borrow Special Excavation (Contractor Furnished) will be material provided from a Contractor source.

EQUIPMENT: Provide Equipment necessary to load, haul, place and compact Borrow Special Excavation which is either Owner furnished or contractor furnished.

CONSTRUCTION: For Borrow Special Excavation (Owner Furnished) provide a minimum of one week advance notice to Rendezvous Lands of the need to obtain material. Load the haul trucks upon arrival and weigh the material for royalty payment by Owner. Rendezvous Land's pit will be open 8:00 a.m. to 5:00 p.m. Monday through Friday. The pit may be open on Saturday with notification by 5:00 p.m. on Thursday and agreement by Rendezvous Lands to do so.

Borrow Special Excavation, either Owner furnished or contractor furnished, shall be hauled and placed directly into its final location or stockpiled at the discretion of the Contractor. No additional measurement or payment will be made for repeat handling.

METHOD OF MEASUREMENT AND BASIS OF PAYMENT

Pay Item	Unit	Measured To the Nearest
Borrow Special Excavation (Owner Furnished)	TON	0.05 TON
Borrow Special Excavation (Contractor Furnished)	TON	0.05 TON

END OF SECTION

01-09-13

PATH 22 WEST BRIDGE PROJECT
SPECIAL PROVISION

FOR

WATERING

Project No. 10-124-02

REFERENCES: The 2003 Edition of the Wyoming Department of Transportation's *Standard Specification for Road and Bridge Construction*.

This Special Provision supplements, amends, and where in conflict therewith, supersedes Section 209, Watering.

The Contractor is responsible for providing water for use on the project including the source and equipment to deliver and distribute water.

Water will not be measured for payment but is considered subsidiary to the items for which water is used.

END OF SECTION

01-09-13

PATH 22 WEST BRIDGE PROJECT
SPECIAL PROVISION

FOR

STRUCTURE EXCAVATION

Project No. 10-124-02

REFERENCES: The 2003 Edition of the Wyoming Department of Transportation's *Standard Specification for Road and Bridge Construction*.

This Special Provision supplements, amends, and where in conflict therewith, supersedes Section 212, Structure Excavation and Backfill.

DESCRIPTION: This special provision describes the classification of structure excavation.

Structure Excavation will be classified as follows:

1. Dry Excavation is material removed from above the Ordinary High Water Elevation in the Snake River which is elevation 6158.11.
2. Wet Excavation is material removed from below the Ordinary High Water Elevation in the Snake River which is elevation 6158.11.

END OF SECTION

01-09-13

PATH 22 WEST BRIDGE PROJECT
SPECIAL PROVISION

FOR

COFFERDAMS

Project No. 10-124-02

REFERENCES: The 2003 Edition of the Wyoming Department of Transportation's *Standard Specification for Road and Bridge Construction*. AASHTO/AWS D1.5-2008, Bridge Welding Code.

DESCRIPTION: Excavation for the foundations shall be performed under dry conditions obtained by cofferdam construction, pumping, watertight forms, or by a combination of these or other measures. The contractor shall make every reasonable effort, to the satisfaction of the Engineer, to achieve dewatering of the excavation areas. 30 days prior to cofferdam placement, the contractor shall submit to the Engineer for approval, computations and details of his proposed cofferdam, watertight forms, dewatering and excavation methods. Cofferdams shall be adequately braced to prevent collapse during excavation, dewatering and placing of concrete and subsequent construction of the remaining portions of the piers.

Provide all pumps and pumping that may be necessary to dewater excavations and to keep them free of water until construction within the excavation limits is complete and accepted.

The actual footing as placed may be somewhat larger in any dimension and of irregular shape but the footing size, reinforcing steel and location shown on the plans must be contained within any concrete mass placed. Immediately prior to placing footing concrete, all loose rocks, mud, and other extraneous material shall be removed from the excavated cavity.

MEASUREMENT and PAYMENT: Cofferdams will not be measured as a separate item but will be incidental to the contract pay item Wet Excavation.

END OF SECTION

12-17-12

PATH 22 WEST BRIDGE PROJECT
SPECIAL PROVISION

FOR

CRUSHED BASE

Project No. 10-124-02

REFERENCES: The 2003 Edition of the Wyoming Department of Transportation's *Standard Specification for Road and Bridge Construction*.

This Special Provision supplements, amends, and where in conflict therewith, supersedes Section 301, Aggregate Subbase, Base Courses and Bed Course Material.

DESCRIPTION: This special provision describes the requirements for Crushed Base.

MATERIALS: Crushed Base, either Owner furnished or contractor furnished, shall meet the gradation requirements for Grading W.

Crushed Base (Owner Furnished) will be material obtained from the Rendezvous Lands Project. The Crushed Base (Owner Furnished) source is a stockpile of material accessed approximately 1000 feet from the start of the approach located at station 22+60 of the project alignment.

Crushed Base (Contractor Furnished) will be material provided from a Contractor source.

EQUIPMENT: Provide Equipment necessary to load, haul, place and compact Crushed Base which is either Owner furnished or contractor furnished.

CONSTRUCTION: For Crushed Base (Owner Furnished) provide a minimum of one week advance notice to Rendezvous Lands of the need to obtain material. Load the haul trucks upon arrival and weigh the material for royalty payment by Owner. Rendezvous Land's pit will be open 8:00 a.m. to 5:00 p.m. Monday through Friday. The pit may be open on Saturday with notification by 5:00 p.m. on Thursday and agreement by Rendezvous Lands to do so.

Crushed Base, either Owner furnished or contractor furnished, shall be hauled and placed directly into its final location or stockpiled at the discretion of the Contractor. No additional measurement or payment will be made for repeat handling.

METHOD OF MEASUREMENT AND BASIS OF PAYMENT: The accepted quantity of Crushed Base, either Owner furnished or contractor furnished, will be measured by the ton at the borrow source.

Pay Item	Unit	Measured To the Nearest
Crushed Base (Owner Furnished)	TON	0.05 TON
Crushed Base (Contractor Furnished)	TON	0.05 TON

END OF SECTION

01-09-13

PATH 22 WEST BRIDGE PROJECT
SPECIAL PROVISION

FOR

BRIDGE PEDESTRIAN RAILING

Project No. 10-124-02

REFERENCES: The 2010 Edition of the Wyoming Department of Transportation's *Standard Specification for Road and Bridge Construction*. AASHTO/AWS D1.5-2011 Bridge Welding Code.

DESCRIPTION: This work consists of fabrication, transporting, storing and installing the bridge pedestrian railing as shown on the plans. Submit shop and working drawings and manuals in accordance with Section 105 of the Standard Specifications, and these Special Provisions.

The bridge pedestrian fence shall consist of a wire rope system as indicated and dimensioned on the plans. Required pre-tensioning of the wire rope system shall be computed independently by the manufacturer. The system shall be capable of restraining the following design forces:

- 1) A six inch diameter sphere with 50 lbs. of force, applied horizontally to the sphere, shall not displace the wire rope a sufficient amount to pass the sphere through.
- 2) A 200 lb. vertical force applied to one strand at the midpoint between posts shall not displace the rope more than 2 inches vertically.

A maximum pretension force of 3000 lb. per wire rope was assumed for design of the rail system. A loss of pretension force of 6% per end panel may be assumed.

MATERIALS: Wire rope shall be stainless steel wire meeting the requirements of ASTM A492, Type 316. The 5/16" diameter wire rope strands shall be made of 19 individual wires with a total breaking load of no less than 12,000 lbs. Wire rope and components used in the fabrication of the assembly of the bridge pedestrian fence shall be products of a single manufacturer or be approved by primary manufacturer for use as part of the bridge pedestrian fence system.

All steel fittings used in cable fencing system including all turnbuckles, swages, eye bolts, toggles, ferrules, wire rope grips and permanent tensioning devices shall be stainless steel and meet the requirements of ASTM A582, Type 316 and ASTM F1145. Strength of all tensioned components including all turnbuckles, swages, eye bolts, toggles, ferrules, wire rope grips and permanent tensioning devices shall be able to

achieve the breaking strength of the wire rope strands being tensioned. Clean and descale rods and fittings in accordance with ASTM A380. All exposed surfaces of components shall be passivated in accordance with ASTM B912 to provide the #7 mirror finish suitable for exterior applications.

Structural steel used in the posts shall be ASTM A709 Grade 50 as indicated on the plans. Structural steel for pipe rails and pipe sleeves shall conform to the requirements of ASTM A53 Type E, Grade B. Structural steel for rub rails shall conform to the requirements of ASTM A500, Grade A.

Exposed fasteners shall be of same materials, color and finish as material to which applied.

Manufacturer shall warrant the components to be free from manufacturing defects for a period of three years from date of substantial completion.

Paint for posts and pipe rail shall be as specified in the contract drawings. Touch up painting required following installation of the rail pipes shall be performed as specified in Section 501 of the Standard Specification.

Nylon bushings as recommended by the cable manufacturer shall be installed at each rail post hole to provide chafe protection of the wire rope. Provide grommets, bushings and washers as necessary for separation of dissimilar metals.

SUBMITTALS: Design submittals of manufacturer's structural calculations shall be prepared by a structural engineer registered in the State of Wyoming. Design pretension loads in each of the strands shall be submitted to the Engineer for review.

Submit 3 sets of shop drawings of the wire rope, posts and all hardware used in the installation and permanent configuration of the pedestrian fence system to the Engineer for review. Shop drawings shall indicate the theoretical lengths of the ropes prior to installation and the final location of the turnbuckles. Final lengths shall be calculated to allow for tensioning with fittings 2/3 open (i.e. 1/3 thread length engaged). Lengths shall be measured from center of pin to center of pin, or center of eye to center of eye.

Submit concrete anchorage systems to be used and locations of connections. Submit manufacturer's written certification that all materials comply with specified requirements and are suitable for intended application.

FABRICATION: Fabricate system in accordance with approved shop drawings. Components shall be free from defects impairing strength, durability and appearance. Exposed surfaces throughout project shall have same inherent texture and color for similar locations. Field measurements shall be taken after permanent end panel

anchorages are in place and prior to fabrication of the wire rope and fittings, to ensure proper installation of work.

CONSTRUCTION: Preassemble items in the shop to the greatest extent practicable to minimize assembly at project site. Disassemble units only to extent necessary for shipping and handling limitations. Mark units for reassembly. All components shall be transported, delivered and stored in a manner that will prevent damage. Use suitable approved type of identification marks on all strands and accessories in order to facilitate proper installation and erection.

Coordinate templates and directions for installation of anchor, which are to be embedded in concrete construction. Furnish anchoring devices which must be set in concrete for installation of work. Separate dissimilar materials with bushings, grommets or washers to prevent electrolytic corrosion.

Set work in location, alignment and elevation, true and free of rack, measured from established lines and levels.

MEASUREMENT and PAYMENT: Bridge pedestrian railing will be measured and paid for at the contract price of the "Pedestrian Railing" complete in place. This shall be full compensation for furnishing, fabricating, transporting, erecting, tensioning and protecting, and for all materials, labor, tools and equipment necessary to complete the work as required by the specifications, plans, and approved shop drawings.

END OF SECTION

01-07-13

PATH 22 WEST BRIDGE PROJECT
SPECIAL PROVISION

FOR

BEARING PILES AND SHEET PILING

Project No. 10-124-02

REFERENCES: The 2003 Edition of the Wyoming Department of Transportation's *Standard Specification for Road and Bridge Construction*.

504.3.1.1 Approval of Pile-Driving Equipment

Replace Section 504.3.1.1 with the following:

Prior to mobilizing pile driving equipment, the Contractor shall submit a pile drivability wave equation analysis of the proposed hammer and driving system to the Engineer. The Contractor's wave equation analysis shall be performed by an experienced engineering consultant. Approval of proposed pile driving equipment is contingent on review of the methods and input parameters used in the wave equation analysis by the Engineer. Pile stresses shall not exceed 90% of yield strength per the drivability analysis.

Within 14 calendar days of submitting the wave equation analysis the Engineer will submit to the contractor a notice of approval to continue OR notification of inadequate equipment.

504.4.4 Bearing Value and Penetration for Bearing Piles

Replace Subsection 504.4.4.2.1 Dynamic Load Tests with the following:

The Contractor shall acquire the services of a consultant experienced in performing dynamic pile load (PDA) tests. The Contractor shall submit materials and references, pertaining to the ability of the consultant to perform the work, to the Engineer for approval. The consultant will conduct a high-strain dynamic test in accordance with ASTM D 4945 on the piles designated as a test piles on the plans. Test piles shall be the first piles driven at each abutment and at each pier location for a total of 4 PDA tested piles. PDA analysis shall be performed by a Professional Engineer registered in the State of Wyoming.

Notify the Engineer at least five working days before pile driving is to begin on the project, and at least five working days before test piles are to be driven. The Engineer must be present during PDA pile driving.

The Engineer shall evaluate the driving resistance and establish driving criteria, using the results of the wave analysis with signal analysis provided by the Contractor's PDA consultant for each production pile tested. Contractor shall not drive other piles at the applicable pier or abutment until the Engineer gives notice that the test results indicate that sufficient capacity has been obtained, and the driving criteria for the remainder of the piles in the abutment have been established.

END OF SECTION

01-09-13

PATH 22 WEST BRIDGE PROJECT
SPECIAL PROVISION

FOR

REINFORCED CONCRETE APPROACH SLAB

Project No. 10-124-02

REFERENCES: The 2003 Edition of the Wyoming Department of Transportation's *Standard Specification for Road and Bridge Construction*.

This Special Provision supplements, amends, and where in conflict therewith, supersedes Section 507.4.3, Reinforced Concrete Approach Slabs.

DESCRIPTION: This special provision describes the requirements for Approach Slab Concrete.

MATERIALS: Class B Concrete (Special) for approach slabs shall be 3250 pounds per square inch compressive strength concrete.

END OF SECTION

01-09-13

PATH 22 WEST BRIDGE PROJECT
SPECIAL PROVISION

FOR

GABIONS

Project No. 10-124-02

REFERENCES: The 2003 Edition of the Wyoming Department of Transportation's *Standard Specification for Road and Bridge Construction*.

This Special Provision supplements, amends, and where in conflict therewith, supersedes Section 511.4.7, Gabions.

DESCRIPTION: This special provision describes the requirements for concrete piers and accessory materials to be installed with gabions.

MATERIALS: Circular stay-in-place forms for concrete piers. Concrete for piers shall be Class B Concrete (Special) with 3250 pounds per square inch compressive strength.

Steel plate as shown on the Drawings.

One inch minus stone backfill.

CONSTRUCTION: Install concrete pier forms and steel plate within gabions as shown on the Drawings. Install piers and steel plate plumb and level such that the top of each are equal to the top of the gabion. Wire steel plate and pier form into position with 12.5 ga. Wire tied to gabions. Ensure the forms and plates do not shift position upon placement of aggregate backfill into gabions.

After placement of steel plate and stone backfill, place once inch minus stone to fill small voids where typical stone backfill is too large to fill the voids.

METHOD OF MEASUREMENT AND BASIS OF PAYMENT: furnishing and installing concrete piers, steel plates and one inch minus stone backfill will not be measured separately for payment but will be considered subsidiary to the Gabion pay item.

END OF SECTION

01-09-13

PATH 22 WEST BRIDGE PROJECT
SPECIAL PROVISION

FOR

TEMPORARY TRAFFIC CONTROL

Project No. 10-124-02

REFERENCES: The 2003 Edition of the Wyoming Department of Transportation's *Standard Specification for Road and Bridge Construction*.

This Special Provision supplements, amends, and where in conflict therewith, supersedes Section 703, Temporary Traffic Control.

The Contractor is responsible for providing all temporary traffic control during the construction of the project including traffic control required for vehicles, pedestrians (and their pets) and boat traffic on the river.

Contractor shall install construction barriers, fence and gates where shown on the Drawings and/or at locations included in an approved traffic control plan. Construction fence shall be manufactured high density, heavy duty plastic construction fence, orange in color, installed with steel fence posts, or an approved equal.

Provide flaggers adequately trained and certified by successful completion of a traffic control-training course conducted by the Wyoming Department of Transportation or Wyoming Contractors Association when necessary to direct traffic.

The Emily's Pond Recreation Area (Emily's Pond), located adjacent to the construction area on the east side of the Snake River is a popular destination for skiers, walkers, and bikers. Users commonly park at the parking lot, and walk along the east levee to the north. The Contractor is permitted to close the Emily's Pond area during times when construction activities will impede recreational traffic or pose a risk to the safety of Emily's Pond visitors. The Traffic Control plan, submitted by the contractor must specify the dates during which closure of Emily's Pond is required. During times when the Emily's Pond area will remain open to the public, the Contractor must install construction fencing to separate the public from the construction areas including haul routes. It is the contractor's responsibility to install construction warning signage and signage indicating closures and/or traffic routes to be used by the public. The Engineer has the authority to require additional signage or traffic control fencing.

The boat ramp on the west side of the Snake River, adjacent to the construction area, is a popular put-in and take-out for river users. The boat ramp will remain open to all users during construction. Two-way traffic must be maintained to the boat ramp. It is the

contractor's responsibility to install construction warning signage and signage indicating traffic routes to be used by the public. The Engineer has the authority to require additional signage or traffic control fencing.

The contractor must conduct construction activities in the Snake River such that sufficient flow is maintained in the westerly river channel(s) to provide access to the boat ramp for rafts, drift boats and other small craft. The contractor must install signage on the west levee upstream of the construction site to warn river users of the construction activities. Where cofferdams or diversions are constructed upstream of the boat ramp, ensure that the resulting river flow is suitable to carry small water craft and such that diversions do not create an un-due hazard to floating craft. Install signage to provide direction to water craft coming from the north to the boat ramp. The Engineer has the authority to require additional signage.

Install "No Parking" signs at locations necessary to prevent public from parking in areas designated for two-way public routes or where access must be maintained for the public, for the Army Corps of Engineers, or for construction purposes.

MEASUREMENT AND PAYMENT: Temporary Traffic Control will not be measured for payment but will be paid on a Lump Sum Basis.

Payment shall be as follows:

Pay Item	Pay Unit	Measure to the Nearest
Temporary Traffic Control	LS	LS

1. 20 percent of the Total Lump Sum Bid will be paid with the first monthly progress payment;
2. 20 percent of the Total Lump Sum Bid will be paid with the second progress payment;
3. 20 percent of the Total Lump Sum Bid will be paid with the third progress payment;
4. 20 percent of the Total Lump Sum Bid will be paid with the fourth progress payment;
5. The final 20 percent of the Total Lump Sum Bid will be paid with the final progress payment.

END OF SECTION

01-09-13

TECHNICAL SPECIFICATIONS

TECHNICAL SPECIFICATIONS

The Wyoming Department of Transportation Standard Specifications for Road and Bridge Construction (WYDOT SSRBC), 2003 Edition, WITH THE SPECIFIC EXCEPTION OF DIVISION 100, GENERAL PROVISIONS, are included herein by reference. To obtain copies of the WYDOT Specifications contact the Wyoming Department of Transportation at (307) 777-4435.

Replace “Department” with “Teton County” wherever “Department” appears throughout the WYDOT Specifications.

Replace “State Bridge Engineer” with “Engineer” wherever “State Bridge Engineer” appears throughout the WYDOT Specifications.

Refer to the Special Provisions for modifications, amendments, clarifications, and supplements to the referenced WYDOT Specifications.

Additional supplementary specifications beyond those referenced above developed for this Project are listed below:

INDEX

ASSIGNED NUMBER

SPECIFICATION

SS-100	SUMMARY OF WORK
SS-105	COORDINATION OF CONTRACT DOCUMENTS
SS-110	PROJECT COORDINATION (INCLUDING MOBILIZATION)
SS-115	FORCE ACCOUNT WORK
SS-120	SUBMITTALS
SS-125	TEMPORARY FACILITIES

PATH 22 WEST BRIDGE PROJECT
SUPPLEMENTARY SPECIFICATION

FOR

SUMMARY OF WORK

Project No. 10-124-02

REFERENCES: The 2003 Edition of the Wyoming Department of Transportation's *Standard Specification for Road and Bridge Construction*.

DESCRIPTION: This specification describes the Project and the Project Area in general terms. It also describes some general responsibilities of the Contractor.

THE PROJECT: The project is generally described as the construction of a pathway bridge across the Snake River, installation of conduit for a future gas line to be affixed to the under-decking of the bridge, associated grading, and appurtenances thereto. The bridge is an approximately 700-foot long, four-span steel girder bridge, 14 feet in width, supported by three piers on driven piles with abutments tied into existing levees on either side of the river.

THE PROJECT AREA: The Project Area is set forth on the Project Drawings and is loosely described as an area extending north a distance of 600 feet from the existing Wyoming Highway 22 Vehicular Bridge across the Snake River and bounded on the west by Wyoming Highway 390 and on the east by Iron Rock Road, all in Teton County, Wyoming.

MISCELLANEOUS: The Contractor shall:

1. Comply with applicable codes and regulations of authorities having jurisdiction.
2. Field-verify dimensions indicated on drawings before fabricating or ordering materials. Do not scale drawings.
3. Notify OWNER of existing conditions differing from those indicated on the drawings. Verify the existence and location of underground utilities along the route of proposed work. Omission of an existing utility location on the Drawings is not to be considered as its nonexistence. Inclusion of existing utility locations on the Drawings is not to be considered as its definite location. Do not remove or alter existing utilities without prior written approval.

4. Take note of the fact that the Contract Documents are intended to provide the basis for proper completion of the work suitable for the intended use of OWNER. Anything not expressly set forth but which is reasonably implied or necessary for proper performance of the project shall be included.
5. Understand that portions of the Contract Documents are written in the imperative mode. Except where specifically intended otherwise, the subject of all imperative statements is CONTRACTOR. For example, "Furnish..." means "CONTRACTOR shall furnish...", "Provide..." means "CONTRACTOR shall provide...".

END OF SECTION

01-09-13

PATH 22 WEST BRIDGE PROJECT
SUMPPLEMENTARY SPECIFICATION

FOR

COORDINATION OF CONTRACT DOCUMENTS

Project No. 10-124-02

REFERENCES: The 2003 Edition of the Wyoming Department of Transportation's *Standard Specification for Road and Bridge Construction*.

DESCRIPTION: This specification describes the Coordination of Contract Documents.

The various portions of the Contract Documents, of which these special provisions are a part, are essential parts of the Agreement, and a requirement occurring in any portion or part is as binding as though occurring in all. All portions are intended to be complimentary and to describe and provide for a complete work. In the case of discrepancy, the following hierarchy shall be observed:

1. Special Provisions will govern over
2. Supplementary Specifications, which will govern over
3. Project Drawings, which will govern over
4. Referenced Specifications and Standard Drawings.

Contractor shall not take advantage of any apparent error or omission in the contract documents. If Contractor discovers an error or omission, Contractor shall immediately notify Engineer. Engineer will pursue such corrections and interpretations as may be necessary for fulfilling the intent of the Contract Documents.

END OF SECTION

01-09-13

PATH 22 WEST BRIDGE PROJECT
SUPPLEMENTARY SPECIFICATION

FOR

PROJECT COORDINATION
(INCLUDING MOBILIZATION)

Project No. 10-124-02

REFERENCES: The 2003 Edition of the Wyoming Department of Transportation's *Standard Specification for Road and Bridge Construction*.

DESCRIPTION: This specification describes the requirements for Project Coordination.

GENERAL COORDINATION

A. CONFERENCES/MEETINGS

1. Preconstruction Conference: Engineer shall schedule a preconstruction conference to be held within twenty (20) days of the issuance of the Notice of Award.
 - a. Attendance: Owner, Engineer, Contractor's assigned supervisory personnel, and major Subcontractors' assigned supervisory personnel shall attend this conference. Representatives of potentially-affected public agencies (e.g., WYDOT, Teton County Road & Levee Department, and Jackson-Teton County Parks & Recreation Department) and private and public utilities (e.g., Wilson Sewer District) shall be invited to attend.
 - b. Minutes: Engineer will record minutes and distribute copies within seven (7) days after the meeting, with one copy each of the minutes being distributed to Contractor, Owner, participants, and those affected by decisions made at the meeting.
2. Construction Progress Meetings: During the course of construction, Engineer and Contractor shall conduct regular construction progress meetings at the project site. These meetings shall take place at 9:30 a.m. on the last Friday of every month, unless an alternative date is agreed upon by all three of Engineer, Contractor, and Owner.

- a. Attendance: Owner, Engineer, and Contractor's assigned supervisory personnel shall attend this conference.
- b. Agenda: The meeting agenda shall include all of the following that apply:
 - (i) Review of Minutes of previous meetings.
 - (ii) Review of Work progress.
 - (iii) Field observations, problems, and decisions.
 - (iv) Presentation of proposed Work Change Directives and/or Change Orders.
 - (v) Identification of problems which impede planned progress.
 - (vi) Review of submittals schedule and status of submittals.
 - (vi) Review of off-site fabrication and delivery schedules.
 - (vii) Maintenance of progress schedule.
 - (viii) Corrective measures to regain projected schedules.
 - (ix) Planned progress during succeeding work period.
 - (x) Coordination of projected progress.
 - (xi) Maintenance of quality and work standards.
 - (xii) Effect of proposed changes on progress schedule and coordination.
 - (xiii) Contractor's Pay Application.
 - (xiii) Other business relating to Work.
- c. Minutes: Engineer will record minutes and distribute copies within seven (7) days after the meeting, with one copy each of the minutes being distributed to Contractor, Owner, participants, and those affected by decisions made at the meeting.
- d. Contractor's Pay Application: All aspects of the application shall be reviewed and agreed upon by representatives of the Engineer and Owner, and, if agreed upon, the application shall be signed with a recommendation for approval by those representatives at the Construction Progress Meeting in order that the application may be submitted to and acted upon by the Owner in a timely manner.

B. MOBILIZATION

- 1. Mobilization shall include all preparatory work and operations, including, but not limited to, those necessary for the movement of personnel, equipment, supplies, and incidentals to the project sites, for the establishment of all facilities necessary for the work on the project, for the costs of obtaining the

required bonds and insurance, and for all other work and operations that must be performed, or costs incurred, prior to beginning work on the various items on the project. Said Mobilization shall specifically include the construction, maintenance, and removal of temporary access roads within the banks of the Snake River to provide access for the cofferdam excavation and construction, pile-driving, pile cap construction, and pier construction activities that are part of this Project.

2. Mobilization shall also specifically include compliance with Wyoming State Statute 16-6-121 (f), the language of which is as follows:

“The prime contractor shall post on the construction site a prominent sign citing this section and stating that any subcontractor or materialman shall give notice to the prime contractor of a right to protection under the bond or guarantee and that failure to provide the notice shall waive the subcontractor or materialman's protection under the bond or guarantee and shall waive any right to a lien for materials or services provided.”

COORDINATION WITH PUBLIC AND PRIVATE AGENCIES

- A. Contractor shall comply with the provisions of Wyoming Statutes 37-12-301 through 37-12-305, known and cited as the “Wyoming Underground Facilities Notification Act,” and commonly referred to as “One-Call.”
 1. The plans prepared for this project by Engineer, although based on the best information available, show the locations of existing underground utilities in an approximate way only. Contractor shall determine the exact location of all existing utilities before commencing work. Contractor shall be fully responsible for any and all damages and resultant costs that might be occasioned by failure to exactly locate and preserve any and all underground utilities.
- B. Should public or private utility companies elect to repair or replace their lines in the project area, their crews will be permitted access to the area to accomplish their work. Contractor shall coordinate with others working at the site to minimize conflicts and to provide required access.

COORDINATION WITH OWNER AND ENGINEER

- A. Owner will provide Engineering surveys to establish reference points as necessary. Construct all work in accordance with the lines and grades shown on the Drawings, and as designated by Engineer. These lines and grades may be modified by Engineer as provided in the General Conditions. Notify Engineer a minimum of 24 hours in advance to request surveying. All survey work shall be done by or under the direct supervision of a licensed Wyoming professional land surveyor.

- B. Unless otherwise provided for in the Contract, Owner shall employ and pay for the services of an independent testing laboratory to perform all tests required by the Contract Documents. Contractor shall notify Engineer a minimum of 24 hours in advance to request testing.

COORDINATION WITH OTHER CONTRACTORS AND OTHER TETON COUNTY PROJECTS

- A. A number of other public or quasi-public infrastructure projects will be taking place concurrently with the Path 22 West Bridge Project. These projects will include:
- A pathway project to the east of the Path 22 West Bridge Project,
 - A pathway project to the west of the Path 22 West Bridge Project, which project will involve constructing an underpass under Wyoming Highway 390, and
 - A natural gas pipeline project that will involve attaching the gas pipeline to the bridge to be constructed as the main effort of the Path 22 West Bridge Project.

It will be the Contractor's responsibility to coordinate activities on the Path 22 West Bridge Project with these other projects so as to reduce to a minimum any conflict between the projects and to minimize any impacts on the project timeline.

COORDINATION WITH PUBLIC

- A. Maintenance of Local Services: Contractor shall, to the extent practicable, maintain uninterrupted water, gas, electric, sewer, cable television, and telephone service to all properties within the project site. Services damaged by Contractor shall be repaired or replaced immediately at the expense of Contractor.
- B. Minimize Disturbance of Private Property: Contractor shall make every effort to minimize disturbance of private property by Contractor's operations. Contractor shall notify Owner, Engineer, and occupant prior to starting work on any installation that requires removal, replacement, or damage to private property. Contractor shall return to original condition or better such removal, replacement, or damage at Contractor's expense.
- C. Minimize Disturbance of Public Property: Contractor shall make every effort to minimize disturbance of public property by Contractor's operations. Contractor shall notify Owner, Engineer, and occupant prior to starting work on any installation that requires removal, replacement, or damage to public property. Contractor shall return to original condition or better such removal, replacement, or damage at Contractor's expense.

PUBLIC INFORMATION PROGRAM

- A. In an effort to avoid, to the maximum extent possible, inconveniencing the residents of Teton County during the course of construction, a Public Information Program (PIP) shall be implemented and continued throughout the life of the project.
 - 1. **Owner's Responsibilities:** Prior to the commencement of work on the project, Owner shall place advertisements in the local newspaper, post information on its website, and run public service notices on local radio regarding the up-coming project, its nature, its anticipated duration, and its potential for disruption of daily activities.

ENVIRONMENTAL CONDITIONS

- A. **Hours of Operation:** Contractor shall conduct all construction activities between the hours of 7:00 a.m. and 7:00 p.m., Monday through Saturday, except for emergencies. No work, except for emergencies and only with express prior approval from Owner, will be allowed on Sundays and legal holidays.
- B. Contractor shall make every effort to minimize noises caused by Contractor's operations. Equipment shall be equipped with silencers or mufflers designed to operate with the least possible noise, if possible. Contractor SHALL NOT permit the use of loud, abusive, obnoxious, or profane language by employees or by the employees of subcontractors. Contractor shall observe local ordinances regarding noise standards.
- C. Contractor shall minimize the introduction of noxious fumes into the air. Motor equipment shall be kept in repair and equipped with anti-pollution devices. Contractor shall take active measures to control dust and airborne debris resulting from construction operations. Burning as a method of cleaning or disposal will not be permitted.
- D. Contractor shall be responsible for dust control, if deemed necessary by Owner and Engineer, and shall provide all equipment and personnel necessary to meet the requirements of this responsibility. Contractor shall provide Engineer with the name(s) and telephone number(s) of the person(s) designated to maintain dust control during evenings and weekends. If this person cannot be contacted, Owner may use its equipment to correct a dust problem. In this event, Contractor shall pay all costs incurred by Owner.
- E. Contractor shall conduct construction operations to minimize damage to natural watercourses, and shall not permit petroleum products, volatile fluids wastes, or any other wastes, or excessive amounts of silt, clay, or mud to enter any drainage system. The bed of natural watercourses shall be restored to normal gradient and cross-section after being disturbed.

1. Compliance with State of Wyoming General Permit for Storm Water Discharges Associated with Construction Activities (Small Construction General Permit WYR10-A000): Contractor shall carry out construction on the project in conformance with the State of Wyoming General Permit for Storm Water Discharges Associated with Construction Activities (Small Construction General Permit WYR10-A000), which permit covers any clearing, grading, or excavation project which will disturb between one and five (not necessarily contiguous) acres. Under the permit, “operators” (in this case, Contractor) must prepare a Storm Water Pollution Prevention Plan (SWPPP).
 - a. Storm Water Pollution Prevention Plan (SWPPP): Contractor shall develop and implement a SWPPP throughout the project area, which implementation shall include periodic self-monitoring and inspection of the construction operation to ensure compliance with the plan. Contractor shall be free to utilize Contractor’s own means and methods in development and implementation of the plan to the extent compliance with regulatory requirements is assured.
- F. Contractor shall not dispose of debris or refuse (construction-related or otherwise) at the work site, in an open dump, or in a natural watercourse, whether on public or private property, or in such places that undesirable wastes can eventually be exposed or carried to a natural watercourse. Such wastes shall be disposed of appropriately (at a public solid waste facility or transfer station) either through efforts of Contractor or an appropriate waste-hauling entity engaged by Contractor.
- G. Contractor shall remove all materials, tools, equipment, and construction debris from the site immediately after completion of the work task.
- H. Contractor shall restrict construction operations as nearly as possible to the immediate site. Unnecessary cutting of vegetation adjacent to the site is prohibited. Every effort shall be made to minimize erosion during and after construction and the site shall be returned to its original condition, except where improvements are indicated or required.
- I. Contractor shall be responsible for providing adequate and well-maintained and serviced toilet facilities for Contractor’s employees and the employees of subcontractors on the project.
- J. Contractor shall be responsible for properly disinfecting all potable water mains and service lines which are damaged, severed, repaired, or replaced by the construction operations.
- K. Contractor shall not erect, or permit the erection of, advertising signs. Only

minimal identification and direction signs shall be permitted on the site. Unnecessary or obnoxious posters, pictures, signs, symbols, drawings, or writing on work, material, or equipment, resulting from vandalism or other causes, shall be covered or removed by Contractor.

- L. Contractor shall take affirmative action to prevent the misuse of the natural environment, wasting of natural resources, or destruction of natural values.

PROJECT CLOSE-OUT

- A. Contractor shall:

1. Leave all project components in an operational state.
2. Ensure that all segments of the project area, including staging areas, are cleaned of all rubbish, trash, unused materials, equipment, and temporary facilities.
3. Perform reclamation, to approximate pre-construction conditions (to the satisfaction of Owner), of all access routes and other disturbances created by Contractor within the banks of the Snake River to facilitate the Work of this Project (as described in Sub-section B.1. of this Specification).
 - a. Said reclamation shall be performed prior to the Spring runoff and the associated rise in the Snake River.
 - b. Should the work of the Project that is to take place within the banks of the Snake River not be completed prior to Spring runoff and the associated rise in the Snake River, said reclamation shall still be performed prior to the Spring runoff. Reconstruction (and eventual reclamation), after the Spring runoff, of the between-banks access routes and other disturbances necessary to facilitate the completion of the Work of this Project will NOT be an occasion or condition for which additional recompense to the Contractor will be considered.
 - c. Should reconstruction and eventual reclamation, after Spring runoff, of the between-banks access routes and other disturbances necessary to facilitate the completion of the Work of this Project be either planned by the Contractor or necessitated by the rise of the Snake River, the final reclamation shall take place prior to the winter of 2013-14.
4. Perform reclamation of any temporary out-of-the-Snake River access roads constructed and utilized by Contractor to the satisfaction of Owner.
5. Perform reclamation of staging areas on sites utilized by Contractor to the

satisfaction of Owner.

6. Supply to Owner manufacturer's operational and maintenance data.
7. Supply to Owner copies of all applicable warranties and guarantees.
8. Provide to Owner releases from all parties (including Contractor, Subcontractors, suppliers, etc.) who are entitled to claims against the subject project, property, or improvements pursuant to the provisions of law.
9. Provide executed "Waiver of Lien" on form provided for Contractor and each subcontractor and supplier. Said "Waiver of Lien" may also be required by Owner to accompany interim pay requests.

MEASUREMENT AND PAYMENT

- A. Payment of "Mobilization" shall be in conformance with the following:

<u>% of Original Contract Amount Earned</u>	<u>% of Lump Sum Price for Mobilization Earned</u>
5	20
10	50
25	60
65	75
90	90
100	100

END OF SECTION

01-09-13

PATH 22 WEST BRIDGE PROJECT
SUPPLEMENTARY SPECIFICATION

FOR

SUBMITTALS

Project No. 10-124-02

REFERENCES: The 2003 Edition of the Wyoming Department of Transportation's *Standard Specification for Road and Bridge Construction*.

DESCRIPTION: This specification describes requirements associated with making submittals.

In general, submittals submitted in hard copy for shop drawings, product data, warranties, and project close-out shall be submitted in quintuplicate (five copies), one for Owner, two for Engineer, and two to be returned to Contractor. However, where appropriate, if submitted in electronic media format via e-mail, only a single copy is required to be submitted.

Samples and shop drawings shall be prepared specifically for this project. Shop drawings shall include dimensions and details, including adjacent construction and related work. Note any special coordination required. Note any deviations from requirements of the Contract Documents.

Provide warranties as specified. Warranties shall not limit length of time for remedy of damages Owner may have by legal statute. Warranties shall be signed by Contractor, Supplier, or Installer responsible for performance of warranty.

Submittal information shall be submitted and reviewed prior to installing the applicable item.

No progress payments shall be made for any specific contract item until all related submittal and certification information for the item has been reviewed and accepted by Engineer.

Contractor shall supply all manuals, maintenance data, manufacturer warranty, certificates, record drawings, specified spare parts, and other equipment and material prior to submitting the application for final payment.

Required submittals shall include, but not be limited to, the following:

1. Project construction progress schedule.
2. Schedule of submittals.

3. Traffic and access control plan.
4. Storm Water Pollution Prevention Plan (SWPPP).
5. List of material suppliers.
6. List of subcontractors.
7. Labor and equipment hourly rates.
8. Aggregate gradation.
9. Concrete mix design.
10. Seed mixture and reclamation certificates.
11. Project record drawings.
12. Manufacturer's Operation and maintenance data.
13. Warranties and Guarantees.
14. Executed Lien Waivers.

END OF SECTION

01-09-13

PATH 22 WEST BRIDGE PROJECT
SUPPLEMENTARY SPECIFICATION

FOR

FORCE ACCOUNT WORK

Project No. 10-124-02

REFERENCES: The 2003 Edition of the Wyoming Department of Transportation's *Standard Specification for Road and Bridge Construction*.

DESCRIPTION: This specification consists of the supply of labor, materials, equipment, and supplies necessary to perform special work items not called out on the drawings or in the specifications, which arise out of discoveries made during the course of the project and which materially change the nature of the work, cannot be construed as reasonably implied or necessary for proper performance of the project from a review of the drawings and specifications, and are impossible to quantify in advance. Payment for accomplishing these items will be made on a time-and-materials basis. No such work shall take place without prior written authorization from Owner.

Contractor shall, prior to the commencement of construction, provide an hourly rate sheet covering all equipment and personnel within his organization. The hourly rate sheet of the successful bidder will establish personnel and equipment force account rates for the extent of the project. It is assumed that all Force Account Work will require equipment and personnel already on the project site; therefore, mobilization and demobilization costs will not be paid. No Force Account Work will be paid at time-and-half labor rates.

The means by which Force Account Work is accomplished will be determined in advance and authorized by the Engineer (through RPR) and Owner.

MEASUREMENT AND PAYMENT: Materials and supplies required under Force Account Work will be paid at 15% above invoice costs. Invoices must be supplied to support material costs.

Force Account Work shall be reconciled with time sheets and material and supplies invoices between Contractor and Engineer (through RPR) on a daily basis to ensure proper accounting.

No quantity measurement will be made for Force Account Work other than time and materials required to complete each work item. Time will begin when all equipment and personnel are present at the site of the proposed work and will end when all work at the site is complete. No time will be allowed for mobilization and demobilization to and from the site.

Force Account Work will be paid on a time-and-material basis as stated herein. Note that the Bid Amount for this item has been entered into the Bid Schedule in order to preserve competitiveness of the bidding process. Note also that there is no guarantee that the entire line item, or any of the line item at all, will be expended.

END OF SECTION

01-09-13

PATH 22 WEST BRIDGE PROJECT
SUPPLEMENTARY SPECIFICATION

FOR

TEMPORARY FACILITIES

Project No. 10-124-02

REFERENCES: The 2003 Edition of the Wyoming Department of Transportation's *Standard Specification for Road and Bridge Construction*.

DESCRIPTION: This specification describes Temporary Facilities to be provided by Contractor.

SAFETY FENCING AND BARRICADES: Install and maintain safety fence around all open trenches and hazardous areas when Contractor's personnel and operations are not active.

FIELD OFFICE: Provide a separate, secure field office for exclusive use by the Contractor's Superintendent.

- A. Equip as specified herein, provided at the site, ready for use within 10 days after the Notice to Proceed.
- B. The Contractor's resident superintendent shall be present on-site or in the field office at all times while Work is in progress by the Contractor or any subcontractor.
- C. Instructions or transmittals received there from the Owner or Engineer shall be considered as delivered to the Contractor.
- D. Provide separate mailing address from local post office for the name of the Contractor.
- E. Provide separate telephone and facsimile under the name of the Contractor to conduct daily project business from the field office.
- F. Maintain complete files of field operations including provisions for maintaining shop drawings and product data, inventories of materials and equipment, referenced industry standards, and "Record Drawings" in an orderly condition.
- G. Pay all costs associated with installation, maintenance, and removal of Contractor's field office.

CONSTRUCTION: Construction of Temporary Facilities shall be:

- A. Structurally sound, weather-tight, with floors raised above ground.
- B. Temperature transmission resistance: Compatible with occupancy and storage requirements.
- C. At Contractor's option, portable or mobile buildings modified for office use may be used.

- D. Fill and grade sites for temporary structures to provide surface drainage.
- E. Construct temporary field offices on proper foundations, provide connections for utility services:
- F. Secure portable or mobile buildings when used.
- G. Provide steps and landings at entrance door.
- H. Mount thermometer at convenient outside location, not in direct sunlight.
- I. Provide periodic maintenance and cleaning for temporary structures, furnishings, equipment, and services.
- J. Remove temporary field offices, contents, and service at the point in time they are no longer needed.
- K. Following removal of the temporary field offices, remove foundations and debris, grade the site to required elevations, and clean the areas surrounding the offices.

PERSONNEL SUPPORT FACILITIES: Provide the following:

- A. Sanitary facilities.
- B. Drinking water.
- C. First aid facilities.
- D. Coordination with Emergency Medical Services.
- E. Trash removal.

END OF SECTION

01-09-13

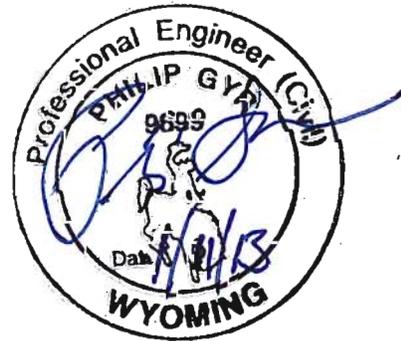
GEOTECHNICAL INVESTIGATION REPORT

GEOTECHNICAL INVESTIGATION

SNAKE RIVER PATHWAY BRIDGE TETON COUNTY, WYOMING

PREPARED
FOR
TOWN OF JACKSON
AND
JACKSON HOLE COMMUNITY PATHWAYS DEPARTMENT
JACKSON, WYOMING

PREPARED
BY
NELSON ENGINEERING
JACKSON, WYOMING



JANUARY 2013
Project No. 10-124-02

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APPENDIX

GENERAL AND PROJECT DESCRIPTION

This report pertains to a geotechnical investigation performed for a proposed pathway bridge across the Snake River in Teton County, Wyoming. The bridge will span the Snake River from parallel to and about 400 feet the north of the existing Wyoming Highway 22 Bridge. In the project reach the river is confined by levees constructed and administered by the Army Corps of Engineers. A 14 foot wide bridge with a length of 700 feet is proposed.

The investigation consisted of researching information from prior investigations in the project area, a subsurface investigation, laboratory testing, and engineering analyses. Geotechnical assessments and analyses are presented here. Recommendations from this report were utilized in the preparation of project plans and specifications prepared by Nelson Engineering and the HNTB Corporation.

Scope of Services

The scope of services for this investigation was to provide geotechnical recommendations based on a subsurface investigation and soils laboratory testing for the proposed bridge. The purpose of the subsurface investigation was to determine subsurface conditions. The results of the subsurface investigation and subsequent laboratory testing were utilized in an engineering analysis conducted per "AASHTO LRFD Bridge Design Specifications, Customary U.S. Units, 6th Edition" referred to herein as Bridge Design Specifications.

SITE CONDITIONS

Site Description

After rising in the southern part of Yellowstone Park, the Snake River flows from north to south through the center of Jackson Hole. Jackson Hole was formed by the uplifting of the Teton Mountain Range to the west and the downward displacement of the Teton Plate Fault block to the east. Deep deposits of alluvial and glacial outwash deposits cover the fault and form the surface of the valley and the project site. The river and its tributaries drain the southern part of Yellowstone National Park and the mountains surrounding Jackson Hole. Jackson Lake Dam regulates the main stem flow of the river.

In the project reach and through the central part of Jackson Hole the river is contained within levees constructed by the Army Corps of Engineers. Prior to the construction of the levees, the river morphology was braided and mobile, flooding broad portions of the valley with regularity during spring flood. Levee maintenance and repair is frequently required to ensure continued flood control. "The gravel bed channel of the Snake River through the Jackson Hole reach is highly mobile and aggressively impinges upon the levee revetments and islands in many locations." (ACOE, 2010). In the bridge vicinity to the west of the incised channel, the valley floor is broad and relatively flat up all the way to the base of the Teton Mountain Range near the town of Wilson. Flat alluvial deposits extend to the base of mountains near Wilson. West Gros Ventre Butte, a remnant fault block composed of west dipping Paleozoic rocks rises to the east of the project site. Alluvium extends to the base of the bluffs forming the western boundary of West Gros Ventre Butt, approximately 850 to the east of the east levee.

The eastern pathway approach and bridge abutment are located within Emily Stevens Park, the western abutment is located on within a parcel to be developed into a park. Both Emily Stevens Park and the western approach area are occupied by former partially reclaimed gravel mines containing multiple ponds and wetlands. Access to the bridge is through via roads that lead to the top of the levees on both the east and west side of the river.

Geologic Mapping

The area's surface geology is mapped on the USGS "Geologic Map of the Teton Village Quadrangle, Teton County, Wyoming," Love, J.D., Reed Jr., J.C. 2000. Mapped deposits on the site are "Gravel deposits-gravel deposited along flood channelways of major streams."

Seismic Hazard

Jackson Hole and the project site are located within the Intermountain Seismic Belt, a zone extending from southern Utah through eastern Idaho and western Montana, and encompassing western Wyoming and the Teton Range (Smith and Arabasz, 1991). The "Map of Quaternary Faults and Folds in Wyoming" (Machette et al, 2001) shows the following active faults near the project site: the Teton Fault, Phillips Canyon Faults, East Gros Ventre Faults, and secondary faults in the Jackson Hole Valley. In particular, the Teton Fault has a paleoseismic record of producing major earthquakes of a magnitude of seven or greater. The terminus of the southern part of the Teton Fault, as mapped by the USGS Geohazards website, is about 3.3 miles northwest of the bridge site. The USGS maps the Phillips Canyon Fault between 3 and 4 miles west of the bridge.

SITE INVESTIGATIONS

2011 and 2012 Borings

Two site investigations were conducted for the proposed bridge as the plans for the project developed. Initially, an alignment to the south of the existing Wyoming Highway 22 Bridge was designated. Lands availability and other considerations later changed the proposed location to the current site north of the Highway 22 Bridge.

In late November, 2011, three boreholes were drilled along the initial, southern alignment. Two boreholes were advanced on an island in the active channel and one borehole was advanced on the east levee. In July, 2012, four boreholes were drilled along the current bridge alignment. Two boreholes were advanced on an island in the active channel, one borehole was advanced on the east levee, and one borehole was advanced on the west levee. Borehole locations are shown on the Borehole Location Drawing in the Appendix. Boreholes advanced in November, 2011, were located using a survey grade GPS-unit; boreholes advanced in July, 2012 were located using a Trimble GeoXT GPS-unit accurate to within 5 feet.

Axis Drilling of Belgrade, Montana advanced the borings with a track mounted Davey-Kent air rotary drill rig. Borings were advanced with an Odex type bit and casing was advanced continuously to the depth of all of the borings.

Andy Pruett, a Geologist-in-Training at Nelson Engineering, logged the boreholes and directed the sampling. Split Spoon sampling was conducted per ASTM D1586 using the rigs' automatic hammer. Soils were classified in the field and logged by the geologist. The soil classifications, moisture conditions, and presence of organic or other notable features were recorded in the field logs. Bulk samples were sealed in plastic bags and transported to our laboratory for testing and further classification. Groundwater observations were made at the time of the excavation based on field observations of soil moisture conditions. Field observations are presented on the test pit logs in the Appendix.

SPT sampling of relatively undisturbed soils was accomplished in most boring intervals. In some intervals differential head created when the bit advancement ceased and the bit withdrawn resulted in "heave" where matrix sandy material was forced into the casing prior to sampling. Instances of heave are noted in the logs. Established protocol was to carefully determine the height of heaved material and to then drive the spoon through the heaved material prior to commencing the 18 inch drive of the SPT. Finer grained sand and small gravel particles within the sample interval have been disturbed and loosened when heave occurs. A lower SPT N than is actually present in the surrounding soils is therefore assumed. For this reason care is taken in the engineering analysis to assess the material properties of the gravel and sand soils understanding that SPT N values may erroneously indicate lower density and strength properties than the actual in-situ soil properties.

The stratification lines shown on the boring logs represent the approximate boundary between soil types. The actual in-situ transition may be either gradual or abrupt. Due to the nature and depositional characteristics of natural soils and fills, care should be taken in interpolating subsurface conditions beyond the location of the borings. Soil conditions can change rapidly in both the lateral and vertical directions. Groundwater conditions shown on the logs are only for the dates indicated. The subsurface conditions were interpreted from the described bore holes at the site. The soil properties inferred from the field assessments supported by our experience form the basis for developing our conclusions and recommendations.

Highway 22 Bridge Borings

In the late 1950's the Highway 22 Bridge was designed and built. Logs of borings are shown on a project plan sheet, included in the Appendix. Four borings were advanced; dense alluvial soils identical to those found in the more recent investigations were logged in these borings. Logs of pile driving for the project, also contained in the Appendix, show successful driving of friction piles to nominal depths of 40 feet for both the abutments and the 7 piers.

Laboratory Testing

Samples obtained during the field investigation were taken to the laboratory where they were visually classified in accordance with ASTM Test Method D-2487-93. Representative samples were selected for testing to determine the physical properties of the in-place soils and to estimate engineering properties. Engineering properties of concern at this location included unit weight, friction angle, seismic response parameters, and site-specific construction recommendations that are influenced by soil type and condition.

Index properties of samples were determined to assist in estimating soil material properties for piles supporting piers and abutments. Grain Size Analysis - ASTM C117 & C136 and Soil Classification - ASTM D2487 tests were conducted

Soil Profiles

Alluvium, composed of mixtures of well rounded cobbles, gravels, sand, and silt, was encountered throughout the depth of all of the borings. Groundwater was encountered in all the borings coincident with adjacent river water surface elevation. Split spoon samples from selected intervals were classified as well graded and poorly graded gravels with sand and silt, USCS designations GW, GW-GM, and GP. Split spoon samples contained both round and angular gravels where the angular gravels represent fragments of larger gravel and cobbles fractured by the split spoon. Bulk stream bed samples in the project reach were obtained and sieve analysis performed by the ACOE (2010). Three surface samples obtained in the project reach have a maximum particle size of 10 inches and are about 30 percent cobbles, gravels 55%, and sands 15%. During boring advancement, intervals of difficult drilling through cobbles were noted as were intervals of moderate drilling through gravels with higher sand content and lower cobble content. Observations of drilling advancement are commensurate with deposition facies observable in the active river channel.

Drilling progress, SPT results, and samples taken at depth confirm the homogeneity of the alluvium when assessed over distances of more than a few feet. Heterogeneity at smaller scales is evident in the drilling and on the river bed surface where nested cobbles and sandier lenses are observable. All the samples taken in the project vicinity, both at depth and on the surface, show alluvium composed of gravel with sand and cobbles. Continuity of the alluvium is shown from the pile driving logs from the Highway 22 Bridge. The lowest elevation of these piles is about elevation 6097.

ENGINEERING DESIGN AND ANALYSIS

Soil Material Parameters

Bridge design soil parameters were largely derived from correlations with SPT N_{160} tests. Parameters of concern for seismic and static superstructure, pile and substructure design include: dry and saturated unit weight, internal friction angle, shear modulus, and the modulus of lateral subgrade reaction. Per the subsurface condition discussion preceding, homogenous soil conditions were assumed for pile and substructure analysis.

SPT N_{160} averages from testing in BH4-7 were determined for use in correlation to determine soil material parameters. In instances where N was greater than 50/6", it was assumed that cobble or large gravels at encountered were the cause of refusal, not gravel and sand density. Discarding tests where 18 inches of drive was achieved, the average $N=42$ for all four borings. When $N=42$ is substituted for the test were $N>50/6$ inches, the average for each boring follows: BH4=29, BH5=46, BH6=34, BH7=55

Table 10.4.6.2.4-1 shows the correlation drained friction angles of 38° to 43°+ for the range of N160 boring averages. For pile analysis, a range of friction angles of 38° to 40° was selected for pile analysis as reasonable and conservative based on the SPT N correlation and the overall derived average SPT N of 42.

NAVFAC 1986 gives correlation of relative density, unit weight and friction angle for well graded and poorly graded gravels and sands. Mixtures of sand and gravel with relative density greater than 75% have dry densities ranging from about 115 to 140 PCF. From this a values in the middle of the range from 125 to 135 PCF were designated as representative. Porosity of poorly graded gravels, especially with significant cobble content, was selected as 0.30. This results in a total unit weight range from 135 PCF to 145 PCF for use in pile resistance analysis.

Small displacement shear strain modulus G and the coefficient of lateral subgrade modulus K_s were derived by determining by correlation of N with Elastic Modulus per Tan (1991) and assuming a Poisson's ratio of 0.35. These parameters were utilized by HNTB to perform substructure seismic and lateral loading analyses.

Seismic Analysis

Seismic Hazard

Section 3.10.2 of the Bridge Design Specifications discusses seismic hazard analysis. Under this section all bridges within 6 miles of a known active fault require a site specific procedure. AASHTO Guide Specifications for LRFD Seismic Bridge Design, 2nd Edition covers seismic design for typical bridge types and applies to non-critical and non-essential bridges. This publication is approved as an alternate to the seismic provisions in the Bridge Design Specifications. Per section 3.4.3.1 of this document, site specific procedures to include near fault directionality affects are normally performed for essential or very critical bridges. Since the project bridge is Ordinary, the General Procedure outlined in Section 3.10.2.1 of the Bridge Design Specifications applies. N1₆₀ values of greater than 15 in the upper subsurface apply; therefore Site Class D is appropriate.

Liquefaction

Section 10.5.4.2 of the Bridge Design Specifications discusses liquefaction analysis requirements. The project bridge falls under Seismic Zone 3 requirements. The soil characteristics of the upper 75 feet are assessed as having N values throughout of greater than 25 and consist of soils classified as gravels. Therefore detailed liquefaction analysis is not required.

Bridge Substructure Support: Driven Piles

In consultation with HNTB, driven friction piles were selected as the best alternative to support the bridge piers and abutments. Pile caps will be located at or below the depth of scour for the design flood, protecting piles from impact damage for the design event. Spread footings were rejected due to pier and abutment loading requiring large footings that would be impractical and costly to construct. Drilled piers dependent on skin friction,

were considered; preliminary analysis of the require diameter and depth led to the conclusion that large cased piers would not be cost effective to construct.

Pile Design and Analysis

Table 10.5.5.2.3-1 of the Bridge Design Specifications gives resistance factors for various methods of determining the nominal bearing resistance of single piles. The consultant team has determined to require dynamic testing with signal matching for the first production pile driven at each substructure location. This meets the requirements for application of a resistance factor of 0.65 for bearing and 0.50 for uplift. Static analysis utilizing the DRIVEN program was performed to optimize pile size and driving depth with the goal of determining contract quantities for bidding. Final pile capacity shall be determined by dynamic testing per the project Plans and Specifications. Pile Drivability for the specific hammer and pile configuration shall be approved by the Engineer as designated in the Project Specifications.

Pile analysis axial load results for the range of friction angles and unit weights selected is given in the Appendix.

SELECTED REFERENCES

Kavanzanjian, E. et al, "LRFD SEISMIC Analysis and Design or Transportation Geotechnical Features and Structural Foundations," FHWA-NHI-11-032 Rev 1, 2011

U.S. Naval Facilities Command "Foundations & Earth Structures" 1986, Design Manual 7.02

U.S. Army Corps of Engineers, Walla Walla District, "Jackson Federal Levee Flood Capacity Study," 2010

White, B.J.P. et al., "Seismicity And Earthquake Hazard Analysis Of The Teton-Yellowstone Region, Wyoming," Journal of Volcanology and Geothermal Research Vol.188 (2009) pg 277-296

WARRANTY AND LIMITING CONDITIONS

The field observations and research reported herein are considered sufficient in detail and scope to form a reasonable basis for the purposes cited above. Nelson Engineering warrants that the findings and conclusions contained herein have been promulgated in accordance with generally accepted professional engineering practice in the fields of foundation engineering, soil mechanics, and engineering geology, only for the site described in this report. No other warranties are implied or expressed.

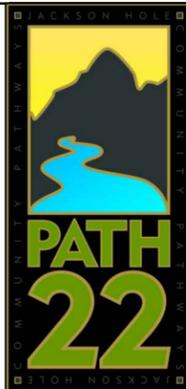
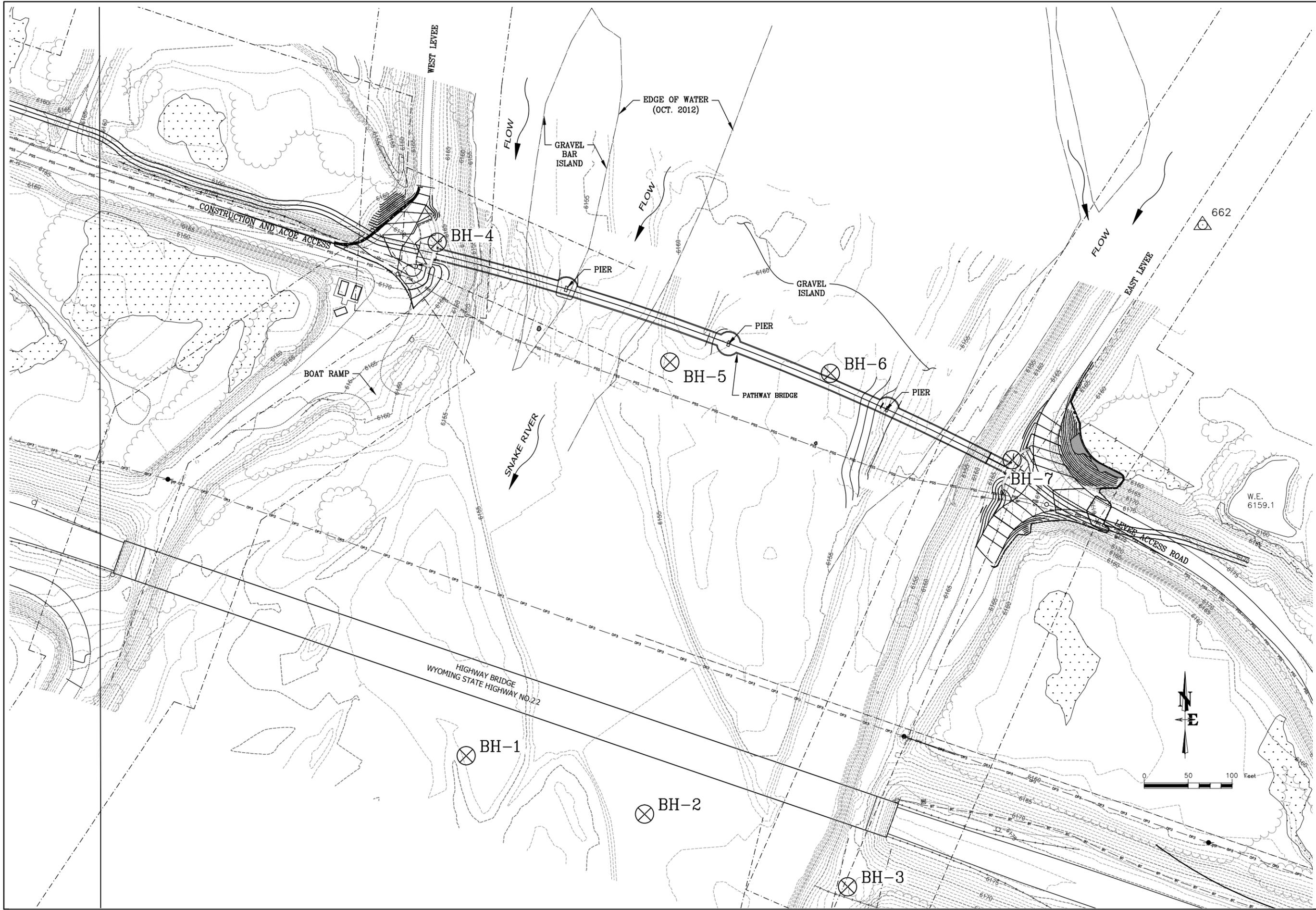
These engineering methods have been developed to provide the client with information regarding apparent or potential engineering conditions relating to the subject property within the scope cited above and are limited to the conditions observed at the time of the site visit and research. There is a distinct possibility that conditions may exist which could not be identified within the scope of the investigation or which were not apparent during the site investigation. The report is also limited to the information available at the time it was prepared. In the event additional information is provided to Nelson Engineering following this report, it will be forwarded to the client in the form received for evaluation by the client. This report was prepared for use by Teton County Pathways in Teton County, Wyoming ("Client") and the conclusions and recommendations presented in this report are based on the agreed-upon scope of work outlined in the report and the contract for professional services between Client and Nelson Engineering ("Consultant"). Use or misuse of this report, or reliance upon the findings hereof by any parties other than the Client, is at their own risk. Neither the Client nor Consultant may make any representation of warranty to such other parties as to the accuracy or completeness of this report or the suitability of its use by such other parties for any purpose whatsoever, known or unknown, to the Client or Consultant. Neither Teton County Pathways nor Nelson Engineering shall have any liability to, or indemnifies or holds harmless third parties for any losses incurred, by the actual or purported use or misuse of this report. No other warranties are implied or expressed.

Philip Gyr, PE
Geotechnical Engineer

APPENDIX

DRAWINGS

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**NELSON
ENGINEERING**
P.O. BOX 1599, JACKSON WYOMING
(307) 733-2087



DRAWING TITLE
BORING
LOCATION MAP

DRAWING NO	1
JOB NO	10-124-02
DATE	12/19/12

BORING LOGS

GEOTECHNICAL GENERAL NOTES

CORRECTED SPT: Standard Penetration Test values corrected to 60% of the theoretical free-fall hammer energy and for corrected for overburden pressure per AASHTO LRFD 6th ED Article 10.4.6.2.4.

DRILLING, SAMPLING, AND SOIL PROPERTIES ABBREVIATIONS AND SYMBOLS

- N:** Standard Penetration Test
- U_c:** Unconfined compressive strength, Pounds/ft² (PSF)
- Pp:** Pocket Penetrometer values, Ton/ft² (TSF)
- FILGC:** Fragments indicate gravels and cobbles larger than split spoon diameter.
- w:** Water content, %
- LL:** Liquid limit, %
- PI:** Plasticity index, %
- gd:** In-situ dry density, lbs/ft³ (PCF)
- : Ground water level
- SS:** Split-Spoon Sample
- ST:** Shelby Tube Sampler
- CS:** Cylindrical Brass Lined Sample



Monitoring Well, diagonal hatching indicates screen and sand packed interval

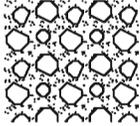
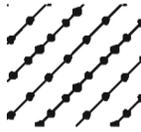
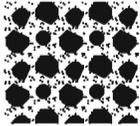
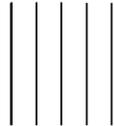
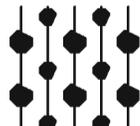
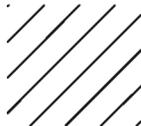
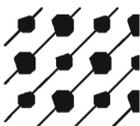
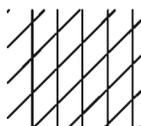
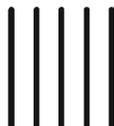
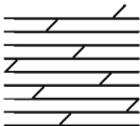
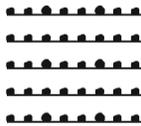
SOIL RELATIVE DENSITY AND CONSISTENCY CLASSIFICATION

Non-Cohesive Soils	Standard Penetration Resistance	Cohesive Soils	Pp-(tons/ft ²)
Very Loose	0 - 4	Very Soft	0 - 0.25
Loose	4 - 10	Soft	0.25 - 0.50
Slightly Compact	8 - 15	Firm (Medium)	0.50 - 1.00
Medium Dense	10 - 30	Stiff	1.00 - 2.00
Dense	30 - 50	Very Stiff	2.00 - 4.00
Very Dense	50+	Hard	4.00+

PARTICLE SIZE

Boulders: 12 in.+	Coarse Sand: 5 mm(#4)-2 mm(#10)	Silts and Clays: <#200
Cobbles: 12 in.-3in.	Medium Sand: 2 mm(#10)-0.4mm(#40)	
Gravel: 3in.-5mm(#4)	Fine Sand: 0.4mm(#40)-0.075mm(#200)	

SOIL GRAPHICS

<i>GW</i>		<i>SC</i>	
<i>GP</i>		<i>ML</i>	
<i>GM</i>		<i>CL</i>	
<i>GC</i>		<i>ML-CL</i>	
<i>SW</i>		<i>OL</i>	
<i>SP</i>		<i>MH</i>	
<i>SM</i>		<i>CH</i>	
<i>BEDROCK</i>		<i>OH</i>	
<i>COBBLES/BOULDERS</i>		<i>PT</i>	

NOTE: ANGLED DEMARCATIONS ON THE LOGS INDICATE APPROXIMATE OR POORLY DEFINED BOUNDARIES BETWEEN SOIL TYPES.

PROJECT NAME: HWY 22 BIKE PATH BRIDGE	DRILL HOLE No. BH-4	PAGE: 1 OF 2
DATE STARTED / FINISHED: 7/17/2012 7/18/2012	DRILLER: AXIS DRILLING	
LOGGED BY: PRUETT	DRILL TYPE: DAVEY-KENT AIR ODEX W ROCK HAMMER	
BOREHOLE LOCATION/ELEVATION: WEST ABUTMENT/SEE MAP	HOLE DIAMETER: 4.5" OD	
	HAMMER TYPE: 140# CATHEAD	

WELL LOG	GRAPHIC LOG	DEPTH (FT)	SAMPLES			SAMPLE ID	RECOVERY (%)	MATERIAL DESCRIPTION	LIQUID LIMIT	PLASTIC LIMIT	CORR. SPT	DRY DENSITY (PCF)	MOISTURE (%)	REMARKS
			DRIVE	UNDISTURBED	BULK									
		1					<p>This log is part of a report prepared by Nelson Engineering for this project and should be read with the report. This summary applies only at the location of the boring and at the time of the drilling. Subsurface conditions may differ at other locations and may change at this location with passage of time. The data presented is a simplification of actual conditions encountered.</p> <p>LARGE GRAVEL AND COBBLE WITH SAND GROUND SURFACE</p>							<p>WEST LEVEE ABUTMENT</p> <p>SLOW HARD DRILLING ON COBBLE FROM 2'-3' D.R. MODERATE TO DIFFICULT DRILLING IN COBBLES TO 5'</p>
		2												
		3												
		4												
		5												
		4			BH4-1	11	5'-6.5' DRY MULTICOLORED GRAVEL, ROUNDED TO ANGULAR GRAVELS, WELL GRADED, FILGC, SLIGHTLY COMPACT, MEDIUM DENSE			16			<p>LOOSE EASY DRILLING FROM 5'-15'. D.R. LOOSE GRAVELS DUE TO WATER FLOW, SAND BEING EJECTED FROM CASING AND GRAVELS ARE PERCOLATING AT BOH</p>	
		4												
		5					GROUNDWATER ENCOUNTERED AT 6.5' WHILE DRILLING							
		3			BH4-2	17	8'-9.5' SATURATED BROWN GRAVEL WITH MINOR SAND, ROUNDED TO ANGULAR GRAVELS, WELL GRADED, FILGC, SLIGHTLY COMPACT, MEDIUM DENSE			18				
		7												
		4												
		4			BH4-3	0	10.25'-11.75' NO RETURN, SLIGHTLY COMPACT, MEDIUM DENSE			13				
		4												
		4					FROM 10'-12.5', SAND AND MINOR GRAVEL EJECTED FROM CASING							
		3			BH4-4	17	13'-14.5' SATURATED MULTICOLORED GRAVEL, ROUNDED TO ANGULAR GRAVELS, POORLY GRADED, FILGC, LOOSE			9			<p>D.R. MORE DIFFICULT DRILLING STARTING AT 15' (BOTTOM OF LEVEE FILL)</p>	
		4												
		4												
		28			BH4-5	78	15.25'-16' SATURATED BROWN GRAVEL WITH SAND, FINE TO MEDIUM GRAINED SAND, ROUNDED TO ANGULAR GRAVEL, WELL GRADED, FILGC, VERY DENSE			>50				
		3												
		7												
		18			BH4-6	50	20.25'-21.75' SAME AS ABOVE, VERY DENSE			50				
		18												

NELSON ENGINEERING

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CLIENT: **TOJ/JH COMMUNITY PATHWAYS DEPARTMENT
HWY 22 SNAKE RIVER CROSSING
TETON COUNTY, WYOMING**

WELL LOG	GRAPHIC LOG	DEPTH (FT)	SAMPLES			SAMPLE ID	RECOVERY (%)	MATERIAL DESCRIPTION	LIQUID LIMIT	PLASTIC LIMIT	CORR. SPT	DRY DENSITY (PCF)	MOISTURE (%)	REMARKS
			DRIVE	UNDISTURBED	BULK									
		22											D.R. MODERATE TO EASY DRILLING FROM 20'-25'	
		23												
		24												
		25												
		26												
		27												
		28												
		29												
		30	10											
		31	15			NS 17	30'-31.5' SAME AS ABOVE, DENSE			46				
		32	22											
		33												
		34												
		35												
		36												
		37												
		38												
		39												
		40	9			BH4-7	40'-41.5' 0"-1" SAND HEAVE							
		41	24			2" SS 56	1"-10" SATURATED BROWN GRAVEL WITH SAND, ANGULAR TO ROUNDED GRAVELS, WELL GRADED, FILGC, VERY DENSE			>50				
		42	29				BOH=41.5'							
		43												
		44												

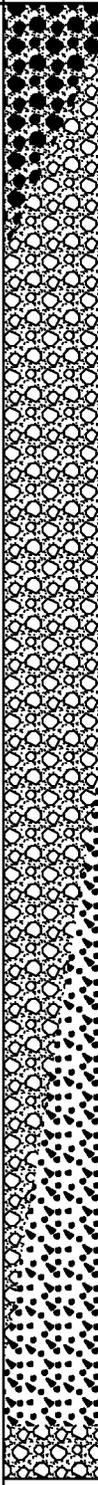
PROJECT NAME: HWY 22 BIKE PATH BRIDGE	DRILL HOLE No. BH-5	PAGE: 1 OF 2
DATE STARTED / FINISHED: 7/19/2012 7/20/2012	DRILLER: AXIS DRILLING	
LOGGED BY: PRUETT	DRILL TYPE: DAVEY-KENT AIR ODEX W ROCK HAMMER	
BOREHOLE LOCATION/ELEVATION: RIVER WEST/SEE MAP	HOLE DIAMETER: 4.5" OD	
	HAMMER TYPE: 140# CATHEAD	

WELL LOG	GRAPHIC LOG	DEPTH (FT)	SAMPLES			RECOVERY (%)	MATERIAL DESCRIPTION	LIQUID LIMIT	PLASTIC LIMIT	CORR. SPT	DRY DENSITY (PCF)	MOISTURE (%)	REMARKS
			DRIVE	UNDISTURBED	BULK								
		1											WEST BOREHOLE ON RIVER ISLAND MODERATE TO DIFFICULT DRILLING THROUGH GRAVELS AND COBBLES WITH SAND FROM 0'-15'
		2											
		3											
		4											
		5											
		6											
		7											
		8											
		9											
		10											
		11											10'-17' DRILLING WATER IS OPAQUE BROWN, ABUNDANT SAND EJECTED
		12											
		13											
		14											
		15											
		16											
		17											
		18											
		19											
		20											
		21											SMOOTH DRILLING FROM 15'-17' MODERATE DRILLING FROM 17'-18' DIFFICULT DRILLING FROM 18'-BOH
		22											
		23											
		24											
		25											
		26											
		27											
		28											
		29											
		30											
		31											20'-21.5' SATURATED BROWN GRAVEL WITH SAND, ROUNDED TO ANGULAR GRAVEL, POORLY GRADED GRAVEL, WELL GRADED SAND, FILGC, VERY DENSE
		32											
		33											
		34											
		35											
		36											
		37											
		38											
		39											
		40											

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HWY 22 SNAKE RIVER CROSSING
TETON COUNTY, WYOMING**

WELL LOG	GRAPHIC LOG	DEPTH (FT)	SAMPLES			SAMPLE ID	RECOVERY (%)	MATERIAL DESCRIPTION	LIQUID LIMIT	PLASTIC LIMIT	CORR. SPT	DRY DENSITY (PCF)	MOISTURE (%)	REMARKS
			DRIVE	UNDISTURBED	BULK									
		22											ABUNDANT CONSTANT WATER FLOW FROM CASING WHILE DRILLING	
		23											D.R. MAJOR GRAVELS COLLECTING BETWEEN DRILL ROD AND CASING CAUSING DRILL ROD TO LOCK ONTO CASING STALLING DRILLING	
		24												
		25	4			BH5-4	11	24.5'-26' FRACTURED MULTICOLORED GRAVELS, ROUNDED TO ANGULAR GRAVEL, WELL GRADED, FILGC, VERY DENSE			58			
		26	23			2" SS								
		27	21											
		28												
		29												
		30	8			BH5-5	56	30'-31.5' SATURATED BROWN GRAVEL WITH SAND, ROUNDED TO ANGULAR GRAVEL, WELL GRADED, FILGC, VERY DENSE			62		DIFFICULT DRILLING FROM 18'-BOH	
		31	22			2" SS								
		32	28											
		33												
		34												
		35						C.I. SAME AS ABOVE						
		36												
		37												
		38												
		39												
		40	6			BH5-6	100	40'-41.5' 0"-9" SATURATED BROWN WELL GRADED SAND			41		20" HEAVE EJECTED BEFORE SS AT 40'	
		41	11			2" SS		9"-18" SATURATED BROWN GRAVEL WITH SAND, ROUNDED TO ANGULAR GRAVEL, WELL GRADED, FILGC, DENSE						
		41.5	25					BOH=41.5'						
		42												
		43												
		44												

WELL LOG	GRAPHIC LOG	DEPTH (FT)	SAMPLES			RECOVERY (%)	MATERIAL DESCRIPTION	LIQUID LIMIT	PLASTIC LIMIT	CORR. SPT	DRY DENSITY (PCF)	MOISTURE (%)	REMARKS
			DRIVE	UNDISTURBED	BULK								
		1 2 3 4 5 6 7 8 9 10 11 12 13 14 15 16 17 18 19 20 21											<p>This log is part of a report prepared by Nelson Engineering for this project and should be read with the report. This summary applies only at the location of the boring and at the time of the drilling. Subsurface conditions may differ at other locations and may change at this location with passage of time. The data presented is a simplification of actual conditions encountered.</p> <p>GRAVEL WITH SAND GROUND SURFACE, MEDIUM TO COARSE GRAVELS</p> <p>FROM 0'-3.5' C.I. SAND</p> <p>GROUNDWATER ENCOUNTERED AT 4.5' DURING DRILLING</p> <p>FROM 3.5'-10' C.I. GRAVEL WITH SAND</p> <p>BH6-1 2" SS 80 10'-10.8' SATURATED BROWN GRAVEL WITH SAND, ANGULAR TO ROUNDED GRAVEL, WELL GRADED, FILGC, VERY DENSE</p> <p>C.I. SAME AS ABOVE</p> <p>BH6-2 2" SS 28 15'-16.5' SATURATED MULTICOLORED GRAVELS, ROUNDED TO ANGULAR GRAVEL, WELL GRADED, FILGC, DENSE</p> <p>C.I. GRAVEL WITH SAND</p> <p>BH6-3 2" SS 67 20'-21.5' 0"-6" SATURATED BROWN POORLY GRADED SAND, FINE TO MEDIUM GRAINED 6"-12" SATURATED BROWN GRAVEL WITH SAND, ANGULAR TO ROUNDED GRAVEL, WELL GRADED, FILGC, DENSE</p>
			19						>50				EAST BOREHOLE ON RIVER ISLAND
			4										EASY DRILLING THROUGH SAND FROM 0'-3.5'
			4										MODERATE DRILLING THROUGH GRAVEL WITH SAND FROM 3.5'-20'
			12										SLOWER DRILLING ON COBBLE FROM 12.5'-13'
			13							37			4" HEAVE EJECTED BEFORE SS AT 15'
			9										11" HEAVE EJECTED BEFORE SS AT 20'
			12							36			
			14										



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CLIENT: **TOJ/JH COMMUNITY PATHWAYS DEPARTMENT
HWY 22 SNAKE RIVER CROSSING
TETON COUNTY, WYOMING**

WELL LOG	GRAPHIC LOG	DEPTH (FT)	SAMPLES			SAMPLE ID	RECOVERY (%)	MATERIAL DESCRIPTION	LIQUID LIMIT	PLASTIC LIMIT	CORR. SPT	DRY DENSITY (PCF)	MOISTURE (%)	REMARKS
			DRIVE	UNDISTURBED	BULK									
		22												
		23												
		24												
		25	8			BH6-4	39	25'-26.5' SATURATED BROWN GRAVEL WITH SAND, ROUNDED TO ANGULAR GRAVEL, WELL GRADED, FILGC, DENSE			39			MODERATE DRILLING THROUGH GRAVEL WITH SAND FROM 20'-35'
		26	13											
		27	17											
		28												
		29												
		30	7											
		31	9			BH6-5	6	30'-31.5' TAN/ORANGE FRACTURED GRAVEL, MEDIUM DENSE			25			15" HEAVE EJECTED BEFORE SS AT 30'
		32	11											
		33						C.I. GRAVEL WITH SAND						
		34												
		35	4											
		36	10			BH6-6	17	35'-36.5' FRACTURED MULTICOLORED GRAVELS, ROUNDED TO ANGULAR GRAVEL, WELL GRADED, FILGC, DENSE			35			16" HEAVE EJECTED BEFORE SS AT 35', UNABLE TO EJECT 9" HEAVE
		37	20											
		38												
		39												
		40	3											
		41	4			BH6-7	22	40'-41.5' SAME AS ABOVE, MEDIUM DENSE			27			3" HEAVE EJECTED BEFORE SS AT 40', UNABLE TO EJECT 10" HEAVE
		42	20					BOH=41.5'						
		43												
		44												

WELL LOG	GRAPHIC LOG	DEPTH (FT)	SAMPLES			SAMPLE ID	RECOVERY (%)	MATERIAL DESCRIPTION	LIQUID LIMIT	PLASTIC LIMIT	CORR. SPT	DRY DENSITY (PCF)	MOISTURE (%)	REMARKS
			DRIVE	UNDISTURBED	BULK									
		1					GRAVEL WITH SAND GROUND SURFACE, TOP OF LEVEE						EAST LEVEE ABUTMENT	
		2					C.I. GRAVEL WITH SAND						MODERATE TO DIFFICULT DRILLING FROM 0'-5'	
		3												
		4												
		5												
		6	6				5'-6.5' MOIST BROWN GRAVEL WITH SAND, ROUNDED TO ANGULAR GRAVEL, WELL GRADED GRAVEL, POORLY GRADED SAND (FINE TO MEDIUM GRAINED), FILGC, DENSE			49				
		6	16			BH7-1 2" SS 22								
		6	12											
		7												
		8	5				7.5'-9' 0"-2" DRY LOOSE GRAVEL							
		8	17			BH7-2 2" SS 39	2"-7" MOIST BROWN GRAVEL WITH SAND, ROUNDED TO ANGULAR GRAVEL, WELL GRADED, FILGC, VERY DENSE			70				
		8	27											
		9												
		10	10											
		10	50			BH7-3 2" SS 67	SAME AS ABOVE, BOUNCING SPOON AT 9", VERY DENSE			>50				
		10	35											
		11												
		12												
		13	4											
		13	27			BH7-4 2" SS 22	13'-14.5' SAME AS ABOVE, VERY DENSE			64				
		13	18											
		14												
		15	4											
		15	10			BH7-5 2" SS 28	15'-16.5' SAME AS ABOVE, SATURATED, MEDIUM DENSE			25				
		15	8				GROUNDWATER ENCOUNTERED AT 16' WHILE DRILLING							
		16												
		17												
		18												
		19											MODERATE DRILLING FROM 16'-25'	
		20	7											
		20	21			BH7-6 2" SS 22	20'-21.5' SAME AS ABOVE, VERY DENSE							
		21	19											

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HWY 22 SNAKE RIVER CROSSING
TETON COUNTY, WYOMING**

WELL LOG	GRAPHIC LOG	DEPTH (FT)	SAMPLES			SAMPLE ID	RECOVERY (%)	This log is part of a report prepared by Nelson Engineering for this project and should be read with the report. This summary applies only at the location of the boring and at the time of the drilling. Subsurface conditions may differ at other locations and may change at this location with passage of time. The data presented is a simplification of actual conditions encountered.	LIQUID LIMIT	PLASTIC LIMIT	CORR. SPT	DRY DENSITY (PCF)	MOISTURE (%)	REMARKS
			DRIVE	UNDISTURBED	BULK									
		22											MODERATE DRILLING THROUGH GRAVEL WITH SAND FROM 16'-25'	
		23												
		24												
		25												
		26												
		27												
		28												
		29												
		30	4											
		31	10			BH7-7 2" SS 56	30'-31.5' 0"-5" SAT BROWN WELL GRADED SAND 5"-10" SATURATED MULTICOLORED GRAVEL, PREDOMINATELY GRAVELS LESS THAN 1" MAXIMUM DIMENSION, MINOR SAND, ANGULAR TO ROUNDED GRAVEL, FILGC, SLIGHTLY COMPACT, MEDIUM DENSE			20			8" HEAVE EJECTED BEFORE SS AT 30'	
		32	7											
		33												
		34												
		35												
		36												
		37												
		38												
		39												
		40	6											
		41	10			BH7-8 2" SS 39	40'-41.5' SATURATED BROWN GRAVEL WITH SAND, ANGULAR TO ROUNDED CLASTS, WELL GRADED, FILGC, MEDIUM DENSE			29			11" HEAVE EJECTED BEFORE SS AT 40'	
		42	17				BOH=41.5'							
		43												
		44												

PROJECT NAME: HWY 22 BIKE PATH BRIDGE	DRILL HOLE No. BH-1	PAGE: 1 OF 3
DATE STARTED / FINISHED: 11/20/2011 11/21/2011	DRILLER: AXIS DRILLING	
LOGGED BY: PRUETT	DRILL TYPE: DAVEY-KENT AIR ODEX W ROCK HAMMER	
BOREHOLE LOCATION/ELEVATION: RIVER WEST/SEE MAP	HOLE DIAMETER: 4.5" OD	
	HAMMER TYPE: 140# CATHEAD	

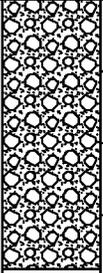
WELL LOG	GRAPHIC LOG	DEPTH (FT)	SAMPLES			RECOVERY (%)	MATERIAL DESCRIPTION	LIQUID LIMIT	PLASTIC LIMIT	CORR. SPT	DRY DENSITY (PCF)	MOISTURE (%)	REMARKS
			DRIVE	UNDISTURBED	BULK								
		1											ON RIVER ISLAND EAST
		2					FROM 0'-10', C.I. ROUNDED GRAVELS AND COBBLES WITH MINOR SAND, ALLUVIUM						MODERATELY HARD DRILLING THROUGH COBBLES 0'-17.5'
		3											
		4											
		5											
		6											
		7					GROUNDWATER ENCOUNTERED AT 7' DURING DRILLING						
		8											
		9											
		10											
		11					10'-11.5' SATURATED MULTICOLORED GRAVELS WITH MINOR SAND, WELL GRADED GRAVELS, ANGULAR TO ROUNDED, FILGC, ALLUVIUM, DENSE			48			
		12											
		13					FROM 10'-15', C.I. GRAVEL WITH SAND AND COBBLES, FILGC						
		14											
		15					15'-16.5' TOP 13"-SATURATED BROWN SAND, WELL GRADED, ALLUVIUM, VERY DENSE						
		16					BOTTOM 5"-SATURATED BROWN GRAVEL WITH SAND, WELL GRADED GRAVELS, FILGC, ROUNDED TO ANGULAR GRAVELS, ALLUVIUM, VERY DENSE			50			2.5' HEAVE BEFORE SS @15', ALL OF HEAVE WAS REMOVED BEFORE SAMPLING HEAVE CLOGGED THE ODEX BIT, DRILLERS HAD TO DISASSEMBLE DRILL ROD AND CLEAN BEFORE PROCEEDING TO 20'
		17											
		18					FROM 15'-20', C.I. GRAVEL AND COBBLES						
		19											
		20					20'-21.5' TOP 8"-SATURATED BROWN SAND, TOP 2" AND BOTTOM 3" POORLY GRADED, MIDDLE 3" WELL GRADED, ALLUVIUM, VERY DENSE						
		21					BOTTOM 8"-SATURATED BROWN GRAVEL WITH SAND, WELL GRADED GRAVELS, ANGULAR TO ROUNDED GRAVELS, FILGC, ALLUVIUM, VERY DENSE			50			

NELSON ENGINEERING

P.O. BOX 1599, JACKSON WYOMING (307) 733-2087

CLIENT: **TOJ/JH COMMUNITY PATHWAYS DEPARTMENT
HWY 22 SNAKE RIVER CROSSING
TETON COUNTY, WYOMING**

WELL LOG	GRAPHIC LOG	DEPTH (FT)	SAMPLES			SAMPLE ID	RECOVERY (%)	MATERIAL DESCRIPTION	LIQUID LIMIT	PLASTIC LIMIT	CORR. SPT	DRY DENSITY (PCF)	MOISTURE (%)	REMARKS
			DRIVE	UNDISTURBED	BULK									
		22											CONSTANT FLOW OF WATER OUT OF CORE BARREL DURING DRILLING	
		23												
		24												
		25	13										1.5' HEAVE BEFORE SS	
		26	18			BH1-4	17	25'-26.5' SATURATED MULTICOLORED GRAVEL, ANGULAR TO ROUNDED GRAVELS, FILGC, ALLUVIUM, VERY DENSE			50		TO REMOVE HEAVE BEFORE SAMPLING	
		27	38											
		28											WHEN STARTING DRILLING @25', ODEX BIT DRILLED THROUGH 1' OF HEAVE IN THE CASING BEFORE GETTING BELOW THE CASING	
		29												
		30												
		31	13											
		32	20			BH1-5	17	30.25'-31.75' SAME AS ABOVE, 1.5" GRAVEL LODGED IN SS TIP, FILGC, ALLUVIUM, DENSE			45			
		33	24											
		34												
		35	3										2' HEAVE BEFORE SS	
		36	15			BH1-6	17	35'-36.5' SATURATED GRAVEL WITH SAND, WELL GRADED GRAVEL, ROUNDED TO ANGULAR GRAVELS, FILGC, ALLUVIUM, MEDIUM DENSE			28		ALL BUT 0.5' OF HEAVE REMOVED BEFORE SAMPLING, GRAVELS AND SAND EJECTED	
		37	14											
		38												
		39												
		40	7											
		41	9			BH1-7	33	40'-41.5' SATURATED MULTICOLORED GRAVEL, ANGULAR TO ROUNDED GRAVELS, WELL GRADED GRAVELS, FILGC, ALLUVIUM, MEDIUM DENSE			25			
		42	18											
		43												
		44												

WELL LOG	GRAPHIC LOG	DEPTH (FT)	SAMPLES			SAMPLE ID	RECOVERY (%)	MATERIAL DESCRIPTION	LIQUID LIMIT	PLASTIC LIMIT	CORR. SPT	DRY DENSITY (PCF)	MOISTURE (%)	REMARKS
			DRIVE	UNDISTURBED	BULK									
		44												
		45	7											
		46	15			BH1-8 2" SS	22	45.25'-46.75' SAME AS ABOVE, MEDIUM DENSE			21		1.5' HEAVE BEFORE SS Ø35', ALL OF HEAVE REMOVED BEFORE SAMPLING, GRAVELS AND SAND EJECTED	
		46.5	9					BOH=46.75'						
		47												
		48												
		49												
		50												
		51												
		52												
		53												
		54												
		55												
		56												
		57												
		58												
		59												
		60												
		61												
		62												
		63												
		64												
		65												
		66												

PROJECT NAME: HWY 22 BIKE PATH BRIDGE	DRILL HOLE No. BH-2	PAGE: 1 OF 3
DATE STARTED / FINISHED: 11/22/2011	DRILLER: AXIS DRILLING	
LOGGED BY: PRUETT	DRILL TYPE: DAVEY-KENT AIR ODEX W ROCK HAMMER	
BOREHOLE LOCATION/ELEVATION: RIVER EAST/SEE MAP	HOLE DIAMETER: 4.5" OD	
	HAMMER TYPE: 140# CATHEAD	

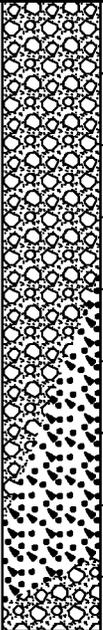
WELL LOG	GRAPHIC LOG	DEPTH (FT)	SAMPLES			SAMPLE ID	RECOVERY (%)	MATERIAL DESCRIPTION	LIQUID LIMIT	PLASTIC LIMIT	CORR. SPT	DRY DENSITY (PCF)	MOISTURE (%)	REMARKS
			DRIVE	UNDISTURBED	BULK									
		1					3"-8" DIAMETER ROUNDED COBBLE GROUND SURFACE						IN RIVER ISLAND WEST	
		2												
		3												
		4												
		5												
		6					GROUNDWATER ENCOUNTERED AT 6.5' DURING DRILLING							
		7												
		8											QUICK DRILLING THROUGH GRAVELS AND SAND DUE TO HIGH AIR PRESSURE FROM COMPRESSOR	
		9												
		10												
		11				BH2-1	10.25'-11.75' SATURATED BROWN GRAVEL WITH SAND, WELL GRADED GRAVELS AND MAINLY FINE GRAINED SAND, ANGULAR TO ROUNDED GRAVELS, FILGC, ALLUVIUM, MEDIUM DENSE			27				
		12												
		13												
		14												
		15				BH2-2	15'-16.5' TOP 2.5"-SATURATED BROWN SAND, FINE GRAINED SAND, POORLY GRADED, ALLUVIUM, VERY DENSE			50				
		16					BOTTOM 2.5"-SATURATED BROWN GRAVEL WITH SAND, ANGULAR TO ROUNDED GRAVELS, FINE GRAINED SAND, WELL GRADED GRAVELS, FILGC, ALLUVIUM, VERY DENSE							
		17												
		18												
		19												
		20				BH2-3	20'-21.5' TOP 3"-SATURATED BROWN SAND, FINE TO MEDIUM GRAINED SAND, POORLY GRADED, ALLUVIUM, VERY DENSE							
		21					BOTTOM 6"-SATURATED BROWN GRAVEL WITH SAND, WELL GRADED GRAVEL AND SAND, ROUNDED TO ANGULAR GRAVELS, FILGC, BOUNCING ON COBBLE AT 17", ALLUVIUM, VERY DENSE			50			0.5' HEAVE BEFORE SS @20', ALL OF HEAVE REMOVED BEFORE SAMPLING	

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CLIENT: **TOJ/JH COMMUNITY PATHWAYS DEPARTMENT
HWY 22 SNAKE RIVER CROSSING
TETON COUNTY, WYOMING**

WELL LOG	GRAPHIC LOG	DEPTH (FT)	SAMPLES			SAMPLE ID	RECOVERY (%)	MATERIAL DESCRIPTION	LIQUID LIMIT	PLASTIC LIMIT	CORR. SPT	DRY DENSITY (PCF)	MOISTURE (%)	REMARKS
			DRIVE	UNDISTURBED	BULK									
		22												
		23												
		24												
		25												
		26	10			BH2-4	11	25.25'-26.75' SATURATED MULTICOLORED GRAVEL, ANGULAR TO ROUNDED GRAVELS, FILGC, ALLUVIUM, DENSE			48		0.5' HEAVE BEFORE SS @25.25', REMOVED HEAVE BEFORE SAMPLING, GRAVELS AND SAND EJECTED	
		27	20											
		28												
		29												
		30												
		31	21			BH2-5	67	30.25'-31.75' TOP 6"-SATURATED BROWN SAND, FINE TO MEDIUM GRAINED SAND, POORLY GRADED, ALLUVIUM, VERY DENSE BOTTOM 6"-SATURATED BROWN GRAVEL WITH SAND, WELL GRADED SAND AND GRAVEL, ANGULAR TO ROUNDED GRAVELS, FILGC, ALLUVIUM, VERY DENSE			50		0.75' HEAVE BEFORE SS @30.25', REMOVED HEAVE BEFORE SAMPLING, GRAVELS AND SAND EJECTED	
		32	39											
		33												
		34												
		35												
		36	23			BH2-6	60	35.25'-36.75' SAME AS ABOVE, BOUNCING ON COBBLE AT 10", VERY DENSE			50		ALL BUT 2" OF HEAVE REMOVED BEFORE SAMPLING @35.25'	
		37	50%											
		38												
		39												
		40												
		41	33			BH2-7	180	40'-41.5' SATURATED BROWN SAND, WELL GRADED, MAJORITY OF SAMPLE IS SAND HEAVE (18" RETURNED FOR A 10" SS DRIVE) 1.5" GRAVEL IN SS TIP, ROUNDED AND ANGULAR, FILGC			50		2' HEAVE BEFORE SS @40', REMOVED HEAVE BEFORE SAMPLING BUT MORE HEAVE OCCURRED AFTER BLOWING OUT HOLE	
		42	50%											
		43												
		44											1.5' OF SAND HEAVE BEFORE DRILLING FROM 40'-45'	

WELL LOG	GRAPHIC LOG	DEPTH (FT)	SAMPLES			RECOVERY (%)	MATERIAL DESCRIPTION	LIQUID LIMIT	PLASTIC LIMIT	CORR. SPT	DRY DENSITY (PCF)	MOISTURE (%)	REMARKS
			DRIVE	UNDISTURBED	BULK								
		44											
		45	3										
		46	14							31			2.5' HEAVE BEFORE SS @45.25', ALL BUT 0.5' OF HEAVE REMOVED BEFORE SAMPLING
		47	24										
		48											
		49											
		50	3										1.5' HEAVE BEFORE SS @50.25', ALL OF HEAVE REMOVED BEFORE SAMPLING
		51	22							25			
		52	19										
		53											
		54											
		55											
		56											
		57											
		58											
		59											
		60											
		61											
		62											
		63											
		64											
		65											
		66											

This log is part of a report prepared by Nelson Engineering for this project and should be read with the report. This summary applies only at the location of the boring and at the time of the drilling. Subsurface conditions may differ at other locations and may change at this location with passage of time. The data presented is a simplification of actual conditions encountered.

BH2-8
2" SS 11

BH2-9
2" SS 44

45.25'-46.75' 2 TAN GRAVEL FRAGMENTS, ANGULAR GRAVELS, FILGC, DENSE

50.25'-51.75' TOP 4"-SATURATED BROWN SAND, WELL GRADED, MEDIUM DENSE

BOTTOM 4"-SATURATED BROWN GRAVEL WITH SAND, WELL GRADED SAND AND GRAVELS, ROUNDED TO ANGULAR GRAVELS, FILGC, ALLUVIUM, MEDIUM DENSE
BOH=51.75'

PROJECT NAME: HWY 22 BIKE PATH BRIDGE	DRILL HOLE No. BH-3	PAGE: 1 OF 2
DATE STARTED / FINISHED: 11/29/2011	DRILLER: AXIS DRILLING	
LOGGED BY: PRUETT	DRILL TYPE: DAVEY-KENT AIR ODEX W ROCK HAMMER	
BOREHOLE LOCATION/ELEVATION: EAST LEVEE/SEE MAP	HOLE DIAMETER: 4.5" OD	
	HAMMER TYPE: 140# CATHEAD	

WELL LOG	GRAPHIC LOG	DEPTH (FT)	SAMPLES			SAMPLE ID	RECOVERY (%)	MATERIAL DESCRIPTION	LIQUID LIMIT	PLASTIC LIMIT	CORR. SPT	DRY DENSITY (PCF)	MOISTURE (%)	REMARKS
			DRIVE	UNDISTURBED	BULK									
		0-1					0'-5' C.I. GRAVEL WITH SAND							EAST LEVEE OF THE SNAKE RIVER SOUTH OF THE HWY 22 BRIDGE
		1-2												
		2-3												
		3-4												
		4-5												
		5-6	6				5'-6.5' DRY BROWN/LT BROWN GRAVEL WITH MINOR SAND, WELL GRADED GRAVELS, ROUNDED TO ANGULAR GRAVELS, FILGC, VERY DENSE, FILL FOR LEVEE			55				
		6-7	26			BH3-1 2" SS	22							
		7-8	16											
		8-9												
		9-10												
		10-11	4				10.25'-11.75' WET BROWN GRAVEL WITH SAND, POORLY GRADED SAND, WELL GRADED GRAVEL, ROUNDED TO ANGULAR GRAVELS, FILGC, ALLUVIUM, MEDIUM DENSE			21				
		11-12	7			BH3-2 2" SS	19							
		12-13	12											
		13-14												GROUNDWATER ENCOUNTERED BETWEEN 11.75'-15.25' DURING DRILLING
		14-15												
		15-16	12				15.25'-16.75' SAME AS ABOVE, SATURATED, WELL GRADED SAND AND GRAVELS, VERY DENSE			50				
		16-17	33			BH3-3 2" SS	39							
		17-18	28											
		18-19												SLOWER PROGRESS DRILLING FROM 15'-20'
		19-20												
		20-21	7				20.25'-21.75' SAME AS ABOVE, TOP 2.5"-WASHED GRAVEL CUTTINGS, VERY DENSE							
		21-22	23			BH3-4 2" SS	39							
		22-23	20											

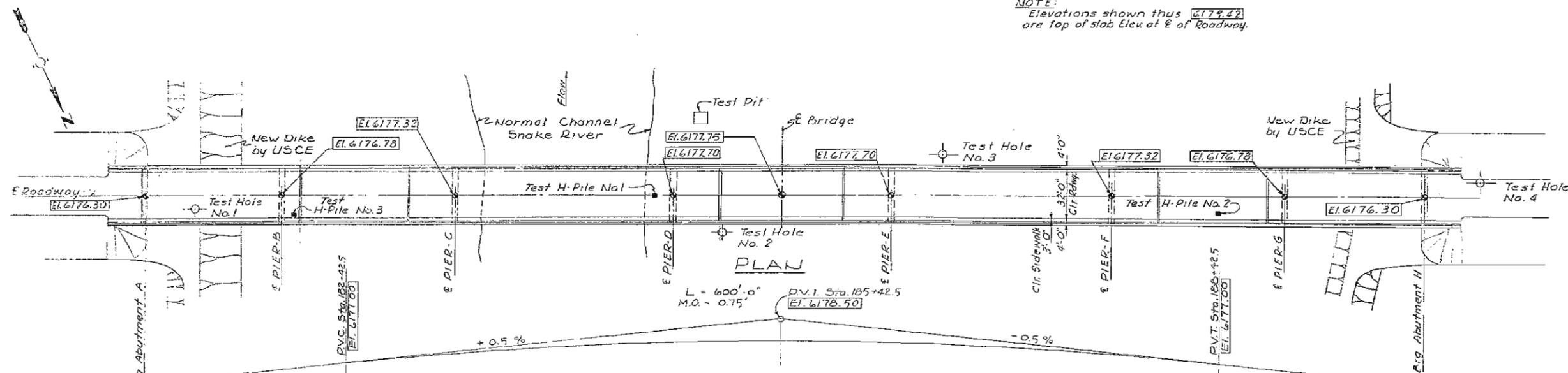
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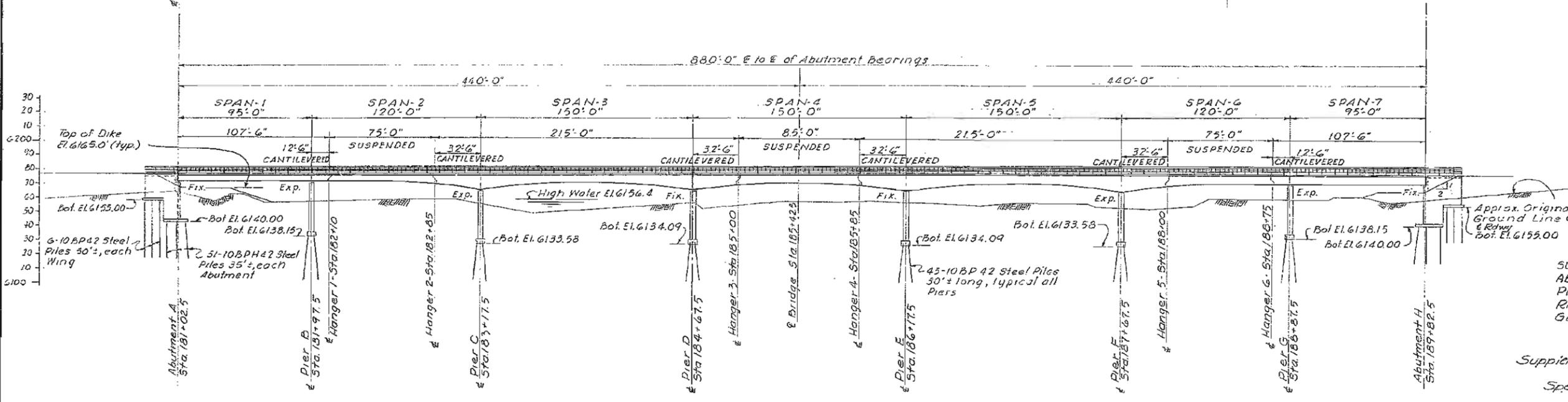
CLIENT: **TOJ/JH COMMUNITY PATHWAYS DEPARTMENT
HWY 22 SNAKE RIVER CROSSING
TETON COUNTY, WYOMING**

WELL LOG	GRAPHIC LOG	DEPTH (FT)	SAMPLES			SAMPLE ID	RECOVERY (%)	MATERIAL DESCRIPTION	LIQUID LIMIT	PLASTIC LIMIT	CORR. SPT	DRY DENSITY (PCF)	MOISTURE (%)	REMARKS
			DRIVE	UNDISTURBED	BULK									
		22												
		23												
		24												
		25												
		26	9			BH3-5	100	25.25'-26.75' TOP 14"-SATURATED BROWN SAND, FINE TO MEDIUM GRAINED SAND, ALLUVIUM, VERY DENSE			50			
		27	33			2" SS		BOTTOM 4"-SATURATED BROWN GRAVEL WITH SAND, WELL GRADED SAND AND GRAVELS, ROUNDED TO ANGULAR GRAVELS, FILGC, ALLUVIUM, VERY DENSE						
		28	22											
		29												
		30												
		31	7			BH3-6	72	30.25'-31.75' TOP 8"-SATURATED BROWN SAND, FINE GRAINED SAND, POORLY GRADED, ALLUVIUM, DENSE			33			
		32	15			2" SS		BOTTOM 5"-SATURATED BROWN GRAVEL WITH SAND, WELL GRADED SAND, POORLY GRADED GRAVEL, ROUNDED TO ANGULAR GRAVELS, FILGC, MULTIPLE ANGULAR 1.5" GRAVELS, ALLUVIUM, DENSE						
		33	21											
		34												
		35												
		36	9			BH3-7	67	35.25'-36.75' TOP 6"-SATURATED BROWN SAND, WELL GRADED SAND, VERY DENSE			50		1' HEAVE BEFORE SS	
		37	40			2" SS		BOTTOM 6"-SATURATED BROWN GRAVEL WITH SAND, WELL GRADED SAND AND GRAVEL, ROUNDED TO ANGULAR GRAVELS, FILGC, ALLUVIUM, VERY DENSE					REMOVED HEAVE BEFORE SAMPLING, SAND EJECTED	
		38	43											
		39												
		40												
		41	2			BH3-8	17	40.25'-41.75' SATURATED MULTICOLORED GRAVELS, ROUNDED TO ANGULAR GRAVELS, FILGC, MEDIUM DENSE			14		1.5' HEAVE BEFORE SS	
		42	9			2" SS		BOH=41.75'					REMOVED ALL BUT 0.5' OF HEAVE BEFORE SAMPLING	
		43	8											
		44												

NOTE:
Elevations shown thus $\boxed{6177.42}$
are top of slab Elev. of Roadway.



VERTICAL CURVE DATA



ELEVATION

(7 Span Welded R Girder with Cantilevered and Suspended Spans - 95'-0", 120'-0", 3-150'-0", 120'-0" and 95'-0" Spans)

NOTES

- Location of sample taken with a 2-inch outside dia. standard spoon driven with a 140-pound hammer falling 30-inches.
- u_{3/2} Indicates that 65 blows of the hammer were required to drive the sampler 2-inches.
- W.T. Ground water table as measured on January 14, 1958.

TOTAL ESTIMATED QUANTITIES

Class B Concrete	2438.4 Cu. Yds.
Reinforcing Steel	385,370 Lbs.
Structural Steel	699,500 Lbs.
Steel Piling (10 BP 42)	13,520 Lin. Ft.
Steel Pile Splice Welds	100 Each
Bridge Railing	1826 Lin. Ft.
Wet Excavation for Bridges	4120 Cu. Yds.
Dry Excavation for Bridges	570 Cu. Yds.
Mechanical Tamping	120 Hrs.
Removing Existing Structure	L.S.
Permanent Barricades	2 Ea.

DESIGN DATA:
Specifications -
For Design, A.A.S.H.O. Standard Specification for Highway Bridges, 1957 Edition.

Live Load -
H 20 - 516 - 44 on three lanes
Roadway Width -
32'-0" Clear between 3'-0" clear sidewalks.
Foundation -
Piers and abutments supported on 10 BP 42 steel piles driven to practical refusal. Minimum penetration to Elevation 6105. Design capacity 35 Tons per pile.

FOUNDATION DATA:
Four test holes were drilled at locations shown in Plan. Standard penetration tests were taken on layers of sand encountered. Representative logs of materials encountered are shown on this sheet. Three test H-Piles were driven at locations shown in Plan, and driving resistance recorded. A test pit was dug at location shown in Plan to determine particle size and cleanliness of material. Photographs were taken of cuts exposed and material dug from test pit. A copy of the soil report containing boring logs, driving resistance charts and photographs is available for inspection from Wyoming Highway Dept.

STREAM DATA:
Drainage Area - 3,226 Sq. mi.
Slope of Streambed - 0.00475 Ft./Ft.
Scour - Considerable shifting of channels and sand bars
Drift - Large Trees & Brush - Some ice.
Streambed Material - Coarse gravel with sand bars.

All Maximum Flood - H.W. Elev. 6156.4
By Manning Formula
Area of Water Section - 2630 Sq. Ft.
Coef. of Roughness (assumed) - 0.035
Hydraulic Radius - 4.97'
Velocity of Flow - 3.52 Ft./Sec.
Discharge - 22,400 c.f.s.

DRAWING INDEX

SUPERSTRUCTURE DETAILS	Sheets 2 to 7
ABUTMENT DETAILS	Sheet 8 to 10
PIER DETAILS	Sheet 11
RAILING & SCUPPER DETAILS	Sheet 12
GENERAL NOTE	Sheet 3

REFERENCES

- Supplemental Specification For Radiographic Examination of Welded Joints
- Special Provision For Removing Existing Structures
- Supplemental Specification For Bridge Railing
- Supplemental Specification For Permanent Barricades
- Special Provisions for Steel Piling

GENERAL PLAN AND ELEVATION

WYOMING HIGHWAY DEPARTMENT
JACKSON-WILSON BRIDGE
OVER
SNAKE RIVER
Sta. 185+42.5
Jackson-Wilson Road
Wyo. Proj. 5-2000(2)
BANNER-PHILLIPS AND ASSOCIATES, INC.
CONSULTING ENGINEERS

APPROVED _____
8-26-58
SUPERINTENDENT

FOR REVISIONS SEE LEFT BORDER

LOGS OF EXPLORATORY HOLES

Hole No.	Elevation	Soil Description
Hole 1	6157.6	GRAVEL, sandy, cobbles, clean rounded
Hole 1	6155.0	GRAVEL, sandy, cobbles, clean rounded
Hole 1	6150.0	GRAVEL, sandy, many cobbles, few boulders, clean, particles rounded
Hole 1	6145.0	GRAVEL, sandy, many cobbles, few boulders, clean, particles rounded
Hole 1	6140.0	GRAVEL, sandy, many cobbles, few boulders, clean, particles rounded
Hole 1	6135.0	GRAVEL, sandy, many cobbles, few boulders, clean, particles rounded
Hole 1	6130.0	GRAVEL, same as above except few cobbles and boulders
Hole 1	6125.0	GRAVEL, same as above except few cobbles and boulders
Hole 1	6120.0	GRAVEL, same as above except few cobbles and boulders
Hole 1	6115.0	GRAVEL, same as above except few cobbles and boulders
Hole 1	6110.0	GRAVEL, same as above except few cobbles and boulders
Hole 2	6157.6	GRAVEL, sandy, cobbles, clean rounded
Hole 2	6155.0	GRAVEL, sandy, cobbles, clean rounded
Hole 2	6150.0	GRAVEL, sandy, many cobbles, few boulders, clean, particles rounded
Hole 2	6145.0	GRAVEL, sandy, many cobbles, few boulders, clean, particles rounded
Hole 2	6140.0	GRAVEL, sandy, many cobbles, few boulders, clean, particles rounded
Hole 2	6135.0	GRAVEL, sandy, many cobbles, few boulders, clean, particles rounded
Hole 2	6130.0	GRAVEL, sandy, many cobbles, few boulders, clean, particles rounded
Hole 2	6125.0	GRAVEL, sandy, many cobbles, few boulders, clean, particles rounded
Hole 2	6120.0	GRAVEL, sandy, many cobbles, few boulders, clean, particles rounded
Hole 2	6115.0	GRAVEL, sandy, many cobbles, few boulders, clean, particles rounded
Hole 2	6110.0	GRAVEL, sandy, many cobbles, few boulders, clean, particles rounded
Hole 3	6157.6	GRAVEL, sandy, cobbles, clean rounded
Hole 3	6155.0	GRAVEL, sandy, cobbles, clean rounded
Hole 3	6150.0	GRAVEL, sandy, many cobbles, few boulders, clean, particles rounded
Hole 3	6145.0	GRAVEL, sandy, many cobbles, few boulders, clean, particles rounded
Hole 3	6140.0	GRAVEL, sandy, many cobbles, few boulders, clean, particles rounded
Hole 3	6135.0	GRAVEL, sandy, many cobbles, few boulders, clean, particles rounded
Hole 3	6130.0	GRAVEL, sandy, many cobbles, few boulders, clean, particles rounded
Hole 3	6125.0	GRAVEL, sandy, many cobbles, few boulders, clean, particles rounded
Hole 3	6120.0	GRAVEL, sandy, many cobbles, few boulders, clean, particles rounded
Hole 3	6115.0	GRAVEL, sandy, many cobbles, few boulders, clean, particles rounded
Hole 3	6110.0	GRAVEL, sandy, many cobbles, few boulders, clean, particles rounded
Hole 4	6157.6	GRAVEL, sandy, cobbles, clean rounded
Hole 4	6155.0	GRAVEL, sandy, cobbles, clean rounded
Hole 4	6150.0	GRAVEL, sandy, many cobbles, few boulders, clean, particles rounded
Hole 4	6145.0	GRAVEL, sandy, many cobbles, few boulders, clean, particles rounded
Hole 4	6140.0	GRAVEL, sandy, many cobbles, few boulders, clean, particles rounded
Hole 4	6135.0	GRAVEL, sandy, many cobbles, few boulders, clean, particles rounded
Hole 4	6130.0	GRAVEL, sandy, many cobbles, few boulders, clean, particles rounded
Hole 4	6125.0	GRAVEL, sandy, many cobbles, few boulders, clean, particles rounded
Hole 4	6120.0	GRAVEL, sandy, many cobbles, few boulders, clean, particles rounded
Hole 4	6115.0	GRAVEL, sandy, many cobbles, few boulders, clean, particles rounded
Hole 4	6110.0	GRAVEL, sandy, many cobbles, few boulders, clean, particles rounded

LABORATORY RESULTS

Sample ID **BH4-6**

Depth (ft) **20.25'-21.75'**

Unified Soils Classification
Well Graded Gravel with Sand (GW)

Gravel	63%
Sand	32%
Fines	4%

Liquid Limit:	NP
Plastic Limit:	NP
Plasticity Index:	NP

In-Situ Moisture Content	58.7%
--------------------------	-------

Cu=	79
Cc=	2

Standard Sieve No.	Particle Size (mm)	Tare Weight (g)	Sample + Tare (g)	Sample Weight (g)	Cumulative % Retained	Percent Passing
1.5"	38	203.8	203.8	0.0	0%	100%
1"	25	203.8	307.2	103.4	21%	79%
3/4"	18.75	203.8	259.7	55.9	32%	68%
3/8"	9.5	203.8	309.3	105.5	53%	47%
#4	4.75	203.8	257.8	54.0	63%	37%
#8	2.36	203.8	240.6	36.8	71%	29%
#16	1.18	203.8	229.5	25.7	76%	24%
#40	0.425	203.8	241.5	37.7	83%	17%
#100	0.15	203.8	245.7	41.9	92%	8%
#200	0.075	203.8	222.7	18.9	96%	4%
Pan	0	203.8	226.1	22.3	100%	0%
Total Weight of Sample (g)				501.9		

Moisture Content	
Wet Wt + Tare (g)	906.3
Dry Wt. + Tare (g)	611.7
Wt of Water (g)	294.6
Tare Wt. (g)	109.8
Dry Wt. (g)	501.9
Moisture Content	58.7%
Wash	
Wet Wt. + Tare (g)	906.3
Pre Wash Dry (g)	501.9
Post Wash Dry (g)	479.6
Tare Wt. (g)	109.8
Wt. Of Minus #200 =	22.3

Particle Size (mm)	
D60=	15
D30=	2.6
D10=	0.19

Project: **Hwy 22 Pathway Bridge**
 Job Number: **10-124-02**
 Visual ID: **Gravel with Sand**

Sampled By: **AP**
 Date: **7/18/2012**
 Tested By: **AP**
 Date: **12/3/2012**



Sample ID **BH5-5**

Depth (ft) **30'-31.5'**

Unified Soils Classification
Well Graded Gravel
with Silt and Sand (GW-GM)

Gravel	57%
Sand	36%
Fines	6%

Liquid Limit:	NP
Plastic Limit:	NP
Plasticity Index:	NP

In-Situ Moisture Content	17.8%
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Cu=	87
Cc=	1

Standard Sieve No.	Particle Size (mm)	Tare Weight (g)	Sample + Tare (g)	Sample Weight (g)	Cumulative % Retained	Percent Passing
1.5"	38	203.8	203.8	0.0	0%	100%
1"	25	203.8	272.4	68.6	10%	90%
3/4"	18.75	203.8	328.7	124.9	29%	71%
3/8"	9.5	203.8	302.2	98.4	44%	56%
#4	4.75	203.8	291.5	87.7	57%	43%
#8	2.36	203.8	255.8	52.0	65%	35%
#16	1.18	203.8	236.3	32.5	70%	30%
#40	0.425	203.8	258.0	54.2	78%	22%
#100	0.15	203.8	277.7	73.9	89%	11%
#200	0.075	203.8	232.8	29.0	94%	6%
Pan	0	203.8	244.5	40.6	100%	0%
Total Weight of Sample (g)				661.8		

Moisture Content	
Wet Wt + Tare (g)	886.7
Dry Wt. + Tare (g)	769.0
Wt of Water (g)	117.7
Tare Wt. (g)	107.3
Dry Wt. (g)	661.8
Moisture Content	17.8%
Wash	
Wet Wt. + Tare (g)	886.7
Pre Wash Dry (g)	661.8
Post Wash Dry (g)	621.1
Tare Wt. (g)	107.3
Wt. Of Minus #200 =	40.6

Particle Size (mm)	
D60=	13
D30=	1.3
D10=	0.15

Project: **Hwy 22 Pathway Bridge**
 Job Number: **10-124-02**
 Visual ID: **Gravel with Sand**

Sampled By: **AP**
 Date: **7/20/2012**
 Tested By: **AP**
 Date: **12/3/2012**



Sample ID **BH6-4**

Depth (ft) **25.0'-26.5'**

Unified Soils Classification
Well Graded Gravel
with Silt and Sand (GW-GM)

Gravel	61%
Sand	35%
Fines	5%

Liquid Limit:	NP
Plastic Limit:	NP
Plasticity Index:	NP

In-Situ Moisture Content	60.2%
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Cu=	75
Cc=	2

Standard Sieve No.	Particle Size (mm)	Tare Weight (g)	Sample + Tare (g)	Sample Weight (g)	Cumulative % Retained	Percent Passing
1.5"	38	203.8	203.8	0.0	0%	100%
1"	25	203.8	241.3	37.5	8%	92%
3/4"	18.75	203.8	238.5	34.7	16%	84%
3/8"	9.5	203.8	349.3	145.5	48%	52%
#4	4.75	203.8	260.6	56.8	61%	39%
#8	2.36	203.8	237.4	33.6	68%	32%
#16	1.18	203.8	221.7	17.9	72%	28%
#40	0.425	203.8	230.4	26.6	78%	22%
#100	0.15	203.8	260.1	56.2	90%	10%
#200	0.075	203.8	226.2	22.4	95%	5%
Pan	0	203.8	225.7	21.9	100%	0%
Total Weight of Sample (g)				453.1		

Moisture Content	
Wet Wt + Tare (g)	1063.3
Dry Wt. + Tare (g)	790.4
Wt of Water (g)	272.9
Tare Wt. (g)	337.3
Dry Wt. (g)	453.1
Moisture Content	60.2%
Wash	
Wet Wt. + Tare (g)	1063.3
Pre Wash Dry (g)	453.1
Post Wash Dry (g)	431.2
Tare Wt. (g)	337.3
Wt.Of Minus #200 =	21.9

Particle Size (mm)	
D60=	12
D30=	1.7
D10=	0.16

Project: **Hwy 22 Pathway Bridge**
Job Number: **10-124-02**
Visual ID: **Gravel with Sand**

Sampled By: **AP**
Date: **7/19/2012**
Tested By: **AP**
Date: **12/3/2012**



Sample ID **BH7-6**

Depth (ft) **20.0'-21.5'**

Unified Soils Classification
Poorly Graded Gravel with Sand (GP)

Gravel	69%
Sand	27%
Fines	3%

Liquid Limit:	NP
Plastic Limit:	NP
Plasticity Index:	NP

In-Situ Moisture Content	39.4%
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Cu=	63
Cc=	5

Standard Sieve No.	Particle Size (mm)	Tare Weight (g)	Sample + Tare (g)	Sample Weight (g)	Cumulative % Retained	Percent Passing
1.5"	38	203.8	203.8	0.0	0%	100%
1"	25	203.8	246.2	42.4	16%	84%
3/4"	18.75	203.8	246.5	42.6	32%	68%
3/8"	9.5	203.8	271.6	67.8	58%	42%
#4	4.75	203.8	235.2	31.4	69%	31%
#8	2.36	203.8	220.7	16.8	76%	24%
#16	1.18	203.8	215.7	11.9	80%	20%
#40	0.425	203.8	220.6	16.7	87%	13%
#100	0.15	203.8	223.1	19.3	94%	6%
#200	0.075	203.8	211.5	7.7	97%	3%
Pan	0	203.8	212.3	8.5	100%	0%
Total Weight of Sample (g)				265.1		

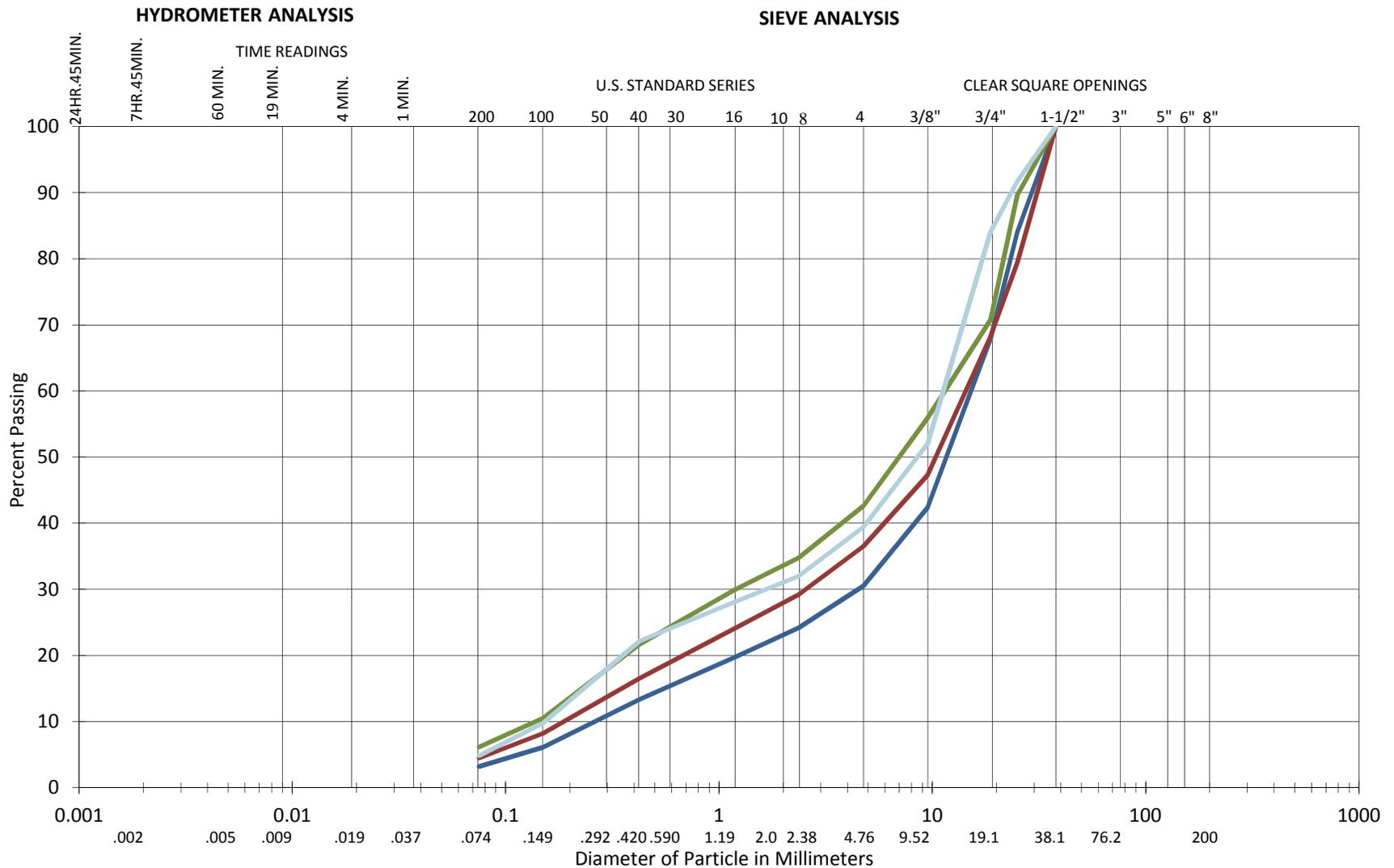
Moisture Content	
Wet Wt + Tare (g)	483.4
Dry Wt. + Tare (g)	379.1
Wt of Water (g)	104.4
Tare Wt. (g)	113.9
Dry Wt. (g)	265.1
Moisture Content	39.4%
Wash	
Wet Wt. + Tare (g)	483.4
Pre Wash Dry (g)	265.1
Post Wash Dry (g)	256.7
Tare Wt. (g)	113.9
Wt. Of Minus #200 =	8.5

Particle Size (mm)	
D60=	17
D30=	4.6
D10=	0.27

Project: **Hwy 22 Pathway Bridge**
 Job Number: **10-124-02**
 Visual ID: **Gravel with Sand**

Sampled By: **AP**
 Date: **7/20/2012**
 Tested By: **AP**
 Date: **12/3/2012**





CLAY (plastic) TO SILT (non-plastic)	SAND			GRAVEL		COBBLES
	FINE	MEDIUM	COARSE	FINE	COARSE	

— BH7-6 — BH4-6 — BH5-5 — BH6-4

Highway 22 Pathway Bridge

PILE ANALYSIS

Pathway Bridge Pile Resistance Analysis Summary

Per HNTB Bridge Structural Plans Dated 12 07 12. Static analysis performed using Nordlund/Thurman method using Driven software. Box option used for perimeter resistance, toe area for point resistance

Existing River Bed GSELEV=	6156
Min. River Bed Elevation Adj. to Piers=	6142.5
Scour Elevation	6135

Pile Cap Thickness=	4.5
Top of Pile Elevation (ft) =	6130.5
Depth of Top of Pile At Full Scour=	4.5

ABUTMENT ANALYSIS	
Max. Factored Load (K)=	223
Dynamic Testing Resistance Factor=	0.65
Static Resistance Factor=	0.45
Minimum Static Unfactored Resistance EQC10.7.3.3-1=	322 Highlighted where Unfactored Resistance >min.

Friction Angle=38 Unit Weight=135				
HP	Pile Length	Skin Friction (K)	Point Bearing (K)	Unfactored Resistance (K)
12x53	50	260	29	289
12x53	55	311	29	340
12x53	60	366	29	395

Friction Angle=38 Unit Weight=145				
HP	Pile Length	Skin Friction (K)	Point Bearing (K)	Unfactored Resistance (K)
12x53	50	291	29	320
12x53	55	349	29	378
12x53	60	411	29	440

Friction Angle=40 Unit Weight=135				
HP	Pile Length	Skin Friction (K)	Point Bearing (K)	Unfactored Resistance (K)
12x53	50	307	45	352
12x53	55	367	45	412
12x53	60	433	45	478

Friction Angle=40 Unit Weight=145				
HP	Pile Length	Skin Friction (K)	Point Bearing (K)	Unfactored Resistance (K)
12x53	50	344	45	389
12x53	55	411	45	456
12x53	60	485	45	530

PIER ANALYSIS		Strength Limit State
Max. Factored Load (K)=	347	(343 Piers 1 and 3, 347 Pier 2) Full Scour
Dynamic Testing Resistance Factor=	0.65	
Static Resistance Factor=	0.45	
Minimum Static Unfactored Resistance EQC10.7.3.3-1=	501	Highlighted where Unfactored Resistance >min.

Friction Angle=38 Unit Weight=135				
HP	Pile Length	Skin Friction (K)	Point Bearing (K)	Unfactored Resistance (K)
14x89	50	347	49	396
14x89	55	420	49	469
14x89	60	500	49	549

Friction Angle=38 Unit Weight=145				
HP	Pile Length	Skin Friction (K)	Point Bearing (K)	Unfactored Resistance (K)
14x89	50	394	49	443
14x89	55	478	49	527
14x89	60	569	49	618

Friction Angle=40 Unit Weight=135				
HP	Pile Length	Skin Friction (K)	Point Bearing (K)	Unfactored Resistance (K)
14x89	50	417	76	493
14x89	55	505	76	581
14x89	60	602	76	678

Friction Angle=40 Unit Weight=145				
HP	Pile Length	Skin Friction (K)	Point Bearing (K)	Unfactored Resistance (K)
14x89	50	476	76	552
14x89	55	575	76	651
14x89	60	685	76	761

EXTREME 1 LOAD CASE PIER ANALYSIS					
					Depth at 1/2 Full Scour
Max. Factored Load Bearing (K)=					407
Max. Factored Load Uplift (K)=					242
Extreme 1 Resistance Factor = 1.0					
Friction Angle=38 Unit Weight=135					
HP	Pile Length	Skin Friction (KIPS)	Point Bearing (KIPS)	Bearing (KIPS)	Uplift (KIPS)
14x89	50	340	49	389	340
14x89	55	413	49	462	413
14x89	60	494	49	543	494

PERMITS

**TETON COUNTY, WYOMING
PATH 22 WEST BRIDGE
PROJECT**

PERMITS

INDEX

1. Federal Emergency Management Agency Clearance

- Potentially required for pier placement in the Snake River.
- Need for clearance obviated by demonstrated “no-rise” condition.

2. U.S. Army Corps of Engineers (ACOE) 404 Permit

- Potentially required for pier placement in Snake River.
- Activities covered under Nationwide Permit No. 14 (Linear Transportation Projects).
- Preconstruction Notification letter (and supporting documentation) to be prepared and submitted ACOE by Engineer on behalf of Owner.
- Contractor to comply with the conditions of Nationwide Permit No. 14.

3. U.S. Army Corps of Engineers (ACOE) 401 Water Quality Certification

- ACOE Requirement administered by Wyoming Department of Environmental Quality (DEQ).
- Review and issuance of certification triggered by submittal of Preconstruction Notification letter (and supporting documentation) under ACOE 404 Permit process.

4. Wyoming Department of Environmental Quality (DEQ) Temporary Turbidity Increase Waiver and Stormwater Discharge Permit

- Required for work within the Snake River.
- To be prepared and submitted by Engineer on behalf of Owner.
- Terms of permit must be adhered to by Contractor.

5. Teton County Permits

- **Grading and Erosion Control Permit**
- **Flood Plain Development Permit**
- **Bridge Permit**

- To be prepared and submitted by Engineer on behalf of Owner.

6. Traffic and Access Control Plan

- Required to minimize disruption to normal and customary vehicle movement within the area.
- To be prepared by Contractor and reviewed and approved by Owner and Engineer.

7. Stormwater Pollution Prevention Plan (SWPPP)

- Required by the Wyoming DEQ.
- Activities covered under Wyoming General Permit for Stormwater Discharge Associated with Small Construction Activities (Between One and Five Acres).
- To be prepared by Contractor with assistance by Engineer.



MERIDIAN ENGINEERING, P.C.

P.O. Box 6677

Jackson, Wyoming 83002

(307) 739-0500

January 11, 2013

Sinclair Buckstaff, Jr., P.E.
Nelson Engineering
P.O. Box 1599
430 South Cache Street
Jackson, Wyoming 83001

Re: Hydraulic Analysis for the Proposed Hwy 22 Pathway Bridge across the Snake River

Dear Sandy,

I have completed a hydraulic analysis for purposes of determining what impacts the proposed Highway 22 Pathway Bridge may have on the Snake River base flood (1% annual chance flood) elevations published by the Federal Emergency Management Agency (FEMA). The paragraphs that follow provide an overview.

The location of the proposed pathway bridge used in this analysis is approximately 440 feet upstream of the existing Highway 22 Bridge. At this location, the pathway bridge will span between two Federal Levees located along either side of the Snake River. These levees are currently certified for provision of flood protection during the occurrence of the base flood discharge as can be seen on the effective Flood Insurance Rate Map. Therefore, the new bridge structure shall be designed and constructed to assure these levees continue to provide their intended flood protection. In addition, the bridge shall be designed to meet all applicable requirements of the National Flood Insurance Program and the Teton County Floodplain Management Resolution.

According to Panel 540 of the Flood Insurance Rate Map for Teton County Wyoming and Incorporated Areas, dated May 4, 1989, the proposed bridge is located within the Snake River Special Flood Hazard Area and regulatory floodway. Prior to developing within the regulatory floodway, it must first be demonstrated through hydrologic and hydraulic analyses performed in accordance with standard engineering practice that the proposed encroachment would not result in any increase in flood levels within the community during the occurrence of the base flood discharge unless a Conditional Letter of Map Revision request is approved by FEMA.

FEMA's effective hydraulic analysis was employed to determine what effects the proposed bridge structure may have on the published base flood elevation data.

Their analysis was performed using the HEC-II computer program. The current version of HEC-RAS was used by Meridian Engineering to model the proposed bridge structure, which is also accepted by FEMA.

Initial modeling efforts included assembly of a duplicate effective hydraulic model using FEMA's effective hydraulic model input data. Upstream and downstream calculated water surface elevations from the duplicate effective model were checked to assure required tie-in tolerances were met. Next a corrected effective model was created using updated channel invert data in proximity of the proposed bridge structure. This data was derived from the U.S. Army Corps of Engineers 2010 Flood Capacity Study and field surveys performed by Nelson Engineering. The corrected effective model is the base model to be compared with the proposed conditions model in determining what impacts the pathway bridge structure may have on the base flood elevation data.

The proposed conditions hydraulic model was next created by adding the bridge structure to the corrected effective model. The basic bridge structure is comprised of a horizontally curved and vertically arched bridge deck, three concrete piers located inside the river banks, and abutments positioned on top of the Federal Levees. From this hydraulic model, it was determined that the low chord of the bridge is elevated several feet above the base flood level. Therefore, the only bridge components partially submerged during the occurrence of the base flood discharge are the piers. Based upon the hydraulic modeling results, the maximum increase in base flood elevation caused by these piers is 0.04 feet. Next, the proposed conditions model was modified to incorporate minor excavation of channel bed material in proximity of the piers to aid in their construction and gain hydraulic conveyance area lost due to the piers. The final results of this model reveal that no increases in base flood levels will result when compared with the corrected effective model.

Based on the results of this hydraulic analysis, it has been determined that a Conditional Letter of Map Revision and subsequent Letter of Map Revision will not be required as a part of this project. If you should need additional information or have any questions regarding this matter, please do not hesitate to contact me.

Sincerely,

A handwritten signature in black ink that reads "Kurt Stout". The signature is written in a cursive, flowing style.

Kurt Stout, P.E.
Civil Engineer
Meridian Engineering, P.C.

**U.S. ARMY CORPS OF ENGINEERS
NATIONWIDE PERMIT PROGRAM**

**Nationwide Permit No. 14
Linear Transportation Projects**

14. Linear Transportation Projects. Activities required for the construction, expansion, modification, or improvement of linear transportation projects (e.g., roads, highways, railways, trails, airport runways, and taxiways) in waters of the United States. For linear transportation projects in non-tidal waters, the discharge cannot cause the loss of greater than 1/2-acre of waters of the United States. For linear transportation projects in tidal waters, the discharge cannot cause the loss of greater than 1/3-acre of waters of the United States. Any stream channel modification, including bank stabilization, is limited to the minimum necessary to construct or protect the linear transportation project; such modifications must be in the immediate vicinity of the project.

This NWP also authorizes temporary structures, fills, and work necessary to construct the linear transportation project. Appropriate measures must be taken to maintain normal downstream flows and minimize flooding to the maximum extent practicable, when temporary structures, work, and discharges, including cofferdams, are necessary for construction activities, access fills, or dewatering of construction sites. Temporary fills must consist of materials, and be placed in a manner, that will not be eroded by expected high flows. Temporary fills must be removed in their entirety and the affected areas returned to pre-construction elevations. The areas affected by temporary fills must be revegetated, as appropriate. 10

This NWP cannot be used to authorize non-linear features commonly associated with transportation projects, such as vehicle maintenance or storage buildings, parking lots, train stations, or aircraft hangars.

Notification: The permittee must submit a pre-construction notification to the district engineer prior to commencing the activity if: (1) the loss of waters of the United States exceeds 1/10-acre; or (2) there is a discharge in a special aquatic site, including wetlands. (See general condition 31.) (Sections 10 and 404)

Note: Some discharges for the construction of farm roads or forest roads, or temporary roads for moving mining equipment, may qualify for an exemption under Section 404(f) of the Clean Water Act (see 33 CFR 323.4).

Summary of the 2012 Nationwide Permits (Excerpts)

Nationwide Permit	Statutory Authority	Limits	Pre-Construction Notification (PCN) Threshold	Changes in 2012	Other Information
NWP 13 – Bank Stabilization	10/404	<ul style="list-style-type: none"> 500 feet along the bank (unless waived by DE) 1 cubic yard per running foot (unless waived by DE) 	PCN required if: <ul style="list-style-type: none"> >500 linear feet in length >1 cubic yard per running foot along bank below OHWM or HTL discharges into special aquatic sites 	Added language authorizing temporary structures, fills and work necessary to construct the activity. Invasive plant species may not be used for bioengineering or vegetative bank stabilization.	Activity cannot impair surface water flow into or out of waters of the U.S. Temporary fills must be removed in their entirety and the affected areas returned to pre-construction elevations.
NWP 14 – Linear Transportation Projects	10/404	<ul style="list-style-type: none"> 1/2 acre in non-tidal waters of the U.S. 1/3 acre in tidal waters of the U.S. 	PCN required if: <ul style="list-style-type: none"> >1/10 acre discharges into special aquatic sites 	None	Temporary fills must be removed in their entirety and the affected areas returned to pre-construction elevations. Does not authorize storage buildings, parking lots, train stations, aircraft hangars, or other non-linear transportation features.
NWP 15 – U.S. Coast Guard Approved Bridges	404	None	PCN not required	Clarified that the construction of the bridge structure must be authorized by the U.S. Coast Guard under Section 9 of the Rivers and Harbors Act of 1899 and other applicable laws.	Causeways and approach fills for bridges are not authorized by this NWP; those activities require separate section 404 authorization.
NWP 16 – Return Water From Upland Contained Disposal Areas	404	None	PCN not required	Clarified that disposal site may be in an area that has no waters of the United States.	
NWP 17 – Hydropower Projects	404	None	all activities	None	Applies to activities licensed by the Federal Energy Regulatory Commission or activities exempt from licensing requirements.
NWP 18 – Minor Discharges	10/404	<ul style="list-style-type: none"> 25 cubic yards discharged below plane of OHWM/HTL 1/10-acre of waters of the U.S. 	PCN required if: <ul style="list-style-type: none"> >10 cubic yards discharged below plane of OHWM/HTL discharges into special aquatic sites 	None	Does not authorize discharges for stream diversions.
NWP 19 – Minor Dredging	10/404	25 cubic yards below plane of OHWM/MHWM	PCN not required	None	Does not authorize dredging or degradation through siltation of coral reefs, submerged aquatic vegetation beds, anadromous fish spawning areas, or wetlands.
NWP 20 – Response Operations for Oil and Hazardous Substances	10/404	None	PCN not required	Changed title. Also authorizes approved regional or local contingency plans, as well as temporary structures and fills for spill response training exercises.	Authorizes activities subject to the National Oil and Hazardous Substances Pollution Contingency Plan.
NWP 21 – Surface Coal Mining Activities	10/404	<ul style="list-style-type: none"> 1/2 acre of non-tidal waters of U.S. 300 linear feet of stream bed (DE can waive for intermittent and ephemeral streams) 	all activities	Added 1/2-acre limit and limits losses of stream beds to 300 linear feet unless district engineers waives in writing for intermittent and ephemeral streams. Agency coordination required for proposed waivers of the 300 linear foot limit. Does not authorize valley fills. Added definition of "valley fill."	Activities that were verified under the 2007 NWP 21 may be reauthorized without the limits, if the permittee submits a written request to the DE for reauthorization by February 1, 2013. Expansions in waters of the U.S. are not eligible for reauthorization. To be reauthorized, the district engineer must issue a written verification.



Department of Environmental Quality

To protect, conserve, and enhance the Quality of Wyoming's environment for the benefit of current and future generations



Dave Freudenthal, Governor

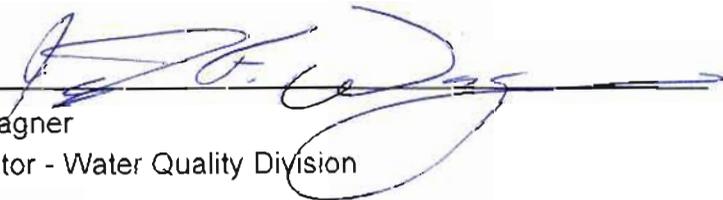
John Corra, Director

General Permit to Discharge Storm Water Associated with Small Construction Activity Under the Wyoming Pollutant Discharge Elimination System (WYPDES)

In compliance with the provisions of Chapter 2 of the Wyoming Water Quality Rules and Regulations, the federal Water Pollution Control Act and the Wyoming Environmental Quality Act, facilities located within the State of Wyoming (except areas within the Wind River Indian Reservation where the state does not have jurisdiction) which are or may discharge storm water associated with small construction activities, are hereby authorized to discharge to surface waters of the State of Wyoming upon compliance with the requirements of this permit.

This general WYPDES permit WYR00-A000 is issued under the provisions of Wyoming Water Quality Rules and Regulations Chapter 2.

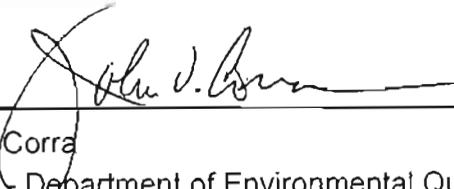
This permit shall become effective on March 1, 2008 and expire on March 15, 2011.



John F. Wagner
Administrator - Water Quality Division

2/5/08

Date



John V. Corra
Director - Department of Environmental Quality

2/6/08

Date

Herschler Building - 122 West 25th Street - Cheyenne, WY 82002 - <http://deq.state.wy.us>



ADMIN/OUTREACH (307) 777-7758 FAX 777-3610	ABANDONED MINES (307) 777-6145 FAX 777-6462	AIR QUALITY (307) 777-7391 FAX 777-6937	INDUSTRIAL SITING (307) 777-7369 FAX 777-6937	LAND QUALITY (307) 777-7756 FAX 777-5864	SOLID & HAZ WASTE (307) 777-7752 FAX 777-5973	WATER QUALITY (307) 777-7781 FAX 777-5973
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Part 1 Coverage Under this Permit

- 1.1 Permit area. The permit covers all areas within the State of Wyoming except areas within the Wind River Indian Reservation where the State does not have jurisdiction.
- 1.2 Storm water discharges covered under this permit
 - 1.2.1 Storm water discharges associated with new and existing small construction activities. To obtain coverage under this permit an operator must complete the requirements described in Part 3 of this permit.
 - 1.2.2 Storm water discharges from areas that are dedicated to producing earthen materials, such as sand and gravel, for use at a single small construction activity covered under this permit. Gravel pits and borrow areas must be opened and operated just for the permitted project. At the end of the project equipment must be removed and the site(s) must be reclaimed. A site that serves more than one project either concurrently or at different times must be permitted under a WYPDES Mineral Mining General Storm Water Permit (or an individual permit in the case of discharges that may reach class 1 waters) rather than the Small Construction General Permit.
 - 1.2.3 Storm water discharges from asphalt batch plants and concrete batch plants that are dedicated to the single small construction activity covered under this permit. At the end of the project equipment must be removed and the production site(s) must be reclaimed. If the plant(s) serves more than one project it must be permitted under a WYPDES Industrial General Permit (where discharges may reach a class 1 water a WYPDES individual permit will be required) rather than the Small Construction General Permit.
 - 1.2.4 Discharges from dewatering of collected storm water and minor amounts of ground water from excavations and depressions on a permitted site provided that requirements specified in Part 8.8 are followed and necessary BMPs are installed and effective.
 - 1.2.5 This permit does not preempt or supersede the authority of local agencies to prohibit, restrict, or control discharges of storm water to storm drain systems or other water courses in their jurisdiction. Construction site operators should contact the local government where they are working to determine what permits, laws or ordinances apply to their construction project.
- 1.3 Storm water discharges not covered under this permit. The following storm water discharges are not provided coverage under this permit:
 - 1.3.1 Storm water discharges from small construction activities with individual WYPDES permits that include storm water control requirements.
 - 1.3.2 Storm water discharges from small construction activities covered under another industry- or geographically-specific general WYPDES permit.
 - 1.3.3 Storm water discharges that are commingled with wastewaters.

- 1.3.4 The placement of fill into waters of the state requiring local, state or federal authorizations (such as a federal Section 404 permit from the US Army Corps of Engineers).
- 1.3.5 Storm water discharges associated with industrial activity (including mineral mining activity), except for discharges from dedicated borrow areas and asphalt or concrete batch plants as described in Parts 1.2.2 and 1.2.3, are not eligible for coverage under this permit. Storm water discharges associated with industrial activity must be covered under another WYPDES storm water permit such as the industrial general permit (IGP) or the mineral mining general permit (MMGP). In certain limited situations, such as where there is a potential discharge to a class 1 water, an individual storm water permit may be required.
- 1.3.6 Storm water discharges that the Department determines will cause, or have the reasonable potential to cause or contribute to, violations of water quality standards or impairments of water quality.

Part 2 Definitions

- 2.1 **"Access Roads"** means private roads which are exclusively or primarily dedicated for use by the permittee.
- 2.2 **"Administrator"** means the Administrator of the Water Quality Division, Wyoming Department of Environmental Quality.
- 2.3 **"Best Management Practices"** ("BMPs") means schedules of activities, prohibitions of practices, maintenance procedures, and other management practices to prevent or reduce the pollution of waters of the state. Best Management Practices (BMPs) also include treatment requirements, operating procedures, and practices to control plant site runoff, spillage or leaks, sludge or waste disposal, or drainage from raw material storage.
- 2.4 **"Bypass"** means the intentional diversion of waste streams from any portion of a treatment facility.
- 2.5 **"Common Plan of Development or Sale"** means projects that may occur in multiple locations and/or in multiple phases, but are part of a single, overall plan. Documentation of common plans may include announcements or other documentation (including signs, public notices, hearings, marketing information, drawings, financing records, permit applications, zoning request, maps, etc.) or physical demarcations (including boundary signs, lot stakes, surveyor markings, etc.) indicating that construction activity will or may occur in the area.
- 2.6 **"CWA"** means Clean Water Act or the federal Water Pollution Control Act, 33 USC 1251, *et. seq.*
- 2.7 **"Department"** means the Department of Environmental Quality.

- 2.8 **“Energy Dissipation”** means methods employed at pipe outlets to prevent erosion by dissipating or lowering the energy of the discharge. Examples include, but are not limited to, concrete aprons, riprap, splash pads, and gabions which are designed and installed to prevent erosion.
- 2.9 **“Finally Stabilized”** means that all soil disturbing activities at the site have been completed, and a uniform perennial vegetative cover with a density of 70% of the native background vegetative cover for the area has been established on all disturbed unpaved areas and areas not covered by permanent structures.
- 2.10 **“Operator”** is the company, individual, or organization that has day-to-day supervision and control of activities occurring at the construction site. This can be the owner, developer, the general contractor, or, in some cases, the agent of one of these parties. The operator is responsible for ensuring compliance with all conditions of the permit.
- 2.11 **“R factor”** means erosivity values which relate primarily to the average annual energy and intensity of rain events for specific rainfall distribution zones throughout the country.
- 2.12 **“Related Effluents”** means discharges from fire fighting activities; fire hydrant flushing; potable water sources including waterline flushing; irrigation drainage; lawn watering; routine external building wash down which does not use detergents; pavement wash waters where spills or leaks of toxic or hazardous materials are not present and where detergents are not used; air conditioning condensate; springs; uncontaminated ground water; and foundation or footing drains where flows are not contaminated with process materials such as solvents.
- 2.13 **“Severe Property Damage”** means substantial physical damage to property, damage to treatment facilities which causes them to become inoperable, or substantial and permanent loss of natural resources which can reasonably be expected to occur in the absence of a bypass. Severe property damage does not mean economic loss caused by delays in production.
- 2.14 **“Small Construction Activity”** means any clearing, grading, or excavation project which will disturb at least one acre and less than five (not necessarily contiguous) surface acres. Small construction activity also includes the disturbance of less than one acre of total land area when that disturbance is part of a larger common plan of development or sale if the larger common plan will ultimately disturb five acres or more. *Construction activity does not include routine maintenance that is performed to maintain the original line and grade, hydraulic capacity or original purpose of a facility.*
- 2.15 **“Spill Prevention Control and Countermeasure Plan (SPCC)”** is a federal requirement (40CFR112) for facilities that store specific amounts of petroleum products. The plan is not a state requirement, but may be referenced as part of the SWPPP when appropriate.
- 2.16 **“Storm Water”** means storm water runoff, snow melt runoff, and surface runoff and drainage.
- 2.17 **“Storm Water Associated with Small Construction Activity”** means the discharge of storm water from construction activities, including clearing, grading, and excavating, that

result in land disturbance of between one and five acres of total land area. Small construction also includes the disturbance of less than one acre of total land area that is a part of a larger common plan of development or sale if the larger plan will ultimately disturb between one and five acres.

- 2.18 “**Storm water Associated with Industrial Activity**” means storm water discharges from any of the activities defined in Section 6 (g) (ii) of Chapter 2 of the Wyoming Water Quality Rules and Regulations.
- 2.19 “**Surface Waters of the State**” means all permanent and intermittent defined drainages and lakes, reservoirs, and wetlands which are not manmade retention ponds used for the treatment of municipal, agricultural or industrial waste; and all other bodies of surface water, either public or private which are wholly or partially within the boundaries of the State.
- 2.20 “**SWPPP**” means Storm Water Pollution Prevention Plan.
- 2.21 “**Temporary Stabilization**” means the exposed ground surface has been covered with appropriate materials to provide temporary stabilization of the surface from water or wind erosion. Materials include, but are not limited to, mulch, riprap, erosion control mats or blankets and temporary cover crops. Surface roughening may also be considered a temporary stabilization method. Seeding alone is not considered stabilization. Temporary stabilization is not a substitute for the more permanent “final stabilization.”
- 2.22 “**Wyoming Surface Water Quality Standards**” refers to Wyoming Water Quality Rules and Regulations, Chapter 1 (surface water standards).

Part 3 Obtaining Authorization to Discharge

Authorization to discharge storm water under this permit is achieved by completing the requirements of Part 3.1 or 3.2.

- 3.1 Permit Authorization. Storm water discharges from small construction activities are authorized under this permit provided the operator:
- 3.1.1 Develops a SWPPP describing the measures to be implemented at the construction site that will eliminate or minimize pollutants from the project. The SWPPP requirements are explained in detail in Part 7 of this permit. ***The SWPPP must be developed and implemented, as applicable, prior to initiating land disturbing activities.***
- 3.1.2 Conducts and documents self monitoring and inspections as described in Part 9 of this permit.
- 3.1.3 The operator fulfills all applicable requirements of this permit.
- 3.2 Qualifying Local Programs
- 3.2.1 If a small construction activity is within the jurisdiction of a qualifying local program (QLP), as described in Parts 3.2.2 and 3.2.3, and is in compliance with the

requirements of that program, then storm water discharges from that activity are also considered to be in compliance with this permit.

3.2.2 A Qualifying Local Program (QLP) is a municipal erosion and sediment control program addressing storm water discharges associated with small construction activities that has been approved by the Department. The Department will maintain a list of approved QLPs in Wyoming.

3.2.3 A QLP must:

3.2.3.1 Require construction site operators to implement appropriate erosion and sediment control best management practices;

3.2.3.2 Require construction site operators to control waste such as discarded building materials, concrete truck wash out, chemicals, litter, and sanitary waste at the construction site that may cause adverse impacts to water quality;

3.2.3.3 Require construction site operators to develop and implement a SWPPP. Those best management practices (BMPs) or other control measures specified in the SWPPP shall ensure that storm water discharges do not cause a violation of Wyoming Water Quality Standards. A SWPPP includes site descriptions, descriptions of appropriate control measures, copies of approved local requirements, maintenance procedures, inspection procedures, and identification of non-storm water discharges; and

3.2.3.4 Implement a procedure to review site plans that incorporates consideration of potential water quality impacts.

- 3.3 Agreement to comply. Operating under the Small Construction General Permit (SCGP) constitutes full agreement by the operator to meet and comply with all requirements of this general permit.
- 3.4 Denial of coverage. Except as noted in Part 3.2, the Administrator shall notify the applicant of the approval or disapproval of coverage under this permit within 30 days of receipt of the NOI. In the case of disapproval, the Administrator shall specify in writing the reason(s) for the disapproval and action(s), if any, that the applicant can take to gain approval.
- 3.5 Individual permit required. If, after evaluation of the small construction activity, it is found that this general permit is not applicable to the operation, the application will be processed as an application for an individual permit. The applicant will be notified of the Administrator's decision to deny authorization under the general permit and require coverage under an individual permit. Additional information may be required.
- 3.6 Temporary coverage. The Administrator reserves the right to issue temporary coverage under this general permit to cover storm water discharges from projects required to obtain coverage under an individual permit.

Part 4 Change of Operator

- 4.1 Document transfer. When responsibility for storm water discharges for a small construction activity changes from one operator to another, the current permittee shall provide the new permittee with copies of all documents relevant to the implementation of the site SWPPP and compliance with this permit.
- 4.2 SWPPP compliance after transfer. The new operator must comply with all conditions in this permit and with all provisions of the existing SWPPP until such time as the existing SWPPP is amended or replaced by a new SWPPP. If the personnel responsible for implementing the SWPPP change, the changes must be made to the SWPPP within 30 days of transfer of operational control.
- 4.3 Transfer of properties within a development. For the transfer of properties within a development (e.g., an original developer sells portions of the property to various homebuilders), the new owner(s) must comply with all conditions of this permit.
- 4.3.1 The new operator may develop and implement a new SWPPP for their parcel(s) that meets all the terms and conditions of this permit, or
- 4.3.2 The new operator may adopt and continue to implement the original SWPPP provided it is adequate for the new activities that will occur onsite.
- 4.3.3 With either option, the permittee shall ensure, either directly or through coordination with other operators that their SWPPP meets all terms and conditions of this permit and their activities do not interfere with another party's erosion and sediment control practices.

Part 5 Waiver from Permit Coverage

The Administrator waives the requirement to obtain authorization under this permit for storm water discharges associated with small construction activities provided the terms and conditions of this section are met.

- 5.1 Waiver applicability and coverage. Operators of small construction activities qualify for a waiver from the requirements of this permit provided:
- 5.1.1 Calculation. The calculated rainfall erosivity "R factor" for the entire period of the construction project, from the initial land disturbance to "final stabilization" is less than 5. The project "R factor" must be determined by:
- 5.1.1.1 Using the simplified method for determining the "R factor" as provided in Part A of the waiver application. Part A was developed using the most conservative assumptions for each county. Or;
- 5.1.1.2 Alternatively, the project operator may calculate a site specific "R factor" using the U.S. Environmental Protection Agency guidance document, Fact Sheet 3.1: Storm Water Phase II Final Rule; Construction Rainfall Erosivity Waiver (document EPA 833-F-00-014).

A link to this document is provided on the Department's web page at <http://deq.state.wy.us/wqd/WYPDES Permitting/WYPDES Storm Water/stormwater.asp>. Paper copies may be obtained by contacting the Storm Water Program at 307.777.7781. This may be a useful option for longer duration projects located in areas of a county that have lower isoerodent values than the conservative values used to develop Part A.

5.1.2 Certification of Waiver

- 5.1.2.1 Operators using the simplified method of Part A must complete the waiver certification section of Part A. The certification must be signed in accordance with Part 10.7 and it must be submitted to the Administrator 30 days prior to commencing land disturbing activities. A site map must be submitted along with the waiver certification.
- 5.1.2.2 Operators using the alternative calculation specified in Part 5.1.1.2 must complete the waiver certification found in Part B. The certification must be signed in accordance with Part 10.7 and it must be submitted to the Administrator 30 days prior to commencing land disturbing activities. A site map must be submitted along with the waiver certification.

5.2 Activities extending beyond the waiver period. If a construction activity extends beyond the certified waiver period for any reason, the operator must either:

- 5.2.1 Recalculate the rainfall erosivity "R factor" using the original start date and a new projected end date and, if the "R factor" is still under 5, complete and sign a new waiver certification before the end of the original waiver period. The new certification must be submitted to the Administrator 14 days before the end of the current certification.
- 5.2.2 Complete and implement the requirements for obtaining authorization under this permit as specified in Part 3 before the end of the certified waiver period.

Part 6 Termination of Permit Coverage

- 6.1 The terms and conditions of this permit must be implemented until one of the following conditions is met:
 - 6.1.1 Final stabilization (see part 2.9 for definition) has been achieved on all parts of the site for which the permittee is responsible.
 - 6.1.2 For individual lots in residential construction only:
 - 6.1.2.1 Final stabilization has been achieved as defined in Part 2.9 or
 - 6.1.2.2 Temporary erosion protection and down gradient perimeter control for individual lots has been completed and the residence has been transferred to the homeowner. Additionally, the permittee shall provide

a copy of a "homeowner fact sheet" to the homeowner to inform the owner of the need for, and the benefits of, erosion and sediment control and final stabilization.

6.1.3 Final stabilization for producing oil and gas facilities does not require revegetation in the area within permanently installed well anchor points, the travel surface of a site access road, and areas within established fire walls surrounding tank batteries. All other areas must be revegetated or covered by permanent materials (paving, gravel, etc.) to be considered finally stabilized. Surfaces left unpaved must be designed and prepared in a manner that will prevent ongoing erosion problems. The permittee may be required to re-extend coverage under this permit to areas with erosion problems.

Part 7 Storm Water Pollution Prevention Plan

7.1 Preparation. Prior to beginning construction activities, an operator shall prepare a "Storm Water Pollution Prevention Plan" (SWPPP) for the construction activity. The primary objective of the plan is to inventory pollutants which have potential to leave the construction site in storm water runoff, identify Best Management Practices (BMPs) which, when implemented, will eliminate or minimize pollutants in runoff and meet the terms and conditions of this permit. Guidance materials for best management practice (BMP) selection and implementation can be found on the web, including the DEQ web page at http://deq.state.wy.us/wqd/WYPDES_Permitting/WYPDES_Storm_Water/stormwater.asp. Facilities must implement the provisions of their SWPPP as a condition of this permit.

7.2 Content. At a minimum, the SWPPP shall include the following information:

7.2.1 *SWPPP Administrator.* Each SWPPP shall identify a specific individual or individuals within the facility organization that are responsible for developing the storm water SWPPP and assisting the facility manager in its implementation, maintenance, and revision. The SWPPP shall clearly identify the responsibility of plan administration, either by name or job title.

7.2.2 Site Description

- 7.2.2.1 A brief description of the nature of the construction activity.
- 7.2.2.2 The proposed sequence of major activities and a planned completion date.
- 7.2.2.3 An estimate of the total area of the site and an estimate of the area expected to undergo clearing, excavation or grading, including off-site borrow areas, access roads, and staging/storage areas.
- 7.2.2.4 A brief description of the existing vegetation at the site and an estimate of the percent of vegetative ground cover.
- 7.2.2.5 The location and description of any other potential pollution sources including, but not limited to, vehicle fueling, storage of fertilizers, chemicals or paint.
- 7.2.2.6 The name of the drainage or water body (surface water(s) of the state) that may receive a storm water discharge from the construction activity and the size, type, and location of any outfall. If the discharge is to a municipal separate storm sewer, indicate the name of the municipal

owner of that system, the location of the storm sewer outfall, and the drainage or water body that will receive storm water discharges from the municipal outfall.

7.2.3 *Site Map.* Each plan shall provide a site map or maps that indicate, at a minimum:

- 7.2.3.1 Construction site boundaries.
- 7.2.3.2 All areas of soil disturbance.
- 7.2.3.3 The location of surface waters of the state as defined in Part 2.20 of this permit. These include springs, streams, wetlands, lakes and any defined drainages that could receive storm water discharge from the construction site.
- 7.2.3.4 Areas used for storage of building materials, soils, wastes, fuel, and areas used for concrete washout.
- 7.2.3.5 Locations of proposed or existing storm water controls.
- 7.2.3.6 Site topography or storm water drainage patterns.
- 7.2.3.7 Where included as part of the permitted project, include site maps for offsite concrete/asphalt batch plants, borrow areas and/or fill material disposal areas, and equipment/materials staging and storage areas.

7.2.4 *Best Management Practices (BMPs).* The plan shall include a narrative description of appropriate controls and measures that will be implemented before, during, and after construction.

The plan shall clearly describe the relationship between the phases of construction and the implementation and maintenance of controls and measures. For example, which controls will be implemented during each of the following stages of construction: clearing and grubbing necessary for perimeter controls, initiation of perimeter controls, remaining clearing and grubbing, road grading, storm drain installation, final grading, stabilization, and removal of control measures.

The description of controls shall address the following minimum components:

7.2.4.1 **EROSION AND SEDIMENT CONTROLS.** An erosion and sediment control plan shall identify appropriate control measures for each major phase of construction.

7.2.4.1.1 Erosion prevention BMPs. The goal of erosion prevention is preventing soil (or sediment) movement and keeping it at its original location within the construction site. Each SWPPP shall provide best management practices (BMPs) for erosion prevention wherever practical. Examples of BMPs for erosion prevention include, but are not limited to:

- Preserving existing vegetation,
- Scheduling
- Surface roughening
- Permanent or temporary seeding and planting

- Mulches, soil binders or tackifiers, erosion control blankets and mats
- Wind erosion control
- Storm water diversion practices upslope of a construction site
- Pipe slope drains
- Outlet protection

7.2.4.1.2 Sedimentation control. Sedimentation occurs when soil is eroded and transported from its original location. The goal of sedimentation control is to prevent sediment from leaving the construction site and, more particularly, from entering surface waters of the state or storm drain inlets. Every SWPPP shall describe adequate BMPs to achieve sedimentation control. Examples of BMPs for sedimentation control include, but are not limited to:

- Sediment barriers such as straw bales, gravel berms, silt fences, fiber rolls or wattles.
- Sediment traps and basins
- Storm drain inlet protection
- Entrance/exit tracking controls
- Undercut lots where curb and gutter are installed
- Vegetated buffer strips
- Grassed waterways
- Water bars and water wings

7.2.4.1.3 Temporary erosion protection. Temporary stabilization (such as cover crop plantings, mulching or erosion controls blankets, surface roughening, etc.) for exposed soil areas where activities have permanently or temporarily ceased should be installed whenever practicable in areas where further work is not expected for 28 days or more. Areas to be protected include graded slopes, ditches, berms and soil stockpiles.

7.2.4.1.4 Best management practice selection, installation and maintenance. All BMPs must be properly selected, installed and maintained in accordance with the manufacturer's specifications and good engineering practices. (It is not required that the SWPPP be prepared or certified by a registered engineer.) If periodic inspections or other information indicates a practice has been used inappropriately or incorrectly the permittee must modify or replace the control.

7.2.4.1.5 Storm water best management practices are expected to withstand and function properly during precipitation events up to a 2-year, 24-hour storm event. Visible and measurable erosion (see Part 8.4) that leaves the construction site from such storm events should be minimal. The 2-year, 24-hour storm event in Wyoming ranges from 0.8 to 2.6 inches. An isopluvial map of

the 2-year, 24-hour storm depth is available on the DEQ storm water website. Permittees may substitute equivalent data published by the local municipality or regulatory agency.

- 7.2.4.2 **CONSTRUCTION SITE DEWATERING.** The SWPPP must specify BMPs for discharges from construction site dewatering. Discharges must meet the conditions specified in Part 8.8 including the use of settling or filtration techniques as appropriate and the use of velocity dissipation devices at the outlet.
- 7.2.4.3 **POST-CONSTRUCTION CONTROLS.** A description of the temporary stabilization measures that will be implemented after construction is complete and until final stabilization is achieved.
- 7.2.4.4 **OPERATIONAL CONTROLS.** The plan shall describe best management practices (BMPs) used in day-to-day operations on the project site that reduce the contribution of pollutants in storm water runoff.
- 7.2.4.4.1 Good housekeeping BMPs to maintain a clean and orderly facility. At a minimum, the SWPPP should address litter, debris, chemicals, fertilizers and sanitary wastes. This includes measures to remove sediment that has left the construction site.
- 7.2.4.4.2 Bulk storage of petroleum products. The SWPPP shall describe specific practices for the bulk storage of petroleum products.
- a. The practices shall provide adequate protection so as to contain all spills and prevent any spilled materials from entering waters of the state or municipal storm sewer systems.
 - b. The SWPPP shall describe appropriate practices for addressing a spill including methods of handling and disposing spilled products and contaminated soils.
 - c. The facility spill prevention control and countermeasures (SPCC) plan may be referenced in the SWPPP as fulfillment of this requirement. The SPCC should be attached to the SWPPP if it is referenced.
- 7.2.4.4.3 Concrete washout. Concrete wash waters shall not enter surface waters of the state or municipal storm drains. The SWPPP must provide for specific practices that will protect surface waters and storm drains.

- 7.2.4.4.4 The SWPPP shall describe appropriate BMPs to control storm water pollution from portable concrete or asphalt batch plants covered under this permit.
- 7.2.4.5 **MAINTENANCE.** All practices identified in the SWPPP must be maintained in effective operating condition. The plan must indicate, as appropriate, the intervals or conditions upon which BMPs shall be maintained. Maintenance shall also occur whenever periodic inspections identify BMPs that are not operating effectively. Maintenance shall be accomplished as soon as is practical.
- 7.2.4.6 **INSPECTIONS.** The plan must provide for site inspections to monitor the condition of storm water outlets and the effectiveness of BMPs. The permittee shall ensure that personnel conducting site inspections are familiar with the requirements of the SWPPP and proper operation and maintenance of all implemented BMPs. All inspections shall be conducted in accordance with Part 9 and signed in accordance with Part 10.7.
- 7.2.4.7 **SIGNATURE.** All SWPPPs must be signed in accordance with Part 10.7 of this permit.
- 7.3 Plan amendment. The permittee shall modify the plan whenever there is a change in design, construction, operation, or maintenance that changes the potential for the discharge of pollutants to waters of the state. The plan shall also be modified if it proves ineffective in eliminating or minimizing pollutants present in storm water. The most current version of the SWPPP must be retained on site or located as described in Part 7.5. The SWPPP may be reviewed by the Administrator as described below.
- 7.4 SWPPP implementation
- 7.4.1 *Projects begun prior to March 1, 2008.* Permittees with construction activities authorized to discharge storm water under the previous general permit issued in 2003 and now replaced by this permit must update their current SWPPP to comply with the requirements of this permit no later than 90 days after the effective date of authorization under this permit. *Permittees shall continue to implement existing SWPPPs developed under the previous permit until the SWPPP has been updated and implemented.*
- 7.4.2 *Projects beginning after March 1, 2008.* For projects that begin after the effective date of this permit, the SWPPP must be implemented immediately and throughout the duration of the construction activity and up until the site is finally stabilized.
- 7.5 Plan retention. The SWPPP shall be retained at the construction site during active construction. When the project is shut down for the season or at the completion of construction the SWPPP may be kept offsite. For small, field-wide authorizations in the oil and gas industry where relatively small, discreet disturbances occur periodically over a

small area, operators may choose to keep only the portions of the SWPPP relevant to the current active construction area on that site, while the complete SWPPP remains at an off-site location.

- 7.5.1 The location of an off-site SWPPP must be posted on site. The posting shall note the location of the SWPPP, a contact phone number and the storm water authorization number; or
- 7.5.2 If posting the offsite location at the construction site is impractical due to remote location or the facility is impractically small for a posting, the operator may send a brief letter to the DEQ Storm Water Coordinator specifying the site authorization number, location of the SWPPP and a contact telephone number for a person with access to the SWPPP.
- 7.5.3 For all SWPPPs the operator must provide reasonable local access to the plan during normal working hours. The permittee shall make the SWPPP available upon request to the Administrator or agent thereof; any federal, state or local agency; interested members of the public; local government officials; or to the operator of a municipal separate storm sewer receiving discharges from the site.
- 7.5.4 The permit does not require that free copies of the plan be provided to interested members of the public, only that they have access to view the document and copy it at their own expense. The copy of the SWPPP must be made available to the Administrator, or authorized agent, for review at the time of an onsite inspection.
- 7.6 Plan review. The Administrator may request any SWPPP be submitted to the department for review. If the Administrator elects to review the SWPPP and finds that it is deficient, the permittee shall modify the plan as directed and within the time specified by the Administrator.
- 7.7 Employee training. Appropriate personnel of all levels of responsibility shall be informed of erosion and sediment control, spill response, good housekeeping, and materials management practices identified in the SWPPP plan for reduction of pollutants in storm water runoff.

PART 8 Additional Terms and Conditions

- 8.1 Quality of discharge. Storm water discharges associated with construction activities shall not cause pollution, contamination or degradation to waters of the state.
- 8.2 Effluent limits.
 - 8.2.1 Those best management practices (BMPs) or other control measures specified in the SWPPP shall ensure that the storm water discharges do not cause a violation of Wyoming Water Quality Standards.
 - 8.2.2 The quality of permitted storm water discharges shall reflect the best which is attainable through the proper implementation of all items in the facility SWPPP.

- 8.3 Best management practice selection, installation and maintenance. All BMPs must be properly selected, installed and maintained in accordance with the manufacturer's specifications and good engineering practices. (It is not required that the SWPPP be prepared or certified by a registered engineer.) If periodic inspections or other information indicates a practice has been used inappropriately or incorrectly the permittee must modify or replace the control.
- 8.4 Visible or measurable erosion. Visible or measurable erosion, associated with a construction activity, which leaves the construction site as a result of inadequate or ineffective SWPPP design or maintenance of BMPs is prohibited. Visible or measurable erosion is defined as:
- 8.4.1 Deposits of mud, dirt, sediment, or similar material exceeding one cubic foot volume in any area of 100 square feet or less on public or private roads, adjacent property, or into waters of the state by deliberate actions or as a result of water or wind erosion; or
 - 8.4.2 Evidence of concentrated flows of water over bare soils, turbid or sediment-laden flows, or evidence of on-site erosion on bare slopes, where runoff of water is not filtered, treated, or captured on the site using BMPs specified in the SWPPP; or
 - 8.4.3 Earth slides, mud flows, earth sloughing, or other earth movement which leaves the construction site.
- 8.5 Recovery of offsite sediment. If any measurable quantity of sediment leaves the construction site because of structural failure or inadequate design of the BMPs, the sediment shall be placed back on site or properly disposed of, as soon as is prudent. Under no conditions shall the sediment be washed into municipal storm sewers or surface waters of the state.
- 8.6 Concrete washout. Concrete wash water shall not be discharged to waters of the state or to storm sewer systems.
- 8.7 Bulk storage of petroleum products. Bulk storage for petroleum products and other chemicals shall have adequate protection so as to contain all spills and prevent any spilled materials from entering waters of the state or municipal storm sewer systems.
- 8.8 Construction site dewatering. Pumped discharges from construction sites covered under this permit are limited to storm water and minor amounts of ground water. A separate permit must be obtained for the discharge of water from other sources, including ground water. Where there is sufficient ground water present such that it must be pumped from the construction site, those discharges do not meet the definition of minor amounts of ground water and must be covered under a separate WYPDES permit specifically for those discharges.
- 8.8.1 The permittee must operate the discharge to minimize the release of sediment.

- 8.8.2 Pumped water that may be turbid or sediment laden must be treated with appropriate BMPs, such that the discharge does not:
- 8.8.2.1 Cause a violation of water quality standards as defined in Chapter 1 of the Wyoming Water Quality Rules and Regulations.
 - 8.8.2.2 Adversely affect downstream landowners.
 - 8.8.2.3 Cause erosion or scouring at the outlet or in the receiving water.
- 8.8.3. The discharge must be dispersed over appropriate energy dissipation devices such as rock riprap, sand bags, plastic sheeting, or equivalent.
- 8.8.4 Significant groundwater. ***The general rule of thumb for determining what ground water is non-significant is as follows:*** If an operator is able to work in a trench or excavation without dewatering during dry weather and only needs to dewater because of a rain or snow melt event, then the ground water can be considered non-significant. If an operator is finding they must dewater even though there has been no precipitation, then a WYPDES wastewater permit (temporary or individual) is required. Any operator who is unsure of whether or not his ground water is non-significant should secure separate coverage under the WYPDES general permit for temporary discharges or an individual wastewater permit for the dewatering operation.
- 8.9 Temporary stabilization (such as cover crop plantings, mulching or erosion controls blankets, surface roughening, etc.) for exposed soil areas where activities have permanently or temporarily ceased should be installed whenever practicable in areas where further work is not expected for 28 days or more. Areas to be protected include graded slopes, ditches, berms and soil stockpiles.
- 8.10 Minimum storm size for BMPs. Storm water best management practices are expected to withstand and function properly during precipitation events up to a 2-year, 24-hour storm event. Visible and measurable erosion (see Part 8.4) that leaves the construction site from such storm events should be minimal. The 2-year, 24-hour storm event in Wyoming ranges from 0.8 to 2.6 inches. An isopluvial map of the 2-year, 24-hour storm depth is available on the DEQ storm water website. Permittees may substitute equivalent data published by the local municipality or regulatory agency.
- 8.11 Allowable discharges. All discharges covered by this permit shall be composed entirely of storm water associated with construction activity or related effluents (see definitions in Part 2). Discharges which include material other than storm water associated with construction activity, must be in compliance with a WYPDES permit (other than this permit) issued for the discharge.
- 8.12 Sanitary facilities. Sanitary sewage facilities (typically portable) will be operated in compliance with all applicable state and local waste disposal, sanitary sewer, or septic system regulations.

- 8.13 Requirements of other agencies. All storm water discharges must comply with erosion control or other requirements, policies, or guidelines of other local, state or federal agencies.

Part 9 Self Monitoring and Inspection Requirements

9.1 Site inspections

- 9.1.1 *Active construction sites.* During active construction inspections must be conducted in accordance with one of the two schedules listed below, unless the project has an alternate inspection schedule approved by the administrator. You must specify in your SWPPP which inspection schedule you will use.
- 9.1.1.1 During active construction, qualified personnel (provided by the permittee) shall inspect disturbed areas, control measures, and locations where vehicles enter or exit the site, at least once every 14 calendar days and within 24 hours of any precipitation and/or snow melt event which exceeds 0.5 inches. The permittee shall have the option of maintaining a rain gauge at their site or using the nearest National Weather Service precipitation gauge station. Any rain measurement shall be taken from an area within 10 miles of the construction project
OR
- 9.1.1.2 At least once every seven days.
- 9.1.2 *Inactive construction sites.* During seasonal shutdowns and during the period following completion of construction, but prior to return of the site to finally stabilized conditions and termination of coverage under this permit, qualified personnel (provided by the permittee) shall inspect the site at least once every month.
- 9.1.3 *Qualified person.* A qualified person is one who is familiar with the requirements of the SWPPP, permit conditions and the proper operation and maintenance of all implemented BMPs.
- 9.1.4 *Alternative inspection plans and schedules.* A permittee may submit an alternative inspection plan for long, narrow, linear construction projects such as pipeline or utility line installation, and other projects in remote areas where vehicle traffic is restricted or could compromise native vegetation or stabilization measures. A copy of the SWPPP and alternate inspection plan must be submitted to the Department at least 30 days prior to implementing the plan. An alternative plan must provide for the timely recognition and repair of erosion or sedimentation.
- 9.1.5 *Records.* The operator shall keep a record of inspections and maintenance. The inspection record shall include:
- 9.1.5.1 Storm water outfalls shall be observed to determine whether or not measurable quantities of sediment or other pollutants have been or are being transported off site.

- 9.1.5.2 BMPs shall be assessed to determine if they are functioning properly or if they are in need of repair or maintenance. If the report describes deficiencies in pollution control structures or procedures, such deficiencies shall be corrected immediately.
 - 9.1.5.3 A brief description of measures taken to correct deficiencies shall be recorded.
 - 9.1.5.4 When an inspection does not identify any incidents of non-compliance, the report shall contain a certification that the site is in compliance with the SWPPP and this permit.
 - 9.1.5.5 The date and inspector identity shall also be recorded. This record shall be signed in accordance with Part 10.7 of the permit and made available to the Administrator upon request.
- 9.1.6 *Severe weather exception.* If any inspection is not possible due to severe weather or other dangerous conditions, the inspection report must document why the inspection did not occur, and the inspection must be conducted as soon as conditions allow.
- 9.1.7 *Winter Conditions.* Inspections on inactive construction sites, as described above in 9.1.2, will not be required where snow cover or frozen ground conditions exists over the entire site for an extended period and melting conditions do not exist. This exemption is applicable *only* during the period where melting conditions do not exist. Regular inspections, as describe above, are required at all other times.
- 9.2 Retention of reports. Copies of the inspection reports shall be retained with the SWPPP and copies shall be provided to the Administrator upon request Such reports shall be retained by the permittee for a minimum of three years.
- 9.3 Collection and submission of self monitoring information. Upon written notification from the Administrator, the permittee shall collect and report storm water effluent and/or ambient water quality data of the type and at the frequency specified by the Administrator.
- 9.4 Construction project identification. A copy of the authorization letter shall be posted at the construction site in a prominent and safe place for public viewing during regular business hours.

Part 10 Standard Permit Conditions

- 10.1 Duty to comply. The permittee must comply with all conditions of this permit, and is responsible for ensuring any subcontractors, employees or other persons associated with the construction activity comply with all conditions of this permit. Any permit noncompliance constitutes a violation of the Chapter 2 of the Wyoming Water Quality Rules and Regulations, the Wyoming Environmental Quality Act and the CWA and may be grounds for enforcement action, permit termination, revocation, or modification, or for denial of a permit renewal application. The permittee shall give the Administrator of the Water Quality Division advance notice of any planned changes at the permitted facility or of any activity which may result in permit noncompliance.

- 10.2 Penalties for violations of permit conditions. Article 9 of the Wyoming Environmental Quality Act provides significant penalties for any person who violates a permit condition. Any person who violates any condition of this permit is subject to a civil penalty not to exceed \$10,000 per day of such violation, as well as other relief. Knowingly or willfully violating the permit may result in criminal penalties of up to \$25,000 per day of violation and/or imprisonment for up to one year. Criminal penalties for subsequent knowing or willful violations of the permit may be up to \$50,000 per day of violation and/or imprisonment for up to two years.
- 10.3 Need to halt or reduce activity not a defense. It shall not be a defense for a permittee in an enforcement action that it would have been necessary to halt or reduce the permitted activity in order to maintain compliance with the conditions of this permit.
- 10.4 Duty to mitigate. The permittee shall take all reasonable steps to minimize or prevent any discharge in violation of this permit which has a reasonable likelihood of adversely affecting human health or the environment.
- 10.5 Duty to provide information. The permittee shall furnish to the Administrator, within a reasonable time, any information which the Administrator may request to determine whether cause exists for modifying, revoking and reissuing, or terminating this permit or to determine compliance with this permit. The permittee shall also furnish to the Administrator, upon request, copies of records required to be kept by this permit.
- 10.6 Other information. When the permittee becomes aware that he or she failed to submit any relevant facts in a permit application or submitted incorrect information in a permit application or in any report to the Administrator, he or she shall promptly submit such facts or information.
- 10.7 Signatory requirements. All SWPPPS, reports, and other information submitted to the Administrator shall be signed and certified.

10.7.1 All permit applications shall be signed as follows:

- 10.7.1.1 For a corporation: A principal executive officer of at least the level of vice president, or the manager of one or more manufacturing, production, or operating facilities, provided the manager is authorized to make management decisions which govern the overall operation of the facility from which the discharge originates;
- 10.7.1.2 For a partnership or sole proprietorship: by a general partner or the proprietor, respectively;
- 10.7.1.3 For a municipality, state, federal, or other public agency: by either a principal executive officer or ranking elected official.

10.7.2 All reports required by the permit and other information requested by the Administrator shall be signed by a person described above or by a duly authorized representative of that person. A person is a duly authorized representative only if:

- 10.7.2.1 The authorization is made in writing by a person described above and submitted to the Administrator; and
- 10.7.2.2 The authorization specifies either an individual or a position having responsibility for the overall operation of the regulated facility or activity, such as the position of plant manager, operator of a well or a well field, superintendent, position of equivalent responsibility or an individual or position having overall responsibility for environmental matters for the company. A duly authorized representative may thus be either a named individual or any individual occupying a named position.

10.7.3 If an authorization under Part 10.7.2 is no longer accurate because a different individual or position has responsibility for the overall operation of the facility, a new authorization satisfying the requirements of Part 10.7.2 must be submitted to the Administrator prior to or together with any reports, information or applications to be signed by an authorized representative.

10.7.4 Any person signing documents required by this permit shall make the following certification:

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

- 10.8 Penalties for falsification of reports and monitoring systems. The federal act provides that any person who knowingly makes any false statement, representation or certification in any record or other document submitted or required to be maintained under this permit, including monitoring reports or reports of compliance or noncompliance shall, upon conviction, be punished by a fine of not more than \$10,000 per violation or by imprisonment for not more than two years per violation or both.
- 10.9 Oil and hazardous substance liability. Nothing in this permit shall be construed to preclude the institution of any legal action or relieve the permittee from any responsibilities, liabilities, or penalties to which the permittee is or may be subject under section 311 of the CWA.

According to Chapter 4 of the Wyoming Water Quality Rules and Regulations, any spill or other release of hazardous substances, fuels, oils or other petroleum product must be contained and cleaned up in a timely and diligent manner. Any spill or release of more than 25 gallons, or which results in a visible sheen on water, or a visible deposit on the bottom or shoreline of any water body, must be reported to the Water Quality Division of the Wyoming Department of Environmental Quality within 24 hours to the department's 24-hour telephone number (307-777-7781). Records of such spills or releases must be maintained for at least three years.

- 10.10 Property rights. The issuance of this permit does not convey any property rights in either real or personal property, or any exclusive privileges, nor does it authorize any injury to private property or any invasion of personal rights, nor any infringement of federal, state or local laws or regulations.
- 10.11 Severability. The provisions of this permit are severable, and if any provision of this permit, or the application of any provision of this permit to any circumstance, is held invalid, the application of such provision to other circumstances, and the remainder of this permit shall not be affected thereby.
- 10.12 Transfers. This permit is not transferable to any person except after notice to the Administrator. The Administrator may require the operator to apply for and obtain an individual WYPDES permit.
- 10.13 State laws. Nothing in this permit shall be construed to preclude the institution of any legal action or relieve the permittee from any responsibilities, liabilities, or penalties established pursuant to any applicable state or federal law or regulation.
- 10.14 Facilities operation and maintenance. The permittee shall at all times properly operate and maintain all facilities and systems of treatment and control (and related appurtenances) which are installed or used by the permittee to achieve compliance with the conditions of this permit. Proper operation and maintenance also includes adequate laboratory controls and appropriate quality assurance procedures. Proper operation and maintenance requires the operation of backup or auxiliary facilities or similar systems, installed by a permittee when necessary to achieve compliance with the conditions of the permit.
- 10.15 Monitoring and records
- 10.15.1 Samples and measurements taken for the purpose of monitoring shall be representative of the monitored activity.
- 10.15.2 The permittee shall retain records of all monitoring information including all calibration and maintenance records and all original strip chart recordings for continuous monitoring instrumentation, copies of the reports required by this permit, and records of all data used to complete the application for this permit, for a period of at least three years from the date of the sample measurement, report, or application. This period may be extended by request of the Administrator at any time.
- 10.15.3 Records of monitoring information shall include:
- 10.15.3.1 The date, exact place, and time of sampling or measurements;
- 10.15.3.2 The initials or name(s) of the individual(s) who performed the sampling or measurements;
- 10.15.3.3 The date(s) analyses were performed;

- 10.15.3.4 The time(s) analyses were initiated;
 - 10.15.3.5 The initials or name(s) of the individual(s) who performed the analyses;
 - 10.15.3.6 References and written procedures for the analytical techniques or methods used; and
 - 10.15.3.7 The results of such analyses, including the bench sheets, instrument readouts, computer disks or tapes, etc., used to determine these results.
- 10.15.4 Monitoring must be conducted according to test procedures approved under 40 CFR Part 136, unless other test procedures have been specified in this permit.
- 10.16 Availability of reports. Except for data determined to be confidential under Section 308 of the CWA, all reports prepared in accordance with the terms of this permit shall be available for public inspection at the offices of the Wyoming Department of Environmental Quality and the Regional Administrator of the Environmental Protection Agency. As required by the CWA, effluent data shall not be considered confidential. Knowingly making any false statement on any such report may result in the imposition of criminal penalties as provided for in Section 309 of the CWA.
- 10.17 Adverse impact. The permittee shall take all reasonable steps to minimize any adverse impact to waters of the state resulting from noncompliance with any conditions specified in this permit, including such accelerated or additional monitoring as necessary to determine the nature and impact of the noncomplying discharge.
- 10.18 Bypass or upset of treatment facilities
- 10.18.1 Bypass means the intentional diversion of storm water around any treatment facility.
 - 10.18.2 Any bypass is prohibited except where unavoidable to prevent loss of life, personal injury, or severe property damage, and there were no feasible alternatives to the bypass.
 - 10.18.2.1 Anticipated bypass

If the permittee knows in advance of the need for a bypass, he or she shall submit prior notice at least ten days before the date of the bypass; including an evaluation of the anticipated quality and effect of the bypass.

The Administrator may approve an anticipated bypass, after considering its adverse effects, if the Administrator determines that it will meet the conditions listed above.

10.18.2.2 Unanticipated bypass or upset

The permittee shall submit notice of an unanticipated bypass or upset. Any information regarding the unanticipated bypass or upset shall be provided orally within 24 hours from the time the permittee became aware of the circumstances. A written submission shall also be provided within five days of the time the permittee becomes aware of the circumstances. The written submission shall contain a description of the bypass or upset and its cause; the period of the bypass or upset, including exact dates and times, and if the bypass or upset has not been corrected, the anticipated time it is expected to continue; and steps taken or planned to reduce, eliminate, and prevent reoccurrence.

10.19 Upset conditions

10.19.1 Upset means an exceptional incident in which there is unintentional and temporary noncompliance with the conditions of this permit because of factors beyond the reasonable control of the permittee. An upset does not include noncompliance to the extent caused by operational error, improper designed treatment facilities, inadequate treatment facilities, lack of preventive maintenance, or careless or improper operation.

10.19.2 An upset constitutes an affirmative defense to an action brought for noncompliance with the conditions of this permit if the requirements of paragraph 10.18.2 are met.

10.19.3 A permittee who wishes to establish the affirmative defense of an upset shall demonstrate, through properly signed, contemporaneous operating logs, or other relevant evidence, that:

10.19.3.1 An upset occurred and that the permittee can identify the specific cause(s) of the upset;

10.19.3.2 The permitted facility was at the time being properly operated;

10.19.3.3 The permittee submitted notice of the upset as required under paragraph 10.18.2 above; and

10.19.3.4 The permittee complied with any remedial measures directed by the Administrator.

10.19.4 In any enforcement proceeding, the permittee seeking to establish the occurrence of an upset has the burden of proof.

10.20 Inspection and entry. The permittee shall allow the Administrator, the Administrator's representative, or an authorized representative of EPA, or in the case of a facility which discharges through a municipal separate storm sewer, an authorized representative of the municipal operator of the separate storm sewer receiving the discharge, upon the presentation of credentials and other documents as may be required by law, to:

- 10.20.1 Enter upon the premises where the regulated facility or activity is located or conducted and where records must be kept under the conditions of this permit;
 - 10.20.2 Have access to and copy at reasonable times, any records that must be kept under the conditions of this permit; and
 - 10.20.3 Inspect at reasonable times any facilities or equipment (including monitoring and control equipment), practices or operations regulated or required under this permit; and
 - 10.20.4 Sample or monitor, at reasonable times, for the purpose of assuring permit compliance or as otherwise authorized by the CWA, any substances or parameters at any location.
- 10.21 Permit actions. This permit may be modified, revoked and reissued, or terminated for cause. The filing of a request by a permittee for a permit modification, revocation and reissuance, or termination, or a notification of planned changes or anticipated noncompliance does not stay any permit condition.
- 10.22 Reopener clause. For good cause the Administrator may, at any time, require a permittee covered under this permit to obtain an individual permit, coverage under an alternative general permit, or this permit may be modified to include different limitations and/or requirements. Permit modification or revocation will be conducted according to Wyoming Water Quality Rules and Regulations, Chapter 2.
- 10.23 Civil and criminal liability. Nothing in this permit shall be construed to relieve the permittee from civil or criminal penalties for noncompliance. As long as the conditions related to the provisions of "Bypass of Treatment Facilities" (Part 10.18), "Upset Conditions" (Part 10.19) are satisfied then they shall not be considered as noncompliance.

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Appendix A

The following waters are designated Class 1:

1. All surface waters located within the boundaries of national parks and congressionally designated wilderness areas as of January 1, 1999;
2. The main stem of the Snake River through its entire length above the U.S. Highway 22 Bridge (Wilson Bridge);
3. The main stem of the Green River, including the Green River Lakes from the mouth of the New Fork River upstream to the wilderness boundary;
4. The Main Stem of the Wind River from the Wedding of the Waters upstream to Boysen Dam;
5. The main stem of the North Platte River from the mouth of Sage Creek (approximately 15 stream miles downstream of Saratoga, Wyoming) upstream to the Colorado state line;
6. The main stem of the North Platte River from the headwaters of Pathfinder Reservoir upstream to Kortez Dam (Miracle Mile segment);
7. The main stem of the North Platte River from the Natrona County Road 309 bridge (Goose Egg bridge) upstream to Alcova Reservoir;
8. The main stem of Sand Creek above the U.S. Highway 14 bridge;
9. The main stem of the Middle Fork of the Powder River through its entire length above the mouth of Buffalo Creek;
10. The main stem of the Tongue River, the main stem of the North Fork of the Tongue River, and the main stem of the South Fork of the Tongue River above the U.S. Forest Service Boundary;
11. The main stem of the Sweetwater River above the mouth of Alkali Creek;
12. The main stem of the Encampment River from the northern U.S. Forest Service boundary upstream to the Colorado state line;
13. The main stem of the Clarks Fork River from the U.S. Forest Service boundary upstream to the Montana state line;
14. All waters within the Fish Creek (near Wilson, Wyoming) drainage;
15. The main stem of Granite Creek (tributary of the Hoback River) through its entire length;
16. Fremont Lake;
17. Wetlands adjacent to the above listed Class 1 waters.

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Appendix B

Acronyms Used in This Document

BMP	Best management practice
CFR	Code of Federal Regulations
CWA	Clean Water Act or the federal Water Pollution Control Act
DEQ	Wyoming Department of Environmental Quality
EPA	US Environmental Protection Agency
QLP	Qualifying Local Program
SPCC	Spill prevention, control and countermeasures
SWPPP	Storm water pollution prevention plan
WYPDES	Wyoming Pollutant Discharge Elimination System

ROSTER OF DRAWINGS

**TETON COUNTY, WYOMING
PATH 22 WEST BRIDGE
PROJECT**

PROJECT DRAWINGS

INDEX

Note: the drawings listed below are not contained within this Project Manual, but, instead, are under separate covers. They are listed here for convenient reference by users of both sets of documents.

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C2	Overview Site Plan
C3	West Staging Plan
C4	East Staging Plan
C5	West Abutment Grading Plan & Details
C6	West Abutment Gabion Wall Plan & Elevation
C7	East Abutment Grading Plan & Details
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C9	Gabion Details
C10	Railing Layout and Details
C11	Piers No. 1, 2, & 3 Grading Plans

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