Navajo Nation Western Navajo Pipeline Phase 1 Bodaway-Gap Well, Tank and Pipeline

PROJECT MANUAL

CONTRACT NO. 2: WELL HOUSE, STORAGE TANK, ALTITUDE VALVE, AND PIPELINES

VOLUME 1 OF 2

DIVISION 0 - BIDDING AND CONTRACTING REQUIREMENTS

Bid Issue

NAVAJO NATION

October 2021

Brown and Caldwell 6975 Union Park Center, Suite 490 Midvale, UT 84047



Cover 00010

PROJECT MANUAL

FOR CONSTRUCTION OF

Navajo Nation WESTERN NAVAJO PIPELINE PHASE 1 BODAWAY-GAP WELL, TANK AND PIPELINE

CONTRACT NO. 2: WELL HOUSE, STORAGE TANK, ALTITUDE VALVE, AND PIPELINE

Volume 1 of 2 Division 0 – Bidding and Contracting Requirements

Navajo Nation

Prepared by:

Brown and Caldwell 6975 Union Park Center, Suite 490 Midvale, UT 84047

Project No. 150360



Title Sheet 00015-1

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Title Sheet 00015-2

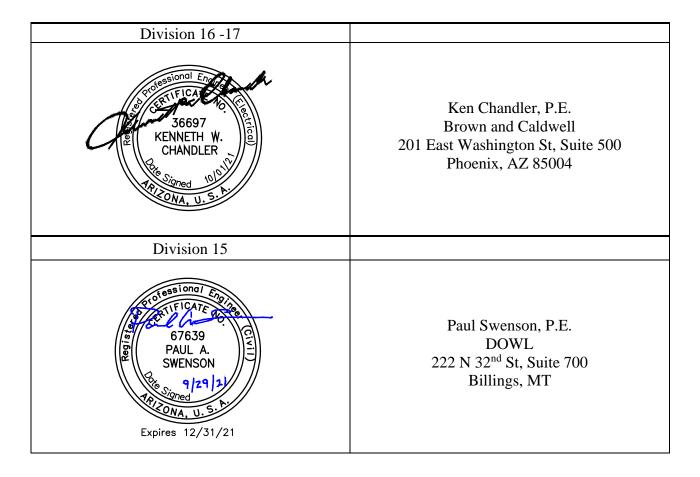
SECTION 00016

SEALS PAGE

WESTERN NAVAJO PIPELINE PHASE 1 BODAWAY-GAP WELL, TANK AND PIPELINE CONTRACT NO. 2 WELL HOUSE, STORAGE TANK, ALTITUDE VALVE, AND PIPELINES

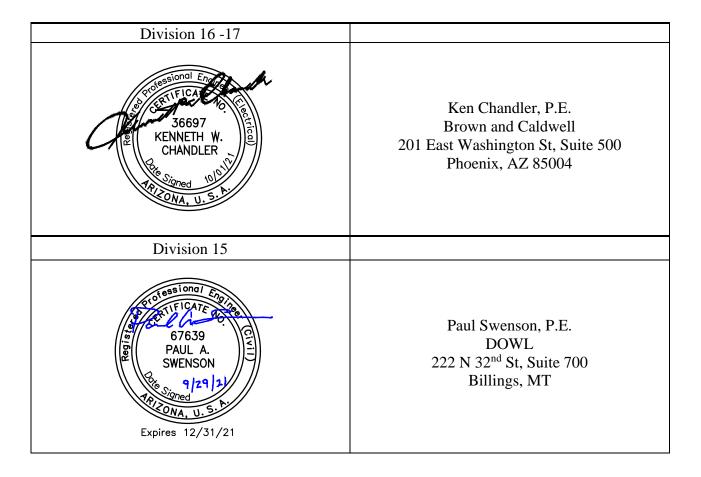
ITEMS IN THIS PROJECT MANUAL	PREPARED BY		
Contract, Bidding and General Requirements Divisions 0 – 2, 7, 9, 10 (10441),11, 13, 15			
BRENCHLEY APPLICATE BRENCHLEY APPLICATE BRENCHLEY APPLICATE	Steve Brenchley, P.E. Brown and Caldwell 6975 Union Park Center, Suite 490 Midvale, UT 84047		
Divisions 1 (01410, 01900), 3, 5 (05502), 9, 13			
CERTIFICATE 10 70234 JONATHAN HARPER TABLE	Jonathan F. Harper Brown and Caldwell 6500 SW Macadam Avenue, Suite 200 Portland, OR 97239		

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END OF SECTION

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END OF SECTION

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Navajo Nation

WESTERN NAVAJO PIPELINE PHASE 1 BODAWAY-GAP WELL, TANK AND PIPELINE CONTRACT NO. 2: WELL HOUSE, STORAGE TANK, AND PIPELINE

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Section 00111

Advertisement for Bids¹

Project Name: Navajo Nation Western Navajo Pipeline Phase 1 – Bodaway-Gap Well, Tank and Pipeline Project

Owner: Navajo Nation, through its Department of Water Resources Water Management Branch, Route 12 NE, NTUA Rd, Bldg. 2793, Fort Defiance, AZ 86504

Funded by: Navajo Nation

Sealed Bids for the construction of the **Contract No. 2: Well House, Storage Tank, and Pipelines**, **Navajo Nation Bid Number 21-09-2581LE**, which includes:

- Well 3 Pump House: Installation of a new pump house and well site improvements with miscellaneous telemetry system,
- Storage Tank No. 2: Construction of an 80,000-gallon storage tank with yard piping, transducer vault, site improvements, and miscellaneous telemetry system,
- Well Supply Pipeline: Installation of approximately 42,184 LF of 10-inch potable water line with 6-inch altitude/flow control valve station.

Each bid response shall be submitted in accordance to Section 00200 Instructions to Bidders of the Bid Documents and received by Navajo Nation Water Management Branch (Lucinda Davis, 928-349-1194 Cell, 928-729-4003 Office, Igdavis@navajo-nsn.gov, P.O. Box 678, Fort Defiance, AZ 86504) until **4:00 p.m. local time on November 18, 2021**, and then at said office publicly opened and read aloud. No late, facsimiled, or electronic mailed bids will be accepted.

Bids will be received for a single prime Contract. Bids shall be on a unit price basis as indicated in the Bid Form.

To ensure delivery by the due date and time, all bids should be addressed to:

PHYSICAL ADDRESS:	NNDNR - DWR Water Management Branch <i>ATTN: Lucinda Davis</i> Navajo Route 12 NE, NTUA Rd, Bldg. 2793 Fort Defiance, Arizona 86504
MAILING ADDRESS:	NNDNR- DWR Water Management Branch P.O. Box 678 Fort Defiance, Arizona 86504

A Pre-Bid Conference will be held virtually on **October 21, 2021 at 10:00 a.m.** local time. The meeting will be held via MS Teams - Call in Number 888-404-2493, 646-917-549#. Those that would like to attend can contact Steve Brenchley to obtain the MS Teams Meeting invite (<u>sbrenchley@brwncald.com</u>, 801-316-9813) or Corwin Willmore (<u>cwillmore@brwncald.com</u>, 801-316-9836). Attendance at the Pre-Bid Conference is not mandatory to qualify to submit a Bid Proposal. Questions regarding bid documents

¹This document is a MODIFIED version of EJCDC[®] C-111 Suggested Advertisement for Bids for Construction Contracts, Copyright © 2013 by the National Society of Professional Engineers, American Society of Civil Engineers, and American Council of Engineering Companies, or is based in part on excerpts from EJCDC documents. Those portions of the text that originated in the published EJCDC documents remain subject to the copyright. are due to Brown and Caldwell on **November 4, 2021**. Answers to Questions will be provided by **November 11, 2021**.

Preference will be applied to qualified Indian-owned businesses in accordance with the Federal Indian preference laws as specified in the Navajo Business and Procurement Act (12 N.N.C. § 1501 et seq.); the Navajo Nation Procurement Act (12 N.N.C. § 301 et seq.); Navajo Business Opportunity Act (5 N.N.C. § 201 et seq.) and other applicable statutory and regulatory requirements.

Suppliers, brokers, agents, subsidiaries, successors, and assigns shall be fully subject to the requirements and provisions of the Navajo Nation Business Opportunity Act.

Electronic Copies of the Contract Documents may be obtained from Brown and Caldwell (Corwin Willmore, (801) 316-9836, cwillmore@brwncald.com), 6975 Union Park Center, Suite 490, Midvale, Utah.

Engineer: Brown and Caldwell, 6975 Union Park Center, Suite 490, Midvale, UT 84047

Advertised: October 14, 2021

END OF SECTION

Section 00200

Instructions to Bidders¹

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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 bidding procedures are to be administered.

ARTICLE 2 – COPIES OF BIDDING DOCUMENTS

- 2.01 Complete sets of the Bidding Documents in the number and for the deposit sum, if any, stated in the advertisement or invitation to bid may be obtained from the Issuing Office. The deposit will be refunded to each document holder of record who returns a complete set of Bidding Documents in good condition within 10 days after opening of Bids.
- 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 authorize or confer a license for any other use.

ARTICLE 3 – QUALIFICATIONS OF BIDDERS

- 3.01 To demonstrate Bidder's qualifications to perform the Work, Bidder shall submit with its Bid (a) written evidence establishing its qualifications such as financial data, previous experience, and present commitments, and (b) the following additional information:
 - A. Evidence of Bidder's authority or ability to obtain required authority to do business in the state where the Project is located.
 - B. Bidder's state or other contractor license number, or evidence of Bidder's ability to obtain state contractor license, if applicable.
 - C. Subcontractor and Supplier qualification information; coordinate with provisions of Article 12 of these Instructions, "Subcontractors, Suppliers, and Others."
 - D. Bidder's Qualification Statement Section 00451
- 3.02 A Bidder's failure to submit required qualification information within the times indicated may disqualify Bidder from receiving an award of the Contract.
- 3.03 No requirement in this Article 3 to submit information will prejudice the right of Owner to seek additional pertinent information regarding Bidder's qualifications.
- 3.04 Bidder is advised to carefully review those portions of the Bid Form requiring Bidder's representations and certifications.

ARTICLE 4 – SITE AND OTHER AREAS; EXISTING SITE CONDITIONS; EXAMINATION OF SITE; OWNER'S SAFETY PROGRAM; OTHER WORK AT THE SITE

4.01 *Site and Other Areas*

A. The Site is identified in the Bidding Documents. By definition, the Site includes rights-ofway, easements, and other lands furnished by Owner for the use of the Contractor. Any additional lands required for temporary construction facilities, construction equipment, or storage of materials and equipment, and any access needed for such additional lands, are to be obtained and paid for by Contractor.

4.02 Existing Site Conditions

- A. Subsurface and Physical Conditions; Hazardous Environmental Conditions
 - 1. The Supplementary Conditions identify:
 - a. those reports known to Owner of explorations and tests of subsurface conditions at or adjacent to the Site.
 - b. those drawings known to Owner of physical conditions relating to existing surface or subsurface structures at the Site (except Underground Facilities).
 - c. reports and drawings known to Owner relating to Hazardous Environmental Conditions that have been identified at or adjacent to the Site.
 - d. Technical Data contained in such reports and drawings.
 - 2. Owner will make copies of reports and drawings referenced above available to any Bidder on request. These reports and drawings are not part of the Contract Documents, but the Technical Data contained therein upon whose accuracy Bidder is entitled to rely, as provided in the General Conditions, has been identified and established in 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.
 - 3. If the Supplementary Conditions do not identify Technical Data, the default definition of Technical Data set forth in Article 1 of the General Conditions will apply.
 - 4. Geotechnical Baseline Report: The Bidding Documents contain a Geotechnical Baseline Report (GBR). The GBR describes certain select subsurface conditions that are anticipated to be encountered by Contractor during construction in specified locations ("Baseline Conditions"). The GBR is a Contract Document.

The Baseline Conditions in the GBR are intended to reduce uncertainty and the degree of contingency in submitted Bids. However, Bidders cannot rely solely on the Baseline Conditions. Bids should be based on a comprehensive approach that includes an independent review and analysis of the GBR, all other Contract Documents, Technical Data, other available information, and observable surface conditions. Not all potential subsurface conditions are baselined.

Nothing in the GBR is intended to relieve Bidders of the responsibility to make their own determinations regarding construction costs, bidding strategies, and Bid prices, nor of the responsibility to select and be responsible for the means, methods,

techniques, sequences, and procedures of construction, and for safety precautions and programs incident thereto.

- B. Underground Facilities: Information and data shown or indicated in the Bidding Documents with respect to existing Underground Facilities at or contiguous to the Site are set forth in the Contract Documents and are based upon information and data furnished to Owner and Engineer by owners of such Underground Facilities, including Owner, or others.
- C. Adequacy of Data: 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 subsurface or physical conditions appear in Paragraphs 5.03, 5.04, and 5.05 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 5.06 of the General Conditions.

4.03 Site Visit and Testing by Bidders

- A. Bidder shall conduct the required Site visit during normal working hours, and shall not disturb any ongoing operations at the Site.
- B. Bidder is not required to conduct any subsurface testing, or exhaustive investigations of Site conditions.
- C. On request, and to the extent Owner has control over the Site, and schedule permitting, the Owner will provide Bidder access to the Site to conduct such additional examinations, investigations, explorations, tests, and studies as Bidder deems necessary for preparing and submitting a successful Bid. Owner will not have any obligation to grant such access if doing so is not practical because of existing operations, security or safety concerns, or restraints on Owner's authority regarding the Site.
- D. Bidder shall comply with all applicable Laws and Regulations regarding excavation and location of utilities, obtain all permits, and comply with all terms and conditions established by Owner or by property owners or other entities controlling the Site with respect to schedule, access, existing operations, security, liability insurance, and applicable safety programs.
 - Due to the current and likely ongoing Public Health State of Emergency due to COVID-19 on the Navajo Nation, Bidder shall also submit a health and safety plan for review and approval by Owner before conducting the required Site visit.
- E. 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.

4.04 Owner's Safety Program

A. Site visits and work at the Site may be governed by an Owner safety program. As the General Conditions indicate, if an Owner safety program exists, it will be noted in the Supplementary Conditions.

4.05 Other Work at the Site

A. Reference is made to Article 8 of the Supplementary Conditions for the identification of the general nature of other work of which Owner is aware (if any) that is to be performed at the Site by Owner or others (such as utilities and other prime contractors) and relates to the Work contemplated by these Bidding Documents. If Owner is party to a written contract for such other work, then on request, Owner will provide to each Bidder access to examine such contracts (other than portions thereof related to price and other confidential matters), if any.

ARTICLE 5 – BIDDER'S REPRESENTATIONS

- 5.01 It is the responsibility of each Bidder before submitting a Bid to:
 - A. examine and carefully study the Bidding Documents, and any data and reference items identified in the Bidding Documents;
 - B. visit the Site, conduct a thorough, alert visual examination of the Site and adjacent areas, and become familiar with and satisfy itself as to the general, local, and Site conditions that may affect cost, progress, and performance of the Work;
 - C. become familiar with and satisfy itself as to all Laws and Regulations that may affect cost, progress, and performance of the Work;
 - D. carefully study all: (1) reports of explorations and tests of subsurface conditions at or adjacent to the Site and all drawings of physical conditions relating to existing surface or subsurface structures at the Site that have been identified in the Supplementary Conditions, especially with respect to Technical Data in such reports and drawings, and (2) reports and drawings relating to Hazardous Environmental Conditions, if any, at or adjacent to the Site that have been identified in the Supplementary Conditions, especially with respect to Technical Data in such reports, especially with respect to Technical Data in the Supplementary Conditions, especially with respect to Technical Data in such reports and drawings;
 - E. consider the information known to Bidder itself; information commonly known to contractors doing business in the locality of the Site; information and observations obtained from visits to the Site; the Bidding Documents; and the Site-related reports and drawings identified in the Bidding Documents, with respect to the effect of such information, observations, and documents on (1) the cost, progress, and performance of the Work; (2) the means, methods, techniques, sequences, and procedures of construction to be employed by Bidder; and (3) Bidder's safety precautions and programs;
 - F. agree, based on the information and observations referred to in the preceding paragraph, that at the time of submitting its Bid 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 bid and within the times required, 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. 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;

- I. determine that the Bidding Documents are generally sufficient to indicate and convey understanding of all terms and conditions for the performance and furnishing of the Work; and
- J. agree that the submission of a Bid will constitute an incontrovertible representation by Bidder that Bidder has complied with every requirement of this Article, that without exception the Bid and all prices in the Bid are premised upon performing and furnishing the Work required by the Bidding Documents.

ARTICLE 6 – PRE-BID CONFERENCE

6.01 A pre-Bid conference will be held virtually at the time and location stated in the invitation or advertisement to bid. 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 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 delivered to all parties recorded as having received the Bidding Documents. Questions received less than seven 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, supplement, or change the Bidding Documents.

ARTICLE 8 – BID SECURITY

- 8.01 A Bid must be accompanied by Bid security made payable to Owner in an amount of **ten (10)** percent of Bidder's maximum Bid price (determined by adding the base bid and all alternates) and in the form of a certified check, bank money order, or a Bid bond (on the form included in the Bidding Documents) issued by a surety meeting the requirements of Paragraphs 6.01 and 6.02 of the General Conditions.
- 8.02 The Bid security of the apparent Successful Bidder will be retained until Owner awards the contract to such Bidder, and 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 released. 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 consider Bidder to be in default, annul the Notice of Award, and the Bid security of that Bidder will be forfeited. Such forfeiture shall be Owner's exclusive remedy if Bidder defaults.
- 8.03 The Bid security of other Bidders that 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 Contract or 61 days after the Bid opening, whereupon Bid security furnished by such Bidders will be released.

8.04 Bid security of other Bidders that Owner believes do not have a reasonable chance of receiving the award will be released 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, for failure to timely attain a Milestone, Substantial Completion, or completion of the Work in readiness for final payment, are set forth in the Agreement.

ARTICLE 11 – SUBSTITUTE AND "OR-EQUAL" ITEMS

- 11.01 The Contract for the Work, as if awarded, will be on the basis of materials and equipment specified or described in the Bidding Documents, and those "or-equal" or substitute or materials and equipment subsequently approved by Engineer prior to the submittal of Bids and identified by Addendum. No item of material or equipment will be considered by Engineer as an "or-equal" or substitute unless written request for approval has been submitted by Bidder and has been received by Engineer at least 15 days prior to the date for receipt of Bids in the case of a proposed substitute and 5 days prior in the case of a proposed "or-equal." Each such request shall comply with the requirements of Paragraphs 7.04 and 7.05 of the General Conditions. The burden of proof of the merit of the proposed item is upon Bidder. Engineer's decision of approval or disapproval of a proposed item will be final. If Engineer approves any such proposed item, such approval will be set forth in an Addendum issued to all prospective Bidders. Bidders shall not rely upon approvals made in any other manner. Substitutes and "or-equal" materials and equipment may be proposed by Contractor in accordance with Paragraphs 7.04 and 7.05 of the General Conditions after the Effective Date of the Contract.
- 11.02 All prices that Bidder sets forth in its Bid shall be based on the presumption that the Contractor will furnish the materials and equipment specified or described in the Bidding Documents, as supplemented by Addenda. Any assumptions regarding the possibility of post-Bid approvals of "or-equal" or substitution requests are made at Bidder's sole risk.
- 11.03 If an award is made, Contractor shall be allowed to submit proposed substitutes and "orequals" in accordance with the General Conditions.

ARTICLE 12 – SUBCONTRACTORS, SUPPLIERS, AND OTHERS

- 12.01 A Bidder shall be prepared to retain specific Subcontractors, Suppliers, or other individuals or entities for the performance of the Work if required by the Bidding Documents (most commonly in the Specifications) to do so. If a prospective Bidder objects to retaining any such Subcontractor, Supplier, or other individual or entity, and the concern is not relieved by an Addendum, then the prospective Bidder should refrain from submitting a Bid.
- 12.02 Subsequent to the submittal of the Bid, Owner may not require the Successful Bidder or Contractor to retain any Subcontractor, Supplier, or other individual or entity against which Contractor has reasonable objection.

- 12.03 As required by the bid documents, the apparent Successful Bidder, and any other Bidder so requested, all Bidders shall within five days after Bid opening, submit with its bid to Owner a list of the Subcontractors proposed for the following portions of the Work:
 - A. **Pipeline Installation**
 - B. Electrical
 - C. Instrument and Controls
 - D. Welded Steel Storage Tank
 - E. Mechanical
 - F. Masonry

If requested by Owner, such Such list shall be accompanied by an experience statement with pertinent information regarding similar projects and other evidence of qualification for each such Subcontractor, or other individual or entity. If Owner or Engineer, after due investigation, has reasonable objection to any proposed Subcontractor, individual, or entity, Owner may, before the Notice of Award is given, request apparent Successful Bidder to submit an acceptable substitute, in which case apparent Successful Bidder shall submit a 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.

The Owner/Engineer will request a list of Suppliers within 5 days of bid opening from the apparent Successful Bidder.

- 12.04 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, or other individuals or entities. Declining to make requested substitutions will 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 subsequent revocation of such acceptance as provided in Paragraph 7.06 of the General Conditions.
- 12.05 Contractor shall not be required to employ and Subcontractor, Supplier, individual or entity against whom Contractor has reasonable objection.
- 12.06 The Contractor shall not award work to Subcontractor(s) in excess of the limits stated in SC 7.06.

ARTICLE 13 – PREPARATION OF BID

- 13.01 The Bid Form is included with the Bidding Documents.
 - A. All blanks on the Bid Form shall be completed in ink and the Bid Form signed in ink. Erasures or alterations shall be initialed in ink by the person signing the Bid Form. A Bid price shall be indicated for each section, Bid item, alternate, adjustment unit price item, and unit price item listed therein.
 - B. If the Bid Form expressly indicates that submitting pricing on a specific alternate item is optional, and Bidder elects to not furnish pricing for such optional alternate item, then Bidder may enter the words "No Bid" or "Not Applicable."
- 13.02 A Bid by a corporation shall be executed in the corporate name by a corporate officer (whose title must appear under the signature), accompanied by evidence of authority to sign. The corporate address and state of incorporation shall be shown.

Instructions to Bidders

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- 13.03 A Bid by a limited liability company shall be executed in the name of the firm by a member or other authorized person 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.
- 13.04 A Bid by an individual shall show the Bidder's name and official address.
- 13.05 A Bid by a joint venture shall be executed by an authorized representative of each joint venturer in the manner indicated on the Bid Form. The official address of the joint venture shall be shown.
- 13.06 All names shall be printed in ink below the signatures.
- 13.07 The Bid shall contain an acknowledgment of receipt of all Addenda, the numbers of which shall be filled in on the Bid Form.
- 13.08 Postal and e-mail addresses and telephone number for communications regarding the Bid shall be shown.
- 13.09 The Bid shall contain evidence of Bidder's authority and qualification to do business in the state where the Project is located, or Bidder shall covenant in writing to obtain such authority and qualification prior to award of the Contract and attach such covenant to the Bid. Bidder's state contractor license number, if any, shall also be shown on the Bid Form.

ARTICLE 14 – BASIS OF BID

14.01 Lump Sum

A. Bidders shall submit a Bid on a lump sum basis as set forth in the Bid Form.

- 14.02 Unit Price
 - A. Bidders shall submit a Bid on a unit price basis for each item of Work listed in the unit price section of the Bid Form.
 - B. The "Bid Price" (sometimes referred to as the extended price) for each unit price Bid item will be the product of the "Estimated Quantity" (which Owner or its representative has set forth in the Bid Form) for the item and the corresponding "Bid Unit Price" offered by the Bidder. The total of all unit price Bid items will be the sum of these "Bid Prices"; such total will be used by Owner for Bid comparison purposes. The final quantities and Contract Price will be determined in accordance with Paragraph 13.03 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.

14.03 Allowances

A. For cash allowances the Bid price shall include such amounts as the Bidder deems proper for Contractor's overhead, costs, profit, and other expenses on account of cash allowances, if any, named in the Contract Documents, in accordance with Paragraph 13.02.B of the General Conditions.

14.04 Price-Plus-Time Bids

A. The Owner will consider the time of Substantial Completion commitment made by the Bidder in the comparison of Bids.

- B. Bidder shall designate the number of days required to achieve Substantial Completion of the Work and enter that number in the Bid Form as the total number of calendar days to substantially complete the Work.
- C. The total number of calendar days for Substantial Completion designated by Bidder shall be less than or equal to a maximum of [____], but not less than the minimum of [____]. If Bidder purports to designate a time for Substantial Completion that is less than the allowed minimum, or greater than the allowed maximum, Owner will reject the Bid as nonresponsive.
- D. The Agreement as executed will contain the Substantial Completion time designated in Successful Bidder's Bid, and the Contractor will be assessed liquidated damages at the rate stated in the Agreement for failure to attain Substantial Completion within that time.
- E. [Bidder shall also designate the time in which it will achieve Milestones, and achieve readiness for final payment. Such time commitments shall be consistent with the "Time of Substantial Completion" to which Bidder commits. The Agreement as executed will contain, as binding Contract Times, Successful Bidder's time commitments regarding Milestones, as applicable, and readiness for final payment.]

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, if required, the Bid Bond Form. The unbound copy of the Bid Form is to be completed and submitted with the Bid security and the other documents required to be submitted under the terms of Article 7 of the Bid Form.
- 15.02 A Bid shall be received 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 a sealed package marked "DO NOT OPEN WESTERN NAVAJO PIPELINE, BODAWAY-GAP WELL, TANK, AND PIPELINE CONTRACT NO. 2". The package shall include the name and address of Bidder, a statement that the Bidder is a Navajo Owned Business if applicable, 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 package plainly marked on the outside with the notation "BID ENCLOSED." A mailed Bid shall be addressed to Owner at address in Article 1.01 of Bid Form.
- 15.03 Bids received after the date and time prescribed for the opening of bids, or not submitted at the correct location or in the designated manner, will not be accepted and will be returned to the Bidder unopened.

ARTICLE 16 – MODIFICATION AND WITHDRAWAL OF BID

- 16.01 A Bid may be withdrawn by an appropriate document duly executed in the same 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. Upon receipt of such notice, the unopened Bid will be returned to the Bidder.
- 16.02 If a Bidder wishes to modify its Bid prior to Bid opening, Bidder must withdraw its initial Bid in the manner specified in Paragraph 16.01 and submit a new Bid prior to the date and time for the opening of Bids.

16.03 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 will reject the Bid of any Bidder that Owner finds, after reasonable inquiry and evaluation, to not be responsible. If Bidder purports to add terms or conditions to its Bid, takes exception to any provision of the Bidding Documents, or attempts to alter the contents of the Contract Documents for purposes of the Bid, then the Owner will reject the Bid as nonresponsive; provided that Owner also reserves the right to waive all minor informalities not involving price, time, or changes in the Work.
 - A. Preference will be applied to qualified Navajo-owned businesses in accordance with the Navajo preference laws as specified in the Navajo Business and Procurement Act (12 N.N.C. § 1501 et seq.); the Navajo Nation Procurement Act (12 N.N.C. § 301 et seq.); Navajo Business Opportunity Act (5 N.N.C. § 201 et seq.) and other applicable statutory and regulatory requirements.
 - B. Navajo-owned business means any Navajo owned (as defined by the United States Secretary of the Interior) commercial, industrial, or business activity established or organized for the purpose of profit: Provided, that such Indian ownership shall constitute not less than 51 per centum of the enterprise. Proposers must submit evidence of Indian ownership with their bid submittal.
 - C. Suppliers, brokers, agents, subsidiaries, successors, and assigns shall be fully subject to the requirements and provisions of the Navajo Nation Business Opportunity Act.
- 19.02 If Owner awards the contract for the Work, such award shall be to the responsible Bidder submitting the lowest responsive Bid.
- 19.03 Evaluation of Bids
 - A. All bids submitted by qualified Navajo-owned businesses shall be opened first. Award shall be made to the qualified Navajo-owned business with the lowest responsive bid among qualified Indian-owned business provided the bid does not exceed the maximum feasible price.

- B. If no qualified Indian-owned businesses is entitled to award, bids shall then be opened and award shall be given to qualified bidders with the lowest responsive bid provided the bid is less than or equal to the maximum feasible price.
- C. 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.
- D. For the determination of the apparent low Bidder when unit price bids are submitted, Bids will be compared on the basis of the total of the products of the estimated quantity of each item and unit price Bid for that item, together with any lump sum items.
- E. After determination of the Successful Bidder based on the Base Bid and on the responsiveness, responsibility, and other factors set forth in these Instructions, the award may be made to said Successful Bidder on its Base Bid and any combination of its additive alternate Bids for which Owner determines funds will be available at the time of award.
- F. Bid prices will be compared after adjusting for differences in time of Substantial Completion (total number of calendar days to substantially complete the Work) designated by Bidders. The adjusting amount will be determined at the rate set forth in the Agreement for liquidated damages for failing to achieve Substantial Completion, or such other amount that Owner has designated in the Bid Form.
 - The method for calculating the lowest bid for comparison will be the summation of the Bid price shown in the Bid Form plus the product of the Bidder-specified time of Substantial Completion (in calendar days) times the rate for liquidated damages [or other Owner designated daily rate] (in dollars per day).
 - 2. This procedure is only used to determine the lowest bid for comparison and contractor selection purposes. The Contract Price for compensation and payment purposes remains the Bid price shown in the Bid Form.
- 19.04 In evaluating whether a Bidder is responsible, Owner will consider the qualifications of the Bidder and may consider the qualifications and experience of Subcontractors and Suppliers proposed for those portions of the Work for which the identity of Subcontractors and Suppliers must be submitted as provided in the Bidding Documents.
- 19.05 Owner may conduct such investigations as Owner deems necessary to establish the responsibility, qualifications, and financial ability of Bidders and any proposed Subcontractors or Suppliers.

ARTICLE 20 – BONDS AND INSURANCE

20.01 Article 6 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 Agreement (executed by Successful Bidder) to Owner, it shall be accompanied by required bonds and insurance documentation.

ARTICLE 21 – SIGNING OF AGREEMENT

21.01 When Owner issues a Notice of Award to the Successful Bidder, it shall be accompanied by the unexecuted counterparts of the Agreement along with the other Contract Documents as identified in the Agreement. Within 15 days thereafter, Successful Bidder shall execute and

deliver the required number of counterparts of the Agreement (and any bonds and insurance documentation required to be delivered by the Contract Documents) to Owner. Within ten days thereafter, Owner shall deliver one fully executed counterpart of the Agreement to Successful Bidder, together with printed and electronic copies of the Contract Documents as stated in Paragraph 2.02 of the General Conditions.

ARTICLE 22 – SALES AND USE TAXES

22.01 Bidder is advised to investigate and understand the applications of all taxes, including the Navajo Nation Business Activity Tax, prior to submitting a bid.

ARTICLE 23 - CONTRACTS TO BE ASSIGNED

ARTICLE 24 – WAGE RATE REQUIREMENTS

24.01 Navajo Preference in Employment Act (NPEA) applies to this contract. Requirements are included in Appendix B.

END OF SECTION

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Instructions to Bidders 00200-14 Section 00410

Bid Form¹

Navajo Nation Western Navajo Pipeline Phase 1: Bodaway-Gap Well, Tank and Pipeline Project

Contract No. 2: Well House, Storage Tank, Altitude Valve, and Pipelines

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ARTICLE 1 – BID RECIPIENT

1.01 This Bid is submitted to: Navajo Nation Water Management Branch

Point of Contact: Lucinda Davis (928-349-1194)

Address: Navajo Route 12 NE, NTUA Rd, Bldg. 2793

Fort Defiance, Arizona 86504

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, and any data and reference items identified in the Bidding Documents, and hereby acknowledges receipt of the following Addenda:

Addendum No.	Addendum, Date

- B. Bidder has visited the Site, conducted a thorough, alert visual examination of the Site and adjacent areas, and become familiar with and satisfied itself as to the general, local, and Site conditions that may affect cost, progress, and performance of the Work.
- C. Bidder is familiar with and has satisfied itself as to all Laws and Regulations that may affect cost, progress, and performance of the Work.
- D. Bidder has carefully studied all: (1) reports of explorations and tests of subsurface conditions at or adjacent to the Site and all drawings of physical conditions relating to existing surface or subsurface structures at the Site that have been identified in the Supplementary Conditions, especially with respect to Technical Data in such reports and drawings, and (2) reports and drawings relating to Hazardous Environmental Conditions, if any, at or adjacent to the Site that have been identified in the Supplementary Conditions and the supplementary Conditions, especially with respect to Technical Data in such reports.

Bid Form 00410-3

- E. Bidder has considered the information known to Bidder itself; information commonly known to contractors doing business in the locality of the Site; information and observations obtained from visits to the Site; the Bidding Documents; and any Site-related reports and drawings identified in the Bidding Documents, with respect to the effect of such information, observations, and documents on (1) the cost, progress, and performance of the Work; (2) the means, methods, techniques, sequences, and procedures of construction to be employed by Bidder; and (3) Bidder's safety precautions and programs.
- F. Bidder agrees, based on the information and observations referred to in the preceding paragraph, that no further examinations, investigations, explorations, tests, studies, or data are necessary for the determination of this Bid for performance of the Work at the price bid and within the times required, and in accordance with the other terms and conditions of the Bidding Documents.
- G. 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.
- H. Bidder has given Engineer written notice of all conflicts, errors, ambiguities, or discrepancies that Bidder has discovered in the Bidding Documents and confirms that 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 and furnishing of the Work.
- J. The submission of this Bid constitutes an incontrovertible representation by Bidder that Bidder has complied with every requirement of this Article, and that without exception the Bid and all prices in the Bid are premised upon performing and furnishing the Work required by the Bidding Documents.

ARTICLE 4 – BIDDER'S CERTIFICATION

- 4.01 Bidder certifies 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 collusive 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 engaged in corrupt, fraudulent, collusive, or coercive practices in competing for the Contract. For the purposes of this Paragraph 4.01.D:
 - 1. "corrupt practice" means the offering, giving, receiving, or soliciting of anything of value likely to influence the action of a public official in the bidding process;
 - "fraudulent practice" means an intentional misrepresentation of facts made (a) to influence the bidding process to the detriment of Owner, (b) to establish bid prices at artificial non-competitive levels, or (c) to deprive Owner of the benefits of free and open competition;

- 3. "collusive practice" means a scheme or arrangement between two or more Bidders, with or without the knowledge of Owner, a purpose of which is to establish bid prices at artificial, non-competitive levels; and
- 4. "coercive practice" means harming or threatening to harm, directly or indirectly, persons or their property to influence their participation in the bidding process or affect the execution of the Contract.

ARTICLE 5 – BASIS OF BID

5.01 Bidder will complete the Work in accordance with the Contract Document, (Refer to Measurement and Payments Section 01550 for specific details on bid items), for the following price(s):

Unit Price Bid Items for **Bodaway-Gap Well, Storage Tank and Pipeline Base Bid - Well** House, Storage Tank, Altitude Valve, and Pipeline.

Schedule/ Item No.	Items Description	Unit	Estimated Quantity	Bid Unit Price	Bid Price
Mobilization	I				
Schedule A	Mobilization for Gap Well House, Storage Tank, Altitude Valve and Pipeline				
A1	Mobilization/Demobilization	LS	1		
A2	Bonds and Insurances	LS	1		
A3	General Requirements	LS	1		
	Schedule A Total				
Schedule B	Gap Well House No. 3				
B1	Site/Civil. cut (approx. 7.0 CY), engineered fill (approx. 345.0 CY).	LS	1		
B2	Prefabricated well house	LS	1		
В3	Well house mechanical	LS	1		
B4	Well House electrical and instrumentation	LS	1		
B5	8-foot chain link fencing and gate	LS	1		
B6	Yard piping	LS	1		
	Schedule B Total				
Schedule C	Gap Storage Tank No. 2				
C1	Site/Civil. cut (approx. 5.5 CY), engineered fill (approx. 318.6 CY	LS	1		
C2	Welded-steel tank	LS	1		
С3	Steel tank concrete foundation	LS	1		
C4	Yard piping	LS	1		

Bid Form 00410-6

	1	1		1
C5	Pressure transmitter vault	LS	1	
C6	Instrumentation	LS	1	
C7	8-foot chain link fencing and gate	LS	1	
	Schedule C Total			
Schedule D	Altitude Valve Station			
D1	Site/Civil	LS	1	
D2	Altitude valve	LS	1	
D3	Instrumentation	LS	1	
	Schedule D Total			
Schedule E	10-inch Pipeline			
E1	10-inch PVC Pipeline	LF	41,184	
E2	Imported Backfill	СҮ	8,066	
E3	Residential Road Crossing (STA 16+80 to STA 17+95)	LF	115	
E4	Road Crossing (STA 38+91 to STA 39+56)	LF	65	
E5	BIA Navajo Route 6231 Crossing (STA 48+80 to STA 50+20)	LF	140	
E6	Residential Road Crossing (STA 227+40 to STA 229+00)	LF	160	
E7	Residential Road Crossing (STA 241+20 to STA 242+20)	LF	100	
E8	Residential Road Crossing (STA 307+80 to STA 308+10)	LF	60	
E9	10-inch gate valve	EA	32	
E10	8-inch gate valve	EA	4	
E11	1-inch combination air valve assembly	EA	16	
E12	2-inch flush valve assembly	EA	9	

E13	Connection to existing 12- inch water main	EA	1	
E14	Greater bury depth	LF	200	
E15	Underground Utility Location STA 10+00 to STA 40+00	LF	3000	
E16	Underground Utility Crossing STA 39+00 to STA 40+00	LF	100	
E17	Traffic Control	LS	1	
	Schedule E Total			
Subtotal All	Unit Price Bid Items (Sum of Sche	dules A th	rough E)	\$
Navajo Natio	on Business Activity Tax (6%)			\$

All Unit Price Bid Items are to be completed by bidder and shall be included in the Total Bid Price.

Total Bid + Navajo Nation Business Activity Tax \$

ARTICLE 6 – TIME OF COMPLETION

- 6.01 Bidder agrees that the Work will be substantially complete and will be completed and ready for final payment in accordance with Paragraph 15.06 of the General Conditions on or before the dates or within the number of calendar days indicated in the Agreement.
- 6.02 Bidder accepts the provisions of the Agreement as to liquidated damages.

ARTICLE 7 – ATTACHMENTS TO THIS BID

- 7.01 The following documents are submitted with and made a condition of this Bid:
 - A. Required Bid security in the form of a Bid Bond (Section 00430) or Certified Check (circle type of security provided);
 - B. List of Proposed Subcontractors (Section 00440);
 - C. List of Proposed Suppliers;
 - D. List of Project References;
 - E. Evidence of authority to do business in the state of the Project; or a written covenant to obtain such license within the time for acceptance of Bids;
 - F. Contractor's License No.____;
 - G. Required Bidder Qualification Statement with supporting data;
 - H. Signed Navajo Nation Certification Regarding Debarment and Suspension

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Bid Form 00410-8
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- I. Signed Affidavit of Responsibility for Subcontractors; and
- J. Signed Affidavit of Non-Collusion

ARTICLE 8 – DEFINED TERMS

8.01 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 9 – BID SUBMITTAL

BIDDER: [Indicate correct name of bidding entity]

By: [Signature]
[Printed name] (If Bidder is a corporation, a limited liability company, a partnership, or a joint venture, attach evidence of authority to sign.)
Attest: [Signature]
[Printed name]
Title:
Submittal Date:
Address for giving notices:
Telephone Number:
Fax Number:
Contact Name and e-mail address:
Bidder's License No.:

**END OF SECTION

Bid Form 00410-9

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Bid Form 00410-10

Section 00430 Bid Bond¹

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)	:
0		•

BID

Bid Due Date:	
---------------	--

Description (Project Name – Include Location):

BOND

ND .		
Bond Number:		
Date:		
Penal sum		\$
	(Words)	(Figures)

Surety and Bidder, intending to be legally bound hereby, subject to the terms set forth below, do each cause this Bid Bond to be duly executed by an authorized officer, agent, or representative.

BIDDEK			SUREIT		
		(Seal)		(Seal)	
Bidder's	Name and Corporate Seal	-	Surety's	Name and Corporate Seal	
By:			By:		
	Signature			Signature (Attach Power of Attorney)	
	Print Name		-	Print Name	
	Title		-	Title	
Attest:			Attest:		
	Signature		-	Signature	
	Title			Title	

Note: Addresses are to be used for giving any required notice. Provide execution by any additional parties, such as joint venturers, if necessary.

¹ EJCDC [®] C-430 Bid Bond (Penal Sum Form). Copyright © 2013 National
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Companies, and American Society of Civil Engineers. All rights reserved.

1. Bidder and Surety, jointly and severally, bind themselves, their heirs, executors, administrators, successors, and assigns to pay to Owner upon default of Bidder the penal sum set forth on the face of this Bond. Payment of the penal sum is the extent of Bidder's and Surety's liability. Recovery of such penal sum under the terms of this Bond shall be Owner's sole and exclusive remedy upon default of Bidder.

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 of 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 the 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 the 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.

Bid Bond 00430-2 **END OF SECTION**

Bid Bond 00430-3 THIS PAGE LEFT INTENTIONALLY BLANK

Bid Bond 00430-4 Section 00440

List of Proposed Subcontractors

All Bidders shall complete this form for all proposed subcontracts. If the contractor fails to receive a bid for a category of work, the contractor shall designate on the listing form that no bid was received. If the contractor fails to receive more than one bid for a category of work, the contractor shall state on the listing form that only one bid was received, together with the name of the subcontractor.

Contractor:

Subcontractor	Business Address	Phone/Fax Number	Arizona License#	Work Description

END OF SECTION

List of Proposed Subcontractors 00440-1

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List of Proposed Subcontractors 00440-2

Bodaway-Gap Contract 2 Bid Issue

Section 00451

QUALIFICATIONS STATEMENT¹

THE INFORMATION SUPPLIED IN THIS DOCUMENT IS CONFIDENTIAL TO THE EXTENT PERMITTED BY LAWS AND REGULATIONS

1.	SUBMITTED BY:	
	Official Name of Firm:	
	Address:	
2.	SUBMITTED TO:	
3.	SUBMITTED FOR:	
	Owner:	
	Project Name:	
	TYPE OF WORK:	
4.	CONTRACTOR'S CONTACT INF	ORMATION
	Contact Person:	
	Title:	
	Phone:	
	Email:	

¹ EJCDC[®] C-451 Qualifications Statement. Copyright © 2013 National Society of Professional Engineers, American Council of Engineering Companies, and American Society of Civil Engineers. All rights reserved.

5. AFFILIATED COMPANIES:

Name:

Address:

6. TYPE OF ORGANIZATION:

\square	SOLE PROPRIETORSHIP

Name of Owner:

Doing Business As:

Date of Organization:

PARTNERSHIP

Date of Organization:

Type of Partnership:

Name of General Partner(s):

CORPORATION

State of Organization:

Date of Organization:

Executive Officers:

- President:

- Vice President(s):

- Treasurer:

- Secretary:

Qualifications Statement 00451-2

Bodaway-Gap Contract 2 Bid Issue

LIMITED LIABILITY COMPANY	
State of Organization:	
Date of Organization:	
Members:	
JOINT VENTURE	
Sate of Organization:	
Date of Organization:	
Form of Organization:	
Joint Venture Managing Partner	
- Name:	
- Address:	
Joint Venture Managing Partner	
- Name:	
- Address:	
Joint Venture Managing Partner	
- Name:	
- Address:	

Qualifications Statement 00451-3

7. LICENSING

8.

9.

Jurisdiction:		
Type of License:		
License Number:		
Jurisdiction:		
Type of License:		
License Number:		
CERTIFICATIONS		CERTIFIED BY:
Disadvantage Business E	Interprise:	
Minority Business Enter	prise:	
Woman Owned Enterpr	ise:	
Small Business Enterpris	e:	
Other ():	
BONDING INFORMATION		
Bonding Company:		
Address:		
Bonding Agent:		
Address:		
Contact Name:		
Phone:		
Aggregate Bonding Capa	acity:	
		submittal:
Qualifi	cations Statement 00451-4	

10. FINANCIAL INFORMATION

Financial Institution:	
Address:	
Account Manager:	
Phone:	

INCLUDE AS AN ATTACHMENT AN AUDITED BALANCE SHEET FOR EACH OF THE LAST 3 YEARS

11. CONSTRUCTION EXPERIENCE:

Current Experience:

List on **Schedule A** all uncompleted projects currently under contract (If Joint Venture list each participant's projects separately).

Previous Experience:

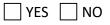
List on **Schedule B** all projects completed within the last 5 Years (If Joint Venture list each participant's projects separately).

Has firm listed in Section 1 ever failed to complete a construction contract awarded to it?

YES NO

If YES, attach as an Attachment details including Project Owner's contact information.

Has any Corporate Officer, Partner, Joint Venture participant or Proprietor ever failed to complete a construction contract awarded to them in their name or when acting as a principal of another entity?



If YES, attach as an Attachment details including Project Owner's contact information.

Are there any judgments, claims, disputes or litigation pending or outstanding involving the firm listed in Section 1 or any of its officers (or any of its partners if a partnership or any of the individual entities if a joint venture)?

YES 🗌 NO

If YES, attach as an Attachment details including Project Owner's contact information.

Qualifications Statement 00451-5

12. SAFETY PROGRAM:

Name of Contractor's Safety Officer:___

Include the following as attachments:

Provide as an Attachment Contractor's (and Contractor's proposed Subcontractors and Suppliers furnishing or performing Work having a value in excess of 10 percent of the total amount of the Bid) <u>OSHA No. 500- Log & Summary of Occupational Injuries & Illnesses</u> for the past 5 years.

Provide as an Attachment Contractor's (and Contractor's proposed Subcontractors and Suppliers furnishing or performing Work having a value in excess of 10 percent of the total amount of the Bid) list of all OSHA Citations & Notifications of Penalty (monetary or other) received within the last 5 years (indicate disposition as applicable) - <u>IF NONE SO STATE.</u>

Provide as an Attachment Contractor's (and Contractor's proposed Subcontractors and Suppliers furnishing or performing Work having a value in excess of 10 percent of the total amount of the Bid) list of all safety citations or violations under any state all received within the last 5 years (indicate disposition as applicable) - <u>IF NONE SO STATE.</u>

Provide the following for the firm listed in Section V (and for each proposed Subcontractor furnishing or performing Work having a value in excess of 10 percent of the total amount of the Bid) the following (attach additional sheets as necessary):

Workers' compensation Experience Modification Rate (EMR) for the last 5 years:

YEAR	EMR	
YEAR	 EMR	
YEAR	 EMR	
YEAR	EMR	
YEAR	 EMR	

Total Recordable Frequency Rate (TRFR) for the last 5 years:

YEAR	 TRFR	
YEAR	TRFR	
YEAR	 TRFR	
YEAR	 TRFR	
YEAR	 TRFR	

Qualifications Statement 00451-6

Total number of man-hours worked for the last 5 Years:

YEAR	 TOTAL NUMBER OF MAN-HOURS	
YEAR	TOTAL NUMBER OF MAN-HOURS	
YEAR	 TOTAL NUMBER OF MAN-HOURS	
YEAR	 TOTAL NUMBER OF MAN-HOURS	
YEAR	 TOTAL NUMBER OF MAN-HOURS	

Provide Contractor's (and Contractor's proposed Subcontractors and Suppliers furnishing or performing Work having a value in excess of 10 percent of the total amount of the Bid) Days Away From Work, Days of Restricted Work Activity or Job Transfer (DART) incidence rate for the particular industry or type of Work to be performed by Contractor and each of Contractor's proposed Subcontractors and Suppliers) for the last 5 years:

DART	
DART	
DART	
 DART	
 DART	
	DART DART DART DART

13. EQUIPMENT:

MAJOR EQUIPMENT:

List on Schedule C all pieces of major equipment available for use on Owner's Project.

I HEREBY CERTIFY THAT THE INFORMATION SUBMITTED HEREWITH, INCLUDING ANY ATTACHMENTS, IS TRUE TO THE BEST OF MY KNOWLEDGE AND BELIEF.

NAME OF ORGANIZATION:	
BY:	
TITLE:	
DATED:	
NOTARY ATTEST:	
SUBSCRIBED AND SWORN TO BEFORE ME	
THIS DAY OF, 20	
NOTARY PUBLIC - STATE OF MY COMMISSION EXPIRES:	
REQUIRED ATTACHMENTS	
1. Schedule A (Current Experience).	
2. Schedule B (Previous Experience).	
3. Schedule C (Major Equipment).	

- 4. Audited balance sheet for each of the last 3 years for firm named in Section 1.
- 5. Evidence of authority for individuals listed in Section 7 to bind organization to an agreement.
- 6. Resumes of officers and key individuals (including Safety Officer) of firm named in Section 1.
- 7. Required safety program submittals listed in Section 13.
- 8. Additional items as pertinent.

SCHEDULE A

CURRENT EXPERIENCE

Project Name	Owner's Contact Person	Design Engineer	Contract Date	Type of Work	Status	Cost of Work
	Name:	Name:				
	Address:	Company:				
	Telephone:	Telephone:				
	Name:	Name:				
	Address:	Company:				
	Telephone:	Telephone:				
	Name:	Name:				
	Address:	Company:				
	Telephone:	Telephone:				
	Name:	Name:				
	Address:	Company:				
	Telephone:	Telephone:				
	Name:	Name:				
	Address:	Company:				
	Telephone:	Telephone:				
	Name:	Name:				
	Address:	Company:				
	Telephone:	Telephone:				
	Name:	Name:				
	Address:	Company:				
	Telephone:	Telephone:				

SCHEDULE B

PREVIOUS EXPERIENCE (Include ALL Projects Completed within last 5 years)

Project Name	Owner's Contact Person	Design Engineer	Contract Date	Type of Work	Status	Cost of Work
	Name: Address: Telephone:	Name: Company: Telephone:				
	Name: Address: Telephone:	Name: Company: Telephone:				
	Name: Address: Telephone:	Name: Company: Telephone:				
	Name: Address: Telephone:	Name: Company: Telephone:				
	Name: Address: Telephone:	Name: Company: Telephone:				
	Name: Address: Telephone:	Name: Company: Telephone:				
	Name: Address: Telephone:	Name: Company: Telephone:				

SCHEDULE B

PREVIOUS EXPERIENCE (Include ALL Projects Completed within last 5 years)

Project Name	Owner's Contact Person	Design Engineer	Contract Date	Type of Work	Status	Cost of Work
	Name:	Name:				
	Address:	Company:				
	Telephone:	Telephone:				
	Name:	Name:				
	Address:	Company:				
	Telephone:	Telephone:				
	Name:	Name:				
	Address:	Company:				
	Telephone:	Telephone:				
	Name:	Name:				
	Address:	Company:				
	Telephone:	Telephone:				
	Name:	Name:				
	Address:	Company:				
	Telephone:	Telephone:				
	Name:	Name:				
	Address:	Company:				
	Telephone:	Telephone:				
	Name:	Name:				
	Address:	Company:				
	Telephone:	Telephone:				

SCHEDULE C - LIST OF MAJOR EQUIPMENT AVAILABLE

ITEM	PURCHASE DATE	CONDITION	ACQUIRED VALUE

END OF SECTION

Qualifications Statement 00451-12

Section 00510 Notice of Award

Date of Issu	ance:		
Owner:	Navajo Nation Water Management Branch	Owner's Contract No.:	
Engineer:	Brown and Caldwell	Engineer's Project No.:	150360
Project:	Navajo Nation Western Navajo Pipeline Phase 1 Bodaway-Gap Well, Tank, and Pipeline	Contract Name:	Contract No. 2: Well House, Storage Tank, Altitude Valve, and Pipelines
Bidder:			
Bidder's Ad	dress:		
TO BIDDER	t:		
	e notified that Owner has accepted your Bir ract, and that you are the Successful Bidder a] for the
	[describe Work, alternates,	or sections of Work award	 [ed]
The Contrac	t Price of the awarded Contract is: \$	[note if subject to unit p	rices, or cost-plus]
] unexecuted counterparts of the Agreeme tract Documents accompanies this Notice der electronically. [revise if multiple copies and	of Award, or has been tra	ansmitted or made available to
] a set of the Drawings will be delivered sep	arately from the other Cor	ntract Documents.
You mu of Award:	st comply with the following conditions prec	cedent within 15 days of th	e date of receipt of this Notice
1.	Deliver to Owner []counterparts of the	Agreement, fully executed	by Bidder.
	Deliver with the executed Agreement(s) the and insurance documentation as specified Articles 2 and 6.		
3.	Other conditions precedent (if any):		
	to comply with these conditions within the t otice of Award, and declare your Bid securit	•	wner to consider you in default,
counterpart	en days after you comply with the above control of the Agreement, together with any addition 2.02 of the General Conditions.		

Owner: Navajo Nation Water Management Branch

Authorized Signature

By:

Title:

Copy: Engineer

END OF SECTION

Notice of Award 00510-1

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Notice of Award 00510-2

Section 00520

Navajo Nation Administrative Purposes Only

The Parties acknowledge the terms within this box section are referenced in the Contract but are for Navajo Nation governmental purposes. Except as provided in the Contract, changes to the terms within this box section will not require a modification.

Contract Number:

Contract Begin Date: Date in Notice to Proceed

Contract Term Ends: _

Business Unit Number(s) Amount to Encumber

AGREEMENT BETWEEN OWNER AND CONTRACTOR FOR CONSTRUCTION CONTRACT (STIPULATED PRICE)¹

THIS AGREEMENT is by and between	Navajo Nation	("Owner") and
		("Contractor").

Contract Start Date: Contract End Date:

Owner and Contractor hereby 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:
 - Bodaway-Gap Well 3 Pump House and Bodaway-Gap Storage Tank No. 2: Construction of a new well pump house and well site improvements Bodaway-Gap Well 3, an 80,000gallon storage tank with piping and transducer vault, and miscellaneous telemetry system improvements for the well and storage tank.
 - Bodaway-Gap Well 3 Pipeline and Altitude Valve Vault: Installation of approximately 41,184 LF of 10-inch and 4-inch altitude flow control valve station.

¹ EJCDC[®] C-520 Agreement between Owner and Contractor for Construction Contract (Stipulated Price). Copyright © 2013 National Society of Professional Engineers, American Council of Engineering Companies, and American Society of Civil Engineers. All rights reserved.

Bodaway-Gap Contract 2 Bid Issue

ARTICLE 2 – THE PROJECT

2.01 The Project, of which the Work under the Contract Documents is a part, is generally described as follows: The overall project will provide additional water supply to the Bodaway-Gap and Cameron Water Systems by adding a new supply well 2-miles north of Tsinaabaas Habitiin Elementary School (Contract No. 1) and Contract No. 2 constructing of a new well pump house, a new storage tank, and pipeline with altitude valve.

ARTICLE 3 – ENGINEER

- 3.01 The Project has been designed by <u>Brown and Caldwell</u>.
- 3.02 The Owner has retained <u>Brown and Caldwell</u> ("Engineer") to 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.

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 *Contract Times: Days*
 - A. The Work will be substantially completed within <u>365 calendar</u> days after the date when the Contract Times commence to run as provided in Paragraph 4.01 of the General Conditions, and completed and ready for final payment in accordance with Paragraph 15.06 of the General Conditions within <u>456 calendar</u> days after the date when the Contract Times commence to run.
 - B. Parts of the Work shall be substantially completed on or before the following Milestone(s):
- 4.03 Contract Term
 - A. The beginning and ending date of this Agreement are shown on the first page. This Agreement shall expire on the ending date shown unless earlier terminated or extended by modification in accordance with the C-800 Supplementary Conditions (modified to incorporate the Navajo Nation Supplementary General Conditions for EJCDC Construction Contracts).
- 4.04 *Liquidated Damages*
 - A. Contractor and Owner recognize that time is of the essence as stated in Paragraph 4.01 above and that Owner will suffer financial and other losses if the Work is not completed and Milestones not achieved within the times specified in Paragraph 4.02 above, plus any extensions thereof allowed in accordance with the Contract. 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):

- Substantial Completion: Contractor shall pay Owner \$1500 for each day that expires after the time (as duly adjusted pursuant to the Contract) specified in Paragraph 4.02.A above for Substantial Completion until the Work is substantially complete.
- Completion of Remaining Work: After Substantial Completion, if Contractor shall neglect, refuse, or fail to complete the remaining Work within the Contract Time (as duly adjusted pursuant to the Contract) for completion and readiness for final payment, Contractor shall pay Owner <u>\$500</u> for each day that expires after such time until the Work is completed and ready for final payment.
- 3. Liquidated damages for failing to timely attain Substantial Completion and final completion are not additive and will not be imposed concurrently.
- 4. Milestones: Contractor shall pay Owner \$**500** for each day that expires after the time (as duly adjusted pursuant to the Contract) specified above for achievement of Milestone 1, until Milestone 1 is achieved.
- B. Bonus: Contractor and Owner further recognize the Owner will realize financial and other benefits if the Work is completed prior to the time specified for Substantial Completion. Accordingly, Owner and Contractor agree that as a bonus for early completion, Owner shall pay Contractor \$______ for each day prior to the time specified in Paragraph 4.02 for Substantial Completion (as duly adjusted pursuant to the Contract) that the Work is substantially complete. The maximum value of the bonus shall be limited to \$______.
- 4.05 Special Damages

[Deleted]

ARTICLE 5 – CONTRACT PRICE

- 5.01 Owner shall pay Contractor for completion of the Work in accordance with the Contract Documents the amounts that follow, subject to adjustment under the Contract:
 - A. For all Work, at the prices stated in Contractor's Bid, attached hereto as an exhibit.

ARTICLE 6 – PAYMENT PROCEDURES

- 6.01 Submittal and Processing of Payments
 - A. Contractor shall submit Applications for Payment in accordance with Article 15 of the General Conditions. Applications for Payment will be processed by Engineer as provided in the General Conditions.
- 6.02 *Progress Payments; Retainage*
 - A. Owner shall make progress payments on account of the Contract Price on the basis of Contractor's Applications for Payment on or about the **25th** day of each month during performance of the Work as provided in Paragraph 6.02.A.1 below, provided that such Applications for Payment have been submitted in a timely manner and otherwise meet the requirements of the Contract. All such payments will be measured by the Schedule of Values established as provided in 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 elsewhere in the Contract.

- 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 Owner may withhold, including but not limited to liquidated damages, in accordance with the Contract
 - a. <u>95</u> 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, then as long as the character and progress of the Work remain satisfactory to Owner and Engineer, there will be no additional retainage; and
 - b. <u>95</u> percent of cost of materials and equipment not incorporated in the Work (with the balance being retainage).
- B. Upon Substantial Completion of the entire construction to be provided under the Contract Documents, Owner shall pay an amount sufficient to increase total payments to Contractor to <u>100</u> percent of the Work completed, less such amounts set off by Owner pursuant to Paragraph 15.01.E of the General Conditions, and less <u>100</u> percent of Engineer's estimate of the value of Work to be completed or corrected as shown on the punch list of items to be completed or corrected prior to final payment.
- 6.03 Final Payment
 - A. Upon final completion and acceptance of the Work in accordance with Paragraph 15.06 of the General Conditions, Owner shall pay the remainder of the Contract Price as recommended by Engineer as provided in said Paragraph 15.06.

ARTICLE 7 – INTEREST

7.01 All amounts not paid when due shall bear interest at the rate of <u>1</u> percent per annum.

ARTICLE 8 – CONTRACTOR'S REPRESENTATIONS

- 8.01 In order to induce Owner to enter into this Contract, Contractor makes the following representations:
 - A. Contractor has examined and carefully studied the Contract Documents, and any data and reference items identified in the Contract Documents.
 - B. Contractor has visited the Site, conducted a thorough, alert visual examination of the Site and adjacent areas, 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 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 adjacent to the Site and all drawings of physical conditions relating to existing surface or subsurface structures at the Site that have been identified in the Supplementary Conditions, especially with respect to Technical Data in such reports and drawings, and (2) reports and drawings relating to Hazardous Environmental Conditions, if any, at or adjacent to the Site that have been identified in the Supplementary Conditions and the supplementary Conditions, especially with respect to Technical Data.

- E. Contractor has considered the information known to Contractor itself; information commonly known to contractors doing business in the locality of the Site; information and observations obtained from visits to the Site; the Contract Documents; and the Site-related reports and drawings identified in the Contract Documents, with respect to the effect of such information, observations, and documents on (1) the cost, progress, and performance of the Work; (2) the means, methods, techniques, sequences, and procedures of construction to be employed by Contractor; and (3) Contractor's safety precautions and programs.
- F. Based on the information and observations referred to in the preceding paragraph, Contractor agrees that no 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.
- 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 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.
- I. The Contract Documents are generally sufficient to indicate and convey understanding of all terms and conditions for performance and furnishing of the Work.
- J. Contractor's entry into this Contract constitutes an incontrovertible representation by Contractor that without exception all prices in the Agreement are premised upon performing and furnishing the Work required by the Contract Documents.

ARTICLE 9 – CONTRACT DOCUMENTS

9.01 *Contents*

- A. The Contract Documents consist of the following:
 - 1. This Agreement (pages 1 to _____, inclusive).
 - 2. Performance bond (pages _____ to ____, inclusive).
 - 3. Payment bond (pages _____ to ____, inclusive).
 - 4. Other bonds.
 - a. _____ (pages _____ to ____, inclusive).
 - 5. General Conditions (pages <u>to</u>, inclusive).
 - 6. Supplementary Conditions (pages _____ to ____, inclusive).
 - Specifications as listed in the tables of contents of the Project Manual Volumes 1 and 2.
 - 8. Drawings (not attached but incorporated by reference) consisting of:
 - a. DRAWINGS FOR BODAWAY-GAP WELL 3, STORAGE TANK No. 2, ALTITUDE VALVE AND PIPELINE

Agreement between Owner and Contractor 00520-5

with each sheet bearing the following general title: Western Navajo Pipeline Phase I Bodaway-Gap Well, Tank and Pipeline the Drawings listed on the attached sheet index.

- 9. Addenda (numbers <u>to</u>, inclusive).
- 10. Exhibits to this Agreement (enumerated as follows):
 - a. Contractor's Bid (pages _____ to ____, inclusive).
 - b. All Rights-of-way and Easements (as found in Appendix C)
 - c. All Permits (as found in Appendix D and E)
 - d. Documentation submitted by Contractor prior to Notice of Award (pages _____ to ____, inclusive
- 11. The following which may be delivered or issued on or after the Effective Date of the Contract and are not attached hereto:
 - a. Notice to Proceed.
 - b. Change Orders.
 - c. Field Orders.
- 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 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. Unless expressly agreed to elsewhere in the Contract, 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, money that may become due and money that is 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 successors, assigns, and legal representatives to the other party hereto, its 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.

10.05 Contractor's Certifications

- A. Contractor certifies that it has not engaged in corrupt, fraudulent, collusive, or coercive practices in competing for or in executing the Contract. For the purposes of this Paragraph 10.05:
 - 1. "corrupt practice" means the offering, giving, receiving, or soliciting of any thing of value likely to influence the action of a public official in the bidding process or in the Contract execution;
 - "fraudulent practice" means an intentional misrepresentation of facts made (a) to influence the bidding process or the execution of the Contract to the detriment of Owner, (b) to establish Bid or Contract prices at artificial non-competitive levels, or (c) to deprive Owner of the benefits of free and open competition;
 - 3. "collusive practice" means a scheme or arrangement between two or more Bidders, with or without the knowledge of Owner, a purpose of which is to establish Bid prices at artificial, non-competitive levels; and
 - 4. "coercive practice" means harming or threatening to harm, directly or indirectly, persons or their property to influence their participation in the bidding process or affect the execution of the Contract.

10.06 Other Provisions

A. Owner stipulates that if the General Conditions that are made a part of this Contract are based on EJCDC[®] C-700, Standard General Conditions for the Construction Contract, published by the Engineers Joint Contract Documents Committee[®], and if Owner is the party that has furnished said General Conditions, then Owner has plainly shown all modifications to the standard wording of such published document to the Contractor, through a process such as highlighting or "track changes" (redline/strikeout), or in the Supplementary Conditions.

IN WITNESS WHEREOF, Owner and Contractor have signed this Agreement.

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

NOTE(S) TO USER:

- 1. See Article 21 of the Instructions to Bidders and correlate procedures for format and signing of the documents.
- 2. The Effective Date of the Contract stated above and the dates of any construction performance bond (EJCDC[®] C-610 or other) and construction payment bond (EJCDC[®] C-615 or other) should be the same, if possible. In no case should the date of any bonds be earlier then the Effective Date of the Contract.

OWNER:	CONTRACTOR:
Navajo Nation	
By: Jonathan Nez	Ву:
Title: President	Title:
	(If Contractor is a corporation, a partnership, or a joint venture, attach evidence of authority to sign.)
Attest:	Attest:
Title:	Title:
Address for giving notices:	Address for giving notices:
NNDNR -DWR Water Management Branch	
P.O. Box 678	
Fort Defiance, AZ 86504	
	License No.: (where applicable)
(If Owner is a corporation, attach evidence of authority to sign. If Owner is a public body, attach evidence of authority to sign and resolution or other documents authorizing execution of this Agreement.)	NOTE TO USER: Use in those states or other jurisdictions where applicable or required.

END OF SECTION

Agreement between Owner and Contractor 00520-8

Section 00550

Owner:	Navajo Nation	Owner's Contract No.:	
Contractor:		Contractor's Project No.:	
Engineer:	Brown and Caldwell	Engineer's Project No.:	150360
Project:	Navajo Nation Western Navajo Pipeline Phase 1 Bodaway-Gap Well, Tank, and Pipeline	Contract Name:	Contract No. 2: Bodaway-Gap Well House, Storage Tank, Altitude Valve, and Pipelines
		Effective Date of Contract	:

NOTICE TO PROCEED

TO CONTRACTOR:

Owner hereby notifies Contractor that the Contract Times under the above Contract will commence to run on [______, 20__].

On that date, Contractor shall start performing its obligations under the Contract Documents. No Work shall be done at the Site prior to such date. In accordance with the Agreement, the number of days to achieve Substantial Completion is ______, and the number of days to achieve readiness for final payment is ______.

Before starting any Work at the Site, Contractor must comply with the following: [Note any access limitations, security procedures, or other restrictions]

Owner: Navajo Nation

Authorized Signature

By:

Title:

Date Issued:

Copy: Engineer

END OF SECTION

Notice to Proceed 00550-1

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Notice to Proceed 00550-2

PERFORMANCE BOND¹

CONTRACTOR (name and address):

SURETY (name and address of principal place of business):

OWNER: Navajo Nation, through its NNDNR – DWR Water Management Branch Route 12 NE, NTUA Road, Bldg. 2793, Fort Defiance, Arizona 86504

CONSTRUCTION CONTRACT

Effective Date of the Agreement: Amount: Description (name and location):

BOND

Bond Number:	
Date (not earlier than the Effective Date of the Agreeme	nt of the Construction Contract):
Amount:	
Modifications to this Bond Form: 🗌 None	See Paragraph 16

Surety and Contractor, intending to be legally bound hereby, subject to the terms set forth below, do each cause this Performance Bond to be duly executed by an authorized officer, agent, or representative.

CONTRACTOR AS PRINCIPAL

SURETY

	(seal)		(seal)
Contractor's Name and Corporate Seal	(,	Surety's Name and Corporate Seal	(,
Ву:		Ву:	
Signature		Signature (attach power of attorney)	
Print Name		Print Name	
Title		Title	
Attest:		Attest:	
Signature		Signature	
Title		Title	
··••		·····•	

Notes: (1) Provide supplemental execution by any additional parties, such as joint venturers. (2) Any singular reference to Contractor, Surety, Owner, or other party shall be considered plural where applicable.

¹ EJCDC[®] C-610 Performance Bond. Copyright © 2013 National Society of Professional Engineers, American Council of Engineering Companies, and American Society of Civil Engineers. All rights reserved.

1. The Contractor and Surety, jointly and severally, bind themselves, their heirs, executors, administrators, successors, and assigns to the Owner for the performance of the Construction Contract, which is incorporated herein by reference.

2. If the Contractor performs the Construction Contract, the Surety and the Contractor shall have no obligation under this Bond, except when applicable to participate in a conference as provided in Paragraph 3.

3. If there is no Owner Default under the Construction Contract, the Surety's obligation under this Bond shall arise after:

31 The Owner first provides notice to the Contractor and the Surety that the Owner is considering declaring a Contractor Default. Such notice shall indicate whether the Owner is requesting a conference among the Owner, Contractor, and Surety to discuss the Contractor's performance. If the Owner does not request a conference, the Surety may, within five (5) business days after receipt of the Owner's notice, request such a conference. If the Surety timely requests a conference, the Owner shall attend. Unless the Owner agrees otherwise, any conference requested under this Paragraph 3.1 shall be held within ten (10) business days of the Surety's receipt of the Owner's notice. If the Owner, the Contractor, and the Surety agree, the Contractor shall be allowed a reasonable time to perform the Construction Contract, but such an agreement shall not waive the Owner's right, if any, subsequently to declare a Contractor Default;

3.2 The Owner declares a Contractor Default, terminates the Construction Contract and notifies the Surety; and

3.3 The Owner has agreed to pay the Balance of the Contract Price in accordance with the terms of the Construction Contract to the Surety or to a contractor selected to perform the Construction Contract.

4. Failure on the part of the Owner to comply with the notice requirement in Paragraph 3.1 shall not constitute a failure to comply with a condition precedent to the Surety's obligations, or release the Surety from its obligations, except to the extent the Surety demonstrates actual prejudice.

5. When the Owner has satisfied the conditions of Paragraph 3, the Surety shall promptly and at the Surety's expense take one of the following actions:

5.1 Arrange for the Contractor, with the consent of the Owner, to perform and complete the Construction Contract;

5.2 Undertake to perform and complete the Construction Contract itself, through its agents or independent contractors;

5.3 Obtain bids or negotiated proposals from qualified contractors acceptable to the Owner for a contract for performance and completion of the Construction Contract, arrange for a contract to be prepared for execution by the

Owner and a contractor selected with the Owners concurrence, to be secured with performance and payment bonds executed by a qualified surety equivalent to the bonds issued on the Construction Contract, and pay to the Owner the amount of damages as described in Paragraph 7 in excess of the Balance of the Contract Price incurred by the Owner as a result of the Contractor Default; or

5.4 Waive its right to perform and complete, arrange for completion, or obtain a new contractor, and with reasonable promptness under the circumstances:

5.4.1 After investigation, determine the amount for which it may be liable to the Owner and, as soon as practicable after the amount is determined, make payment to the Owner; or

5.4.2 Deny liability in whole or in part and notify the Owner, citing the reasons for denial.

6. If the Surety does not proceed as provided in Paragraph 5 with reasonable promptness, the Surety shall be deemed to be in default on this Bond seven days after receipt of an additional written notice from the Owner to the Surety demanding that the Surety perform its obligations under this Bond, and the Owner shall be entitled to enforce any remedy available to the Owner. If the Surety proceeds as provided in Paragraph 5.4, and the Owner refuses the payment or the Surety has denied liability, in whole or in part, without further notice the Owner shall be entitled to enforce any remedy available to the Owner shall be entitled to the Owner shall be entitled to enforce any remedy available to the Owner shall be entitled to enforce any remedy available to the Owner.

7. If the Surety elects to act under Paragraph 5.1, 5.2, or 5.3, then the responsibilities of the Surety to the Owner shall not be greater than those of the Contractor under the Construction Contract, and the responsibilities of the Owner to the Surety shall not be greater than those of the Owner under the Construction Contract. Subject to the commitment by the Owner to pay the Balance of the Contract Price, the Surety is obligated, without duplication for:

7.1 the responsibilities of the Contractor for correction of defective work and completion of the Construction Contract;

7.2 additional legal, design professional, and delay costs resulting from the Contractor's Default, and resulting from the actions or failure to act of the Surety under Paragraph 5; and

7.3 liquidated damages, or if no liquidated damages are specified in the Construction Contract, actual damages caused by delayed performance or non-performance of the Contractor.

8. If the Surety elects to act under Paragraph 5.1, 5.3, or 5.4, the Surety's liability is limited to the amount of this Bond.

9. The Surety shall not be liable to the Owner or others for obligations of the Contractor that are unrelated to the Construction 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

the Owner or its heirs, executors, administrators, successors, and assigns.

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

11. 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 a declaration of Contractor Default or within two years after the Contractor ceased working or within two years after the 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 periods of limitations available to sureties as a defense in the jurisdiction of the suit shall be applicable.

12. Notice to the Surety, the Owner, or the Contractor shall be mailed or delivered to the address shown on the page on which their signature appears.

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

14. Definitions

14.1 Balance of the Contract Price: The total amount payable by the Owner to the Contractor under the Construction Contract after all proper adjustments have been made including

allowance for the Contractor for any amounts received or to be received by the Owner in settlement of insurance or other claims for damages to which the Contractor is entitled, reduced by all valid and proper payments made to or on behalf of the Contractor under the Construction Contract.

14.2 Construction Contract: The agreement between the Owner and Contractor identified on the cover page, including all Contract Documents and changes made to the agreement and the Contract Documents.

14.3 Contractor Default: Failure of the Contractor, which has not been remedied or waived, to perform or otherwise to comply with a material term of the Construction Contract.

14.4 Owner Default: Failure of the Owner, which has not been remedied or waived, to pay the Contractor as required under the Construction Contract or to perform and complete or comply with the other material terms of the Construction Contract.

14.5 Contract Documents: All the documents that comprise the agreement between the Owner and Contractor.

15. If this Bond is issued for an agreement between a contractor and subcontractor, the term Contractor in this Bond shall be deemed to be Subcontractor and the term Owner shall be deemed to be Contractor.

16. Modifications to this Bond are as follows:

END OF SECTION

Performance Bond 00610-3 THIS PAGE LEFT INTENTIONALLY BLANK

Performance Bond 00610-4

Bodaway-Gap Contract 2 Bid Issue

PAYMENT BOND¹

CONTRACTOR (name and address):

SURETY (name and address of principal place of business):

OWNER: Navajo Nation, through its NNDNR – DWR Water Management Branch Route 12 NE, NTUA Road, Bldg. 2793, Fort Defiance, Arizona 86504

CONSTRUCTION CONTRACT

Effective Date of the Agreement: Amount: Description (name and location):

BOND

nt of the Construction Contract):
See Paragraph 18

Surety and Contractor, intending to be legally bound hereby, subject to the terms set forth below, do each cause this Payment Bond to be duly executed by an authorized officer, agent, or representative.

CONTRACTOR AS PRINCIPAL	SURETY			
	(seal)	(seal)		
Contractor's Name and Corporate Seal	Surety's Name and Corporate Seal			
Ву:	Ву:			
Signature	Signature (attach power of at			
Print Name	Print Name			
Title	Title			
Attest:	Attest:			
Signature	Signature			
Title	Title			

Notes: (1) Provide supplemental execution by any additional parties, such as joint venturers. (2) Any singular reference to Contractor, Surety, Owner, or other party shall be considered plural where applicable.

- 1. The Contractor and Surety, jointly and severally, bind themselves, their heirs, executors, administrators, successors, and assigns to the Owner to pay for labor, materials, and equipment furnished for use in the performance of the Construction Contract, which is incorporated herein by reference, subject to the following terms.
- 2. If the Contractor promptly makes payment of all sums due to Claimants, and defends, indemnifies, and holds harmless the Owner from claims, demands, liens, or suits by any person or entity seeking payment for labor, materials, or equipment furnished for use in the performance of the Construction Contract, then the Surety and the Contractor shall have no obligation under this Bond.
- 3. If there is no Owner Default under the Construction Contract, the Surety's obligation to the Owner under this Bond shall arise after the Owner has promptly notified the Contractor and the Surety (at the address described in Paragraph 13) of claims, demands, liens, or suits against the Owner or the Owner's property by any person or entity seeking payment for labor, materials, or equipment furnished for use in the performance of the Construction Contract, and tendered defense of such claims, demands, liens, or suits to the Contractor and the Surety.
- 4. When the Owner has satisfied the conditions in Paragraph 3, the Surety shall promptly and at the Surety's expense defend, indemnify, and hold harmless the Owner against a duly tendered claim, demand, lien, or suit.
- 5. The Surety's obligations to a Claimant under this Bond shall arise after the following:
 - 5.1 Claimants who do not have a direct contract with the Contractor,
 - 5.1.1 have furnished a written notice of nonpayment to the Contractor, stating with substantial accuracy the amount claimed and the name of the party to whom the materials were, or equipment was, furnished or supplied or for whom the labor was done or performed, within ninety (90) days after having last performed labor or last furnished materials or equipment included in the Claim; and
 - 5.1.2 have sent a Claim to the Surety (at the address described in Paragraph 13).
 - 5.2 Claimants who are employed by or have a direct contract with the Contractor have sent a Claim to the Surety (at the address described in Paragraph 13).

- 6. If a notice of non-payment required by Paragraph 5.1.1 is given by the Owner to the Contractor, that is sufficient to satisfy a Claimant's obligation to furnish a written notice of non-payment under Paragraph 5.1.1.
- 7. When a Claimant has satisfied the conditions of Paragraph 5.1 or 5.2, whichever is applicable, the Surety shall promptly and at the Surety's expense take the following actions:
 - 7.1 Send an answer to the Claimant, with a copy to the Owner, within sixty (60) days after receipt of the Claim, stating the amounts that are undisputed and the basis for challenging any amounts that are disputed; and
 - 7.2 Pay or arrange for payment of any undisputed amounts.
 - 7.3 The Surety's failure to discharge its obligations under Paragraph 7.1 or 7.2 shall not be deemed to constitute a waiver of defenses the Surety or Contractor may have or acquire as to a Claim, except as to undisputed amounts for which the Surety and Claimant have reached agreement. If, however, the Surety fails to discharge its obligations under Paragraph 7.1 or 7.2, the Surety shall indemnify the Claimant for the reasonable attorney's fees the Claimant incurs thereafter to recover any sums found to be due and owing to the Claimant.
- The Surety's total obligation shall not exceed the amount of this Bond, plus the amount of reasonable attorney's fees provided under Paragraph 7.3, and the amount of this Bond shall be credited for any payments made in good faith by the Surety.
- 9. Amounts owed by the Owner to the Contractor under the Construction Contract shall be used for the performance of the Construction Contract and to satisfy claims, if any, under any construction performance bond. By the Contractor furnishing and the Owner accepting this Bond, they agree that all funds earned by the Contractor in the performance of the Construction Contract are dedicated to satisfy obligations of the Contractor and Surety under this Bond, subject to the Owner's priority to use the funds for the completion of the work.
- 10. The Surety shall not be liable to the Owner, Claimants, or others for obligations of the Contractor that are unrelated to the Construction Contract. The Owner shall not be liable for the payment of any costs or expenses of any Claimant under this Bond, and shall have under this Bond no obligation to make payments to or give notice on behalf of Claimants, or otherwise have any obligations to Claimants under this Bond.

- 11. The Surety hereby waives notice of any change, including changes of time, to the Construction Contract or to related subcontracts, purchase orders, and other obligations.
- 12. No suit or action shall be commenced by a Claimant under this Bond other than in a court of competent jurisdiction in the state in which the project that is the subject of the Construction Contract is located or after the expiration of one year from the date (1) on which the Claimant sent a Claim to the Surety pursuant to Paragraph 5.1.2 or 5.2, 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.
- 13. Notice and Claims to the Surety, the Owner, or the Contractor shall be mailed or delivered to the address shown on the page on which their signature appears. Actual receipt of notice or Claims, however accomplished, shall be sufficient compliance as of the date received.
- 14. When this Bond has been furnished to comply with a statutory or other legal requirement in the location where the construction was to be performed, any provision in this Bond conflicting with said statutory or legal requirement shall be deemed deleted herefrom and provisions conforming to such statutory or other legal requirement shall be deemed incorporated herein. When so furnished, the intent is that this Bond shall be construed as a statutory bond and not as a common law bond.
- 15. Upon requests by any person or entity appearing to be a potential beneficiary of this Bond, the Contractor and Owner shall promptly furnish a copy of this Bond or shall permit a copy to be made.

16. Definitions

- 16.1 **Claim:** A written statement by the Claimant including at a minimum:
 - 1. The name of the Claimant;
 - The name of the person for whom the labor was done, or materials or equipment furnished;
 - A copy of the agreement or purchase order pursuant to which labor, materials, or equipment was furnished for use in the performance of the Construction Contract;
 - 4. A brief description of the labor, materials, or equipment furnished;
 - 5. The date on which the Claimant last performed labor or last furnished materials or equipment for use in the performance of the Construction Contract;

- 6. The total amount earned by the Claimant for labor, materials, or equipment furnished as of the date of the Claim;
- 7. The total amount of previous payments received by the Claimant; and
- 8. The total amount due and unpaid to the Claimant for labor, materials, or equipment furnished as of the date of the Claim.
- 16.2 Claimant: An individual or entity having a direct contract with the Contractor or with a subcontractor of the Contractor to furnish labor, materials, or equipment for use in the performance of the Construction Contract. The term Claimant also includes any individual or entity that has rightfully asserted a claim under an applicable mechanic's lien or similar statute against the real property upon which the Project is located. The intent of this Bond shall be to include without limitation in the terms of "labor, materials, or equipment" that part of the water, gas, power, light, heat, oil, gasoline, telephone service, or rental equipment used in the Construction Contract, architectural and engineering services required for performance of the work of the Contractor and the 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.
- 16.3 **Construction Contract:** The agreement between the Owner and Contractor identified on the cover page, including all Contract Documents and all changes made to the agreement and the Contract Documents.
- 16.4 **Owner Default**: Failure of the Owner, which has not been remedied or waived, to pay the Contractor as required under the Construction Contract or to perform and complete or comply with the other material terms of the Construction Contract.
- 16.5 **Contract Documents:** All the documents that comprise the agreement between the Owner and Contractor.
- 17. If this Bond is issued for an agreement between a contractor and subcontractor, the term Contractor in this Bond shall be deemed to be Subcontractor and the term Owner shall be deemed to be Contractor.

18. Modifications to this Bond are as follows:

END OF SECTION

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Payment Bond 00615-4

EJ(CDC	Contractor's Application for Payment No.				
	RS JOINT CONTRACT NTS COMMITTEE	Application Period:	Application Date:			
To (Owner):	Navajo Nation Water Management Branch	From (Contractor):	Via (Engineer):			
Project:	Navajo Nation Bodaway-Gap Well House, Storage Tank, Altitude Valve, and Pipelines Construction	Contract: Bodaway-Gap Well House, Storage Tank, Altitude Valve, and Pipelines - Contract 2				
Owner's C	Contract No.:	Contractor's Project No.:	Engineer's Project No.: 150360			

Application For Payment

	Change Order Summary	7				
Approved Change Orders			1. ORIGINAL CONTRACT PRICE §			
Number	Additions	Deductions	2. Net change by Char	nge Orders.		
			3. Current Contract P	Price (Line 1	1 ± 2) §	
			4. TOTAL COMPLE	TED AND S	STORED TO DATE	
			(Column F total on	Progress E	stimates) \$	
			5. RETAINAGE:			
			a.	X	Work Completed \$	
			b.	х	Stored Material \$	
			c. Tota	l Retainage	(Line 5.a + Line 5.b) \$	
			6. AMOUNT ELIGIB	LE TO DA	TE (Line 4 - Line 5.c) \$	
TOTALS			7. LESS PREVIOUS	PAYMENT	S (Line 6 from prior Application) \$	
NET CHANGE BY			8. AMOUNT DUE TH	HS APPLIC	CATION \$	
CHANGE ORDERS			9. BALANCE TO FIN	ISH, PLUS	RETAINAGE	

(Column G total on Progress Estimates + Line 5.c above)...... \$_____

Contractor's Certification

The undersigned Contractor certifies, to the best of its knowledge, the following:	Payment
(1) All previous progress payments received from Owner on account of Work done under the Contract have been applied on account to discharge Contractor's legitimate obligations incurred in connection with	
the Work covered by prior Applications for Payment;	
(2) Title to all Work, materials and equipment incorporated in said Work, or otherwise listed in or	
covered by this Application for Payment, will pass to Owner at time of payment free and clear of all	is recom
Liens, security interests, and encumbrances (except such as are covered by a bond acceptable to Owner	
indemnifying Owner against any such Liens, security interest, or encumbrances); and	
(3) All the Work covered by this Application for Payment is in accordance with the Contract Documents and is not defective.	Dariman
	Paymen
	is approv
Contractor Signature	
By: Date:	Approve
	1

ment of:	\$		
		(Line 8 or other - attach explanation of the	other amount)
ecommended by:	_		
		(Engineer)	(Date)
ment of:	\$		
		(Line 8 or other - attach explanation of the	other amount)
pproved by:	_		
		(Owner)	(Date)
proved by:			
		Funding or Financing Entity (if applicable)	(Date)

Application for Payment 00620-1 Bodaway-Gap Contract 2 Bid Issue

Section 00620

Progress Estimate - Unit Price Work

Contractor's Application

For (Contract): Bodaway-Gap Well House, Storage Tank, Altitude Valve, and Pipelines - Contract 2								Application Number:			
Application Period:								Application Date:			
	А		В	С	D	E	E F				
	Item	Contract Information			Estimated	Value of Work		Total Completed % Balance to F			
Bid Item No.	Description	Item Quantity	Units	Unit Price	Total Value of Item (\$)	Quantity Installed	Installed to Date	Materials Presently Stored (not in C)	and Stored to Date (D + E)	% (F / B)	Balance to Finish (B - F)
	Totals										

Application for Payment 00620-3 Bodaway-Gap Contract 2 Bid Issue

Section 00625

CERTIFICATE OF SUBSTANTIAL COMPLETION

Owner:	Navajo Nation	Owner's Contract No.:	
Contractor		Contractor's Project No.	:
Engineer:	Brown and Caldwell	Engineer's Project No.:	150360
Project:	Navajo Nation	Contract Name:	Contract No. 2: Bodaway-Gap
-	Western Navajo Pipeline Phase 1		Well, Storage Tank, Altitude
	Bodaway-Gap Well, Tank and Pipeline		Valve, and Pipelines
This [prel	iminary] [final] Certificate of Substantial Co	mpletion applies to:	
🗌 All	Work	The following sp	ecified portions of the Work:
	Date of Substa	ntial Completion	
The Work	to which this Certificate applies has been in	spected by authorized repr	esentatives of Owner, Contractor, and
Engineer, a	and found to be substantially complete. Th I above is hereby established, subject to the	e Date of Substantial Comp	letion of the Work or portion thereof
The date o	of Substantial Completion in the final Certifi I correction period and applicable warrantie	cate of Substantial Complet	
•	st of items to be completed or corrected is		•

A punch list of items to be completed or corrected is attached to this Certificate. This list may not be all-inclusive, and the failure to include any items on such list does not alter the responsibility of the Contractor to complete all Work in accordance with the Contract.

The responsibilities between Owner and Contractor for security, operation, safety, maintenance, heat, utilities, insurance, and warranties upon Owner's use or occupancy of the Work shall be as provided in the Contract, except as amended as follows: [Note: Amendments of contractual responsibilities recorded in this Certificate should be the product of mutual agreement of Owner and Contractor; see Paragraph 15.03.D of the General Conditions.]

Amendments to Owner's responsibilities:

] None]As follows

Amendments to Contractor's responsibilities: None As follows:

The following documents are attached to and made a part of this Certificate: [punch list; others]

This Certificate does not constitute an acceptance of Work not in accordance with the Contract Documents, nor is it a release of Contractor's obligation to complete the Work in accordance with the Contract.

E	XECUTED BY ENGINEER:		RECEIVED:		RECEIVED:		
By:		By:		By:			
	(Authorized signature)	_	Owner (Authorized Signature)		Contractor (Authorized Signature)		
Title:		Title:		Title:			
Date:		Date:		Date:			
			END OF SECTION				
	Certificate of Substantial Completion 00625-1						

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Certificate of Substantial Completion 00625-2

Section 00700

STANDARD GENERAL CONDITIONS OF THE CONSTRUCTION CONTRACT¹

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ARTICLE 1 – DEFINITIONS AND TERMINOLOGY

1.01 Defined Terms

- A. Wherever used in the Bidding Requirements or Contract Documents, a term printed with initial capital letters, including the term's singular and plural forms, will have the meaning indicated in the definitions below. 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, executed by Owner and Contractor, that sets forth the Contract Price and Contract Times, identifies the parties and the Engineer, and designates the specific items that are Contract Documents.
 - 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. *Bid*—The offer of a Bidder submitted on the prescribed form setting forth the prices for the Work to be performed.
 - 5. *Bidder*—An individual or entity that submits a Bid to Owner.
 - 6. *Bidding Documents*—The Bidding Requirements, the proposed Contract Documents, and all Addenda.
 - 7. *Bidding Requirements*—The advertisement or invitation to bid, Instructions to Bidders, Bid Bond or other Bid security, if any, the Bid Form, and the Bid with any attachments.
 - 8. *Change Order*—A document 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, or other revision to the Contract, issued on or after the Effective Date of the Contract.
 - 9. *Change Proposal*—A written request by Contractor, duly submitted in compliance with the procedural requirements set forth herein, seeking an adjustment in Contract Price or Contract Times, or both; contesting an initial decision by Engineer concerning the requirements of the Contract Documents or the acceptability of Work under the Contract Documents; challenging a set-off against payments due; or seeking other relief with respect to the terms of the Contract.
 - 10. *Claim*—(a) A demand or assertion by Owner directly to Contractor, duly submitted in compliance with the procedural requirements set forth herein: seeking an adjustment of Contract Price or Contract Times, or both; contesting an initial decision by Engineer concerning the requirements of the Contract Documents or the acceptability of Work under the Contract Documents; contesting Engineer's decision regarding a Change Proposal; seeking resolution of a contractual issue that Engineer has declined to address; or seeking other relief with respect to the terms of the Contract; or (b) a demand or assertion by Contractor directly to Owner, duly submitted in compliance with the procedural requirements set forth herein, contesting Engineer's decision

regarding a Change Proposal; or seeking resolution of a contractual issue that Engineer has declined to address. A demand for money or services by a third party is not a Claim.

- 11. Constituent of Concern—Asbestos, petroleum, radioactive materials, polychlorinated biphenyls (PCBs), hazardous waste, and any substance, product, waste, or other material of any nature whatsoever that is or becomes listed, regulated, or addressed pursuant to (a) the Comprehensive Environmental Response, Compensation and Liability Act, 42 U.S.C. §§9601 et seq. ("CERCLA"); (b) the Hazardous Materials Transportation Act, 49 U.S.C. §§5501 et seq.; (c) the Resource Conservation and Recovery Act, 42 U.S.C. §§6901 et seq. ("RCRA"); (d) the Toxic Substances Control Act, 15 U.S.C. §§2601 et seq.; (e) the Clean Water Act, 33 U.S.C. §§1251 et seq.; (f) the Clean Air Act, 42 U.S.C. §§7401 et seq.; or (g) any other federal, state, or local statute, law, rule, regulation, ordinance, resolution, code, order, or decree regulating, relating to, or imposing liability or standards of conduct concerning, any hazardous, toxic, or dangerous waste, substance, or material.
- 12. *Contract*—The entire and integrated written contract between the Owner and Contractor concerning the Work.
- 13. *Contract Documents*—Those items so designated in the Agreement, and which together comprise the Contract.
- 14. *Contract Price*—The money that Owner has agreed to pay Contractor for completion of the Work in accordance with the Contract Documents.
- 15. *Contract Times*—The number of days or the dates by which Contractor shall: (a) achieve Milestones, if any; (b) achieve Substantial Completion; and (c) complete the Work.
- 16. *Contractor*—The individual or entity with which Owner has contracted for performance of the Work.
- 17. *Cost of the Work*—See Paragraph 13.01 for definition.
- 18. *Drawings*—The part of the Contract that graphically shows the scope, extent, and character of the Work to be performed by Contractor.
- 19. *Effective Date of the Contract*—The date, indicated in the Agreement, on which the Contract becomes effective.
- 20. Engineer—The individual or entity named as such in the Agreement.
- 21. *Field Order*—A written order issued by Engineer which requires minor changes in the Work but does not change the Contract Price or the Contract Times.
- 22. Hazardous Environmental Condition—The presence at the Site of Constituents of Concern in such quantities or circumstances that may present a danger to persons or property exposed thereto. The presence at the Site of materials that are necessary for the execution of the Work, or that are to be incorporated in the Work, and that are controlled and contained pursuant to industry practices, Laws and Regulations, and the requirements of the Contract, does not establish a Hazardous Environmental Condition.

- 23. *Laws and Regulations; Laws or Regulations*—Any and all applicable laws, statutes, rules, regulations, ordinances, codes, and orders of any and all governmental bodies, agencies, authorities, and courts having jurisdiction.
- 24. *Liens*—Charges, security interests, or encumbrances upon Contract-related funds, real property, or personal property.
- 25. *Milestone*—A principal event in the performance of the Work that the Contract requires Contractor to achieve by an intermediate completion date or by a time prior to Substantial Completion of all the Work.
- 26. *Notice of Award*—The written notice by Owner to a Bidder of Owner's acceptance of the Bid.
- 27. *Notice to Proceed*—A written notice 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.
- 28. *Owner*—The individual or entity with which Contractor has contracted regarding the Work, and which has agreed to pay Contractor for the performance of the Work, pursuant to the terms of the Contract.
- 29. *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.
- 30. *Project*—The total undertaking to be accomplished for Owner by engineers, contractors, and others, including planning, study, design, construction, testing, commissioning, and start-up, and of which the Work to be performed under the Contract Documents is a part.
- 31. *Project Manual*—The written documents prepared for, or made available for, procuring and constructing the Work, including but not limited to the Bidding Documents or other construction procurement documents, geotechnical and existing conditions information, the Agreement, bond forms, General Conditions, Supplementary Conditions, and Specifications. The contents of the Project Manual may be bound in one or more volumes.
- 32. *Resident Project Representative*—The authorized representative of Engineer assigned to assist Engineer at the Site. As used herein, the term Resident Project Representative or "RPR" includes any assistants or field staff of Resident Project Representative.
- 33. *Samples*—Physical examples of materials, equipment, or workmanship that are representative of some portion of the Work and that establish the standards by which such portion of the Work will be judged.
- 34. Schedule of Submittals—A schedule, prepared and maintained by Contractor, of required submittals and the time requirements for Engineer's review of the submittals and the performance of related construction activities.
- 35. *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.
- 36. Shop Drawings—All drawings, diagrams, illustrations, schedules, and other data or information that are specifically prepared or assembled by or for Contractor and

submitted by Contractor to illustrate some portion of the Work. Shop Drawings, whether approved or not, are not Drawings and are not Contract Documents.

- 37. *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, and such other lands furnished by Owner which are designated for the use of Contractor.
- 38. *Specifications*—The part of the Contract that consists of written requirements for materials, equipment, systems, standards, and workmanship as applied to the Work, and certain administrative requirements and procedural matters applicable to the Work.
- 39. *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.
- 40. 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.
- 41. *Successful Bidder*—The Bidder whose Bid the Owner accepts, and to which the Owner makes an award of contract, subject to stated conditions.
- 42. *Supplementary Conditions*—The part of the Contract that amends or supplements these General Conditions.
- 43. *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 a Subcontractor.
- 44. Technical Data—Those items expressly identified as Technical Data in the Supplementary Conditions, with respect to either (a) subsurface conditions at the Site, or physical conditions relating to existing surface or subsurface structures at the Site (except Underground Facilities) or (b) Hazardous Environmental Conditions at the Site. If no such express identifications of Technical Data have been made with respect to conditions at the Site, then the data contained in boring logs, recorded measurements of subsurface water levels, laboratory test results, and other factual, objective information regarding conditions at the Site that are set forth in any geotechnical or environmental report prepared for the Project and made available to Contractor are hereby defined as Technical Data with respect to conditions at the Site under Paragraphs 5.03, 5.04, and 5.06.
- 45. 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 but not limited to those that convey electricity, gases, steam, liquid petroleum products, telephone or other communications, fiber optic transmissions, cable television, water, wastewater, storm water, other liquids or chemicals, or traffic or other control systems.
- 46. *Unit Price Work*—Work to be paid for on the basis of unit prices.
- 47. *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; furnishing, installing, and incorporating all materials and equipment into such construction; and may include related services such as testing, start-up, and commissioning, all as required by the Contract Documents.

48. Work Change Directive—A written directive to Contractor issued on or after the Effective Date of the Contract, signed by Owner and recommended by Engineer, ordering an addition, deletion, or revision in the Work.

1.02 Terminology

- A. The words and terms discussed in the following paragraphs are not defined but, when used in the Bidding Requirements or Contract Documents, have the indicated 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 information in the Contract Documents and with the design concept of the 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 Article 10 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 15.03 or 15.04).
- 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. If the Contract Documents establish an obligation of Contractor with respect to specific services, materials, or equipment, but do not expressly use any of the four words "furnish," "install," "perform," or "provide," then Contractor shall furnish and install said services, materials, or equipment complete and ready for intended use.
- F. Unless stated otherwise in the Contract Documents, words or phrases that have a wellknown 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. *Bonds*: 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 Contractor's Insurance*: When Contractor delivers the executed counterparts of the Agreement to Owner, Contractor shall also deliver to Owner, with copies to each named insured and additional insured (as identified in the Supplementary Conditions or elsewhere in the Contract), the certificates and other evidence of insurance required to be provided by Contractor in accordance with Article 6.
- C. *Evidence of Owner's Insurance*: After receipt of the executed counterparts of the Agreement and all required bonds and insurance documentation, Owner shall promptly deliver to Contractor, with copies to each named insured and additional insured (as identified in the Supplementary Conditions or otherwise), the certificates and other evidence of insurance required to be provided by Owner under Article 6.
- 2.02 *Copies of Documents*
 - A. Owner shall furnish to Contractor four printed copies of the Contract (including one fully executed counterpart of the Agreement), and one copy in electronic portable document format (PDF). Additional printed copies will be furnished upon request at the cost of reproduction.
 - B. Owner shall maintain and safeguard at least one original printed record version of the Contract, including Drawings and Specifications signed and sealed by Engineer and other design professionals. Owner shall make such original printed record version of the Contract available to Contractor for review. Owner may delegate the responsibilities under this provision to Engineer.
- 2.03 Before Starting Construction
 - A. *Preliminary Schedules*: Within 10 days after the Effective Date of the Contract (or as otherwise specifically required by the Contract Documents), 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;
- 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.

2.04 *Preconstruction Conference; Designation of Authorized Representatives*

- 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 2.03.A, procedures for handling Shop Drawings, Samples, and other submittals, processing Applications for Payment, electronic or digital transmittals, and maintaining required records.
- B. At this conference Owner and Contractor each shall designate, in writing, a specific individual to act as its authorized representative with respect to the services and responsibilities under the Contract. Such individuals shall have the authority to transmit and receive information, render decisions relative to the Contract, and otherwise act on behalf of each respective party.
- 2.05 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 2.03.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 the component parts of the Work.

2.06 *Electronic Transmittals*

A. Except as otherwise stated elsewhere in the Contract, the Owner, Engineer, and Contractor may transmit, and shall accept, Project-related correspondence, text, data, documents, drawings, information, and graphics, including but not limited to Shop Drawings and other

submittals, in electronic media or digital format, either directly, or through access to a secure Project website.

- B. If the Contract does not establish protocols for electronic or digital transmittals, then Owner, Engineer, and Contractor shall jointly develop such protocols.
- C. When transmitting items in electronic media or digital format, the transmitting party makes no representations as to long term compatibility, usability, or readability of the items resulting from the recipient's use of software application packages, operating systems, or computer hardware differing from those used in the drafting or transmittal of the items, or from those established in applicable transmittal protocols.

ARTICLE 3 – DOCUMENTS: INTENT, REQUIREMENTS, 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.
- C. Unless otherwise stated in the Contract Documents, if there is a discrepancy between the electronic or digital versions of the Contract Documents (including any printed copies derived from such electronic or digital versions) and the printed record version, the printed record version shall govern.
- D. The Contract supersedes prior negotiations, representations, and agreements, whether written or oral.
- E. Engineer will issue clarifications and interpretations of the Contract Documents as provided herein.
- 3.02 *Reference Standards*
 - A. Standards Specifications, Codes, Laws and Regulations
 - 1. Reference in the Contract Documents to standard specifications, manuals, reference standards, 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, reference standard, code, or Laws or Regulations in effect at the time of opening of Bids (or on the Effective Date of the Contract 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, reference standard, 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 part of the Contract Documents prepared by or for Engineer. No such provision or instruction shall be effective to assign to Owner, Engineer, or any of their officers, directors, members, partners, employees, agents, consultants, or subcontractors, 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 part of the Contract Documents prepared by or for Engineer.

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3.03 Reporting and Resolving Discrepancies

- A. *Reporting Discrepancies*:
 - 1. Contractor's Verification of Figures and Field Measurements: Before undertaking each part of the Work, Contractor shall carefully study the Contract Documents, and check and verify pertinent figures and dimensions therein, particularly with respect to applicable field measurements. Contractor shall promptly report in writing to Engineer any conflict, error, ambiguity, or discrepancy that Contractor discovers, or has actual knowledge of, and shall not proceed with any Work affected thereby until the conflict, error, ambiguity, or discrepancy is resolved, by a clarification or interpretation by Engineer, or by an amendment or supplement to the Contract Documents issued pursuant to Paragraph 11.01.
 - 2. Contractor's Review of Contract Documents: If, before or during the performance of the Work, Contractor discovers any conflict, error, ambiguity, or discrepancy within the Contract Documents, or between the Contract Documents and (a) any applicable Law or Regulation, (b) actual field conditions, (c) any standard specification, manual, reference standard, or code, or (d) any instruction of any Supplier, then 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 7.15) until the conflict, error, ambiguity, or discrepancy is resolved, by a clarification or interpretation by Engineer, or by an amendment or supplement to the Contract Documents issued pursuant to Paragraph 11.01.
 - 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 had actual knowledge thereof.
- B. Resolving Discrepancies:
 - 1. Except as may be otherwise specifically stated in the Contract Documents, the provisions of the part of the Contract Documents prepared by or for Engineer shall take precedence in resolving any conflict, error, ambiguity, or discrepancy between such provisions of the Contract Documents and:
 - a. the provisions of any standard specification, manual, reference standard, or code, or the instruction of any Supplier (whether or not specifically incorporated by reference as a Contract Document); 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 *Requirements of the Contract Documents*

- A. During the performance of the Work and until final payment, Contractor and Owner shall submit to the Engineer all matters in question concerning the requirements of the Contract Documents (sometimes referred to as requests for information or interpretation—RFIs), or relating to the acceptability of the Work under the Contract Documents, as soon as possible after such matters arise. Engineer will be the initial interpreter of the requirements of the Contract Documents, and judge of the acceptability of the Work thereunder.
- B. Engineer will, with reasonable promptness, render a written clarification, interpretation, or decision on the issue submitted, or initiate an amendment or supplement to the Contract

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Documents. Engineer's written clarification, interpretation, or decision will be final and binding on Contractor, unless it appeals by submitting a Change Proposal, and on Owner, unless it appeals by filing a Claim.

- C. If a submitted matter in question concerns terms and conditions of the Contract Documents that do not involve (1) the performance or acceptability of the Work under the Contract Documents, (2) the design (as set forth in the Drawings, Specifications, or otherwise), or (3) other engineering or technical matters, then Engineer will promptly give written notice to Owner and Contractor that Engineer is unable to provide a decision or interpretation. If Owner and Contractor are unable to agree on resolution of such a matter in question, either party may pursue resolution as provided in Article 12.
- 3.05 *Reuse of Documents*
 - A. Contractor and its Subcontractors and Suppliers shall not:
 - 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 its consultants, including electronic media editions, or reuse any 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; or
 - 2. have or acquire any title or ownership rights in any other Contract Documents, reuse any such Contract Documents for any purpose without Owner's express written consent, or violate any copyrights pertaining to such Contract Documents.
 - B. The prohibitions 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.

ARTICLE 4 – COMMENCEMENT AND PROGRESS OF THE WORK

- 4.01 *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 Contract 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 Contract. 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 Contract, whichever date is earlier.
- 4.02 *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 such date.
- 4.03 *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

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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.

4.04 *Progress Schedule*

- A. Contractor shall adhere to the Progress Schedule established in accordance with Paragraph 2.05 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 2.05) proposed adjustments in the Progress Schedule that will not result in changing the Contract Times.
 - 2. Proposed adjustments in the Progress Schedule that will change the Contract Times shall be submitted in accordance with the requirements of Article 11.
- B. 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, or during any appeal process, except as permitted by Paragraph 16.04, or as Owner and Contractor may otherwise agree in writing.

4.05 Delays in Contractor's Progress

- A. If Owner, Engineer, 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 Times and Contract Price. 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.
- B. Contractor shall not be entitled to an adjustment in Contract Price or Contract Times for delay, disruption, or interference caused by or within the control of Contractor. Delay, disruption, and interference attributable to and within the control of a Subcontractor or Supplier shall be deemed to be within the control of Contractor.
- C. If Contractor's performance or progress is delayed, disrupted, or interfered with by unanticipated causes not the fault of and beyond the control of Owner, Contractor, and those for which they are responsible, then Contractor shall be entitled to an equitable adjustment in Contract Times. 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. Such an adjustment shall be Contractor's sole and exclusive remedy for the delays, disruption, and interference described in this paragraph. Causes of delay, disruption, or interference that may give rise to an adjustment in Contract Times under this paragraph include but are not limited to the following:
 - 1. severe and unavoidable natural catastrophes such as fires, floods, epidemics, and earthquakes;
 - 2. abnormal weather conditions;
 - acts or failures to act of utility owners (other than those performing other work at or adjacent to the Site by arrangement with the Owner, as contemplated in Article 8); and
 - 4. acts of war or terrorism.
- D. Delays, disruption, and interference to the performance or progress of the Work resulting from the existence of a differing subsurface or physical condition, an Underground Facility Standard General Conditions of the Construction Contract

that was not shown or indicated by the Contract Documents, or not shown or indicated with reasonable accuracy, and those resulting from Hazardous Environmental Conditions, are governed by Article 5.

- E. Paragraph 8.03 governs delays, disruption, and interference to the performance or progress of the Work resulting from the performance of certain other work at or adjacent to the Site.
- F. Contractor shall not be entitled to an adjustment in Contract Price or Contract Times for any delay, disruption, or interference if such delay is concurrent with a delay, disruption, or interference caused by or within the control of Contractor.
- G. Contractor must submit any Change Proposal seeking an adjustment in Contract Price or Contract Times under this paragraph within 30 days of the commencement of the delaying, disrupting, or interfering event.

ARTICLE 5 – AVAILABILITY OF LANDS; SUBSURFACE AND PHYSICAL CONDITIONS; HAZARDOUS ENVIRONMENTAL CONDITIONS

5.01 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.
- 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 permanent improvements are to be made 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.
- 5.02 Use of Site and Other Areas
 - A. Limitation on Use of Site and Other Areas:
 - 1. Contractor shall confine construction equipment, temporary construction facilities, the storage of materials and equipment, and the operations of workers to the Site, adjacent areas that Contractor has arranged to use through construction easements or otherwise, and other adjacent areas permitted by Laws and Regulations, and shall not unreasonably encumber the Site and such other adjacent areas with construction equipment or other materials or equipment. Contractor shall assume full responsibility for (a) damage to the Site; (b) damage to any such other adjacent areas used for Contractor's operations; (c) damage to any other adjacent land or areas; and (d) for injuries and losses sustained by the owners or occupants of any such land or areas; provided that such damage or injuries result from the performance of the Work or from other actions or conduct of the Contractor or those for which Contractor is responsible.
 - 2. If a damage or injury claim is made by the owner or occupant of any such land or area because of the performance of the Work, or because of other actions or conduct of the Contractor or those for which Contractor is responsible, Contractor shall (a) take immediate corrective or remedial action as required by Paragraph 7.12, or otherwise;

(b) promptly attempt to settle the claim as to all parties through negotiations with such owner or occupant, or otherwise resolve the claim by arbitration or other dispute resolution proceeding, or at law; and (c) to the fullest extent permitted by Laws and Regulations, indemnify and hold harmless Owner and Engineer, and the officers, directors, members, partners, employees, agents, consultants and subcontractors of each and any of them from and against any such claim, and against all 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 directly or indirectly, in whole or in part by, or based upon, Contractor's performance of the Work, or because of other actions or conduct of the Contractor or those for which Contractor is responsible.

- B. *Removal of Debris During Performance of the Work*: During the progress of the Work the Contractor shall keep the Site and other adjacent 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 and adjacent areas 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 of 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 structures or land to stresses or pressures that will endanger them.
- 5.03 Subsurface and Physical Conditions
 - A. *Reports and Drawings*: The Supplementary Conditions identify:
 - 1. those reports known to Owner of explorations and tests of subsurface conditions at or adjacent to the Site;
 - 2. those drawings known to Owner of physical conditions relating to existing surface or subsurface structures at the Site (except Underground Facilities); and
 - 3. Technical Data contained in such reports and drawings.
 - B. Reliance by Contractor on Technical Data Authorized: Contractor may rely upon the accuracy of the Technical Data expressly identified in the Supplementary Conditions with respect to such reports and drawings, but such reports and drawings are not Contract Documents. If no such express identification has been made, then Contractor may rely upon the accuracy of the Technical Data (as defined in Article 1) contained in any geotechnical or environmental report prepared for the Project and made available to Contractor. Except for such reliance on Technical Data, Contractor may not rely upon or make any claim against Owner or Engineer, or any of their officers, directors, members, partners, employees, agents, consultants, or subcontractors, 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

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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.

5.04 *Differing Subsurface or Physical Conditions*

- A. *Notice by Contractor*: If Contractor believes that any subsurface or physical condition that is uncovered or revealed at the Site 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 5.03 is materially inaccurate; or
 - 2. is of such a nature as to require a change in the Drawings or Specifications; 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 7.15), notify Owner and Engineer in writing about such condition. Contractor shall not further disturb such condition or perform any Work in connection therewith (except with respect to an emergency) until receipt of a written statement permitting Contractor to do so.

- B. *Engineer's Review*: After receipt of written notice as required by the preceding paragraph, Engineer will promptly review the subsurface or physical condition in question; determine the necessity of Owner's obtaining additional exploration or tests with respect to the condition; conclude whether the condition falls within any one or more of the differing site condition categories in Paragraph 5.04.A above; obtain any pertinent cost or schedule information from Contractor; prepare recommendations to Owner regarding the Contractor's resumption of Work in connection with the subsurface or physical condition in question and the need for any change in the Drawings or Specifications; and advise Owner in writing of Engineer's findings, conclusions, and recommendations.
- C. Owner's Statement to Contractor Regarding Site Condition: After receipt of Engineer's written findings, conclusions, and recommendations, Owner shall issue a written statement to Contractor (with a copy to Engineer) regarding the subsurface or physical condition in question, addressing the resumption of Work in connection with such condition, indicating whether any change in the Drawings or Specifications will be made, and adopting or rejecting Engineer's written findings, conclusions, and recommendations, in whole or in part.
- D. Possible Price and Times Adjustments:
 - 1. Contractor shall be entitled to an equitable adjustment in Contract Price or Contract Times, or both, to the extent that the existence of a differing subsurface or physical condition, or any related delay, disruption, or interference, 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 fall within any one or more of the categories described in Paragraph 5.04.A;
- 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 Paragraph 13.03; and,
- c. 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.
- 2. Contractor shall not be entitled to any adjustment in the Contract Price or Contract Times with respect to a subsurface or physical condition if:
 - a. Contractor knew of the existence of such condition at the time Contractor made a 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 otherwise; or
 - b. the existence of such condition reasonably could have been discovered or revealed as a result of any examination, investigation, exploration, test, or study of the Site and contiguous areas expressly required by the Bidding Requirements or Contract Documents to be conducted by or for Contractor prior to Contractor's making such commitment; or
 - c. Contractor failed to give the written notice as required by Paragraph 5.04.A.
- 3. If Owner and Contractor agree regarding Contractor's entitlement to and the amount or extent of any adjustment in the Contract Price or Contract Times, or both, then any such adjustment shall be set forth in a Change Order.
- 4. Contractor may submit a Change Proposal regarding its entitlement to or the amount or extent of any adjustment in the Contract Price or Contract Times, or both, no later than 30 days after Owner's issuance of the Owner's written statement to Contractor regarding the subsurface or physical condition in question.

5.05 Underground Facilities

- A. *Contractor's Responsibilities*: The information and data shown or indicated in the Contract Documents with respect to existing Underground Facilities at or adjacent 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 do not warrant or guarantee the accuracy or completeness of any such information or data provided by others; 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 information and data regarding existing Underground Facilities at the Site;
 - b. locating all Underground Facilities shown or indicated in the Contract Documents as being at the Site;

- c. coordination of the Work with the owners (including Owner) of such Underground Facilities, during construction; and
- d. the safety and protection of all existing Underground Facilities at the Site, and repairing any damage thereto resulting from the Work.
- B. Notice by Contractor: If Contractor believes that an Underground Facility that is uncovered or revealed at the Site was not shown or indicated in the Contract Documents, or was not shown or indicated with reasonable accuracy, then 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 7.15), identify the owner of such Underground Facility and give written notice to that owner and to Owner and Engineer.
- C. Engineer's Review: Engineer will promptly review the Underground Facility and conclude whether such Underground Facility was not shown or indicated in the Contract Documents, or was not shown or indicated with reasonable accuracy; obtain any pertinent cost or schedule information from Contractor; prepare recommendations to Owner regarding the Contractor's resumption of Work in connection with the Underground Facility in question; determine the extent, if any, to which a change is required in the Drawings or Specifications to reflect and document the consequences of the existence or location of the Underground Facility; and advise Owner in writing of Engineer's findings, conclusions, and recommendations. During such time, Contractor shall be responsible for the safety and protection of such Underground Facility.
- D. Owner's Statement to Contractor Regarding Underground Facility: After receipt of Engineer's written findings, conclusions, and recommendations, Owner shall issue a written statement to Contractor (with a copy to Engineer) regarding the Underground Facility in question, addressing the resumption of Work in connection with such Underground Facility, indicating whether any change in the Drawings or Specifications will be made, and adopting or rejecting Engineer's written findings, conclusions, and recommendations in whole or in part.
- E. *Possible Price and Times Adjustments*:
 - 1. Contractor shall be entitled to an equitable adjustment in the Contract Price or Contract Times, or both, to the extent that any existing Underground Facility at the Site that was not shown or indicated in the Contract Documents, or was not shown or indicated with reasonable accuracy, or any related delay, disruption, or interference, causes an increase or decrease in Contractor's cost of, or time required for, performance of the Work; subject, however, to the following:
 - a. Contractor did not know of and could not reasonably have been expected to be aware of or to have anticipated the existence or actual location of the Underground Facility in question;
 - 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 Paragraph 13.03;
 - c. 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; and
 - d. Contractor gave the notice required in Paragraph 5.05.B.

- 2. If Owner and Contractor agree regarding Contractor's entitlement to and the amount or extent of any adjustment in the Contract Price or Contract Times, or both, then any such adjustment shall be set forth in a Change Order.
- 3. Contractor may submit a Change Proposal regarding its entitlement to or the amount or extent of any adjustment in the Contract Price or Contract Times, or both, no later than 30 days after Owner's issuance of the Owner's written statement to Contractor regarding the Underground Facility in question.
- 5.06 Hazardous Environmental Conditions at Site
 - A. *Reports and Drawings*: The Supplementary Conditions identify:
 - 1. those reports and drawings known to Owner relating to Hazardous Environmental Conditions that have been identified at or adjacent to the Site; and
 - 2. Technical Data contained in such reports and drawings.
 - B. Reliance by Contractor on Technical Data Authorized: Contractor may rely upon the accuracy of the Technical Data expressly identified in the Supplementary Conditions with respect to such reports and drawings, but such reports and drawings are not Contract Documents. If no such express identification has been made, then Contractor may rely on the accuracy of the Technical Data (as defined in Article 1) contained in any geotechnical or environmental report prepared for the Project and made available to Contractor. Except for such reliance on Technical Data, Contractor may not rely upon or make any claim against Owner or Engineer, or any of their officers, directors, members, partners, employees, agents, consultants, or subcontractors 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 removing or remediating any Hazardous Environmental Condition encountered, uncovered, or revealed at the Site unless such removal or remediation is expressly identified in the Contract Documents to be within the scope of the Work.
 - D. Contractor shall be responsible for controlling, containing, and duly removing all Constituents of Concern brought to the Site by Contractor, Subcontractors, Suppliers, or anyone else for whom Contractor is responsible, and for any associated costs; and for the costs of removing and remediating any Hazardous Environmental Condition created by the presence of any such Constituents of Concern.
 - E. If Contractor encounters, uncovers, or reveals a Hazardous Environmental Condition whose removal or remediation is not expressly identified in the Contract Documents as being within the scope of the Work, or if Contractor or anyone for whom Contractor is responsible creates a Hazardous Environmental Condition, then Contractor shall immediately: (1) secure or otherwise isolate such condition; (2) stop all Work in connection

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with such condition and in any area affected thereby (except in an emergency as required by Paragraph 7.15); and (3) 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. Promptly after consulting with Engineer, Owner shall take such actions as are necessary to permit Owner to timely obtain required permits and provide Contractor the written notice required by Paragraph 5.06.F. If Contractor or anyone for whom Contractor is responsible created the Hazardous Environmental Condition in question, then Owner may remove and remediate the Hazardous Environmental Condition, and impose a set-off against payments to account for the associated costs.

- F. Contractor shall not resume Work in connection with such Hazardous Environmental Condition or in any affected area until after Owner has obtained any required permits related thereto, and delivered written notice to Contractor either (1) specifying that such condition and any affected area is or has been rendered safe for the resumption of Work, or (2) specifying any special conditions under which such Work may be resumed safely.
- G. 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, then within 30 days of Owner's written notice regarding the resumption of Work, Contractor may submit a Change Proposal, or Owner may impose a set-off.
- H. 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, following the contractual change procedures in Article 11. Owner may have such deleted portion of the Work performed by Owner's own forces or others in accordance with Article 8.
- I. To the fullest extent permitted by Laws and Regulations, Owner shall indemnify and hold harmless Contractor, Subcontractors, and Engineer, and the officers, directors, members, 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 (1) was not shown or indicated in the Drawings, Specifications, or other Contract Documents, identified as Technical Data entitled to limited reliance pursuant to Paragraph 5.06.B, or identified in the Contract Documents to be included within the scope of the Work, and (2) was not created by Contractor or by anyone for whom Contractor is responsible. Nothing in this Paragraph 5.06.H shall obligate Owner to indemnify any individual or entity from and against the consequences of that individual's or entity's own negligence.
- J. To the fullest extent permitted by Laws and Regulations, Contractor shall indemnify and hold harmless Owner and Engineer, and the officers, directors, members, 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 failure to control, contain, or remove a Constituent of Concern brought to the Site by Contractor or by anyone for whom Contractor is responsible, or to a Hazardous Environmental Condition

created by Contractor or by anyone for whom Contractor is responsible. Nothing in this Paragraph 5.06.J shall obligate Contractor to indemnify any individual or entity from and against the consequences of that individual's or entity's own negligence.

K. The provisions of Paragraphs 5.03, 5.04, and 5.05 do not apply to the presence of Constituents of Concern or to a Hazardous Environmental Condition uncovered or revealed at the Site.

ARTICLE 6 – BONDS AND INSURANCE

6.01 *Performance, Payment, and Other Bonds*

- A. Contractor shall furnish a performance bond and a payment bond, 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. 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 15.08, whichever is later, except as provided otherwise by Laws or Regulations, the Supplementary Conditions, or other specific provisions of the Contract. Contractor shall also furnish such other bonds as are required by the Supplementary Conditions or other specific provisions of the Contract.
- B. All bonds shall be in the form prescribed by the Contract except as provided otherwise by Laws or Regulations, and shall be executed by such sureties as are named in "Companies Holding Certificates of Authority as Acceptable Sureties on Federal Bonds and as Acceptable Reinsuring Companies" as published in Circular 570 (as amended and supplemented) by the Financial Management Service, Surety Bond Branch, U.S. Department of the Treasury. A bond signed by an agent or attorney-in-fact must be accompanied by a certified copy of that individual's authority to bind the surety. The evidence of authority shall show that it is effective on the date the agent or attorney-in-fact signed the accompanying bond.
- C. Contractor shall obtain the required bonds from surety companies that are duly licensed or authorized in the jurisdiction in which the Project is located to issue bonds in the required amounts.
- D. If the surety on a bond furnished by Contractor is declared bankrupt or becomes insolvent, or its right to do business is terminated in any state or jurisdiction where any part of the Project is located, or the surety ceases to meet the requirements above, then 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 bond and surety requirements above.
- E. If Contractor has failed to obtain a required bond, Owner may exclude the Contractor from the Site and exercise Owner's termination rights under Article 16.
- F. Upon request, Owner shall provide a copy of the payment bond to any Subcontractor, Supplier, or other person or entity claiming to have furnished labor or materials used in the performance of the Work.

6.02 Insurance—General Provisions

A. Owner and Contractor shall obtain and maintain insurance as required in this Article and in the Supplementary Conditions.

- B. All insurance required by the Contract to be purchased and maintained by Owner or Contractor shall be obtained from insurance companies that are duly licensed or authorized, in the state or jurisdiction in which the Project is located, to issue insurance policies for the required limits and coverages. Unless a different standard is indicated in the Supplementary Conditions, all companies that provide insurance policies required under this Contract shall have an A.M. Best rating of A-VII or better.
- C. Contractor shall deliver to Owner, with copies to each named insured and additional insured (as identified in this Article, in the Supplementary Conditions, or elsewhere in the Contract), certificates of insurance establishing that Contractor has obtained and is maintaining the policies, coverages, and endorsements required by the Contract. Upon request by Owner or any other insured, Contractor shall also furnish other evidence of such required insurance, including but not limited to copies of policies and endorsements, and documentation of applicable self-insured retentions and deductibles. Contractor may block out (redact) any confidential premium or pricing information contained in any policy or endorsement furnished under this provision.
- D. Owner shall deliver to Contractor, with copies to each named insured and additional insured (as identified in this Article, the Supplementary Conditions, or elsewhere in the Contract), certificates of insurance establishing that Owner has obtained and is maintaining the policies, coverages, and endorsements required of Owner by the Contract (if any). Upon request by Contractor or any other insured, Owner shall also provide other evidence of such required insurance (if any), including but not limited to copies of policies and endorsements, and documentation of applicable self-insured retentions and deductibles. Owner may block out (redact) any confidential premium or pricing information contained in any policy or endorsement furnished under this provision.
- E. Failure of Owner or Contractor to demand such certificates or other evidence of the other party's full compliance with these insurance requirements, or failure of Owner or Contractor to identify a deficiency in compliance from the evidence provided, shall not be construed as a waiver of the other party's obligation to obtain and maintain such insurance.
- F. If either party does not purchase or maintain all of the insurance required of such party by the Contract, 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.
- G. If Contractor has failed to obtain and maintain required insurance, Owner may exclude the Contractor from the Site, impose an appropriate set-off against payment, and exercise Owner's termination rights under Article 16.
- H. Without prejudice to any other right or remedy, if a party has failed to obtain required insurance, the other party may elect to obtain equivalent insurance to protect such other party's interests at the expense of the party who was required to provide such coverage, and the Contract Price shall be adjusted accordingly.
- I. Owner does not represent that insurance coverage and limits established in this Contract necessarily will be adequate to protect Contractor or Contractor's interests.
- J. The insurance and insurance limits required herein shall not be deemed as a limitation on Contractor's liability under the indemnities granted to Owner and other individuals and entities in the Contract.

6.03 Contractor's Insurance

- A. *Workers' Compensation*: Contractor shall purchase and maintain workers' compensation and employer's liability insurance for:
 - 1. claims under workers' compensation, disability benefits, and other similar employee benefit acts.
 - 2. United States Longshoreman and Harbor Workers' Compensation Act and Jones Act coverage (if applicable).
 - 3. claims for damages because of bodily injury, occupational sickness or disease, or death of Contractor's employees (by stop-gap endorsement in monopolist worker's compensation states).
 - 4. Foreign voluntary worker compensation (if applicable).
- B. *Commercial General Liability—Claims Covered*: Contractor shall purchase and maintain commercial general liability insurance, covering all operations by or on behalf of Contractor, on an occurrence basis, against:
 - 1. claims for damages because of bodily injury, sickness or disease, or death of any person other than Contractor's employees.
 - 2. claims for damages insured by reasonably available personal injury liability coverage.
 - 3. 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.
- C. *Commercial General Liability—Form and Content*: Contractor's commercial liability policy shall be written on a 1996 (or later) ISO commercial general liability form (occurrence form) and include the following coverages and endorsements:
 - 1. Products and completed operations coverage:
 - a. Such insurance shall be maintained for three years after final payment.
 - b. Contractor shall furnish Owner and each other additional insured (as identified in the Supplementary Conditions or elsewhere in the Contract) evidence of continuation of such insurance at final payment and three years thereafter.
 - 2. Blanket contractual liability coverage, to the extent permitted by law, including but not limited to coverage of Contractor's contractual indemnity obligations in Paragraph 7.18.
 - 3. Broad form property damage coverage.
 - 4. Severability of interest.
 - 5. Underground, explosion, and collapse coverage.
 - 6. Personal injury coverage.
 - 7. Additional insured endorsements that include both ongoing operations and products and completed operations coverage through ISO Endorsements CG 20 10 10 01 and CG 20 37 10 01 (together); or CG 20 10 07 04 and CG 20 37 07 04 (together); or their equivalent.

- 8. For design professional additional insureds, ISO Endorsement CG 20 32 07 04, "Additional Insured—Engineers, Architects or Surveyors Not Engaged by the Named Insured" or its equivalent.
- D. Automobile liability: Contractor shall purchase and maintain automobile liability insurance against 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. The automobile liability policy shall be written on an occurrence basis.
- E. Umbrella or excess liability: Contractor shall purchase and maintain umbrella or excess liability insurance written over the underlying employer's liability, commercial general liability, and automobile liability insurance described in the paragraphs above. Subject to industry-standard exclusions, the coverage afforded shall follow form as to each and every one of the underlying policies.
- F. *Contractor's pollution liability insurance*: Contractor shall purchase and maintain a policy covering third-party injury and property damage claims, including clean-up costs, as a result of pollution conditions arising from Contractor's operations and completed operations. This insurance shall be maintained for no less than three years after final completion.
- G. Additional insureds: The Contractor's commercial general liability, automobile liability, umbrella or excess, and pollution liability policies shall include and list as additional insureds Owner and Engineer, and any individuals or entities identified in the Supplementary Conditions; include coverage for the respective officers, directors, members, 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 (including as applicable those arising from both ongoing and completed operations) on a non-contributory basis. Contractor shall obtain all necessary endorsements to support these requirements.
- H. *Contractor's professional liability insurance*: If Contractor will provide or furnish professional services under this Contract, through a delegation of professional design services or otherwise, then Contractor shall be responsible for purchasing and maintaining applicable professional liability insurance. This insurance shall provide protection against claims arising out of performance of professional design or related services, and caused by a negligent error, omission, or act for which the insured party is legally liable. It shall be maintained throughout the duration of the Contract and for a minimum of two years after Substantial Completion. If such professional design services are performed by a Subcontractor, and not by Contractor itself, then the requirements of this paragraph may be satisfied through the purchasing and maintenance of such insurance by such Subcontractor.
- I. *General provisions*: The policies of insurance required by this Paragraph 6.03 shall:
 - 1. include at least the specific coverages provided in this Article.
 - 2. be written for not less than the limits of liability provided in this Article and in the Supplementary Conditions, or required by Laws or Regulations, whichever is greater.
 - 3. contain a provision or endorsement that the coverage afforded will not be canceled, materially changed, or renewal refused until at least 10 days prior written notice has been given to Contractor. Within three days of receipt of any such written notice, Contractor shall provide a copy of the notice to Owner, Engineer, and each other insured under the policy.

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- 4. remain in effect at least until final payment (and longer if expressly required in this Article) and at all times thereafter when Contractor may be correcting, removing, or replacing defective Work as a warranty or correction obligation, or otherwise, or returning to the Site to conduct other tasks arising from the Contract Documents.
- 5. be appropriate for the Work being performed and provide protection from claims that 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.
- J. The coverage requirements for specific policies of insurance must be met by such policies, and not by reference to excess or umbrella insurance provided in other policies.

6.04 Owner's Liability Insurance

- A. In addition to the insurance required to be provided by Contractor under Paragraph 6.03, 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.
- B. Owner's liability policies, if any, operate separately and independently from policies required to be provided by Contractor, and Contractor cannot rely upon Owner's liability policies for any of Contractor's obligations to the Owner, Engineer, or third parties.

6.05 Property Insurance

- A. *Builder's Risk*: Unless otherwise provided in the Supplementary Conditions, Contractor shall purchase and maintain builder's risk insurance upon the Work on a completed value basis, in the amount of the full insurable 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:
 - include the Owner and Contractor as named insureds, and all Subcontractors, and any individuals or entities required by the Supplementary Conditions to be insured under such builder's risk policy, as insureds or named insureds. For purposes of the remainder of this Paragraph 6.05, Paragraphs 6.06 and 6.07, and any corresponding Supplementary Conditions, the parties required to be insured shall collectively be referred to as "insureds."
 - 2. be written on a builder's risk "all risk" policy form that shall at least include insurance for physical loss or damage to the Work, temporary buildings, falsework, and materials and equipment in transit, and shall insure against at least the following perils or causes of loss: fire; lightning; windstorm; riot; civil commotion; terrorism; vehicle impact; aircraft; smoke; theft; vandalism and malicious mischief; mechanical breakdown, boiler explosion, and artificially generated electric current; earthquake; volcanic activity, and other earth movement; flood; collapse; explosion; debris removal; demolition occasioned by enforcement of Laws and Regulations; water damage (other than that caused by flood); and such other perils or causes of loss as may be specifically required by the Supplementary Conditions. If insurance against mechanical breakdown, boiler explosion, and artificially generated electric current; earthquake; volcanic activity, and other earth movement; or flood, are not commercially available

under builder's risk policies, by endorsement or otherwise, such insurance may be provided through other insurance policies acceptable to Owner and Contractor.

- 3. cover, as insured property, at least the following: (a) the Work and all materials, supplies, machinery, apparatus, equipment, fixtures, and other property of a similar nature that are to be incorporated into or used in the preparation, fabrication, construction, erection, or completion of the Work, including Owner-furnished or assigned property; (b) spare parts inventory required within the scope of the Contract; and (c) temporary works which are not intended to form part of the permanent constructed Work but which are intended to provide working access to the Site, or to the Work under construction, or which are intended to provide temporary support for the Work under construction, including scaffolding, form work, fences, shoring, falsework, and temporary structures.
- 4. cover expenses incurred in the repair or replacement of any insured property (including but not limited to fees and charges of engineers and architects).
- 5. extend to cover damage or loss to insured property while in temporary storage at the Site or in a storage location outside the Site (but not including property stored at the premises of a manufacturer or Supplier).
- 6. extend to cover damage or loss to insured property while in transit.
- 7. allow for partial occupation or use of the Work by Owner, such that those portions of the Work that are not yet occupied or used by Owner shall remain covered by the builder's risk insurance.
- 8. allow for the waiver of the insurer's subrogation rights, as set forth below.
- 9. provide primary coverage for all losses and damages caused by the perils or causes of loss covered.
- 10. not include a co-insurance clause.
- 11. include an exception for ensuing losses from physical damage or loss with respect to any defective workmanship, design, or materials exclusions.
- 12. include performance/hot testing and start-up.
- 13. be maintained in effect, subject to the provisions herein regarding Substantial Completion and partial occupancy or use of the Work by Owner, until the Work is complete.
- B. Notice of Cancellation or Change: All the policies of insurance (and the certificates or other evidence thereof) required to be purchased and maintained in accordance with this Paragraph 6.05 will contain a provision or endorsement that the coverage afforded will not be canceled or materially changed or renewal refused until at least 10 days prior written notice has been given to the purchasing policyholder. Within three days of receipt of any such written notice, the purchasing policyholder shall provide a copy of the notice to each other insured.
- C. *Deductibles*: The purchaser of any required builder's risk or property insurance shall pay for costs not covered because of the application of a policy deductible.
- D. Partial Occupancy or Use by Owner: If Owner will occupy or use a portion or portions of the Work prior to Substantial Completion of all the Work as provided in Paragraph 15.04, then Owner (directly, if it is the purchaser of the builder's risk policy, or through Contractor) will Standard General Conditions of the Construction Contract

provide notice of such occupancy or use to the builder's risk insurer. The builder's risk insurance shall not be canceled or permitted to lapse on account of any such partial use or occupancy; rather, those portions of the Work that are occupied or used by Owner may come off the builder's risk policy, while those portions of the Work not yet occupied or used by Owner shall remain covered by the builder's risk insurance.

- E. *Additional Insurance*: If Contractor elects to obtain other special insurance to be included in or supplement the builder's risk or property insurance policies provided under this Paragraph 6.05, it may do so at Contractor's expense.
- F. Insurance of Other Property: If the express insurance provisions of the Contract do not require or address the insurance of a property item or interest, such as tools, construction equipment, or other personal property owned by Contractor, a Subcontractor, or an employee of Contractor or a Subcontractor, then the entity or individual owning such property item will be responsible for deciding whether to insure it, and if so in what amount.

6.06 Waiver of Rights

- All policies purchased in accordance with Paragraph 6.05, expressly including the builder's Α. risk policy, 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 insureds thereunder, or against Engineer or its consultants, or their officers, directors, members, partners, employees, agents, consultants, or subcontractors. Owner and Contractor waive all rights against each other and the respective officers, directors, members, 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 Engineer, its consultants, all Subcontractors, all individuals or entities identified in the Supplementary Conditions as insureds, and the officers, directors, members, 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 or Contractor as trustee or fiduciary, or otherwise payable under any policy so issued.
- B. Owner waives all rights against Contractor, Subcontractors, and Engineer, and the officers, directors, members, 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 occupancy or use pursuant to Paragraph 15.04, after Substantial Completion pursuant to Paragraph 15.03, or after final payment pursuant to Paragraph 15.06.
- C. Any insurance policy maintained by Owner covering any loss, damage or consequential loss referred to in Paragraph 6.06.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, or the officers, directors, members, partners, employees, agents, consultants, or subcontractors of each and any of them.

D. Contractor shall be responsible for assuring that the agreement under which a Subcontractor performs a portion of the Work contains provisions whereby the Subcontractor waives all rights against Owner, Contractor, all individuals or entities identified in the Supplementary Conditions as insureds, the Engineer and its consultants, and the officers, directors, members, 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 builder's risk insurance and any other property insurance applicable to the Work.

6.07 Receipt and Application of Property Insurance Proceeds

- A. Any insured loss under the builder's risk and other policies of insurance required by Paragraph 6.05 will be adjusted and settled with the named insured that purchased the policy. Such named insured shall act as fiduciary for the other insureds, and give notice to such other insureds that adjustment and settlement of a claim is in progress. Any other insured may state its position regarding a claim for insured loss in writing within 15 days after notice of such claim.
- B. Proceeds for such insured losses may be made payable by the insurer either jointly to multiple insureds, or to the named insured that purchased the policy in its own right and as fiduciary for other insureds, subject to the requirements of any applicable mortgage clause. A named insured receiving insurance proceeds under the builder's risk and other policies of insurance required by Paragraph 6.05 shall distribute such proceeds in accordance with such agreement as the parties in interest may reach, or as otherwise required under the dispute resolution provisions of this Contract or applicable Laws and Regulations.
- C. If no other special agreement is reached, the damaged Work shall be repaired or replaced, the money so received applied on account thereof, and the Work and the cost thereof covered by Change Order, if needed.

ARTICLE 7 – CONTRACTOR'S RESPONSIBILITIES

- 7.01 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.
 - 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.

7.02 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.

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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, Monday through Friday. Contractor will not perform Work on a Saturday, Sunday, or any legal holiday. Contractor may perform Work outside regular working hours or on Saturdays, Sundays, or legal holidays only with Owner's written consent, which will not be unreasonably withheld.

7.03 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, whether or not such items are specifically called for in the Contract Documents.
- B. All materials and equipment incorporated into the Work 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.
- 7.04 "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 Contract Price has been based upon Contractor furnishing such item as specified. The specification or description of such an item 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 is permitted, Contractor may request that Engineer authorize the use of other items of material or equipment, or items from other proposed suppliers under the circumstances described below.
 - 1. If Engineer in its sole discretion determines that 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, Engineer shall deem it an "or equal" item. For the purposes of this paragraph, 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;
 - 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
- 4) it is not objectionable to Owner.
- b. Contractor certifies that, if approved and incorporated into the Work:
 - 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.
- B. *Contractor's Expense*: Contractor shall provide all data in support of any proposed "or equal" item at Contractor's expense.
- C. Engineer's Evaluation and Determination: Engineer will be allowed a reasonable time to evaluate each "or-equal" request. Engineer may require Contractor to furnish additional data about the proposed "or-equal" item. Engineer will be the sole judge of acceptability. No "or-equal" item will be ordered, furnished, installed, or utilized until Engineer's review is complete and Engineer determines that the proposed item is an "or-equal", which will be evidenced by an approved Shop Drawing or other written communication. Engineer will advise Contractor in writing of any negative determination.
- D. *Effect of Engineer's Determination*: Neither approval nor denial of an "or-equal" request shall result in any change in Contract Price. The Engineer's denial of an "or-equal" request shall be final and binding, and may not be reversed through an appeal under any provision of the Contract Documents.
- E. *Treatment as a Substitution Request*: If Engineer determines that an item of material or equipment proposed by Contractor does not qualify as an "or-equal" item, Contractor may request that Engineer considered the proposed item as a substitute pursuant to Paragraph 7.05.
- 7.05 Substitutes
 - A. Unless the specification or description of an item of material or equipment required to be furnished under the Contract Documents contains or is followed by words reading that no substitution is permitted, Contractor may request that Engineer authorize the use of other items of material or equipment under the circumstances described below. To the extent possible such requests shall be made before commencement of related construction at the Site.
 - 1. Contractor shall submit sufficient information as provided below to allow Engineer to determine if the item of material or equipment proposed is functionally equivalent to that named and an acceptable substitute therefor. Engineer will not accept requests for review of proposed substitute items of material or equipment from anyone other than Contractor.
 - 2. The requirements for review by Engineer will be as set forth in Paragraph 7.05.B, as supplemented by the Specifications, and as Engineer may decide is appropriate under the circumstances.
 - 3. 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:

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- a. shall certify that the proposed substitute item will:
 - 1) perform adequately the functions and achieve the results called for by the general design,
 - 2) be similar in substance to that specified, and
 - 3) be suited to the same use as that specified.
- b. will state:
 - 1) the extent, if any, to which the use of the proposed substitute item will necessitate a change in Contract Times,
 - 2) whether 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
 - 3) whether incorporation or use of the proposed substitute item in connection with the Work is subject to payment of any license fee or royalty.
- c. will identify:
 - 1) all variations of the proposed substitute item from that specified, and
 - 2) available engineering, sales, maintenance, repair, and replacement services.
- d. shall contain an itemized estimate of all costs or credits that will result directly or indirectly from use of such substitute item, including but not limited to changes in Contract Price, shared savings, costs of redesign, and claims of other contractors affected by any resulting change.
- B. *Engineer's Evaluation and Determination:* Engineer will be allowed a reasonable time to evaluate each substitute request, and to obtain comments and direction from Owner. Engineer may require Contractor to furnish additional data about the proposed substitute item. Engineer will be the sole judge of acceptability. No substitute will be ordered, furnished, installed, or utilized until Engineer's review is complete and Engineer determines that the proposed item is an acceptable substitute. Engineer's determination will be evidenced by a Field Order or a proposed Change Order accounting for the substitution itself and all related impacts, including changes in Contract Price or Contract Times. Engineer will advise Contractor in writing of any negative determination.
- C. *Special Guarantee*: Owner may require Contractor to furnish at Contractor's expense a special performance guarantee or other surety with respect to any substitute.
- D. Reimbursement of Engineer's Cost: Engineer will record Engineer's costs in evaluating a substitute proposed or submitted by Contractor. Whether or not Engineer approves a substitute so proposed or submitted by Contractor, Contractor shall reimburse Owner for the reasonable charges of Engineer for evaluating each such proposed substitute. Contractor shall also reimburse Owner for the reasonable 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.
- E. *Contractor's Expense*: Contractor shall provide all data in support of any proposed substitute at Contractor's expense.

F. *Effect of Engineer's Determination*: If Engineer approves the substitution request, Contractor shall execute the proposed Change Order and proceed with the substitution. The Engineer's denial of a substitution request shall be final and binding, and may not be reversed through an appeal under any provision of the Contract Documents. Contractor may challenge the scope of reimbursement costs imposed under Paragraph 7.05.D, by timely submittal of a Change Proposal.

7.06 Concerning Subcontractors, Suppliers, and Others

- A. Contractor may retain Subcontractors and Suppliers for the performance of parts of the Work. Such Subcontractors and Suppliers must be acceptable to Owner.
- B. Contractor shall retain specific Subcontractors, Suppliers, or other individuals or entities for the performance of designated parts of the Work if required by the Contract to do so.
- C. Subsequent to the submittal of Contractor's Bid or final negotiation of the terms of the Contract, Owner may not require Contractor to retain any Subcontractor, Supplier, or other individual or entity to furnish or perform any of the Work against which Contractor has reasonable objection.
- D. Prior to entry into any binding subcontract or purchase order, Contractor shall submit to Owner the identity of the proposed Subcontractor or Supplier (unless Owner has already deemed such proposed Subcontractor or Supplier acceptable, during the bidding process or otherwise). Such proposed Subcontractor or Supplier shall be deemed acceptable to Owner unless Owner raises a substantive, reasonable objection within five days.
- E. Owner may require the replacement of any Subcontractor, Supplier, or other individual or entity retained by Contractor to perform any part of the Work. Owner also may require Contractor to retain specific replacements; provided, however, that Owner may not require a replacement to which Contractor has a reasonable objection. If Contractor has submitted the identity of certain Subcontractors, Suppliers, or other individuals or entities for acceptance by Owner, and Owner has accepted it (either in writing or by failing to make written objection thereto), then Owner may subsequently revoke the acceptance of any such Subcontractor, Supplier, or other individual or entity so identified solely on the basis of substantive, reasonable objection after due investigation. Contractor shall submit an acceptable replacement for the rejected Subcontractor, Supplier, or other individual or entity.
- F. If Owner requires the replacement of any Subcontractor, Supplier, or other individual or entity retained by Contractor to perform any part of the Work, then Contractor shall be entitled to an adjustment in Contract Price or Contract Times, or both, with respect to the replacement; and Contractor shall initiate a Change Proposal for such adjustment within 30 days of Owner's requirement of replacement.
- G. 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 the right of Owner to the completion of the Work in accordance with the Contract Documents.
- H. On a monthly basis Contractor shall submit to Engineer a complete list of all Subcontractors and Suppliers having a direct contract with Contractor, and of all other Subcontractors and Suppliers known to Contractor at the time of submittal.

- I. 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.
- J. Contractor shall be solely responsible for scheduling and coordinating the work of Subcontractors, Suppliers, and all other individuals or entities performing or furnishing any of the Work.
- K. Contractor shall restrict all Subcontractors, Suppliers, and such other individuals or entities performing or furnishing any of the Work from communicating with Engineer or Owner, except through Contractor or in case of an emergency, or as otherwise expressly allowed herein.
- L. 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.
- M. All Work performed for Contractor by a Subcontractor or Supplier shall be pursuant to an appropriate contractual agreement that specifically binds the Subcontractor or Supplier to the applicable terms and conditions of the Contract Documents for the benefit of Owner and Engineer.
- N. Owner may furnish to any Subcontractor or Supplier, to the extent practicable, information about amounts paid to Contractor on account of Work performed for Contractor by the particular Subcontractor or Supplier.
- O. 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 create any obligation on the part of Owner or Engineer to pay or to see to the payment of any money due any such Subcontractor, Supplier, or other individual or entity except as may otherwise be required by Laws and Regulations.

7.07 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, Owner shall indemnify and hold harmless Contractor, and its officers, directors, members, partners, employees, agents, consultants, and subcontractors 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 specified in the Contract Documents, but not

identified as being subject to payment of any license fee or royalty to others required by patent rights or copyrights.

C. To the fullest extent permitted by Laws and Regulations, Contractor shall indemnify and hold harmless Owner and Engineer, and the officers, directors, members, 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.

7.08 Permits

A. Unless otherwise provided in the Contract Documents, 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 the submission of Contractor's Bid (or when Contractor became bound under a negotiated contract). Owner shall pay all charges of utility owners for connections for providing permanent service to the Work.

7.09 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.

7.10 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 or takes any other action knowing or having reason to know that it is contrary to Laws or Regulations, Contractor shall bear all resulting costs and losses, and shall indemnify and hold harmless Owner and Engineer, and the officers, directors, members, 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 such Work or other action. It shall not be Contractor's responsibility to make certain that the Work described in the Contract Documents is in accordance with Laws and Regulations, but this shall not relieve Contractor of Contractor's obligations under Paragraph 3.03.
- C. Owner or Contractor may give notice to the other party of any changes after the submission of Contractor's Bid (or after the date when Contractor became bound under a negotiated contract) in Laws or Regulations having an effect on the cost or time of performance of the Work, including but not limited to changes in Laws or Regulations having an effect on procuring permits and on sales, use, value-added, consumption, and other similar taxes. If Owner and Contractor are unable to agree on entitlement to or on the amount or extent, if any, of any adjustment in Contract Price or Contract Times

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resulting from such changes, then within 30 days of such notice Contractor may submit a Change Proposal, or Owner may initiate a Claim.

- 7.11 *Record Documents*
 - A. Contractor shall maintain in a safe place at the Site one printed record copy of all Drawings, Specifications, Addenda, Change Orders, Work Change Directives, Field Orders, written interpretations and clarifications, and approved Shop Drawings. Contractor shall keep such record documents in good order and annotate them to show changes made during construction. These record documents, together with all approved Samples, will be available to Engineer for reference. Upon completion of the Work, Contractor shall deliver these record documents to Engineer.
- 7.12 Safety and Protection
 - A. Contractor shall be solely responsible for initiating, maintaining, and supervising all safety precautions and programs in connection with the Work. Such responsibility does not relieve Subcontractors of their responsibility for the safety of persons or property in the performance of their work, nor for compliance with applicable safety Laws and Regulations. 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, other work in progress, 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 Owner; the owners of adjacent property, Underground Facilities, and other utilities; and other contractors and utility owners performing work at or adjacent to the Site, when prosecution of the Work may affect them, and shall cooperate with them in the protection, removal, relocation, and replacement of their property or work in progress.
 - C. Contractor shall comply with the applicable requirements of Owner's safety programs, if any. The Supplementary Conditions identify any Owner's safety programs that are applicable to the Work.
 - D. Contractor shall inform Owner and Engineer of the specific requirements of Contractor's safety program with which Owner's and Engineer's employees and representatives must comply while at the Site.
 - E. All damage, injury, or loss to any property referred to in Paragraph 7.12.A.2 or 7.12.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 at its expense (except damage or loss attributable to the fault of Drawings or Specifications or to the acts or omissions of Owner or Engineer 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).

- F. Contractor's duties and responsibilities for safety and protection 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 15.06.B that the Work is acceptable (except as otherwise expressly provided in connection with Substantial Completion).
- G. Contractor's duties and responsibilities for safety and protection shall resume whenever Contractor or any Subcontractor or Supplier returns to the Site to fulfill warranty or correction obligations, or to conduct other tasks arising from the Contract Documents.

7.13 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.
- 7.14 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.
- 7.15 *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.

7.16 Shop Drawings, Samples, and Other Submittals

- A. Shop Drawing and Sample Submittal Requirements:
 - 1. Before submitting a Shop Drawing or Sample, Contractor shall have:
 - reviewed and coordinated the Shop Drawing or Sample with other Shop Drawings and Samples and with the requirements of the Work and the Contract Documents;
 - b. determined and verified all field measurements, quantities, dimensions, specified performance and design criteria, installation requirements, materials, catalog numbers, and similar information with respect thereto;
 - c. determined and verified the suitability of all materials and equipment offered with respect to the indicated application, fabrication, shipping, handling, storage, assembly, and installation pertaining to the performance of the Work; and

- d. determined and verified all information relative to Contractor's responsibilities for means, methods, techniques, sequences, and procedures of construction, and safety precautions and programs incident thereto.
- 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 of that submittal, and that Contractor approves the 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 set forth in a written communication separate from the Shop Drawings or Sample submittal; and, in addition, in the case of Shop Drawings by a specific notation made on each Shop Drawing submitted to Engineer for review and approval of each such variation.
- B. *Submittal Procedures for Shop Drawings and Samples*: Contractor shall submit Shop Drawings and Samples to Engineer for review and approval in accordance with the accepted Schedule of Submittals. Each submittal will be identified as Engineer may require.
 - 1. Shop Drawings:
 - a. Contractor shall submit the number of copies required in the Specifications.
 - 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 7.16.D.
 - 2. Samples:
 - a. Contractor shall submit the number of Samples required in the Specifications.
 - b. Contractor shall 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 7.16.D.
 - 3. 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. *Other Submittals*: Contractor shall submit other submittals to Engineer in accordance with the accepted Schedule of Submittals, and pursuant to the applicable terms of the Specifications.
- 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 or to safety precautions or programs incident thereto.
- 3. Engineer's review and approval of a separate item as such will not indicate approval of the assembly in which the item functions.
- 4. Engineer's review and approval of a Shop Drawing or Sample 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 7.16.A.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 will document any such approved variation from the requirements of the Contract Documents in a Field Order.
- 5. Engineer's review and approval of a Shop Drawing or Sample shall not relieve Contractor from responsibility for complying with the requirements of Paragraph 7.16.A and B.
- 6. Engineer's review and approval of a Shop Drawing or Sample, or of a variation from the requirements of the Contract Documents, shall not, under any circumstances, change the Contract Times or Contract Price, unless such changes are included in a Change Order.
- 7. Neither Engineer's receipt, review, acceptance or approval of a Shop Drawing, Sample, or other submittal shall result in such item becoming a Contract Document.
- 8. Contractor shall perform the Work in compliance with the requirements and commitments set forth in approved Shop Drawings and Samples, subject to the provisions of Paragraph 7.16.D.4.
- 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.
 - 2. Contractor shall furnish required submittals with sufficient information and accuracy to obtain required approval of an item with no more than three submittals. Engineer will record Engineer's time for reviewing a fourth or subsequent submittal of a Shop Drawings, sample, or other item requiring approval, and Contractor shall be responsible for Engineer's charges to Owner for such time. Owner may impose a set-off against payments due to Contractor to secure reimbursement for such charges.
 - 3. If Contractor requests a change of a previously approved submittal item, Contractor shall be responsible for Engineer's charges to Owner for its review time, and Owner may impose a set-off against payments due to Contractor to secure reimbursement for such charges, unless the need for such change is beyond the control of Contractor.

7.17 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 officers, directors,

members, partners, employees, agents, consultants, and subcontractors shall be entitled to rely on 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;
 - 6. the issuance of a notice of acceptability by Engineer;
 - 7. any inspection, test, or approval by others; or
 - 8. any correction of defective Work by Owner.
- D. If the Contract requires the Contractor to accept the assignment of a contract entered into by Owner, then the specific warranties, guarantees, and correction obligations contained in the assigned contract shall govern with respect to Contractor's performance obligations to Owner for the Work described in the assigned contract.
- 7.18 Indemnification
 - A. To the fullest extent permitted by Laws and Regulations, and in addition to any other obligations of Contractor under the Contract or otherwise, Contractor shall indemnify and hold harmless Owner and Engineer, and the officers, directors, members, 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 officers, directors, members, partners, employees, agents, consultants, or subcontractors 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 7.18.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 7.18.A shall not extend to the liability of Engineer and Engineer's officers, directors, members, 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.
- 7.19 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 Laws and Regulations.
 - 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, 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, 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 7.16.D.1.
 - E. Contractor shall not be responsible for the adequacy of the performance or design criteria specified by Owner or Engineer.

ARTICLE 8 – OTHER WORK AT THE SITE

- 8.01 Other Work
 - A. In addition to and apart from the Work under the Contract Documents, the Owner may perform other work at or adjacent to the Site. Such other work may be performed by Standard General Conditions of the Construction Contract

Owner's employees, or through contracts between the Owner and third parties. Owner may also arrange to have third-party utility owners perform work on their utilities and facilities at or adjacent to the Site.

- B. If Owner performs other work at or adjacent to the Site with Owner's employees, or through contracts for such other work, then Owner shall give Contractor written notice thereof prior to starting any such other work. If Owner has advance information regarding the start of any utility work at or adjacent to the Site, Owner shall provide such information to Contractor.
- C. Contractor shall afford each other contractor that performs such other work, each utility owner performing other work, and Owner, if Owner is performing other work with Owner's employees, proper and safe access to the Site, and provide a reasonable opportunity for the introduction and storage of materials and equipment and the execution of such other work. 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 such work; provided, however, that Contractor may cut or alter others' work with the written consent of Engineer and the others whose work will be affected.
- D. If the proper execution or results of any part of Contractor's Work depends upon work performed by others under this Article 8, 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.

8.02 Coordination

- A. If Owner intends to contract with others for the performance of other work at or adjacent to the Site, to perform other work at or adjacent to the Site with Owner's employees, or to arrange to have utility owners perform work at or adjacent to the Site, the following will be set forth in the Supplementary Conditions or provided to Contractor prior to the start of any such other work:
 - 1. the identity of the individual or entity that will have authority and responsibility for coordination of the activities among the various contractors;
 - 2. an itemization of the specific matters to be covered by such authority and responsibility; and
 - 3. the extent of such authority and responsibilities.
- B. Unless otherwise provided in the Supplementary Conditions, Owner shall have sole authority and responsibility for such coordination.

8.03 *Legal Relationships*

A. If, in the course of performing other work at or adjacent to the Site for Owner, the Owner's employees, any other contractor working for Owner, or any utility owner causes damage to the Work or to the property of Contractor or its Subcontractors, or delays, disrupts, interferes with, or increases the scope or cost of the performance of the Work, through actions or inaction, then Contractor shall be entitled to an equitable adjustment in the

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Contract Price or the Contract Times, or both. Contractor must submit any Change Proposal seeking an equitable adjustment in the Contract Price or the Contract Times under this paragraph within 30 days of the damaging, delaying, disrupting, or interfering event. The entitlement to, and extent of, any such equitable adjustment shall take into account information (if any) regarding such other work that was provided to Contractor in the Contract Documents prior to the submittal of the Bid or the final negotiation of the terms of the Contract. When applicable, any such equitable adjustment in Contract Price shall be conditioned on Contractor assigning to Owner all Contractor's rights against such other contractor or utility owner with respect to the damage, delay, disruption, or interference that is the subject of the adjustment. 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.

- B. Contractor shall take reasonable and customary measures to avoid damaging, delaying, disrupting, or interfering with the work of Owner, any other contractor, or any utility owner performing other work at or adjacent to the Site. If Contractor fails to take such measures and as a result damages, delays, disrupts, or interferes with the work of any such other contractor or utility owner, then Owner may impose a set-off against payments due to Contractor, and assign to such other contractor or utility owner the Owner's contractual rights against Contractor with respect to the breach of the obligations set forth in this paragraph.
- C. When Owner is performing other work at or adjacent to the Site with Owner's employees, Contractor shall be liable to Owner for damage to such other work, and for the reasonable direct delay, disruption, and interference costs incurred by Owner as a result of Contractor's failure to take reasonable and customary measures with respect to Owner's other work. In response to such damage, delay, disruption, or interference, Owner may impose a set-off against payments due to Contractor.
- D. If Contractor damages, delays, disrupts, or interferes with the work of any other contractor, or any utility owner performing other work at or adjacent to the Site, through Contractor's failure to take reasonable and customary measures to avoid such impacts, or if any claim arising out of Contractor's actions, inactions, or negligence in performance of the Work at or adjacent to the Site is made by any such other contractor or utility owner against Contractor, Owner, or Engineer, then Contractor shall (1) promptly attempt to settle the claim as to all parties through negotiations with such other contractor or utility owner, or otherwise resolve the claim by arbitration or other dispute resolution proceeding or at law, and (2) indemnify and hold harmless Owner and Engineer, and the officers, directors, members, partners, employees, agents, consultants and subcontractors of each and any of them from and against any such claims, and against all 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 damage, delay, disruption, or interference.

ARTICLE 9 – OWNER'S RESPONSIBILITIES

9.01 *Communications to Contractor*

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

9.02 Replacement of Engineer

A. Owner may at its discretion appoint an engineer to replace Engineer, provided Contractor makes no reasonable objection to the replacement engineer. The replacement engineer's status under the Contract Documents shall be that of the former Engineer.

9.03 Furnish Data

- A. Owner shall promptly furnish the data required of Owner under the Contract Documents.
- 9.04 Pay When Due
 - A. Owner shall make payments to Contractor when they are due as provided in the Agreement.
- 9.05 Lands and Easements; Reports, Tests, and Drawings
 - A. Owner's duties with respect to providing lands and easements are set forth in Paragraph 5.01.
 - B. Owner's duties with respect to providing engineering surveys to establish reference points are set forth in Paragraph 4.03.
 - C. Article 5 refers to Owner's identifying and making available to Contractor copies of reports of explorations and tests of conditions at the Site, and drawings of physical conditions relating to existing surface or subsurface structures at the Site.
- 9.06 Insurance
 - A. Owner's responsibilities, if any, with respect to purchasing and maintaining liability and property insurance are set forth in Article 6.
- 9.07 Change Orders
 - A. Owner's responsibilities with respect to Change Orders are set forth in Article 11.
- 9.08 Inspections, Tests, and Approvals
 - A. Owner's responsibility with respect to certain inspections, tests, and approvals is set forth in Paragraph 14.02.B.
- 9.09 *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.
- 9.10 Undisclosed Hazardous Environmental Condition
 - A. Owner's responsibility in respect to an undisclosed Hazardous Environmental Condition is set forth in Paragraph 5.06.
- 9.11 Evidence of Financial Arrangements
 - A. Upon request of Contractor, Owner shall furnish Contractor reasonable evidence that financial arrangements have been made to satisfy Owner's obligations under the Contract Documents (including obligations under proposed changes in the Work).

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9.12 Safety Programs

- A. While at the Site, Owner's employees and representatives shall comply with the specific applicable requirements of Contractor's safety programs of which Owner has been informed.
- B. Owner shall furnish copies of any applicable Owner safety programs to Contractor.

ARTICLE 10 – ENGINEER'S STATUS DURING CONSTRUCTION

- 10.01 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.

10.02 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 10.08. 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.

10.03 Project Representative

- A. If Owner and Engineer have agreed that Engineer will furnish a Resident Project Representative to represent Engineer at the Site and assist Engineer in observing the progress and quality of the Work, then the authority and responsibilities of any such Resident Project Representative will be as provided in the Supplementary Conditions, and limitations on the responsibilities thereof will be as provided in Paragraph 10.08. 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.
- 10.04 *Rejecting Defective Work*
 - A. Engineer has the authority to reject Work in accordance with Article 14.

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- 10.05 Shop Drawings, Change Orders and Payments
 - A. Engineer's authority, and limitations thereof, as to Shop Drawings and Samples, are set forth in Paragraph 7.16.
 - B. 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, are set forth in Paragraph 7.19.
 - C. Engineer's authority as to Change Orders is set forth in Article 11.
 - D. Engineer's authority as to Applications for Payment is set forth in Article 15.
- 10.06 Determinations for Unit Price Work
 - A. Engineer will determine the actual quantities and classifications of Unit Price Work performed by Contractor as set forth in Paragraph 13.03.
- 10.07 Decisions on Requirements of Contract Documents and Acceptability of Work
 - A. Engineer will render decisions regarding the requirements of the Contract Documents, and judge the acceptability of the Work, pursuant to the specific procedures set forth herein for initial interpretations, Change Proposals, and acceptance of the Work. In rendering such decisions and judgments, Engineer will not show partiality to Owner or Contractor, and will not be liable to Owner, Contractor, or others in connection with any proceedings, interpretations, decisions, or judgments conducted or rendered in good faith.

10.08 Limitations on Engineer's Authority and Responsibilities

- A. Neither Engineer's authority or responsibility under this Article 10 or under any other provision of the Contract, 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 15.06.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 10.08 shall also apply to the Resident Project Representative, if any.

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10.09 Compliance with Safety Program

A. While at the Site, Engineer's employees and representatives will comply with the specific applicable requirements of Owner's and Contractor's safety programs (if any) of which Engineer has been informed.

ARTICLE 11 – AMENDING THE CONTRACT DOCUMENTS; CHANGES IN THE WORK

11.01 Amending and Supplementing Contract Documents

- A. The Contract Documents may be amended or supplemented by a Change Order, a Work Change Directive, or a Field Order.
 - 1. Change Orders:
 - a. If an amendment or supplement to the Contract Documents includes a change in the Contract Price or the Contract Times, such amendment or supplement must be set forth in a Change Order. A Change Order also may be used to establish amendments and supplements of the Contract Documents that do not affect the Contract Price or Contract Times.
 - b. Owner and Contractor may amend those terms and conditions of the Contract Documents that do not involve (1) the performance or acceptability of the Work, (2) the design (as set forth in the Drawings, Specifications, or otherwise), or (3) other engineering or technical matters, without the recommendation of the Engineer. Such an amendment shall be set forth in a Change Order.
 - 2. Work Change Directives: A Work Change Directive will not change the Contract Price or the Contract Times but is evidence that the parties expect that the modification ordered or documented by a Work Change Directive will be incorporated in a subsequently issued Change Order, following negotiations by the parties as to the Work Change Directive's effect, if any, on the Contract Price and Contract Times; or, if negotiations are unsuccessful, by a determination under the terms of the Contract Documents governing adjustments, expressly including Paragraph 11.04 regarding change of Contract Price. Contractor must submit any Change Proposal seeking an adjustment of the Contract Price or the Contract Times, or both, no later than 30 days after the completion of the Work set out in the Work Change Directive. Owner must submit any Claim seeking an adjustment of the Contract Price or the Contract Times, or both, no later than 60 days after issuance of the Work Change Directive.
 - 3. *Field Orders*: Engineer may authorize minor changes in the Work if the changes 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. Such changes will be accomplished by a Field Order and will be binding on Owner and also on Contractor, which shall perform the Work involved promptly. If Contractor believes that a Field Order justifies an adjustment in the Contract Price or Contract Times, or both, then before proceeding with the Work at issue, Contractor shall submit a Change Proposal as provided herein.

11.02 *Owner-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. Such changes shall be supported by Engineer's recommendation, to the extent the change

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involves the design (as set forth in the Drawings, Specifications, or otherwise), or other engineering or technical matters. Such changes may be accomplished by a Change Order, if Owner and Contractor have agreed as to the effect, if any, of the changes on Contract Times or Contract Price; or by a Work Change Directive. Upon receipt of any such document, Contractor shall promptly proceed with the Work involved; or, in the case of a deletion in the Work, promptly cease construction activities with respect to such deleted Work. Added or revised Work shall be performed under the applicable conditions of the Contract Documents. Nothing in this paragraph shall obligate Contractor to undertake work that Contractor reasonably concludes cannot be performed in a manner consistent with Contractor's safety obligations under the Contract Documents or Laws and Regulations.

11.03 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, except in the case of an emergency as provided in Paragraph 7.15 or in the case of uncovering Work as provided in Paragraph 14.05.

11.04 Change of Contract Price

- A. The Contract Price may only be changed by a Change Order. Any Change Proposal for an adjustment in the Contract Price shall comply with the provisions of Paragraph 11.06. Any Claim for an adjustment of Contract Price shall comply with the provisions of Article 12.
- B. 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, then by application of such unit prices to the quantities of the items involved (subject to the provisions of Paragraph 13.03); or
 - 2. where the Work involved is not covered by unit prices contained in the Contract Documents, then by a mutually agreed lump sum (which may include an allowance for overhead and profit not necessarily in accordance with Paragraph 11.04.C.2); or
 - 3. where the Work involved is not covered by unit prices contained in the Contract Documents and the parties do not reach mutual agreement to a lump sum, then on the basis of the Cost of the Work (determined as provided in Paragraph 13.01) plus a Contractor's fee for overhead and profit (determined as provided in Paragraph 11.04.C).
- C. *Contractor's Fee*: When applicable, 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 13.01.B.1 and 13.01.B.2, the Contractor's fee shall be 15 percent;
 - b. for costs incurred under Paragraph 13.01.B.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 Paragraphs 11.01.C.2.a and Standard General Conditions of the Construction Contract

11.01.C.2.b is that the Contractor's fee shall be based on: (1) a fee of 15 percent of the costs incurred under Paragraphs 13.01.A.1 and 13.01.A.2 by the Subcontractor that actually performs the Work, at whatever tier, and (2) with respect to Contractor itself and to any Subcontractors of a tier higher than that of the Subcontractor that actually performs the Work, a fee of five percent of the amount (fee plus underlying costs incurred) attributable to the next lower tier Subcontractor; provided, however, that for any such subcontracted work the maximum total fee to be paid by Owner shall be no greater than 27 percent of the costs incurred by the Subcontractor that actually performs the work;

- d. no fee shall be payable on the basis of costs itemized under Paragraphs 13.01.B.4, 13.01.B.5, and 13.01.C;
- 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 11.04.C.2.a through 11.04.C.2.e, inclusive.

11.05 Change of Contract Times

- A. The Contract Times may only be changed by a Change Order. Any Change Proposal for an adjustment in the Contract Times shall comply with the provisions of Paragraph 11.06. Any Claim for an adjustment in the Contract Times shall comply with the provisions of Article 12.
- B. An adjustment of the Contract Times shall be subject to the limitations set forth in Paragraph 4.05, concerning delays in Contractor's progress.

11.06 Change Proposals

- A. Contractor shall submit a Change Proposal to Engineer to request an adjustment in the Contract Times or Contract Price; appeal an initial decision by Engineer concerning the requirements of the Contract Documents or relating to the acceptability of the Work under the Contract Documents; contest a set-off against payment due; or seek other relief under the Contract. The Change Proposal shall specify any proposed change in Contract Times or Contract Price, or both, or other proposed relief, and explain the reason for the proposed change, with citations to any governing or applicable provisions of the Contract Documents.
 - 1. *Procedures*: Contractor shall submit each Change Proposal to Engineer promptly (but in no event later than 30 days) after the start of the event giving rise thereto, or after such initial decision. The Contractor shall submit supporting data, including the proposed change in Contract Price or Contract Time (if any), to the Engineer and Owner within 15 days after the submittal of the Change Proposal. The supporting data shall be accompanied by a written statement that the supporting data are accurate and complete, and that any requested time or price adjustment is the entire adjustment to which Contractor believes it is entitled as a result of said event. Engineer will advise Owner regarding the Change Proposal.

- 2. Engineer's Action: Engineer will review each Change Proposal and, within 30 days after receipt of the Contractor's supporting data, either deny the Change Proposal in whole, approve it in whole, or deny it in part and approve it in part. Such actions shall be in writing, with a copy provided to Owner and Contractor. If Engineer does not take action on the Change Proposal within 30 days, then either Owner or Contractor may at any time thereafter submit a letter to the other party indicating that as a result of Engineer's inaction the Change Proposal is deemed denied, thereby commencing the time for appeal of the denial under Article 12.
- 3. *Binding Decision*: Engineer's decision will be final and binding upon Owner and Contractor, unless Owner or Contractor appeals the decision by filing a Claim under Article 12.
- B. *Resolution of Certain Change Proposals*: If the Change Proposal does not involve the design (as set forth in the Drawings, Specifications, or otherwise), the acceptability of the Work, or other engineering or technical matters, then Engineer will notify the parties that the Engineer is unable to resolve the Change Proposal. For purposes of further resolution of such a Change Proposal, such notice shall be deemed a denial, and Contractor may choose to seek resolution under the terms of Article 12.

11.07 *Execution of Change Orders*

- A. Owner and Contractor shall execute appropriate Change Orders covering:
 - 1. 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;
 - 2. changes in Contract Price resulting from an Owner set-off, unless Contractor has duly contested such set-off;
 - 3. changes in the Work which are: (a) ordered by Owner pursuant to Paragraph 11.02, (b) required because of Owner's acceptance of defective Work under Paragraph 14.04 or Owner's correction of defective Work under Paragraph 14.07, or (c) agreed to by the parties, subject to the need for Engineer's recommendation if the change in the Work involves the design (as set forth in the Drawings, Specifications, or otherwise), or other engineering or technical matters; and
 - 4. changes in the Contract Price or Contract Times, or other changes, which embody the substance of any final and binding results under Paragraph 11.06, or Article 12.
- B. If Owner or Contractor refuses to execute a Change Order that is required to be executed under the terms of this Paragraph 11.07, it shall be deemed to be of full force and effect, as if fully executed.

11.08 Notification to Surety

A. If the provisions of any bond require notice to be given to a surety 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), 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.

ARTICLE 12 – CLAIMS

12.01 Claims

- A. *Claims Process*: The following disputes between Owner and Contractor shall be submitted to the Claims process set forth in this Article:
 - 1. Appeals by Owner or Contractor of Engineer's decisions regarding Change Proposals;
 - 2. Owner demands for adjustments in the Contract Price or Contract Times, or other relief under the Contract Documents; and
 - 3. Disputes that Engineer has been unable to address because they do not involve the design (as set forth in the Drawings, Specifications, or otherwise), the acceptability of the Work, or other engineering or technical matters.
- B. *Submittal of Claim*: The party submitting a Claim shall deliver it directly to the other party to the Contract promptly (but in no event later than 30 days) after the start of the event giving rise thereto; in the case of appeals regarding Change Proposals within 30 days of the decision under appeal. The party submitting the Claim shall also furnish a copy to the Engineer, for its information only. The responsibility to substantiate a Claim shall rest with the party making the Claim. In the case of a Claim by Contractor seeking an increase in the Contract Times or Contract Price, or both, Contractor shall certify that the Claim is made in good faith, that the supporting data are accurate and complete, and that to the best of Contractor's knowledge and belief the amount of time or money requested accurately reflects the full amount to which Contractor is entitled.
- C. *Review and Resolution*: The party receiving a Claim shall review it thoroughly, giving full consideration to its merits. The two parties shall seek to resolve the Claim through the exchange of information and direct negotiations. The parties may extend the time for resolving the Claim by mutual agreement. All actions taken on a Claim shall be stated in writing and submitted to the other party, with a copy to Engineer.
- D. Mediation:
 - 1. At any time after initiation of a Claim, Owner and Contractor may mutually agree to mediation of the underlying dispute. The agreement to mediate shall stay the Claim submittal and response process.
 - 2. If Owner and Contractor agree to mediation, then after 60 days from such agreement, either Owner or Contractor may unilaterally terminate the mediation process, and the Claim submittal and decision process shall resume as of the date of the termination. If the mediation proceeds but is unsuccessful in resolving the dispute, the Claim submittal and decision process shall resume as of the date of the conclusion of the mediation, as determined by the mediator.
 - 3. Owner and Contractor shall each pay one-half of the mediator's fees and costs.
- E. *Partial Approval*: If the party receiving a Claim approves the Claim in part and denies it in part, such action shall be final and binding unless within 30 days of such action the other party invokes the procedure set forth in Article 17 for final resolution of disputes.
- F. Denial of Claim: If efforts to resolve a Claim are not successful, the party receiving the Claim may deny it by giving written notice of denial to the other party. If the receiving party does not take action on the Claim within 90 days, then either Owner or Contractor may at any time thereafter submit a letter to the other party indicating that as a result of the inaction,

the Claim is deemed denied, thereby commencing the time for appeal of the denial. A denial of the Claim shall be final and binding unless within 30 days of the denial the other party invokes the procedure set forth in Article 17 for the final resolution of disputes.

G. *Final and Binding Results*: If the parties reach a mutual agreement regarding a Claim, whether through approval of the Claim, direct negotiations, mediation, or otherwise; or if a Claim is approved in part and denied in part, or denied in full, and such actions become final and binding; then the results of the agreement or action on the Claim shall be incorporated in a Change Order to the extent they affect the Contract, including the Work, the Contract Times, or the Contract Price.

ARTICLE 13 – COST OF THE WORK; ALLOWANCES; UNIT PRICE WORK

- 13.01 *Cost of the Work*
 - A. *Purposes for Determination of Cost of the Work*: The term Cost of the Work means the sum of all costs necessary for the proper performance of the Work at issue, as further defined below. The provisions of this Paragraph 13.01 are used for two distinct purposes:
 - 1. To determine Cost of the Work when Cost of the Work is a component of the Contract Price, under cost-plus-fee, time-and-materials, or other cost-based terms; or
 - 2. To determine the value of a Change Order, Change Proposal, Claim, set-off, or other adjustment in Contract Price. When the value of any such adjustment is determined on the basis of Cost of the Work, Contractor is entitled only to those additional or incremental costs required because of the change in the Work or because of the event giving rise to the adjustment.
 - B. *Costs Included*: Except as otherwise may be agreed to in writing by Owner, costs included in the Cost of the Work shall be in amounts no higher than those prevailing in the locality of the Project, shall not include any of the costs itemized in Paragraph 13.01.C, and shall include only the following items:
 - 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 on the Work. 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, and 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 13.01.
- 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, as 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 6.05), 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 communication service at the Site, express and courier services, and similar petty cash items in connection with the Work.

- i. The costs of premiums for all bonds and insurance that Contractor is required by the Contract Documents to purchase and maintain.
- C. 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, expediters, 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 13.01.B.1 or specifically covered by Paragraph 13.01.B.4. The payroll costs and other compensation excluded here 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 Paragraph 13.01.B.
- D. *Contractor's Fee*: When the Work as a whole 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, Change Proposal, Claim, set-off, or other 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 11.04.C.
- E. *Documentation*: Whenever the Cost of the Work for any purpose is to be determined pursuant to this Article 13, 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.
- 13.02 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: Contractor agrees that:
 - 1. 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
 - 2. 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.

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- C. *Contingency Allowance*: 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.

13.03 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. Payments to Contractor for Unit Price Work will be based on actual quantities.
- 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. 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 the following paragraph.
- E. Within 30 days of Engineer's written decision under the preceding paragraph, Contractor may submit a Change Proposal, or Owner may file a Claim, seeking an adjustment in the Contract Price 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;
 - 2. there is no corresponding adjustment with respect to any other item of Work; and
 - 3. Contractor believes that it 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 14 – TESTS AND INSPECTIONS; CORRECTION, REMOVAL OR ACCEPTANCE OF DEFECTIVE WORK

- 14.01 Access to Work
 - A. Owner, Engineer, their consultants and other representatives and personnel of Owner, independent testing laboratories, and authorities having jurisdiction will have access to the Site and the Work at reasonable times for their observation, inspection, and testing. Contractor shall provide them proper and safe conditions for such access and advise them of Contractor's safety procedures and programs so that they may comply therewith as applicable.

14.02 Tests, Inspections, and Approvals

- A. Contractor shall give Engineer timely notice of readiness of the Work (or specific parts thereof) for all required inspections and tests, and shall cooperate with inspection and testing personnel to facilitate required inspections and tests.
- B. Owner shall retain and pay for the services of an independent inspector, testing laboratory, or other qualified individual or entity to perform all inspections and tests expressly required by the Contract Documents to be furnished and paid for by Owner, except that costs incurred in connection with tests or inspections of covered Work shall be governed by the provisions of Paragraph 14.05.
- 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, obtaining, and paying for all inspections and tests required:
 - 1. by the Contract Documents, unless the Contract Documents expressly allocate responsibility for a specific inspection or test to Owner;
 - 2. to attain Owner's and Engineer's acceptance of materials or equipment to be incorporated in the Work;
 - 3. by manufacturers of equipment furnished under the Contract Documents;
 - 4. for testing, adjusting, and balancing of mechanical, electrical, and other equipment to be incorporated into the Work; and
 - 5. for acceptance of materials, mix designs, or equipment submitted for approval prior to Contractor's purchase thereof for incorporation in the Work.

Such inspections and tests shall be performed by independent inspectors, testing laboratories, or other qualified individuals or entities acceptable to Owner and Engineer.

- E. If the Contract Documents require the Work (or part thereof) to be approved by Owner, Engineer, or another designated individual or entity, then Contractor shall assume full responsibility for arranging and obtaining such approvals.
- F. 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, Contractor shall, if requested by Engineer, uncover such Work for observation. Such uncovering shall be at Contractor's expense unless Contractor had given Engineer timely notice of Contractor's intention to cover the same and Engineer had not acted with reasonable promptness in response to such notice.
- 14.03 Defective Work
 - A. *Contractor's Obligation*: It is Contractor's obligation to assure that the Work is not defective.
 - B. *Engineer's Authority*: Engineer has the authority to determine whether Work is defective, and to reject defective Work.

- C. *Notice of Defects*: Prompt notice of all defective Work of which Owner or Engineer has actual knowledge will be given to Contractor.
- D. *Correction, or Removal and Replacement*: Promptly after receipt of written notice of defective Work, Contractor shall correct all such defective Work, whether or not fabricated, installed, or completed, or, if Engineer has rejected the defective Work, remove it from the Project and replace it with Work that is not defective.
- E. *Preservation of Warranties*: When correcting defective Work, Contractor shall take no action that would void or otherwise impair Owner's special warranty and guarantee, if any, on said Work.
- F. *Costs and Damages*: In addition to its correction, removal, and replacement obligations with respect to defective Work, Contractor shall pay all claims, costs, losses, and damages arising out of or relating to defective Work, including but not limited to the cost of the inspection, testing, correction, removal, replacement, or reconstruction of such defective Work, fines levied against Owner by governmental authorities because the Work is defective, and the costs of repair or replacement of work of others resulting from defective Work. Prior to final payment, if Owner and Contractor are unable to agree as to the measure of such claims, costs, losses, and damages resulting from defective Work, then Owner may impose a reasonable set-off against payments due under Article 15.

14.04 Acceptance of Defective Work

A. If, instead of requiring correction or removal and replacement of defective Work, Owner prefers to accept it, Owner may do so (subject, if such acceptance occurs prior to final payment, to Engineer's confirmation that such acceptance is in general accord with the design intent and applicable engineering principles, and will not endanger public safety). Contractor shall pay all claims, costs, losses, and damages attributable to Owner's evaluation of and determination to accept such defective Work (such costs to be approved by Engineer as to reasonableness), and for the diminished value of the Work to the extent not otherwise paid by Contractor. If any such acceptance occurs prior to final payment, the necessary revisions in the Contract Documents with respect to the Work shall be incorporated in a Change Order. If the parties are unable to agree as to the decrease in the Contract Price, reflecting the diminished value of Work so accepted, then Owner may impose a reasonable set-off against payments due under Article 15. If the acceptance of defective Work occurs after final payment, Contractor shall pay an appropriate amount to Owner.

14.05 Uncovering Work

- A. Engineer has the authority to require special inspection or testing of the Work, whether or not the Work is fabricated, installed, or completed.
- B. If any Work is covered contrary to the written request of Engineer, then Contractor shall, if requested by Engineer, uncover such Work for Engineer's observation, and then replace the covering, all at Contractor's expense.
- C. If Engineer considers it necessary or advisable that covered Work be observed by Engineer or inspected or tested by others, then 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, and provide all necessary labor, material, and equipment.

- If it is found that the uncovered Work is defective, Contractor shall be responsible for all claims, costs, losses, and damages 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 pending Contractor's full discharge of this responsibility the Owner shall be entitled to impose a reasonable set-off against payments due under Article 15.
- 2. 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, then Contractor may submit a Change Proposal within 30 days of the determination that the Work is not defective.

14.06 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, then 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.

14.07 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, 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, then 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 14.07, 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, 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 incurred or sustained by Owner in exercising the rights and remedies under this Paragraph 14.07 will be charged against Contractor as set-offs against payments due under Article 15. 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 14.07.

ARTICLE 15 – PAYMENTS TO CONTRACTOR; SET-OFFS; COMPLETION; CORRECTION PERIOD

15.01 *Progress Payments*

- A. *Basis for Progress Payments*: The Schedule of Values established as provided in Article 2 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 during the pay period, as determined under the provisions of Paragraph 13.03. Progress payments for cost-based Work will be based on Cost of the Work completed by Contractor during the pay period.
- B. 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, a warehouse bond, 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.
- C. Review of Applications:
 - 1. Engineer will, within 10 days after receipt of each Application for Payment, including each resubmittal, 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 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, the results of any subsequent tests called for in the

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Contract Documents, a final determination of quantities and classifications for Unit Price Work under Paragraph 13.03, and 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; or
 - b. 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 money 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 15.01.C.2.
- 6. Engineer will recommend reductions in payment (set-offs) necessary in Engineer's opinion to protect Owner from loss because:
 - a. the Work is defective, requiring correction or replacement;
 - b. the Contract Price has been reduced by Change Orders;
 - c. Owner has been required to correct defective Work in accordance with Paragraph 14.07, or has accepted defective Work pursuant to Paragraph 14.04;
 - d. Owner has been required to remove or remediate a Hazardous Environmental Condition for which Contractor is responsible; or
 - e. Engineer has actual knowledge of the occurrence of any of the events that would constitute a default by Contractor and therefore justify termination for cause under the Contract Documents.

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- D. Payment Becomes Due:
 - 1. Ten days after presentation of the Application for Payment to Owner with Engineer's recommendation, the amount recommended (subject to any Owner set-offs) will become due, and when due will be paid by Owner to Contractor.
- E. Reductions in Payment by Owner:
 - 1. In addition to any reductions in payment (set-offs) recommended by Engineer, Owner is entitled to impose a set-off against payment based on any of the following:
 - a. claims have been made against Owner on account of Contractor's conduct in the performance or furnishing of the Work, or Owner has incurred costs, losses, or damages on account of Contractor's conduct in the performance or furnishing of the Work, including but not limited to claims, costs, losses, or damages from workplace injuries, adjacent property damage, non-compliance with Laws and Regulations, and patent infringement;
 - b. Contractor has failed to take reasonable and customary measures to avoid damage, delay, disruption, and interference with other work at or adjacent to the Site;
 - c. Contractor has failed to provide and maintain required bonds or insurance;
 - d. Owner has been required to remove or remediate a Hazardous Environmental Condition for which Contractor is responsible;
 - e. Owner has incurred extra charges or engineering costs related to submittal reviews, evaluations of proposed substitutes, tests and inspections, or return visits to manufacturing or assembly facilities;
 - f. the Work is defective, requiring correction or replacement;
 - g. Owner has been required to correct defective Work in accordance with Paragraph 14.07, or has accepted defective Work pursuant to Paragraph 14.04;
 - h. the Contract Price has been reduced by Change Orders;
 - i. an event that would constitute a default by Contractor and therefore justify a termination for cause has occurred;
 - j. liquidated damages have accrued as a result of Contractor's failure to achieve Milestones, Substantial Completion, or final completion of the Work;
 - 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;
 - I. there are other items entitling Owner to a set off against the amount recommended.
 - 2. If Owner imposes any set-off against payment, whether based on its own knowledge or on the written recommendations of Engineer, Owner will give Contractor immediate written notice (with a copy to Engineer) stating the reasons for such action and the specific amount of the reduction, 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, if Contractor remedies the reasons for such action. The reduction

imposed shall be binding on Contractor unless it duly submits a Change Proposal contesting the reduction.

3. Upon a subsequent determination that Owner's refusal of payment was not justified, the amount wrongfully withheld shall be treated as an amount due as determined by Paragraph 15.01.C.1 and subject to interest as provided in the Agreement.

15.02 Contractor's Warranty of Title

- A. Contractor warrants and guarantees that title to all Work, materials, and equipment furnished under the Contract will pass to Owner free and clear of (1) all Liens and other title defects, and (2) all patent, licensing, copyright, or royalty obligations, no later than seven days after the time of payment by Owner.
- 15.03 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 and request that Engineer issue a certificate of Substantial Completion. Contractor shall at the same time submit to Owner and Engineer an initial draft of punch list items to be completed or corrected before final payment.
 - 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.
 - If Engineer considers the Work substantially complete, Engineer will deliver to Owner a C. preliminary certificate of Substantial Completion which shall fix the date of Substantial Completion. Engineer shall attach to the certificate a punch list of items to be completed or corrected before final payment. Owner shall have seven days after receipt of the preliminary certificate during which to make written objection to Engineer as to any provisions of the certificate or attached punch list. If, after considering the objections to the provisions of the preliminary certificate, Engineer concludes that the Work is not substantially complete, Engineer will, within 14 days after submission of the preliminary certificate to Owner, notify Contractor in writing that the Work is not substantially complete, stating the reasons therefor. If Owner does not object to the provisions of the certificate, or if despite consideration of Owner's objections Engineer concludes that the Work is substantially complete, then Engineer will, within said 14 days, execute and deliver to Owner and Contractor a final certificate of Substantial Completion (with a revised punch list of items to be completed or corrected) reflecting such changes from the preliminary certificate as Engineer believes justified after consideration of any objections from Owner.
 - D. At the time of receipt of the preliminary certificate of Substantial Completion, Owner and Contractor will confer regarding Owner's use or occupancy of the Work following Substantial Completion, review the builder's risk insurance policy with respect to the end of the builder's risk coverage, and confirm the transition to coverage of the Work under a permanent property insurance policy held by Owner. Unless Owner and Contractor agree otherwise in writing, Owner shall bear responsibility for security, operation, protection of the Work, property insurance, maintenance, heat, and utilities upon Owner's use or occupancy of the Work.
 - E. After Substantial Completion the Contractor shall promptly begin work on the punch list of items to be completed or corrected prior to final payment. In appropriate cases Contractor

may submit monthly Applications for Payment for completed punch list items, following the progress payment procedures set forth above.

F. Owner shall have the right to exclude Contractor from the Site after the date of Substantial Completion subject to allowing Contractor reasonable access to remove its property and complete or correct items on the punch list.

15.04 Partial Use or Occupancy

- 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. At any time Owner may request in writing that Contractor permit Owner to use or occupy any such part of the Work that Owner believes to be substantially complete. If and when Contractor agrees that such part of the Work is substantially complete, Contractor, Owner, and Engineer will follow the procedures of Paragraph 15.03.A through E for that part of the Work.
 - 2. At any time Contractor may notify Owner and Engineer in writing that Contractor considers any such part of the Work 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 15.03 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 6.05 regarding builder's risk or other property insurance.

15.05 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, or agreed portion thereof, is incomplete or defective. Contractor shall immediately take such measures as are necessary to complete such Work or remedy such deficiencies.

15.06 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

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inspection, annotated record documents (as provided in Paragraph 7.11), and other documents, Contractor may make application for final payment.

- 2. The final Application for Payment shall be accompanied (except as previously delivered) by:
 - a. all documentation called for in the Contract Documents;
 - b. consent of the surety, if any, to final payment;
 - c. satisfactory evidence that all title issues have been resolved such that title to all Work, materials, and equipment has passed to Owner free and clear of any Liens or other title defects, or will so pass upon final payment.
 - d. a list of all disputes that Contractor believes are unsettled; and
 - e. complete and legally effective releases or waivers (satisfactory to Owner) of all Lien rights arising out of the Work, and of Liens filed in connection with the Work.
- 3. In lieu of the releases or waivers of Liens specified in Paragraph 15.06.A.2 and as approved by Owner, Contractor may furnish receipts or releases in full and an affidavit of Contractor that: (a) the releases and receipts include all labor, services, material, and equipment for which a Lien could be filed; and (b) all payrolls, material and equipment bills, and other indebtedness connected with the Work for which Owner might in any way be responsible, or which might in any way result in liens or other burdens on Owner's property, 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, or Owner at its option may issue joint checks payable to Contractor and specified Subcontractors and Suppliers.
- B. Engineer's Review of Application and Acceptance:
 - If, on the basis of Engineer's observation of the Work during construction and final 1. 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 have been fulfilled, Engineer will, within ten days after receipt of the final Application for Payment, indicate in writing Engineer's recommendation of final payment and present the Application for Payment to Owner for payment. Such recommendation shall account for any set-offs against payment that are necessary in Engineer's opinion to protect Owner from loss for the reasons stated above with respect to progress payments. 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 15.07. 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. *Completion of Work*: The Work is complete (subject to surviving obligations) when it is ready for final payment as established by the Engineer's written recommendation of final payment.
- D. *Payment Becomes Due*: Thirty days after the presentation to Owner of the final Application for Payment and accompanying documentation, the amount recommended by Engineer

(less any further sum Owner is entitled to set off against Engineer's recommendation, including but not limited to set-offs for liquidated damages and set-offs allowed under the provisions above with respect to progress payments) will become due and shall be paid by Owner to Contractor.

15.07 Waiver of Claims

- A. The making of final payment will not constitute a waiver by Owner of claims or rights against Contractor. Owner expressly reserves claims and rights arising from unsettled Liens, from defective Work appearing after final inspection pursuant to Paragraph 15.05, from Contractor's failure to comply with the Contract Documents or the terms of any special guarantees specified therein, from outstanding Claims by Owner, or from Contractor's continuing obligations under the Contract Documents.
- B. The acceptance of final payment by Contractor will constitute a waiver by Contractor of all claims and rights against Owner other than those pending matters that have been duly submitted or appealed under the provisions of Article 17.

15.08 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 Site, adjacent areas that Contractor has arranged to use through construction easements or otherwise, and other adjacent areas used by Contractor as permitted by Laws and Regulations, is found to be defective, then Contractor shall promptly, without cost to Owner and in accordance with Owner's written instructions:
 - 1. correct the defective repairs to the Site or such other adjacent areas;
 - 2. correct such defective Work;
 - 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 to 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. 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 repair or such removal and replacement (including but not limited to all costs of repair or replacement of work of others).
- 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, 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 are in addition to all other obligations and warranties. The provisions of this paragraph shall not be construed as a substitute for, or a waiver of, the provisions of any applicable statute of limitation or repose.

ARTICLE 16 – SUSPENSION OF WORK AND TERMINATION

- 16.01 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 written notice to Contractor and Engineer. Such notice will fix the date on which Work will be resumed. Contractor shall resume the Work on the date so fixed. Contractor shall be entitled to an adjustment in the Contract Price or an extension of the Contract Times, or both, directly attributable to any such suspension. Any Change Proposal seeking such adjustments shall be submitted no later than 30 days after the date fixed for resumption of Work.

16.02 Owner May Terminate for Cause

- A. The occurrence of any one or more of the following events will constitute a default by Contractor and 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);
 - 2. Failure of Contractor to perform or otherwise to comply with a material term of the Contract Documents;
 - 3. Contractor's disregard of Laws or Regulations of any public body having jurisdiction; or
 - 4. Contractor's repeated disregard of the authority of Owner or Engineer.
- B. If one or more of the events identified in Paragraph 16.02.A occurs, then after giving Contractor (and any surety) ten days written notice that Owner is considering a declaration that Contractor is in default and termination of the contract, Owner may proceed to:
 - 1. declare Contractor to be in default, and give Contractor (and any surety) notice that the Contract is terminated; and
 - 2. enforce the rights available to Owner under any applicable performance bond.
- C. Subject to the terms and operation of any applicable performance bond, if Owner has terminated the Contract for cause, Owner may exclude Contractor from the Site, take possession of the Work, 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 complete the Work as Owner may deem expedient.
- D. Owner may not proceed with termination of the Contract under Paragraph 16.02.B if Contractor within seven days of receipt of notice of intent to terminate begins to correct its failure to perform and proceeds diligently to cure such failure.
- E. If Owner proceeds as provided in Paragraph 16.02.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 the cost to complete the Work, including all related claims, costs,

Standard General Conditions of the Construction Contract

losses, and damages (including but not limited to all fees and charges of engineers, architects, attorneys, and other professionals) sustained by Owner, such excess will be paid to Contractor. If the cost to complete the Work including such related claims, costs, losses, and damages exceeds 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.

- F. 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, or any rights or remedies of Owner against Contractor or any surety under any payment bond or performance bond. Any retention or payment of money due Contractor by Owner will not release Contractor from liability.
- G. If and to the extent that Contractor has provided a performance bond under the provisions of Paragraph 6.01.A, the provisions of that bond shall govern over any inconsistent provisions of Paragraphs 16.02.B and 16.02.D.

16.03 *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; and
 - 3. other reasonable expenses directly attributable to termination, including costs incurred to prepare a termination for convenience cost proposal.
- B. Contractor shall not be paid on account of loss of anticipated overhead, profits, or revenue, or other economic loss arising out of or resulting from such termination.

16.04 Contractor May Stop Work or Terminate

- A. If, through no act or fault of Contractor, (1) the Work is suspended for more than 90 consecutive days by Owner or under an order of court or other public authority, or (2) Engineer fails to act on any Application for Payment within 30 days after it is submitted, or (3) 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 16.03.
- 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

Standard General Conditions of the Construction Contract

00700-69

Work until payment is made of all such amounts due Contractor, including interest thereon. The provisions of this paragraph are not intended to preclude Contractor from submitting a Change Proposal 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 17 – FINAL RESOLUTION OF DISPUTES

17.01 Methods and Procedures

- A. *Disputes Subject to Final Resolution*: The following disputed matters are subject to final resolution under the provisions of this Article:
 - 1. A timely appeal of an approval in part and denial in part of a Claim, or of a denial in full; and
 - 2. Disputes between Owner and Contractor concerning the Work or obligations under the Contract Documents, and arising after final payment has been made.
- B. *Final Resolution of Disputes*: For any dispute subject to resolution under this Article, Owner or Contractor may:
 - 1. elect in writing to invoke the dispute resolution process provided for in the Supplementary Conditions; or
 - 2. agree with the other party to submit the dispute to another dispute resolution process; or
 - 3. if no dispute resolution process is provided for in the Supplementary Conditions or mutually agreed to, give written notice to the other party of the intent to submit the dispute to a court of competent jurisdiction.

ARTICLE 18 – MISCELLANEOUS

18.01 *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, by a commercial courier service or otherwise, to the individual or to a member of the firm or to an officer of the corporation for which it is intended; or
 - 2. delivered at or sent by registered or certified mail, postage prepaid, to the last business address known to the sender of the notice.

18.02 Computation of Times

A. When any period of time is referred to in the Contract 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.

18.03 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

Standard General Conditions of the Construction Contract

00700-70

them which are otherwise imposed or available by Laws or Regulations, by special warranty or guarantee, or by other provisions of the Contract. 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.

18.04 Limitation of Damages

A. With respect to any and all Change Proposals, Claims, disputes subject to final resolution, and other matters at issue, neither Owner nor Engineer, nor any of their officers, directors, members, partners, employees, agents, consultants, or subcontractors, shall be liable to Contractor for any claims, costs, losses, or damages sustained by Contractor on or in connection with any other project or anticipated project.

18.05 No Waiver

A. A party's non-enforcement of any provision shall not constitute a waiver of that provision, nor shall it affect the enforceability of that provision or of the remainder of this Contract.

18.06 Survival of Obligations

A. All representations, indemnifications, warranties, and guarantees made in, required by, or given in accordance with the Contract, as well as all continuing obligations indicated in the Contract, will survive final payment, completion, and acceptance of the Work or termination or completion of the Contract or termination of the services of Contractor.

18.07 Controlling Law

A. This Contract is to be governed by the law of the state in which the Project is located.

18.08 Headings

A. Article and paragraph headings are inserted for convenience only and do not constitute parts of these General Conditions.

END OF SECTION

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Standard General Conditions of the Construction Contract 00700-72

Change Order No.

Date of Issu	iance:	Effective Date:	
Owner:	Navajo Nation	Owner's Contract No.:	
Contractor:		Contractor's Project No.	:
Engineer:	Brown and Caldwell	Engineer's Project No.:	150360
Project:	Navajo Nation	Contract Name:	Contract No. 2: Well House,
	Western Navajo Pipeline Phase 1: Bodaway-Gap		Storage Tank, Altitude Valve,
	Well, Tank, and Pipeline		and Pipelines

The Contract is modified as follows upon execution of this Change Order: Description:

Attachments:	[List documents	supporting	chanael
/ lucinicitus.		Supporting	chungej

CHANGE IN CONTRACT	PRICE				IN CONTRACT TIMES
			-	-	in Milestones if applicable]
Original Contract Price:		Original Contract Times:			
¢			Substantial Completion:		
\$			Ready for Final	Paymei	nt:
					days or dates
[Increase] [Decrease] from previously	/ approv	ed Change		-	rom previously approved Change
Orders No to No:			Orders No		
					ו:
\$			Ready for Final	Payme	nt:
					days
Contract Price prior to this Change Or	der:		Contract Times	prior to	o this Change Order:
			Substantial Cor	npletior	າ:
\$			Ready for Final	Payme	nt:
					days or dates
[Increase] [Decrease] of this Change (Order:		[Increase] [Dec	rease] c	of this Change Order:
			Substantial Cor	npletior	ו:
\$					nt:
					days or dates
Contract Price incorporating this Char	nge Orde	er:	Contract Times	with al	l approved Change Orders:
	-		Substantial Completion:		
\$					nt:
					days or dates
RECOMMENDED:		ACCEF	PTED:		ACCEPTED:
Ву:	By:			By:	
Engineer (if required)	_ ^	Owner (Autho	orized Signature)	-	Contractor (Authorized Signature)
Title:	Title:	-	,	Title:	
Date	Date			Date	
	_			-	
Approved by Funding Agency (if appli	cable)				
Ву:			Date:		
Title:					
	**	END OF SEC	TION**		
		Change Or	der		
		00941-1			

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Change Order 00941-2

Field Order No.

Date of Issuance:		Effective Date:		
Owner:	Navajo Nation	Owner's Contract No.:		
Contractor:		Contractor's Project No.:		
Engineer:	Brown and Caldwell	Engineer's Project No.:	150360	
Project:	Navajo Nation Western Navajo Pipeline Phase 1: Bodaway-Gap Well, Tank, and Pipeline	Contract Name:	Contract No. 2: Well House, Storage Tank, Altitude Valve, and Pipelines	

Contractor is hereby directed to promptly execute this Field Order, issued in accordance with General Conditions Paragraph 11.01, for minor changes in the Work without changes in Contract Price or Contract Times. If Contractor considers that a change in Contract Price or Contract Times is required, notify Engineer immediately and submit a change proposal before proceeding with this Work.

Reference:

Specification(s)

Drawing(s) / Detail(s)

Description:

Attachments:

	ISSUED:		RECEIVED:
Ву:	Engineer (Authorized Signature)	Ву:	Contractor (Authorized Signature)
Title:			
Date:		Date:	
Copy to:	Owner	**END OF S	ECTION**

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Field Order 00942-2 Appendix A: Navajo Nation and W-9 Forms

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Bodaway-Gap Contract 2 Bid Issue

AFFIDAVIT OF NON-COLLUSION

for _	architectural, engineering, design-build, constr	Services	des	scription of project	Project
	located in the		Chapter of t	he Navajo Nation	
4. 4. C					
tate of) ss.				
County of)				
					•
ffiant:		, being first du	uly sworn, hereby	deposes and says:	
. that he/she	is the	of		the I	Rusiness Entity
	is the		company, firm, partn	ership, etc.	Susmess Entry
	ibmitted/is submitting to) the Navajo Natio	n a Proposal or S	tatement of Quality	fications (SOQ) o
	above-named Project;		• • • • • • • • • • • • • • • • • • •		
	nt is fully informed w				
	by said Business Ent				t to all pertiner
circumstan	ces regarding the submi	ssion of said Propo	sal/SOQ/Bid to th	e Navajo Nation;	
that he/she	is authorized to represe	ent said Business E	Entity for purposes	s of the declaration	ns set forth herein
	ll such declarations are			all of its owners,	partners, officer
	employees, officials, ager	-			
	oposal/SOQ/bid is genu				
that said E	ntity has not in any mar	nner colluded, cons	pired, connived, c	or agreed, directly	or indirectly, wit
any other e	entity, bidder, or person,	to submit a sham	Proposal/SOQ/Bic	l to the Navajo Na	tion in connectio
with the pr	oposed Contract for whi	ch said Proposal/S	OQ/Bid was subm	itted, or to refrain	from submitting
Proposal/S	OQ/Bid to the Navajo N	ation in connection	n with the propose	d Contract;	
that said I	Entity has not in any	manner, directly d	or indirectly, sou	ght by agreemen	t or collusion, c
communica	ation or conference, with	n any other entity, b	bidder, or person,	to fix any price or	fee relating to an
Proposal/S	OQ/Bid of Entity or of	any other entity, b	idder, or person, o	or to fix any price	e, overhead, profi
reimbursen	nent, or cost element of	said Proposal/SOQ	/Bid, or of that of	any other entity, b	idder, or person:
that said I	Entity has not -through	n any collusion, c	conspiracy, conniv	vance, or unlawfi	al written or or
agreement-	secured any advantage	against the Navajo	o Nation or agains	st any other entity	v. bidder or perso
interested i	n the proposed Contract	for the above-name	ed Project;	,	, p
that all state	ements set forth herein,	and in said Proposa	al/SOQ/Bid submi	tted to the Navajo	Nation, are true.
					• · ·
signature of Af	ffiant:	· · · · · · · · · · · · · · · · · · ·	NOTARY:		
printed name of	of Affiant:				
title of Affiant:				sworn to before	
name of Busine	ss Entity:		day of	, 20_	<u> </u>
				re	· · · · · · · · · · · · · · · · · · ·
	LLC, Partnership, etc.):				
address of Busin	ness Entity:		My commission	expires	, 20
Business Entited	- FINI-	<u> </u>			
Business Entity'	s EIN:				

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AFFIDAVIT OF RESPONSIBILITY FOR SUBCONTRACTORS

	AFFIDAVII OF RESPONSIBL	LITT FOR SUBCONTRACTORS	
	For	services for the	Project
	(architectural, engineering, design-build, construction, etc.)		
	located in the	Chapter of the Navajo Nation.	
	State of		
	County of		
	Affiant:, being first d	uly sworn, herby deposes and says:	
1.	that he/she is the of	f, the Busi	ness Entity
		(company, firm, partnership, etc.)	otions (SOO) or Did
	that has submitted/is submitting to the Navajo Na for the above-named Project;	ation a Proposal of Statement of Quannea	ations (SOQ) of Blu
2.	that he/she is authorized to represent said Busines	ss Entity for nurnoses of the declarations	set forth herein and
2.	that all such declarations are made on behalf of s		
	employees, officials, agents, or parties-in-interest;		, officers, members,
3.	that, as of the date of signature below, said Entity		n Exhibit A attached
	hereto, for the above-named Project;		
4.	that none of the subcontractors so listed are deba	rred, suspended, or otherwise ineligible t	o receive a contract
	from the Federal Government, any State Governm	nent, the Navajo Nation, or from any other	Tribal Government
	in the United States;		
5.	that none of the subcontractors listed are the		•
	determination of ineligibility from the Federal, an		
6.	no subcontractors are currently, or have been with		
	under any civil complaint or charge by the Federa		
	fraudulent activities, forgery, falsification, theft, b	•	U U
7.	stolen property, or other offense related to the rece no subcontractors have had a contract with such C	1 0	
7. 8.	that the Entity named in Line 1 herein shall assume		
0.	on the Project, and shall perform all subcontracto		
	necessary, in order to guaranteed successful comp	•	•
			-,

9. that all statements set forth herein, and in said Proposal/SOQ/Bid submitted to the Navajo Nation, are true.

Affiant acknowledges and agrees that, if any statement herein is determined to be false or misleading, such will be grounds for immediate termination of the subject Contract or Agreement with the Navajo Nation, and that the Navajo Nation may pursue appropriate legal remedies related to such termination and any false or misleading statements.

Signature of Affiant:	– NOTARY:
Printed Name of Affiant:	Subscribed and sworn to before me this
	- Notary Signature:
Type of Entity (LLC, Partnership, etc.):	My Commission expires, 20
Address of Business Entity:	
	-
Business Entity's EIN:	

► Go to www.irs.gov/FormW9 for instructions and the latest information.

	2 Business name/disregarded entity name, if different from above				
e. ns on page 3.	 3 Check appropriate box for federal tax classification of the person whose name is entered on line 1. Che following seven boxes. Individual/sole proprietor or C Corporation S Corporation Partnership single-member LLC 	eck only one of the	4 Exemptions (codes apply only to certain entities, not individuals; see instructions on page 3): Exempt payee code (if any)		
Print or type. Specific Instructions					
See Sp					
	6 City, state, and ZIP code				
	7 List account number(s) here (optional)				
Par	Taxpayer Identification Number (TIN)				
backu reside	your TIN in the appropriate box. The TIN provided must match the name given on line 1 to ave p withholding. For individuals, this is generally your social security number (SSN). However, for nt alien, sole proprietor, or disregarded entity, see the instructions for Part I, later. For other s, it is your employer identification number (EN). If you do not have a number see How to ge	or a	urity number		

Note: If the account is in more than one name, see the instructions for line 1. Also see What Name and
Number To Give the Requester for guidelines on whose number to enter.

Certification Part II

Under penalties of perjury, I certify that:

- 1. The number shown on this form is my correct taxpayer identification number (or I am waiting for a number to be issued to me); and
- 2. I am not subject to backup withholding because: (a) I am exempt from backup withholding, or (b) I have not been notified by the Internal Revenue Service (IRS) that I am subject to backup withholding as a result of a failure to report all interest or dividends, or (c) the IRS has notified me that I am no longer subject to backup withholding; and
- 3. I am a U.S. citizen or other U.S. person (defined below); and
- 4. The FATCA code(s) entered on this form (if any) indicating that I am exempt from FATCA reporting is correct.

Certification instructions. You must cross out item 2 above if you have been notified by the IRS that you are currently subject to backup withholding because you have failed to report all interest and dividends on your tax return. For real estate transactions, item 2 does not apply. For mortgage interest paid, acquisition or abandonment of secured property, cancellation of debt, contributions to an individual retirement arrangement (IRA), and generally, payments other than interest and dividends, you are not required to sign the certification, but you must provide your correct TIN. See the instructions for Part II, later.

Sign	Signature of	
Here	U.S. person >	

TIN. later.

General Instructions

Section references are to the Internal Revenue Code unless otherwise noted.

Future developments. For the latest information about developments related to Form W-9 and its instructions, such as legislation enacted after they were published, go to www.irs.gov/FormW9.

Purpose of Form

An individual or entity (Form W-9 requester) who is required to file an information return with the IRS must obtain your correct taxpayer identification number (TIN) which may be your social security number (SSN), individual taxpayer identification number (ITIN), adoption taxpayer identification number (ATIN), or employer identification number (EIN), to report on an information return the amount paid to you, or other amount reportable on an information return. Examples of information returns include, but are not limited to, the following.

· Form 1099-INT (interest earned or paid)

- Form 1099-DIV (dividends, including those from stocks or mutual funds)
- Form 1099-MISC (various types of income, prizes, awards, or gross proceeds)
- Form 1099-B (stock or mutual fund sales and certain other transactions by brokers)

or

Employer identification number

• Form 1099-S (proceeds from real estate transactions)

Date 🕨

- Form 1099-K (merchant card and third party network transactions)
- Form 1098 (home mortgage interest), 1098-E (student loan interest),
- 1098-T (tuition)
- Form 1099-C (canceled debt)
- Form 1099-A (acquisition or abandonment of secured property)
- Use Form W-9 only if you are a U.S. person (including a resident alien), to provide your correct TIN.

If you do not return Form W-9 to the requester with a TIN, you might be subject to backup withholding. See What is backup withholding, later.

By signing the filled-out form, you:

1. Certify that the TIN you are giving is correct (or you are waiting for a number to be issued),

2. Certify that you are not subject to backup withholding, or

3. Claim exemption from backup withholding if you are a U.S. exempt payee. If applicable, you are also certifying that as a U.S. person, your allocable share of any partnership income from a U.S. trade or business is not subject to the withholding tax on foreign partners' share of effectively connected income, and

4. Certify that FATCA code(s) entered on this form (if any) indicating that you are exempt from the FATCA reporting, is correct. See *What is FATCA reporting*, later, for further information.

Note: If you are a U.S. person and a requester gives you a form other than Form W-9 to request your TIN, you must use the requester's form if it is substantially similar to this Form W-9.

Definition of a U.S. person. For federal tax purposes, you are considered a U.S. person if you are:

• An individual who is a U.S. citizen or U.S. resident alien;

• A partnership, corporation, company, or association created or organized in the United States or under the laws of the United States;

An estate (other than a foreign estate); or

• A domestic trust (as defined in Regulations section 301.7701-7).

Special rules for partnerships. Partnerships that conduct a trade or business in the United States are generally required to pay a withholding tax under section 1446 on any foreign partners' share of effectively connected taxable income from such business. Further, in certain cases where a Form W-9 has not been received, the rules under section 1446 require a partnership to presume that a partner is a foreign person, and pay the section 1446 withholding tax. Therefore, if you are a U.S. person that is a partner in a partnership conducting a trade or business in the United States, provide Form W-9 to the partnership to establish your U.S. status and avoid section 1446 withholding on your share of partnership income.

In the cases below, the following person must give Form W-9 to the partnership for purposes of establishing its U.S. status and avoiding withholding on its allocable share of net income from the partnership conducting a trade or business in the United States.

 In the case of a disregarded entity with a U.S. owner, the U.S. owner of the disregarded entity and not the entity;

• In the case of a grantor trust with a U.S. grantor or other U.S. owner, generally, the U.S. grantor or other U.S. owner of the grantor trust and not the trust; and

• In the case of a U.S. trust (other than a grantor trust), the U.S. trust (other than a grantor trust) and not the beneficiaries of the trust.

Foreign person. If you are a foreign person or the U.S. branch of a foreign bank that has elected to be treated as a U.S. person, do not use Form W-9. Instead, use the appropriate Form W-8 or Form 8233 (see Pub. 515, Withholding of Tax on Nonresident Aliens and Foreign Entities).

Nonresident alien who becomes a resident alien. Generally, only a nonresident alien individual may use the terms of a tax treaty to reduce or eliminate U.S. tax on certain types of income. However, most tax treaties contain a provision known as a "saving clause." Exceptions specified in the saving clause may permit an exemption from tax to continue for certain types of income even after the payee has otherwise become a U.S. resident alien for tax purposes.

If you are a U.S. resident alien who is relying on an exception contained in the saving clause of a tax treaty to claim an exemption from U.S. tax on certain types of income, you must attach a statement to Form W-9 that specifies the following five items.

1. The treaty country. Generally, this must be the same treaty under which you claimed exemption from tax as a nonresident alien.

2. The treaty article addressing the income.

3. The article number (or location) in the tax treaty that contains the saving clause and its exceptions.

4. The type and amount of income that qualifies for the exemption from tax.

5. Sufficient facts to justify the exemption from tax under the terms of the treaty article.

Example. Article 20 of the U.S.-China income tax treaty allows an exemption from tax for scholarship income received by a Chinese student temporarily present in the United States. Under U.S. law, this student will become a resident alien for tax purposes if his or her stay in the United States exceeds 5 calendar years. However, paragraph 2 of the first Protocol to the U.S.-China treaty (dated April 30, 1984) allows the provisions of Article 20 to continue to apply even after the Chinese student becomes a resident alien of the United States. A Chinese student who qualifies for this exception (under paragraph 2 of the first protocol) and is relying on this exception to claim an exemption from tax on his or her scholarship or fellowship income would attach to Form W-9 a statement that includes the information described above to support that exemption.

If you are a nonresident alien or a foreign entity, give the requester the appropriate completed Form W-8 or Form 8233.

Backup Withholding

What is backup withholding? Persons making certain payments to you must under certain conditions withhold and pay to the IRS 24% of such payments. This is called "backup withholding." Payments that may be subject to backup withholding include interest, tax-exempt interest, dividends, broker and barter exchange transactions, rents, royalties, nonemployee pay, payments made in settlement of payment card and third party network transactions, and certain payments from fishing boat operators. Real estate transactions are not subject to backup withholding.

You will not be subject to backup withholding on payments you receive if you give the requester your correct TIN, make the proper certifications, and report all your taxable interest and dividends on your tax return.

Payments you receive will be subject to backup withholding if:

1. You do not furnish your TIN to the requester,

2. You do not certify your TIN when required (see the instructions for Part II for details),

3. The IRS tells the requester that you furnished an incorrect TIN,

4. The IRS tells you that you are subject to backup withholding because you did not report all your interest and dividends on your tax return (for reportable interest and dividends only), or

5. You do not certify to the requester that you are not subject to backup withholding under 4 above (for reportable interest and dividend accounts opened after 1983 only).

Certain payees and payments are exempt from backup withholding. See *Exempt payee code*, later, and the separate Instructions for the Requester of Form W-9 for more information.

Also see Special rules for partnerships, earlier.

What is FATCA Reporting?

The Foreign Account Tax Compliance Act (FATCA) requires a participating foreign financial institution to report all United States account holders that are specified United States persons. Certain payees are exempt from FATCA reporting. See *Exemption from FATCA reporting code*, later, and the Instructions for the Requester of Form W-9 for more information.

Updating Your Information

You must provide updated information to any person to whom you claimed to be an exempt payee if you are no longer an exempt payee and anticipate receiving reportable payments in the future from this person. For example, you may need to provide updated information if you are a C corporation that elects to be an S corporation, or if you no longer are tax exempt. In addition, you must furnish a new Form W-9 if the name or TIN changes for the account; for example, if the grantor of a grantor trust dies.

Penalties

Failure to furnish TIN. If you fail to furnish your correct TIN to a requester, you are subject to a penalty of \$50 for each such failure unless your failure is due to reasonable cause and not to willful neglect.

Civil penalty for false information with respect to withholding. If you make a false statement with no reasonable basis that results in no backup withholding, you are subject to a \$500 penalty.

Criminal penalty for falsifying information. Willfully falsifying certifications or affirmations may subject you to criminal penalties including fines and/or imprisonment.

Misuse of TINs. If the requester discloses or uses TINs in violation of federal law, the requester may be subject to civil and criminal penalties.

Specific Instructions

Line 1

You must enter one of the following on this line; **do not** leave this line blank. The name should match the name on your tax return.

If this Form W-9 is for a joint account (other than an account maintained by a foreign financial institution (FFI)), list first, and then circle, the name of the person or entity whose number you entered in Part I of Form W-9. If you are providing Form W-9 to an FFI to document a joint account, each holder of the account that is a U.S. person must provide a Form W-9.

a. **Individual.** Generally, enter the name shown on your tax return. If you have changed your last name without informing the Social Security Administration (SSA) of the name change, enter your first name, the last name as shown on your social security card, and your new last name.

Note: ITIN applicant: Enter your individual name as it was entered on your Form W-7 application, line 1a. This should also be the same as the name you entered on the Form 1040/1040A/1040EZ you filed with your application.

b. **Sole proprietor or single-member LLC.** Enter your individual name as shown on your 1040/1040A/1040EZ on line 1. You may enter your business, trade, or "doing business as" (DBA) name on line 2.

c. Partnership, LLC that is not a single-member LLC, C corporation, or S corporation. Enter the entity's name as shown on the entity's tax return on line 1 and any business, trade, or DBA name on line 2.

d. **Other entities.** Enter your name as shown on required U.S. federal tax documents on line 1. This name should match the name shown on the charter or other legal document creating the entity. You may enter any business, trade, or DBA name on line 2.

e. **Disregarded entity.** For U.S. federal tax purposes, an entity that is disregarded as an entity separate from its owner is treated as a "disregarded entity." See Regulations section 301.7701-2(c)(2)(iii). Enter the owner's name on line 1. The name of the entity entered on line 1 should never be a disregarded entity. The name on line 1 should be the name shown on the income tax return on which the income should be reported. For example, if a foreign LLC that is treated as a disregarded entity for U.S. federal tax purposes has a single owner that is a U.S. person, the U.S. owner's name is required to be provided on line 1. If the direct owner of the entity is also a disregarded entity, enter the first owner that is not disregarded for federal tax purposes. Enter the disregarded entity's name on line 2, "Business name/disregarded entity name." If the owner of the disregarded entity is a foreign person, the owner must complete an appropriate Form W-8 instead of a Form W-9. This is the case even if the foreign person has a U.S. TIN.

Line 2

If you have a business name, trade name, DBA name, or disregarded entity name, you may enter it on line 2.

Line 3

Check the appropriate box on line 3 for the U.S. federal tax classification of the person whose name is entered on line 1. Check only one box on line 3.

IF the entity/person on line 1 is a(n)	THEN check the box for
Corporation	Corporation
 Individual Sole proprietorship, or Single-member limited liability company (LLC) owned by an individual and disregarded for U.S. federal tax purposes. 	Individual/sole proprietor or single- member LLC
 LLC treated as a partnership for U.S. federal tax purposes, LLC that has filed Form 8832 or 2553 to be taxed as a corporation, or LLC that is disregarded as an entity separate from its owner but the owner is another LLC that is not disregarded for U.S. federal tax purposes. 	Limited liability company and enter the appropriate tax classification. (P= Partnership; C= C corporation; or S= S corporation)
Partnership	Partnership
Trust/estate	Trust/estate

Line 4, Exemptions

If you are exempt from backup withholding and/or FATCA reporting, enter in the appropriate space on line 4 any code(s) that may apply to you.

Exempt payee code.

• Generally, individuals (including sole proprietors) are not exempt from backup withholding.

• Except as provided below, corporations are exempt from backup withholding for certain payments, including interest and dividends.

• Corporations are not exempt from backup withholding for payments made in settlement of payment card or third party network transactions.

• Corporations are not exempt from backup withholding with respect to attorneys' fees or gross proceeds paid to attorneys, and corporations that provide medical or health care services are not exempt with respect to payments reportable on Form 1099-MISC.

The following codes identify payees that are exempt from backup withholding. Enter the appropriate code in the space in line 4.

1 - An organization exempt from tax under section 501(a), any IRA, or a custodial account under section 403(b)(7) if the account satisfies the requirements of section 401(f)(2)

2-The United States or any of its agencies or instrumentalities

3-A state, the District of Columbia, a U.S. commonwealth or possession, or any of their political subdivisions or instrumentalities

4-A foreign government or any of its political subdivisions, agencies, or instrumentalities

5-A corporation

6—A dealer in securities or commodities required to register in the United States, the District of Columbia, or a U.S. commonwealth or possession

 $7\!-\!A$ futures commission merchant registered with the Commodity Futures Trading Commission

8-A real estate investment trust

9—An entity registered at all times during the tax year under the Investment Company Act of 1940

10-A common trust fund operated by a bank under section 584(a)

11-A financial institution

12-A middleman known in the investment community as a nominee or custodian

13—A trust exempt from tax under section 664 or described in section 4947

The following chart shows types of payments that may be exempt from backup withholding. The chart applies to the exempt payees listed above, 1 through 13.

IF the payment is for	THEN the payment is exempt
	for
Interest and dividend payments	All exempt payees except for 7
Broker transactions	Exempt payees 1 through 4 and 6 through 11 and all C corporations. S corporations must not enter an exempt payee code because they are exempt only for sales of noncovered securities acquired prior to 2012.
Barter exchange transactions and patronage dividends	Exempt payees 1 through 4
Payments over \$600 required to be reported and direct sales over \$5,000 ¹	Generally, exempt payees 1 through 5 ²
Payments made in settlement of payment card or third party network transactions	Exempt payees 1 through 4

¹ See Form 1099-MISC, Miscellaneous Income, and its instructions.

² However, the following payments made to a corporation and reportable on Form 1099-MISC are not exempt from backup withholding: medical and health care payments, attorneys' fees, gross proceeds paid to an attorney reportable under section 6045(f), and payments for services paid by a federal executive agency.

Exemption from FATCA reporting code. The following codes identify payees that are exempt from reporting under FATCA. These codes apply to persons submitting this form for accounts maintained outside of the United States by certain foreign financial institutions. Therefore, if you are only submitting this form for an account you hold in the United States, you may leave this field blank. Consult with the person requesting this form if you are uncertain if the financial institution is subject to these requirements. A requester may indicate that a code is not required by providing you with a Form W-9 with "Not Applicable" (or any similar indication) written or printed on the line for a FATCA exemption code.

A—An organization exempt from tax under section 501(a) or any individual retirement plan as defined in section 7701(a)(37)

B-The United States or any of its agencies or instrumentalities

C-A state, the District of Columbia, a U.S. commonwealth or possession, or any of their political subdivisions or instrumentalities

D-A corporation the stock of which is regularly traded on one or more established securities markets, as described in Regulations section 1.1472-1(c)(1)(i)

E-A corporation that is a member of the same expanded affiliated group as a corporation described in Regulations section 1.1472-1(c)(1)(i)

F-A dealer in securities, commodities, or derivative financial instruments (including notional principal contracts, futures, forwards, and options) that is registered as such under the laws of the United States or any state

G-A real estate investment trust

H-A regulated investment company as defined in section 851 or an entity registered at all times during the tax year under the Investment Company Act of 1940

I-A common trust fund as defined in section 584(a)

J—A bank as defined in section 581

K-A broker

L-A trust exempt from tax under section 664 or described in section 4947(a)(1)

M-A tax exempt trust under a section 403(b) plan or section 457(g) plan

Note: You may wish to consult with the financial institution requesting this form to determine whether the FATCA code and/or exempt payee code should be completed.

Line 5

Enter your address (number, street, and apartment or suite number). This is where the requester of this Form W-9 will mail your information returns. If this address differs from the one the requester already has on file, write NEW at the top. If a new address is provided, there is still a chance the old address will be used until the payor changes your address in their records.

Line 6

Enter your city, state, and ZIP code.

Part I. Taxpayer Identification Number (TIN)

Enter your TIN in the appropriate box. If you are a resident alien and you do not have and are not eligible to get an SSN, your TIN is your IRS individual taxpayer identification number (ITIN). Enter it in the social security number box. If you do not have an ITIN, see *How to get a TIN* below.

If you are a sole proprietor and you have an EIN, you may enter either your SSN or EIN.

If you are a single-member LLC that is disregarded as an entity separate from its owner, enter the owner's SSN (or EIN, if the owner has one). Do not enter the disregarded entity's EIN. If the LLC is classified as a corporation or partnership, enter the entity's EIN.

Note: See *What Name and Number To Give the Requester,* later, for further clarification of name and TIN combinations.

How to get a TIN. If you do not have a TIN, apply for one immediately. To apply for an SSN, get Form SS-5, Application for a Social Security Card, from your local SSA office or get this form online at *www.SSA.gov.* You may also get this form by calling 1-800-772-1213. Use Form W-7, Application for IRS Individual Taxpayer Identification Number, to apply for an ITIN, or Form SS-4, Application for Employer Identification Number, to apply for an EIN. You can apply for an EIN online by accessing the IRS website at *www.irs.gov/Businesses* and clicking on Employer Identification Number (EIN) under Starting a Business. Go to *www.irs.gov/Forms* to view, download, or print Form W-7 and/or Form SS-4. Or, you can go to *www.irs.gov/OrderForms* to place an order and have Form W-7 and/or SS-4 mailed to you within 10 business days.

If you are asked to complete Form W-9 but do not have a TIN, apply for a TIN and write "Applied For" in the space for the TIN, sign and date the form, and give it to the requester. For interest and dividend payments, and certain payments made with respect to readily tradable instruments, generally you will have 60 days to get a TIN and give it to the requester before you are subject to backup withholding on payments. The 60-day rule does not apply to other types of payments. You will be subject to backup withholding on all such payments until you provide your TIN to the requester.

Note: Entering "Applied For" means that you have already applied for a TIN or that you intend to apply for one soon.

Caution: A disregarded U.S. entity that has a foreign owner must use the appropriate Form W-8.

Part II. Certification

To establish to the withholding agent that you are a U.S. person, or resident alien, sign Form W-9. You may be requested to sign by the withholding agent even if item 1, 4, or 5 below indicates otherwise.

For a joint account, only the person whose TIN is shown in Part I should sign (when required). In the case of a disregarded entity, the person identified on line 1 must sign. Exempt payees, see *Exempt payee code*, earlier.

Signature requirements. Complete the certification as indicated in items 1 through 5 below.

1. Interest, dividend, and barter exchange accounts opened before 1984 and broker accounts considered active during 1983. You must give your correct TIN, but you do not have to sign the certification.

2. Interest, dividend, broker, and barter exchange accounts opened after 1983 and broker accounts considered inactive during 1983. You must sign the certification or backup withholding will apply. If you are subject to backup withholding and you are merely providing your correct TIN to the requester, you must cross out item 2 in the certification before signing the form.

3. Real estate transactions. You must sign the certification. You may cross out item 2 of the certification.

4. Other payments. You must give your correct TIN, but you do not have to sign the certification unless you have been notified that you have previously given an incorrect TIN. "Other payments" include payments made in the course of the requester's trade or business for rents, royalties, goods (other than bills for merchandise), medical and health care services (including payments to corporations), payments to a nonemployee for services, payments made in settlement of payment card and third party network transactions, payments to certain fishing boat crew members and fishermen, and gross proceeds paid to attorneys (including payments to corporations).

5. Mortgage interest paid by you, acquisition or abandonment of secured property, cancellation of debt, qualified tuition program payments (under section 529), ABLE accounts (under section 529A), IRA, Coverdell ESA, Archer MSA or HSA contributions or distributions, and pension distributions. You must give your correct TIN, but you do not have to sign the certification.

What Name and Number To Give the Requester

For this type of account:	Give name and SSN of:
1. Individual	The individual
2. Two or more individuals (joint account) other than an account maintained by an FFI	The actual owner of the account or, if combined funds, the first individual on the account ¹
3. Two or more U.S. persons (joint account maintained by an FFI)	Each holder of the account
4. Custodial account of a minor (Uniform Gift to Minors Act)	The minor ²
5. a. The usual revocable savings trust (grantor is also trustee)	The grantor-trustee ¹
b. So-called trust account that is not a legal or valid trust under state law	The actual owner ¹
6. Sole proprietorship or disregarded entity owned by an individual	The owner ³
7. Grantor trust filing under Optional Form 1099 Filing Method 1 (see Regulations section 1.671-4(b)(2)(i) (A))	The grantor*
For this type of account:	Give name and EIN of:
8. Disregarded entity not owned by an individual	The owner
9. A valid trust, estate, or pension trust	Legal entity ⁴
10. Corporation or LLC electing corporate status on Form 8832 or Form 2553	The corporation
11. Association, club, religious, charitable, educational, or other tax- exempt organization	The organization
12. Partnership or multi-member LLC	The partnership
13. A broker or registered nominee	The broker or nominee

For this type of account:	Give name and EIN of:
14. Account with the Department of Agriculture in the name of a public entity (such as a state or local government, school district, or prison) that receives agricultural program payments	The public entity
 Grantor trust filing under the Form 1041 Filing Method or the Optional Form 1099 Filing Method 2 (see Regulations section 1.671-4(b)(2)(i)(B)) 	The trust

¹ List first and circle the name of the person whose number you furnish. If only one person on a joint account has an SSN, that person's number must be furnished.

² Circle the minor's name and furnish the minor's SSN.

³ You must show your individual name and you may also enter your business or DBA name on the "Business name/disregarded entity" name line. You may use either your SSN or EIN (if you have one), but the IRS encourages you to use your SSN.

⁴ List first and circle the name of the trust, estate, or pension trust. (Do not furnish the TIN of the personal representative or trustee unless the legal entity itself is not designated in the account title.) Also see *Special rules for partnerships*, earlier.

*Note: The grantor also must provide a Form W-9 to trustee of trust.

Note: If no name is circled when more than one name is listed, the number will be considered to be that of the first name listed.

Secure Your Tax Records From Identity Theft

Identity theft occurs when someone uses your personal information such as your name, SSN, or other identifying information, without your permission, to commit fraud or other crimes. An identity thief may use your SSN to get a job or may file a tax return using your SSN to receive a refund.

To reduce your risk:

- Protect your SSN,
- · Ensure your employer is protecting your SSN, and
- Be careful when choosing a tax preparer.

If your tax records are affected by identity theft and you receive a notice from the IRS, respond right away to the name and phone number printed on the IRS notice or letter.

If your tax records are not currently affected by identity theft but you think you are at risk due to a lost or stolen purse or wallet, questionable credit card activity or credit report, contact the IRS Identity Theft Hotline at 1-800-908-4490 or submit Form 14039.

For more information, see Pub. 5027, Identity Theft Information for Taxpayers.

Victims of identity theft who are experiencing economic harm or a systemic problem, or are seeking help in resolving tax problems that have not been resolved through normal channels, may be eligible for Taxpayer Advocate Service (TAS) assistance. You can reach TAS by calling the TAS toll-free case intake line at 1-877-777-4778 or TTY/TDD 1-800-829-4059.

Protect yourself from suspicious emails or phishing schemes. Phishing is the creation and use of email and websites designed to mimic legitimate business emails and websites. The most common act is sending an email to a user falsely claiming to be an established legitimate enterprise in an attempt to scam the user into surrendering private information that will be used for identity theft. The IRS does not initiate contacts with taxpayers via emails. Also, the IRS does not request personal detailed information through email or ask taxpayers for the PIN numbers, passwords, or similar secret access information for their credit card, bank, or other financial accounts.

If you receive an unsolicited email claiming to be from the IRS, forward this message to *phishing@irs.gov*. You may also report misuse of the IRS name, logo, or other IRS property to the Treasury Inspector General for Tax Administration (TIGTA) at 1-800-366-4484. You can forward suspicious emails to the Federal Trade Commission at *spam@uce.gov* or report them at *www.ftc.gov/complaint*. You can contact the FTC at *www.ftc.gov/idtheft* or 877-IDTHEFT (877-438-4338). If you have been the victim of identity theft, see *www.ldentityTheft.gov* and Pub. 5027.

Visit *www.irs.gov/IdentityTheft* to learn more about identity theft and how to reduce your risk.

Privacy Act Notice

Section 6109 of the Internal Revenue Code requires you to provide your correct TIN to persons (including federal agencies) who are required to file information returns with the IRS to report interest, dividends, or certain other income paid to you; mortgage interest you paid; the acquisition or abandonment of secured property; the cancellation of debt; or contributions you made to an IRA, Archer MSA, or HSA. The person collecting this form uses the information on the form to file information returns with the IRS, reporting the above information. Routine uses of this information include giving it to the Department of Justice for civil and criminal litigation and to cities, states, the District of Columbia, and U.S. commonwealths and possessions for use in administering their laws. The information also may be disclosed to other countries under a treaty, to federal and state agencies to enforce civil and criminal laws, or to federal law enforcement and intelligence agencies to combat terrorism. You must provide your TIN whether or not you are required to file a tax return. Under section 3406, payers must generally withhold a percentage of taxable interest, dividend, and certain other payments to a payee who does not give a TIN to the payer. Certain penalties may also apply for providing false or fraudulent information.

NAVAJO NATION CERTIFICATION Regarding Debarment and Suspension

Applicant acknowledges that to the best of his/her knowledge that their company and principal participants on this contract:

- 1. Are not debarred, suspended, or otherwise slated for debarment, ineligible and/or excluded from participation on Federal, State, and Tribal Government contracts etc.
- 2. Are not presently nor have been under criminal indictment or civilly charged by a governmental entity (Federal, State, and Tribal Government) for fraud, forgery, falsification, theft, bribery, destruction of records, receiving stolen property and other criminal offenses in the administration of a government contract.
- 3. Have not been terminated for cause or convenience by a governmental entity in the administration of a government contract (Federal, State, and Tribal Government).
- 4. If the Navajo Nation determines that the Certificate provided herein is not true, it will be grounds to terminate the contract and pursue other legal remedies.

Applicant's Address

Name & Signature of Applicant

Type or Print Name

Signature

Date

Appendix B: Office of Navajo Labor Relations Minimum Wage Rate Determination and Requirements THIS PAGE LEFT INTENTIONALLY BLANK

Bodaway-Gap Contract 2 Bid Issue

THE NAVAJO PREFERENCE IN EMPLOYMENT ACT 15 N.N.C. CHAPTER 7 & 8

(Amended August 1, 1985) (Amended October 25, 1990)

The Office of Navajo Labor Relations The Navajo Nation P.O. Box 1943 Window Rock, Arizona 86515 Phone: (928) 871-6800

CO-73-90

Class "C" Resolution No BIA Action Required. Executive Branch Action Necessary

RESOLUTION OF THE NAVAJO NATION COUNCIL

Amending the Navajo Preference in Employment Act, Title 15, Chapter 7 of the Navajo Tribal Code

WHEREAS:

1. The Navajo Nation Council is the governing body of the Navajo Nation, 2 N.T.C., Section 102; and

2. The ability of members of the Navajo Nation to secure and retain employment within the territorial jurisdiction implicates the health, safety and welfare of the Nation; and

3. Pursuant to an Executive Order, dated February 24, 1986, the Navajo Labor Investigative Task Force was created to assess and investigate labor issues important to the Nation; and

4. By Executive Order dated November 17, 1989, the Navajo Labor Investigative Task Force was reconstituted and its authority to investigative labor matters pursuant to the 1986 Executive Order was reaffirmed; and

5. During the course of its investigation, the Navajo Labor Investigative Task Force received comments in various forms concerning labor matters as well as company and union officials. The Task Force incorporated its findings into a document, entitled <u>Report to the Navajo Nation Council Regarding the Proposed</u> <u>Amendments to the Navajo Preference in Employment Act</u>. Based on these findings and the comments received from the interested public, the Task Force proposed that the Navajo Preference in Employment Act (15 N.T.C., Section 601, et. seq.) be amended; and

6. The Navajo Labor Investigative Task Force presented its report, minutes of public meetings it conducted and proposed amendments to the Navajo Preference Act to the Human Services Committee of the Navajo Nation Council; and

7. Pursuant to its powers to recommend legislation on labor matters (2 N.T.C., Section 604(b)(3)), the Human Services Committee of the Navajo Nation Council by Resolution HSC-0024-91 dated September 26, 1990, adopted the <u>Report to the Navajo Nation</u> <u>Council Regarding the Proposed Amendments to the Navajo Preference</u> <u>in Employment Act</u> and recommended that the Navajo Nation Council enact into law, the <u>Proposed Amendments to the Navajo Preference</u> in <u>Employment Act</u>. (Resolution attached hereto as Exhibit "A")

NAVAJO PREFERENCE IN EMPLOYMENT ACT AMENDED OCTOBER 1990

SECTION 601. TITLE

A. This Act shall be cited as the Navajo Preference in Employment Act and is hereby codified as Title 15 Chapter 7 of the Navajo Nation Code.

SECTION 602. PURPOSE

- A. The purposes of the Navajo Preference in Employment Act are:
 - 1. To provide employment opportunities for the Navajo work force;
 - 2. To provide training for the Navajo people;
 - 3. To promote the economic development of the Navajo Nation;
 - 4. To lessen the Navajo Nation's dependence upon off-reservation sources of employment, income, goods and services;
 - 5. To foster the economic self-sufficiency of Navajo families;
 - 6. To protect the health, safety, and welfare of Navajo workers; and
 - 7. To foster cooperative efforts with employers to assure expanded employment opportunities for the Navajo work force.
- B. It is the intention of the Navajo Nation Council that the provisions of this Act be construed and applied to accomplish the purposes set forth above.

SECTION 603. DEFINITIONS

- A. The term "Commission" shall mean the Navajo Nation Labor Commission.
- B. The term "employment" shall include, but is not limited to, the recruitment, hiring, promotion, transfer, training, upgrading, reduction-in-force, retention, and recall of employees.
- C. The term "employer" shall include all persons, firms, associations, corporations, and the Navajo Nation and all of its agencies and instrumentalities, who engage the services of any person for compensation, whether as employee, agent, or servant.
- D. The term "Navajo" means any enrolled member of the Navajo Nation.
- E. The term "ONLR" means the Office of Navajo Labor Relations.

- F. The term "probable cause" shall mean a reasonable ground for belief in the existence of facts warranting the proceedings complained of.
- G. The term "territorial jurisdiction" means the territorial jurisdiction of the Navajo Nation as defined in 7 N.N.C. §254.
- H. The term "counsel" or "legal counsel" shall mean: (a) a person who is an active member in good standing of the Navajo Nation Bar Association and duly authorized to practice law in the courts of the Navajo Nation; and (b) for the sole purpose of co-counseling in association with a person described in clause (a), an attorney duly authorized, currently licensed and in good standing to practice law in any state of the United States who has, pursuant to written request demonstrating the foregoing qualifications and good cause, obtained written approval of the Commission to appear and participate as co-counsel in a particular Commission proceeding.
- I. The term "necessary qualifications" shall mean those job-related qualifications which are essential to the performance of the basic responsibilities designated for each employment position including any essential qualifications concerning education, training and job-related experience, but excluding any qualifications relating to ability or aptitude to perform essential and basic responsibilities shall be deemed satisfaction of necessary qualifications.
- J. The term "qualifications" shall include the ability to speak and/or understand the Navajo language and familiarity with Navajo culture, customs, and traditions.
- K. The term "person" shall include individuals; labor organizations; tribal, federal, state and local governments, their agencies, subdivisions, instrumentalities and enterprises; and private and public, profit and nonprofit, entities of all kinds having recognized legal capacity or authority to act, whether organized as corporations, partnerships, associations, committees or in any other form.
- L. The term "employee" means an individual employed by an employer.
- M. The term "employment agency" means a person regularly undertaking, with or without compensation, to procure employees for an employer or to obtain for employees opportunities to work for an employer.
- N. The term "labor organization" or "union" means an organization in which employees participate or by which employees are represented and which exists for the purpose, in while or in part, of dealing with employers concerning grievances, labor disputes, wages, rates of pay, hours or other terms and conditions of employment, including a national or international

labor organization and any subordinate conference, general committee, joint or system board, or joint council.

- O. The term "petitioner" means a person who files a complaint seeking to initiate a Commission proceeding under the Act.
- P. The term "respondent" means the person against whom a complaint is filed by a petitioner.
- Q. The term "Act" means the Navajo Preference in Employment Act.

SECTION 604. NAVAJO EMPLOYMENT PREFERENCE

- A. All employers doing business within the territorial jurisdiction [or near the boundaries] of the Navajo Nation, or engaged in any contract with the Navajo Nation shall:
 - 1. Give preference in employment to Navajos. Preference in employment shall include specific Navajo affirmative action plans and timetables for all phases of employment to achieve the Navajo Nation goal of employing Navajos in all job classifications including supervisory and management positions.
 - 2. Within 90 days after the later of: (a) the effective date of this \S 604(A)(2); or (b) the date on which an employer commences business within the territorial jurisdiction of the Navajo Nation, the employer shall file with ONLR a written Navajo affirmative action plan which complies with this Section and other provisions of the Act. In any case where a labor organization represents employees of the employer, the plan shall be jointly filed by the employer and labor organization. Any such associated labor organization shall have obligations under this Section equivalent to those of the employer as to employees represented by such organization. Failure to file such a plan within the prescribed time limit, submission of a plan which does not comply with the requirements of the Act, or failing to implement or comply with the terms of a conforming plan shall constitute violation of the Act. In the event of a required joint plan by an employer and associated labor organization. only the noncomplying party shall be deemed in violation of the Act, as long as the other party has demonstrated a willingness and commitment to comply with the Act.
 - 3. Subject to the availability of adequate resources, ONLR shall provide reasonable guidance and assistance to employers and associated labor organization in connection with the development and implementation of a Navajo affirmative action plan. Upon request, ONLR shall either approve or disapprove any plan, in whole or in part. In the event of approval thereof by ONLR, no charge shall be filed hereunder with respect to alleged unlawful provisions or omissions in the plan, except upon 30 days prior written notice

to the employer and any associated labor organization to enable voluntary correction of any stated deficiencies in such plan. No charge shall be filed against an employer and any associated labor organization for submitting a non-conforming plan, except upon 30 days prior to notice by ONLR identifying deficiencies in the plan which require correction.

- B. Specific requirements for Navajo preference:
 - 1. All employers shall include and specify a Navajo employment preference policy statement in all job announcements and advertisements and employer policies covered by this Act.
 - 2. All employers shall post in a conspicuous place on its premises for its employees and applicants a Navajo preference policy notice prepared by ONLR.
 - 3. Any seniority system of an employer shall be subject to this Act and all other labor laws of the Navajo Nation. Such a seniority system shall not operate to defeat nor prevent the application of the Act, provided, however, that nothing in this Act shall be interpreted as invalidating an otherwise lawful and bona fide seniority system which is used as a selection or retention criterion with respect to any employment opportunity where the pool of applicants or candidates is exclusively composed of Navajos or of non-Navajos.
 - 4. The Navajo Nation when contracting with the federal or state government or one of its entities shall include provisions for Navajo preference in all phases of employment as provided herein. When contracting with any federal agency, the term Indian preference may be substituted for Navajo preference for federal purposes, provided that any such voluntary substitution shall not be construed by the Navajo Nation that this Act is not fully applicable to the federal contract as a matter of law.
 - 5. All employers shall utilize Navajo Nation employment sources and job services for employee recruitment and referrals, provided, however, those employers do not have the foregoing obligations in the event a Navajo is selected for the employment opportunity who is current employee of the employer.
 - 6. All employers shall advertise and announce all job vacancies in at least one newspaper and radio station serving the Navajo Nation, provided, however, the employers do not have the foregoing obligations in the event a Navajo is selected for the employment opportunity who is a current employee of the employer.

- 7. All employers shall use non-discriminatory job qualifications and selection criteria in employment.
- 8. All employers shall not penalize, discipline, discharge nor take any adverse action against any employee without just cause. A written notification to the employee citing such cause for any of the above actions is required in all cases. Provided, that this Subsection shall not apply to Division Directors, or to other employees and officials of the Navajo Nation who serve, pursuant to a specific provision of the Navajo Nation Code, at the pleasure of the Navajo Nation Council, the standing committees of the Navajo Nation Council, the President of the Navajo Nation, the Speaker of the Navajo Nation Council, the Chief Justice of the Navajo Nation, or those persons employed pursuant to 2 N.N.C. §§ 281(C) and 1009.
- 9. All employers shall maintain a safe and clean working environment and provide employment conditions which are free of prejudice, intimidation and harassment.
- 10. Training shall be an integral part of the specific affirmative action plans or activities for Navajo preference in employment.
- 11. An employer-sponsored cross-cultural program shall be an essential part of the affirmative action plans required under the Act. Such program shall primarily focus on the education of non-Navajo employees, including management and supervisory personnel, regarding the cultural and religious traditions or beliefs of Navajos and their relationship to the development of employment policies which accommodate such traditions and beliefs. The cross-cultural program shall be developed and implemented through a process which involves the substantial and continuing participation of an employer's Navajo employees, or representative Navajo employees.
- 12. No fringe benefit plan addressing medical or other benefits, sick leave program or any other personnel policy of an employer, including policies jointly maintained by an employer and associated labor organization, shall discriminate against Navajos in terms or coverage as a result of Navajo cultural or religious traditions or beliefs. To the maximum extent feasible, all of the foregoing policies shall accommodate and recognize in coverage such Navajo traditions and beliefs.
- C. Irrespective of the qualifications of any non-Navajo applicant or candidate, any Navajo applicant or candidate who demonstrates the necessary qualifications for any employment position:
 - 1. Shall be selected by the employer in the case of hiring, promotion, transfer, upgrading, recall and other employment opportunities with respect to such positions; and

- 2. Shall be retained by the employer in the case of a reduction-in-force affecting such class of positions until all non-Navajos employed in the class of positions are laid-off, provided that any Navajo who is laid-off in compliance with this provision shall have the right to displace a non-Navajo in any other employment position for which the Navajo demonstrates necessary qualifications.
- 3. Among a pool of applicants or candidates who are solely Navajo and meet the necessary qualifications, the Navajo with the best qualifications shall be selected or retained, as the case may be.
- D. All employers shall establish written necessary qualifications for each employment position in their work force, a copy of which shall be provided to applicants or candidates at the time they express an interest in such position.

SECTION 605. REPORTS

All employers doing business or engaged in any project or enterprise within the territorial jurisdiction of the Navajo Nation or pursuant to a contract with the Navajo Nation shall submit employment information and reports as required to ONLR. Such reports, in a form acceptable to ONLR, shall include all information necessary and appropriate to determine compliance with the provisions of this Act. All reports shall be filed with ONLR not later than 10 business days after the end of each calendar quarter, provided that ONLR shall have the right to require filing of reports on a weekly or monthly schedule with respect to part-time or full-time temporary employment.

SECTION 606. UNION AND EMPLOYMENT AGENCY ACTIVITIES/RIGHTS OF NAVAJO WORKERS

- A. Subject to lawful provisions of applicable collective bargaining agreements, the basic rights of Navajo workers to organize, bargain collectively, strike, and peaceably picket to secure their legal rights, shall not be abridged in any way by any person. The right to strike and picket does not apply to employees of the Navajo Nation, its agencies, or enterprises.
- B. It shall be unlawful for any labor organization, employer or employment agency to take any action, including action by contract, which directly or indirectly cause or attempts to cause the adoption or use of any employment practice, policy or decision which violates the Act.

SECTION 607. NAVAJO PREVAILING WAGE

A. Definitions. For purpose of the Section, the following terms shall have the meanings indicated:

- 1. The term "prevailing wage" shall mean the wage paid to a majority (more than fifty percent (50%)) of the employees in the classification on similar construction projects in the area during a period not to exceed 24 months prior to the effective date of the prevailing wage rate set hereunder; provided that in the event the same wage is not paid to a majority of the employees in the classification, "prevailing wage" shall mean the average of the wages paid, weighted by the total number of employees in the classification.
- 2. The term "prevailing wage rate" shall mean the rate established by ONLR pursuant to this Section.
- 3. The term "wage" shall mean the total of:
 - a. The basic hourly rate; and
 - The amount of: (a) contributions irrevocably made by a contractor or b. subcontractor to a trustee or to a third person pursuant to a bona fide fringe benefit fund, plan or program for the benefit of employees; and (b) costs to the contractor or subcontractor which may be reasonably providing bona fide fringe benefits to employees anticipated in pursuant to an enforceable commitment to carry out a financially responsible plan or program which was commitment to carry out a financially responsible plan or program which was communicated in writing to the employees affected. The types of fringe benefits contemplated hereunder include medical or hospital health care, pensions on retirement or death, compensation for injuries or illness resulting from occupational activity, or insurance to provide any of the foregoing; unemployment benefits; life insurance, disability insurance, sickness insurance, or accident insurance; vacation or holiday pay; defraying costs of apprenticeships or other similar programs; or other bona fide fringe benefits.
- 4. The term "area" in determining the prevailing wage means the geographic area within the territorial jurisdiction of the Navajo Nation; provided that in the event of insufficient similar construction projects in the area during the period in question, "area" shall include the geographic boundaries of such contiguous municipal, county or state governments as ONLR may determine necessary to secure sufficient wage information on similar construction projects.
- 5. The term "classifications" means all job positions in which persons are employed, exclusive of classifications with assigned duties which are primarily administrative, executive or clerical, and subject to satisfaction of the conditions prescribed in §§ 607(E)(7) and (8), exclusive of "apprentice" and "trainee" classifications as those terms are defined herein.

- 6. "Apprentice" means: (a) a person employed and individually registered in a bona fide apprenticeship program registered with the U.S. Department of Labor, Employment and Training Administration, Bureau of Apprenticeship and Training, or with an Apprenticeship Agency administered by a state or Indian Tribe and recognized by the Bureau, or (b) a person in the first 90 days of probationary employment as an apprentice in such an apprenticeship program, who is not individually registered in the program, but who has been certified by the Bureau of Apprenticeship and Training or a state or Tribal Apprenticeship Agency (where appropriate) to be eligible for probationary employment as an apprentice.
- 7. "Trainee" means a person: (a) registered and receiving on the job training in a construction occupation under a program which has been approved in advance by the U.S. Department of Labor, Employment and Training Administration, as meeting its standards for on-the-job training programs and which has been so certified by that Administration; or (b) employed and/or receiving on-the-job training under a public employment or work experience program which is approved and funded by the Navajo Nation.
- 8. The term "construction" shall mean all activity performed under a contract which relates to: (a) the building, development, rehabilitation, repair, alternation or installation of structures and improvements of all types, including without limitations buildings, bridges, dams, plants, highways, sewers, water mains, power lines and other structures; (b) drilling, blasting, excavating, clearing and landscaping, painting and decorating; (c) transporting materials and supplies to or from the site of any of the activities referred to in (a) or (b) by employees of the contractor or subcontractor; and (d) manufacturing or finishing materials, articles, supplies or equipment at the construction site of any of the foregoing activities by employees of the contractor or subcontractor.
- 9. The term "contract" shall mean the prime construction contract and all subcontracts of any tier thereunder entered into by parties engaged in commercial, business or governmental activities (whether or not such activities are conducted for profit).
- B. Establishment of wage rates.
 - 1. For all construction reasonably anticipated to occur in the area on a regular basis, ONLR shall establish a general prevailing wage rate for each classification within specified types of construction. ONLR shall define classifications and types of construction in accordance with guidelines generally recognized in the construction industry. In all cases where construction is contemplated for which prevailing wage rates have not been set, the contract letting entity shall submit to ONLR a written request for a project prevailing wage scale. Such request shall be submitted not less then

60 days prior to the scheduled date for bid solicitation and shall include detailed information on the anticipated construction classifications, nature of the project and completion plans. ONLR shall use its best efforts to provide a project prevailing wage scale for each classification involved in the project construction within 60 days after receipt of a request therefor.

- 2. In settings prevailing wage rates, ONLR shall conduct such surveys and collect such data as it deems necessary and sufficient to arrive at a wage determination. Wage data may be collected from contractors, contractors' associations, labor organizations, public officials and other sources which reflect wage rates paid in classifications on types of construction in the area, including the names and addresses of contractors and subcontractors; the locations, approximate costs, dates and types of construction; the number of workers employed in each classification on the project; and the wage rates paid such workers. Wage rate data for the area may be provided, and considered in making wage determinations, in various forms including signed statements, collective bargaining agreements and prevailing wage rates established by federal authorities for federally-assisted construction projects.
- 3. Any classification of workers not listed in a prevailing wage rate and which is to be used under a construction contract shall be classified in conformance with the prevailing wage determination issued and applicable to the project; provided that an additional classification and prevailing wage rate therefor will be established in the event each of the following criteria are satisfied:
 - a. The work performed by the proposed classification is not performed by a classification within the existing prevailing wage scale;
 - b. The proposed classification is utilized in the area by the construction industry; and
 - c. The wage set for the proposed classification bear a reasonable relationship to the wage rates contained in the existing scale for other classifications.
- 4. Subject to the prior written approval thereof by the Director of ONLR, a general prevailing wage rate shall be effective on the date notice of such rate is published in a newspaper in general circulation in the Navajo Nation. The notice shall contain the following information:
 - (1) The fact a prevailing wage rate has been set and approved in writing by the Director of ONLR;
 - (2) The type of construction for which the rate was established;

- (3) The effective date, described as the date of publication of the notice or other specified date;
- (4) The address and telephone number of ONLR; and
- (5) A statement that ONLR will provide a copy of the full wage determination on request, and respond to any reasonable questions regarding such determination or its application.
 - a. General prevailing wage rates shall continue in effect until such time as any modifications are adopted.
 - b. A prevailing wage rate for a particular project shall be effective on the date of issuance to the requesting party of a written wage determination approved by the Director of ONLR. The wage determination shall continue in effect for the duration of the project; provided that any such determination may be modified by ONLR in the event that period of time from the effective date of the determination to the date bids are solicited exceeds 180 days and the estimated date of completion of the project is more than one year after the effective date of the determination.
 - c. Project and general wage determinations may be modified from time to time, in whole or in part, to adjust rates in conformity with current conditions, subject to special conditions applicable to project determinations. Such modifications become effective upon the same terms and conditions which are applicable to original determinations.
 - d. Fringe Benefits. The fringe benefits amount of wage reflected in a prevailing wage rate shall be paid in cash to the employee, and shall not be deducted from such employee's wages, unless each of the following conditions is satisfied:
 - (1) The deductions is not contrary to applicable law;
 - (2) A voluntary and informed written consent authorizing the deduction is obtained from the employee in advance of the period in which the work is to be done and such consent is not a condition either for the obtaining or continuing employment;
 - (3) No profit or other benefit is obtained as a result of deduction, directly or indirectly, by the contractor, subcontractor or any person affiliated with them in the

form of a commission, dividend or other consideration; and

- (4) The deduction serves the convenience and interests of the employee.
- C. No contract-letting entity, contractor or subcontractor shall proceed with a construction contract subject to this Section in the absence of a contractual requirement for payment of prevailing wages pursuant to a specified wage determination issued by ONLR. Violation of this obligation shall render the contract-letting entity, and the employer contractor or subcontractor, jointly and severally liable for the difference between wages actually paid and the prevailing wage rate, together with interest thereon (or if no prevailing wage rates have been set, such wage rates as may be issued by ONLR during the course, or after the completion, of the construction project).
 - 1. Failure by any employer, contractor or subcontractor to pay prevailing wages shall render such employer liable for the difference between the amount of wages actually paid and the prevailing rate, together with interest thereon.
 - 2. Any deduction of fringe benefits by an employer contractor or subcontractor in violation of § 607(C) shall render such employer liable for the amount of such deduction, together with interest thereon.
 - 3. Upon written request of ONLR, a contract-letting entity or contractor, as the case may be, shall withhold from any monies payable on account of work performed by an employer contractor or subcontractor under construction contract such sums as may be determined by ONLR as necessary to satisfy any liabilities of such contractor or subcontractor for unpaid prevailing wages or wrongful deduction of fringe benefits.
 - 4. If following a hearing under § 611, a contract-letting entity (other than the Navajo Nation), contractor or subcontractor is found to have willfully violated this Section the Commission may enter a debarment order disqualifying such party from receiving any contract, or subcontract thereunder, with the Navajo Nation for a period not to exceed three years.
 - 5. The liabilities described in this § 607(C) shall not foreclose the Commission form awarding such other relief or imposing such other civil penalties as may be appropriate following a hearing conducted under § 611.
- D. Exemptions. This Section shall not apply to:
 - 1. A contract associated with a construction activity which relates to the provision of architect, engineer, legal or consultant services, or, except as

provided under § 607(A)(8)(d), the manufacturing or furnishing of materials or performance of services and maintenance work by persons not employed by a prime contractor or any of its subcontractors.

- 2. A construction contract relating to a project having a total cost of two thousand dollars (\$2,000) or less.
- 3. A construction contract which is let by a natural person who is an owner or person legally authorized to let such contract, for such person's personal, family or household purposes.
- 4. A construction contract to the extent the work thereunder is performed by employees of the owner, or employees of the person or entity legally authorized to let the prime contract.
- 5. A construction contract for a project receiving federal financial assistance to the extent the prevailing wage is set by federal authorities pursuant to the Davis-Bacon Act, 40 U.S.C., § 276a et seq., (as amended), or other federal law applicable to such project.
- 6. A construction contract to the extent such contract requires payment of wages pursuant to wage scale established under a collective bargaining agreement between any contractor or subcontractor and a labor organization.
- 7. With the exception of the provisions of § 607(C), an apprentice, provided that the apprentice is paid not less than: (a) the basic hourly rate prescribed in the registered program for the apprentice's level of progress, expressed as a percentage of the applicable journeyman rate specified in the prevailing wage rate; and (b) the fringe benefit amount prescribed in the registered program or, if not specified, the fringe benefit amount set in the prevailing wage rate for the applicable journeyman classification. An apprentice who is not enrolled in a registered program (within the meaning of § 607(A)(6)), shall be paid wages in a amount not less than the level prescribed for the applicable journeyman classification specified in the prevailing wage rate.
- 8. With the exception of the provisions of § 607(C), a trainee provided that the trainee is paid not less than: (a) the basic hourly rate prescribed in the approved program for the trainee's level of progress, expressed as a percentage of the applicable journeyman rate specified in the prevailing wage rate; and (b) the fringe benefit amount prescribed in the approved program or, if not specified and as to federally approved programs only, the fringe benefit amount set in the prevailing wage rate for the applicable journeyman classification. A trainee who is not enrolled in an approved program (within the meaning of § 607(A)(7)), shall be paid wages in an

amount not less than level prescribed for the applicable journeyman classification specified in the prevailing wage rate.

SECTION 608. HEALTH AND SAFETY OF NAVAJO WORKERS

Employers shall, with respect to business conducted within the territorial jurisdiction of the Navajo Nation, adopt and implement work practices which conform to occupational safety and health standards imposed by law.

SECTION 609. CONTRACT COMPLIANCE

- All transaction documents, including without limitation, leases, subleases, contracts, A. subcontracts, permits, and collective bargaining agreements between employers and labor organization (herein collectively "transaction documents"), which are entered into by or issued to any employer and which are to be performed with the territorial jurisdiction of the Navajo Nation shall contain a provision pursuant to which the employer and any other contracting party affirmatively agree to strictly abide by all requirements of this Act. With respect to any transaction document which does not contain the foregoing provision, the terms and provisions of this Act are incorporated therein as a matter of law and the requirements of the Act shall constitute affirmative contractual obligations of the contracting parties. In addition to the sanctions prescribed by Act, violation of the Act shall also provide grounds for the Navajo Nation to invoke such remedies for breach as may be available under the transaction document or applicable law. To the extent of any inconsistency or conflict between a transaction document and the Act, the provision of the transaction document in question shall be legally invalid and unenforceable and the Act shall prevail and govern the subject of the inconsistency or conflict.
- B. Every bid solicitation, request for proposals and associated notices and advertisements which relate to prospective contracts to be performed within the territorial jurisdiction of the Navajo Nation shall expressly provide that the contract shall be performed in strict compliance with this Act. With respect to any such solicitation, request, notice or advertisement which does not contain the foregoing provision, the terms provisions of this Act are incorporated therein as a matter of law.

SECTION 610. MONITORING AND ENFORCEMENT

- A. Responsible Agency. Compliance with the Act shall be monitored and enforced by ONLR.
- B. Charges.
 - 1. Charging Party. Any employee may file a charge ("Individual Charge") claiming a violation of his or her rights under the Act. ONLR, on its own initiative, may file a charge ("ONLR Charge") claiming a violation of rights

under the Act held by identified Navajos or a class of Navajos, including a claim that respondent is engaging in a pattern of conduct or practice in violation of rights guaranteed by the Act. An Individual Charge and ONLR Charge are collectively referred to herein as a "Charge".

- 2. Form and Content. A Charge shall be in writing, signed by the charging party (which shall be the Director of ONLR in the case of any ONLR Charge), and contain the following information:
 - a. The name, address and any telephone number of the charging party;
 - b. The name and address or business location of the respondent against whom the Charge is made;
 - c. A clear and concise statement of the facts constituting the alleged violation of the Act, including the dates of each violation and other pertinent events and the names of individuals who committed, participated in or witnessed the acts complained of;
 - d. With respect to a Charge alleging a pattern or practice in violation of the Act, the period of time during which such pattern or practice has existed and whether it continues on the date of the Charge;
 - e. The specific harm sustained by the charging party in the case of an Individual Charge or the specific harm sustained by specified Navajos or a class of Navajos with respect to an ONLR Charge;
 - f. A statement disclosing whether proceedings involving the alleged violation have been initiated before any court or administrative agency or within any grievance process maintained by the respondent, including the date of commencement, the court, agency or process and the status of the proceeding; and
 - g. ONLR shall provide assistance to persons who wish to file Individual Charges. Notwithstanding the foregoing provisions, a Charge shall be deemed sufficient if it contains a reasonably precise identification of the charging party and respondent, and the action, pattern or practice which are alleged to violate the Act.
- 3. Place of Filing. Individual Charges may be filed in any ONLR office. An ONLR Charge shall be filed in ONLR's administrative office in Window Rock.
- 4. Date of Filing. Receipt of each Individual Charge shall be acknowledged by the dated signature of an ONLR employee which shall be deemed the date on which the Individual Charge is filed. The date on which an ONLR

Charge is signed by the ONLR Director shall be deemed the date of filing for such Charge.

- 5. Amendment. A Charge may be amended by filing, in the office where the Charge was first submitted, a written instrument which sets forth the amendment and any portions of the original Charge revised thereby. To the extent the information reflected in the amendment arose out of subject matter of the original Charge, the amendment shall relate back and be deemed filed as of the filing date of such Charge. Any portion of the amendment which does not qualify for relation back treatment shall constitute a new Charge.
- 6. Time Limitation. A Charge shall be filed within one year after accrual of the claim which constitutes the alleged violation of the Act. The date of accrual of a claim shall be the earlier of:
 - a. The date on which the charging party had actual knowledge of the claim, or
 - b. Taking into account the circumstances of the charging party, the date on which the charging party should reasonably have been expected to know of the existence of the claim; provided, however, that a Charge relating to a continuing, or pattern or practice, violation of the Act shall be filed within one year after the later of:
 - (1) The date of termination of such violation, pattern or practice; or
 - (2) The date of accrual of the claim to which the Charge relates. Failure to file a Charge within the time limitations prescribed herein shall bar proceedings on the related claim before the Commission or in any court of the Navajo Nation; provided, however, that nothing herein shall be interpreted as foreclosing proceedings before any Navajo court or administrative body (other than the Commission) on any claim which also arises under applicable common, statutory or other law independent of this Act.
- 7. Notice of Respondent. Within 20 days after a Charge is filed, ONLR shall serve a copy thereof on respondent; provided, however, that if in ONLR's judgment, service of a copy of the Charge would impede its enforcement functions under the Act, ONLR may in lieu of a copy serve on respondent a notice of the Charge which contains the date, place and summary of relevant facts relating to the alleged violation, together with the identity of the charging party unless withheld for the reason stated above. Service of any amendment to the Charge shall be accomplished within 20 days after the

amendment is filed. Failure of ONLR to serve a copy of a Charge or notice thereof within the prescribed time period shall not be a ground for dismissal of the Charge or any subsequent proceedings thereon.

- 8. Withdrawal of Charge.
 - a. ONLR may, in its discretion, withdraw any ONLR Charge upon written notice thereof to respondent and each person identified in the Charge whose rights under the Act were alleged to have been violated. Any person receiving notice of withdrawal or any other person who asserts a violation of his or her rights as a result of the violation alleged in the withdrawn ONLR Charge may file any Individual Charge which, if filed within 90 days after the issuance date of ONLR's withdrawal notice, shall relate back to the filing date of the ONLR Charge.
 - b. Any charging party may, in his or her discretion, withdraw an Individual Charge by filing a written notice of withdrawal with the ONLR office where the Charge was submitted, with a copy thereof filed with the ONLR administrative office in Window Rock. ONLR shall, within 20 days after receiving the notice, transmit a copy to the respondent. Within 90 days after receipt of the withdrawal notice, ONLR may file an ONLR Charge relating in whole or part to the violations alleged in the withdrawn Individual Charge. Any filing of an ONLR Charge within the prescribed time period shall relate back to the filing date of the withdrawn Charge.
- 9. Overlapping Charges. Nothing herein shall be construed as prohibiting the filing of any combination of Individual Charges and an ONLR Charge which, in whole or part, contain common allegations of violations of the Act.
- Irrespective of whether a person is otherwise eligible to file an 10. Informants. Individual Charge, any such person or any organization may in lieu of filing a Charge, submit to ONLR written or verbal information concerning alleged violations of the Act and may further request ONLR to file an ONLR Charge thereon. In addition to other limitations on disclosure provided in § 610(M), and in the absence of the written consent of the informant, neither the identity of the informant nor any information provided by such informant shall be disclosed to the respondent, agents or legal counsel for the respondent, or the public, either voluntarily by ONLR or pursuant to any discovery or other request for, or order relating to, such information during the course of any judicial or non-judicial proceeding, including a proceeding before the Commission or any subsequent appeal or challenge to a Commission or appellate decision; provided, however, that in the event the informant is called as a witness by ONLR at a Commission proceeding involving the information provided by the informant:

- a. The informant's name may be disclosed, but his or her status as an informant shall remain privileged and confidential and shall not be disclosable through witness examination or otherwise, and
- b. With the exception of the witness status as any informer, information provided by the informant is disclosable in accordance with the procedures outlined under § 610(M).
- C. Investigation of Charges.
 - 1. ONLR shall conduct such investigation of a Charge as it deems necessary to determine whether there is probable cause to believe the Act has been violated.
 - 2. Subpoenas.
 - a. The Director of ONLR shall have the authority to sign and issue a subpoena compelling the disclosure by any person evidence relevant to a Charge, including a subpoena ordering, under oath as may be appropriate:
 - (1) The attendance and testimony of witnesses;
 - (2) Responses to written interrogatories;
 - (3) The production of evidence, including without limitation books, records, correspondence or other documents (or lists or summaries thereof) in the subpoenaed person's possession, custody or control or which are lawfully obtainable by such person; and
 - (4) Access to evidence for the purposes of examination and copying. Neither an individual charging party nor a respondent shall have a right to demand issuance of a subpoena prior to the initiation of any proceedings on the Charge before the Commission, in which event subpoenas are issuable only pursuant to the procedures governing such proceedings.
 - b. Service of the subpoena shall be effected by one of the methods prescribed in § 610(O). A Subpoena directed to a natural person shall be served either on the person at his or her residence or office address or, in the case of personal delivery, at such residence or office either on the person subpoenaed or on anyone at least 18 years of age (and in the case of office service, a person who is also an employee of such office). Service of a subpoena directed to any other person shall be

addressed or delivered to either the statutory agent (if any) of such person or any employee occupying a managerial or supervisory position at any office of the person maintained within or outside the territorial jurisdiction of the Navajo Nation. Personal service may be performed by a natural person at least 18 years of age, including an employee of ONLR.

- c. The subpoena shall set a date, time and place for the attendance of a witness or production of or access to evidence, as the case may be, provided that the date for compliance shall be not less than 30 days after the date on which service of the subpoena was affected.
- d. Any person served with a subpoena intending not to fully comply therewith shall, within five business days after service, serve on the Director of ONLR, a petition requesting the modification or revocation of the subpoena and identifying with particularity each portion of the subpoena which is challenged and the reasons therefor. To the extent any portion of the subpoena is not challenged, the unchallenged parts shall be complied with in accordance with the terms of the subpoena as issued. The ONLR Director shall issue and serve on petitioner a decision and reasons therefor within eight business days following receipt of the petition, and any failure to serve a decision within such period shall be deemed a denial of the petition. In the event the Director's decision reaffirms any part of the subpoena challenged in the petition, the Director may extend the date for compliance with such portion for a period not to exceed 10 business days. Any petitioner dissatisfied with the decision of the **ONLR** Director shall either:
 - (1) Comply with the subpoena (with any modifications thereto reflected in the Director's decision); or
 - (2) Within five business days following receipt of the Director's decision of the date such decision was due, file a petition with the Commission (with a copy concurrently served on the ONLR Director) seeking modification or revocation of the subpoena and stating with particularity therein each portion of the subpoena challenged and the reasons therefore. A copy of the ONLR Director's decision, if any, shall be attached to the petition.
- e. In the event a person fails to comply with a served subpoena, ONLR may petition the Commission for enforcement of the subpoena. For purpose of awarding any relief to petitioner, the Commission may issue any order appropriate and authorized in a case where it is

established that a Commission order has been violated. A copy of the petition shall be concurrently served on the non-complying person.

- f. Beginning on the first day of non-compliance with a subpoena served on a respondent, or any employee or agent of respondent, until the date of full compliance therewith, there shall be a tolling of all periods of limitation set forth in this Section.
- D. Dismissal of Charges.
 - 1. Individual Charges. ONLR shall dismiss an Individual Charge upon reaching any one or more of the following determinations:
 - a. The Individual Charge, on its face or following an ONLR investigation, fails to demonstrate that probable cause exists to believe a violation of the Act has occurred;
 - b. The Individual Charge was not filed within the time limits prescribed by § 610(B)(6);
 - c. The charging party has failed to reasonably cooperate in the investigation of, or attempt to settle, that Individual Charge;
 - d. The charging party has refused, within 30 days of receipt, to accept a settlement offer agreed to by respondent and approved by ONLR, which accords substantially full relief for the harm sustained by such party; or
 - e. The Charge has been settled pursuant to § 610(G).
 - 2. ONLR Charges. ONLR shall dismiss an ONLR Charge upon determining that:
 - a. No probable cause exists to believe a violation of the Act has occurred;
 - b. The Charge was not filed within the time limits prescribed by 610(B)(6);or
 - c. The Charge had been settled pursuant to § 610(G).
 - 3. Partial Dismissal. In the event a portion of a Charge is dismissible on one or more of the foregoing grounds, only such portion of the Charge shall be dismissed and the remainder retained by ONLR for final disposition.
 - 4. Notice. Written notice of dismissal, stating the grounds therefore, shall be served on respondent and the individual charging party in the case of an Individual Charge or, in the case of any ONLR Charge, on the respondent

and any person known to ONLR who claims to be aggrieved by the violations alleged in such Charge. Such notice shall be accompanied by a right to sue authorization pursuant to § 610(H).

- E. Probable Cause Determination. Following its investigation of a Charge and in the absence of a settlement or dismissal required under § 610(D), ONLR shall issue written notice of its determination that probable cause exists to believe a violation of the Act has occurred or is occurring. Such notice shall identity each violation of the Act for which probable cause has been found, and copies thereof shall be promptly sent to the respondent, the charging party in the case of an Individual Charge, and, in the case of an ONLR Charge, each person identified by ONLR whose rights are believed to have been violated. Any probable cause determination shall be based on, and limited to, the evidence obtained by ONLR and shall not be deemed a judgment by ONLR on the merits of allegations not addressed in the determination.
- F. Conciliation. If, following its investigation of a Charge, ONLR determines there is probable cause to believe the Act has been or is being violated, ONLR shall make a good faith effort to secure compliance and appropriate relief by informal means through conference, conciliation and persuasion. In the event there is a failure to resolve the matter informally as to any allegations in an Individual Charge for which probable cause has been determined, ONLR shall either issue the notice prescribed in § 610(H) or initiate a Commission proceeding under § 610(I) concerning unresolved allegations. A successful resolution of any such allegation shall be committed to writing in the form required under § 610(G). Nothing herein shall be construed as prohibiting ONLR from initiating or participating in efforts to informally resolve a Charge prior to issuance of probable cause determination.
- G. Settlement.
 - 1. Settlement agreements shall be committed to writing and executed by respondent, the individual charging party if any and, in the case of any respondent, the individual charging party if any and, in the case of any Charge, by the Director of ONLR. Refusal of an individual charging party to execute a settlement agreement subjects the Individual Charge to dismissal under the conditions set forth in § 610(D)(1)(d). Settlement agreements may also be signed by those aggrieved persons identified as having a claim with respect to an ONLR Charge.
 - 2. Settlement agreements hereunder shall be enforceable among the parties thereto in accordance with the terms of the agreement. Any member of a class of persons affected by the settlement who is not a signatory to the agreement shall have the right to initiate proceedings before the Commission pursuant to the procedure in § 610(H)(2)(a)(3).

- 3. Each settlement agreement shall provide for the dismissal of the Charge to the extent the violations alleged therein are resolved under the agreement.
- 4. Any breach of a settlement agreement by respondent shall present grounds for filing a Charge under this Section. A charging party asserting a claim for breach may either seek:
 - a. Enforcement of that portion of the settlement agreement alleged to have been breached; or
 - b. In the case of a material breach as to any or all terms, partial or total rescission of the agreement, as the case may be, and such other further relief as may have been available in the absence of settlement. A Charge asserting a breach of a settlement agreement with respect to any original allegation in the Charge covered by such agreement shall, for purposes of all time limitations in this Section, be deemed to arise on the accrual date of the breach.
- H. Individual Right to Sue.
 - 1. Individual Charges.
 - a. Prior to the expiration of 180 days following the date an Individual Charge was filed, ONLR, by notice to the individual charging party, shall authorize such individual to initiate a proceeding before the Commission in accordance with the procedures prescribed in § 610(J), if:
 - (1) The Individual Charge had been dismissed by ONLR pursuant to § 610(D)(1);
 - (2) ONLR has issued a probable cause determination under § 610(E), there has been a failure of conciliation contemplated by § 610(F), and ONLR has determined not to initiate a Commission proceeding on behalf of the individual charging party; or
 - (3) Notwithstanding the absence of a probable cause determination or conclusion of conciliation efforts, ONLR certifies it will be unable to complete one or both of these steps within 180 days after the date on which the Individual Charge was filed.
 - b. After the expiration of 180 days following the date an Individual Charge was filed, the individual charging party shall have the right to initiate a proceeding before the Commission irrespective of whether

ONLR has issued a notice of right to sue, made a probable cause determination, or commenced or concluded conciliation efforts.

- 2. ONLR Charges.
 - a. Prior to the expiration of 180 days following the date an ONLR Charge was filed, ONLR, by notice to any person known to it who claims to be aggrieved by the allegations presented in such Charge, shall authorize such person to initiate a proceeding before the Commission in accordance with the procedures prescribed in § 610(J), if:
 - (1) The ONLR Charge has been dismissed by ONLR pursuant to § 610(D)(2);
 - ONLR has issued a probable cause determination under § 610(E), there has been a failure of conciliation contemplated by § 610(F), and ONLR has determined not to initiate a Commission proceeding on the Charge;
 - (3) ONLR has entered into a settlement agreement under § 610(G) to which such aggrieved person is not a party; or
 - (4) Notwithstanding the absence of a probable cause determination or conclusion of conciliation efforts, ONLR certifies it will be unable to complete one or both of these steps within 180 days after the date on which the ONLR Charge was filed
 - b. After the expiration of 180 days following the date an ONLR Charge was filed and prior to the date on which ONLR commences a Commission proceeding, any person claiming to be aggrieved by the allegations presented in such Charge shall have the right to initiate a proceeding before the Commission irrespective of whether ONLR has issued a notice of right to sue, made a probable cause determination or commenced or concluded conciliation efforts.
- 3. Content of Notice. A notice of right to sue shall include the following information:
 - a. Authorization to the individual charging party or aggrieved person to initiate a proceeding before the Commission pursuant to and within the time limits prescribed by § 610(J);
 - b. A summary of the procedures applicable to the institution of such proceeding, or a copy of the Act containing such procedures;

- c. A copy of the Charge; and
- d. A copy of any written determination of ONLR with respect to such Charge.
- 4. ONLR Assistance. Authorization to commence Commission proceedings hereunder shall not prevent ONLR from assisting any individual charging party or aggrieved person in connection with Commission proceedings or other efforts to remedy the alleged violations of the Act.
- I. ONLR Right to Sue.
 - ONLR shall have the right to initiate proceedings Individual Charges. 1. before the Commission based on the allegations of an Individual Charge with respect to which ONLR has issued a probable cause determination under § 610(E) and there has been a failure of conciliation contempt by § 610(F). ONLR shall have such right notwithstanding that the individual charging party has concurrent right to sue hereunder which has not been exercised. ONLR's right to sue shall continue until such time as the individual charging party commences a Commission proceeding and, in that case, shall be revived in the event the proceeding is dismissed or concluded for reasons unrelated to the merits. Initiation of Commission proceedings by ONLR shall terminate the right to sue of an individual charging party, subject to revival of such right in the event the proceeding is dismissed or concluded for reasons unrelated to the merits. Nothing herein shall be construed as foreclosing ONLR from exercising its right to intervene in a Commission proceeding under § 610(L).
 - 2. ONLR Charges. ONLR shall have the right to initiate proceedings before the Commission based on the allegations of an ONLR Charge with respect to which ONLR has issued a probable determination under § 610(E) and there been a failure of conciliation contempt by § 610(F). ONLR shall have such right notwithstanding that a person claiming to be aggrieved as a result of the allegations in the ONLR Charge has a concurrent right to sue hereunder which has not been exercised. In the event an aggrieved person first initiates a Commission proceeding in an authorized manner, ONLR's right to sue shall only expire as to such person and shall revive in the event that aggrieved person's proceeding is dismissed or concluded for reasons unrelated to the merits. Nothing herein shall be construed as foreclosing ONLR from exercising its right to intervene in a Commission proceeding under § 610(L).
- J. Initiate of Commission Proceedings. Proceedings before the Commission shall be initiated upon the filing of a written complaint by a petitioner with the Commission.
 - 1. Complaints shall satisfy each of the following conditions:

- a. The petitioner is authorized to file the Complaint under the terms and condition prescribed by this Section;
- b. The underlying Charge was filed within the time limits prescribed in § 610(B)(6); and
- c. The complaint was filed within 360 days following the date on which the underlying Charge was filed.
- 2. Upon motion of respondent and a showing that any one or more of the foregoing conditions has not been satisfied, the Commission shall dismiss the complaint; provided, however, that no complaint shall be dismissed under (b) above as to any allegation of a pattern of conduct or practice in violation of the Act to the extent such pattern or practice continued to persist during the time limit prescribed in § 610(B)(6); and provided further that, in the absence of dismissal or conclusion of Commission proceedings on the merits, nothing herein shall be construed as prohibiting the refiling of a Charge alleging the same or comparable pattern or practice violations of the Act which continued to persist during the time limits prescribed in § 610(B)(6) for refiling such Charge.
- K. Preliminary Relief. Prior to the initiation of Commission proceedings on a Charge and notwithstanding the failure to satisfy any precondition to such proceedings, either ONLR, an individual charging party or aggrieved person may, upon notice to respondent, petition the Commission for appropriate temporary or preliminary relief in the form of an injunction or other equitable remedy on the ground that prompt action is necessary to carry out the purpose of the Act, including the preservation and protection of rights thereunder. Nothing herein shall be construed as foreclosing a petition which seeks comparable relief subsequent to the commencement of Commission proceedings.
- L. Intervention in Commission Proceedings. Within three business days after the date on which any complaint, or petition pursuant to § 610(K), is filed with the Commission, other than a complaint or petition filed by ONLR, the Commission shall cause copies thereof to be sent to the ONLR Director and the Attorney General of the Navajo Nation. ONLR shall have an unconditional right to intervene in the Commission proceeding initiated by such complaint or petition upon the timely application by motion accompanied by a pleading setting forth the claims for which intervention is sought.
- M. Confidentiality.
 - 1. Conciliation. In the absence of written consent of the persons concerned, statements or offers of settlement made, documents provided or conduct by participants in conciliation efforts under § 610(F) shall not be admissible in any Commission or other proceeding relating to the Charge which is that

subject of conciliation, to provide liability for or invalidity of the Charge or the amount or nature of relief therefore; provided, however, that nothing herein shall be construed as requiring the exclusion of such evidence merely because it was presented in the court of conciliation if:

- a. The evidence is otherwise discoverable; or
- b. The evidence is offered for another purpose, including without limitation, proving bias or prejudice of a witness, negativing a contention of undue delay, or proving an effort to obstruct a criminal investigation or prosecution.
- 2. Charge, Records, and Information.
 - a. Prior to the institution of Commission proceedings thereon, and in the absence of the written consent of the persons concerned, ONLR shall not disclose as a matter of public information any Charge, response thereto, any statements or other information obtained in the course of it investigation of the Charge, except that nothing herein shall prevent earlier disclosure of such information by ONLR in its discretion:
 - (1) To charging parties or their attorneys, respondents or their attorneys, witnesses or other interested persons where the disclosure is deemed by ONLR to be necessary for securing a resolution of the Charge, including appropriate relief therefore; or
 - (2) To employees or representatives of the Navajo Nation or employees or representatives of federal, state or local authorities who have a government interest in the subject matter of the Charge; or
 - (3) To persons for the purpose of publishing data derived from such information in a form which does not reveal the identity of charging parties, aggrieved persons, respondents or persons supplying the information.
 - b. Except as otherwise provided herein, any person to whom a permissible disclosure is made hereunder shall be bound to maintain the confidentially of such information from further disclosure and shall use the information solely for the purpose for which it was disclosed.
- 3. Privilege Information. Neither ONLR, charging parties, aggrieved persons, respondents, witnesses or persons supplying information in connection with a Charge shall be compelled, either before or after

commencement of Commission proceedings, to disclose any information which represents the opinions or conclusions formed by ONLR during the course of its investigation of a Charge, or any information which is protected by the attorney-client privilege, the informer's privilege referred to in § 610(B)(10), or any other absolute or limited privilege recognized under the laws of the Navajo Nation. To the extent justice requires, the Commission may, balancing the rights of parties and affected persons, prohibit or limit the disclosure of any other information for good cause shown, including a showing that disclosure would impede enforcement of the Act, jeopardize rights guaranteed thereunder, or cause annoyance, embarrassment, oppression, or undue burden or expense to parties or affected persons.

- N. Non-retaliation. It shall be unlawful for any employer, labor organization, joint labor-management committee involved in apprenticeship or other matters relating to employment, employment agency or other person to, directly or indirectly, take or attempt to induce another person to take, any action adversely affecting:
 - 1. The terms and conditions of any person's employment or opportunities associated with such employment;
 - 2. An applicant's opportunity for employment;
 - 3. The membership of any employee or applicant for employment in a labor organization; or
 - 4. Any other right, benefit, privilege or opportunity unrelated to employment, because such person has opposed an employment practice subject to this Act or has made a charge, testified, or assisted or participated in any matter in an investigation, proceeding or hearing under the Act.
- O. Service of Documents. Service of any notice, determination or other document required to be transmitted under this Section shall be accomplished by personal delivery or certified mail, return receipt requested.

SECTION 611. HEARINGS

- A. The Commission shall schedule a hearing within 60 days of the filing of a written complaint by a petitioner with the Commission. The hearing shall be held at a location designated by the Commission.
 - 1. Notice. The Commission shall issue a notice of hearing. The time and place of the hearing shall be clearly described in the notice. The notice shall also set forth in clear and simple terms the nature of the alleged violations and shall state that: (a) the violations may be contested at a hearing before the Commission; and (b) any party may appear by counsel and crossexamine adverse witnesses.

- 2. Upon application by a party to the Commission or on the Commissions' own motion, the Commission may issue subpoenas compelling the disclosure by any person evidence relevant to the Complaint, including a subpoena ordering, under oath as may be appropriate:
 - a. The attendance and testimony of witnesses;
 - b. Responses to written interrogatories;
 - c. The production of evidence; and
 - d. Access to evidence for the purpose of examination and copying.
- 3. The Commission is authorized to administer oaths and compel attendance of any person at a hearing and to compel production of any documents.
- 4. In the event a party does not make an appearance on the day set for hearing or fails to comply with the rules of procedure set forth by the Commission for the conduct of hearings, the Commission is authorized to enter a default determination against the non-appearing and/or non-complying party.
- B. Burden of proof. In any compliance review, complaint proceeding, investigation, or hearing, the burden of proof shall be upon the respondent to show compliance with the provisions of this Act by preponderance of the evidence.
- C. Hearing. The Commission shall conduct the hearing in a fair and orderly manner and extend to all parties the right to be heard.
 - 1. The Commission shall not be bound by any formal rules of evidence.
 - 2. The respondent shall have the opportunity to answer the complaint and the parties shall have the right to legal counsel, to present witnesses, and to cross-examine adverse witnesses.
 - 3. The Commission shall issue its decision by a majority vote of a quorum present which shall be signed by the Chairperson of the Commission.
 - 4. Copies of the decision shall be sent to all parties of record in the proceeding by certified mail, return receipt.
 - 5. Records of the proceeding shall be recorded. Any party may request a transcript of the proceeding at their own expense.
 - 6. The decision of the Commission shall be final with a right of appeal only on questions of law to the Navajo Nation Supreme Court.

SECTION 612. REMEDIES AND SANCTIONS

- A. If, following notice and hearing, the Commission finds that respondent has violated the Act, the Commission shall:
 - 1. Issue one or more remedial orders, including without limitation, directed hiring, reinstatement, displacement of non-Navajo employees, back-pay, front-pay, injunctive relief, mandated corrective action to cure the violation within a reasonable period of time, and/or, upon a finding of intentional violation, imposition of civil fines; provided that liability for back-pay or other forms compensatory damages shall not accrue from a date more than two years prior to the date of filing of the Charge which is the basis for the complaint.
 - 2. In the case of an individual suit initiated pursuant to § 610(H) award costs and attorneys' fees if the respondent's position was not substantially justified.
 - 3. Refer matters involving respondent contracts, agreements, leases and permits to the Navajo Nation Attorney General for appropriate action.
- B. In the absence of a showing of good cause thereof, if any party to a proceeding under this Act fails to comply with a subpoena or order issued by the Commission, the Commission may impose such actions as are just, including without limitation any one or more of the following:
 - 1. In the case of non-compliance with a subpoena of documents or witnesses:
 - a. An order that the matters for which the subpoena was issued or any other designated facts shall be deemed established for the purposes of the proceeding and in accordance with the claim of the party obtaining the order;
 - b. An order refusing to allow the disobedient party to support or oppose designated claims or defenses, or prohibiting that party from introducing designated matters in evidence; or
 - c. An order striking pleading or parts thereof, or staying further proceedings until the subpoena is obeyed, or dismissing the action or proceeding or any part thereof, or rendering a judgment by default against the disobedient party.
 - 2. In the case of non-compliance by a party or non-party with a Commission subpoena of documents or witnesses or with any other order of the Commission:

- a. An order holding the disobedient person in contempt of the Commission and imposing appropriate sanctions therefore, including a civil fine; or
- b. An order directing the disobedient person to pay the reasonable costs and/or attorneys' fees caused by the non-compliance.
- C. The person or party in whose favor a Commission's decision providing for remedial action is entered shall have the right to seek legal and/or equitable relief in the District Courts of the Navajo Nation to enforce the remedial action; provided that the Commission itself shall have the right to seek legal and/or equitable relief in the District Courts of the Navajo Nation to enforce civil fines or sanctions imposed by the Commission against a person or party. In both instances that Attorney General of the Navajo Nation shall have an unconditional right to intervene on behalf of the Navajo Nation. Any attempted enforcement of a Commission order or decision directing payment of money by the Navajo Nation or any of its governmental entities shall, with respect to the extent of any liability be governed by the Navajo Sovereign Immunity Act, 1 N.N.C. § 551 et seq., as amended.

SECTION 613. APPEAL AND STAY OF EXECUTION

- A. Any party may appeal a decision of the Commission to the Navajo Nation Supreme Court by lodging a written notice of appeal, in the form prescribed by the Navajo Rules of Civil Appellate Procedure and within 10 days after receipt of the Commission's decision.
- B. In the absence of a stipulation by the parties approved by the Commission, a stay of execution of the decision from which the appeal is taken shall only be granted upon written application of the appellant to the Commission and an opportunity for response by appellee. The application for a stay shall be filed within the period prescribed for appeal in Subsection (A) hereof. No stay shall be issued unless the appellant presents a clear and convincing showing that each of the following requirements has been satisfied:
 - 1. Appellant is likely to prevail on the merits of the appeal;
 - 2. Appellant will be irreparably harmed in the absence of a stay;
 - 3. Appellee and interested persons will not be substantially harmed by a stay;
 - 4. The public interest will be served by a stay; and
 - 5. An appeal bond or other security, in the amount and upon the terms prescribed by Subsection (C) below, has been filed with and approved by the Commission; provided that no appeal bond shall be required of ONLR, the Navajo Nation or any government agency or enterprise of the Navajo Nation.

- C. The appeal bond shall be issued by a duly authorized and responsible surety which shall obligate itself to pay to appellee, or any other person in whose favor an award is made by the Commission decision, the amounts specified or described in the bond upon conclusion of the appeal and failure of appellant, following written demand by appellee, to satisfy the foregoing obligations.
 - 1. The amount or nature of liability assumed by the surety shall be specified in the bond and shall include:
 - a. The total amount of all monetary awards made in the Commission decision, together with such interest thereon as may be prescribed in the Commission's decision;
 - b. Costs of appeal and attorneys' fees incurred by appellee in defending the appeal and which may be awarded to appellee by the Navajo Nation Supreme Court;
 - c. Damages sustained by appellee or other recipients of a Commission award for delay in satisfaction of the Commission decision caused by the appeal; and
 - d. Such other amount or liability reasonably required to be secured to protect the interests of the appellee or other award recipients.
 - 2. The bond shall provide that the surety submits to the jurisdiction of the Commission and the Courts of the Navajo Nation, and irrevocably appoints the Commission as the surety's agent upon whom any papers affecting the surety's liability on the bond may be served. The surety's liability may be enforced on motion of the appellee filed with the Commission, with copies thereof served on the surety and appellant.
 - 3. In lieu of posting an appeal bond, appellant may, with the approval of the Commission, post a cash bond and undertaking in the amount and upon the terms which are required above with respect to an appeal bond.
 - 4. No appeal bond or cash bond and undertaking, nor the liabilities of the surety or appellant thereunder, shall be exonerated or released until all amounts and liabilities prescribed therein have been fully paid and satisfied.
- D. Within three business days following the filing with the Navajo Nation Supreme Court of any appeal from a Commission proceeding, the Clerk of such Court shall, in all cases other than those in which ONLR is not either the appellant or appellee, cause copies of the notice of appeal and all other documents filed in connection therewith to be sent to the ONLR Director and the Attorney General of the Navajo Nation. ONLR shall have an unconditional right to intervene and participate as amicus in the appeal proceedings upon timely application therefore by motion

lodged with the Navajo Nation Supreme Court. ONLR's right of participation shall be coextensive with that of the parties to the appeal, including the rights to file opening, answering and reply briefs, and the right to present oral argument to the Court.

SECTION 614. NON-NAVAJO SPOUSES

- A. When a non-Navajo is legally married to a Navajo, he or she shall be entitled to preference in employment under the Act. Proof of marriage by a valid marriage certificate shall be required. In addition, such non-Navajo spouses shall be required to have resided within the territorial jurisdiction of the Navajo Nation for a continuous one year period immediately preceding the application for Navajo preference consideration.
- B. Upon meeting the above requirements, such consideration shall be limited to preference in employment where the spouse would normally be in a pool of non-Navajo workers. In this instance, Navajo preference would place the non-Navajo spouse in the applicant pool of Navajos for consideration. However, preference priority shall be given to all Navajo applicants who meet the necessary job qualifications within that pool.
- C. Non-Navajo spouses having a right to secondary preference under this Section shall also have and enjoy all other employment rights granted to Navajos under the Act, it being understood that Navajos retain a priority right with respect to provisions of the Act concerning preferential treatment in employment opportunities.

SECTION 615. POLYGRAPH TEST

- A. No person shall request or require any employee or prospective employee to submit to, or take a polygraph examination as a condition of obtaining employment or of continuing employment or discharge or discipline in any manner an employee for failing, refusing, or declining to submit to or take a polygraph examination.
- B. For purpose of this Section, "polygraph" means any mechanical or electrical instrument or device of any type used or allegedly used to examine, test, or question individuals for the purpose of determining truthfulness. This provision shall not apply to federal or state government employees.

SECTION 616. RULES AND REGULATIONS

The Health, Education and Human Services Committee of the Navajo Nation Council is authorized to promulgate rules and regulations necessary for the enforcement and implementation of the provisions of this Act. The Commission is hereby delegated the authority to adopt and implement, on it own initiative and without any approval, rules of procedure and practice governing the conduct of proceedings under § 611 of the Act, provided that such rules are consistent with the provisions of the Act.

SECTION 617. PRIOR INCONSISTENT LAW REPEALED

All prior Navajo Nation laws, rules, regulations, and provisions of the Navajo Nation Code previously adopted which are inconsistent with this Act are hereby repealed.

SECTION 618. EFFECTIVE DATE AND AMENDMENT OF THE ACT

- A. The effective date of this Act shall be 60 days after the passage of the Act by the Navajo Nation Council and shall remain in effect until amended or repealed by the Navajo Nation Council.
- B. Any amendment or repeal of the Act shall only be effective upon approval of the Navajo Nation Council, and shall not be valid if it has the effect of amending, modifying, limiting, expanding or waiving the Act for the benefit or to the detriment of a particular person.
- C. Any amendment to the Act, unless the amendment expressly states otherwise, shall be effective 60 days after the passage thereof by the Navajo Nation Council.
- D. The time limits prescribed in § 610 relating to filing a Charge and subsequent proceedings thereon were added by amendment adopted by the Navajo Nation Council subsequent to the effective date of the original Act. Notwithstanding an actual accrual date for any alleged violation of the Act which is prior to the effective date of the amendment which added the time limits in § 610 hereof, such alleged violation shall be deemed to accrue on the effective date of the foregoing amendment for purposes of all time limits set forth in § 610.

SECTION 619. SEVERABILITY OF THE ACT

If any provision of this Act or the application thereof to any person, association, entity or entity or circumstances is held invalid, such invalidity shall not affect the remaining provisions or applications thereof.

RESOLUTION OF THE NAVAJO NATION COUNCIL

21ST NAVAJO NATION COUNCIL – Second Year 2008

AN ACT

RELATING TO HEALTH, HUMAN SERVICES, AND JUDICIARY; ENACTING THE NAVAJO NATION HEALTHY START ACT OF 2008

BE IT ENACTED:

Section One. Enactment of the Navajo Nation Healthy Start Act of 2008

The Navajo Nation Council hereby enacts the Navajo Nation Healthy Start Act of 2008.

Section Two. Findings

- A. The Navajo Nation hereby finds that the results of health studies indicate that breast-feeding of infants gives to these infants significant benefits in nutrition, assists in their progress through developmental stages, and strengthens their immune systems.
- B. The Navajo Nation further finds that the significant benefits to breast-fed infants leads to long-term increased health of these persons.
- C. The Navajo Nation finds that breast-feeding gives to mother's significant health benefits, including decreased rates of diseases, including diabetes and breast cancer.
- D. The Navajo Nation further finds that provisions of breast-feeding opportunities for working mothers increase their productivity and job satisfaction, and reduces sick time taken by both moms and dads for infant children's illness.
- E. The Navajo Nation further finds that provision for breastfeeding opportunities for working mothers lowers health care and insurance costs.
- F. The Navajo Nation finds the following amendments to Title 15 of the Navajo Nation Code will address these findings and are the most appropriate means for addressing the health needs of the Navajo people.

CO-40-08

Section Three. Amendment of Title 15 of the Navajo Nation Code

The Navajo Nation Council hereby amends Title 15 of the Navajo Nation Code, as follows:

NAVAJO NATION CODE ANNOTATED TITLE 15. LABOR CAHPTER 8. NAVAJO NATION HEALTHY START ACT

§ 801. Short Title

This Act shall be known as the "Navajo Nation Healthy Start Act."

§ 802. Purpose

The purpose of this Act is to provide for opportunities for working mothers to obtain the health benefits of breast-feeding for their infant children, themselves, and the Navajo Nation, through provision for breast-feeding or use of a breast pump, or both, within workplaces on the Navajo Nation.

§ 803. Definitions

- A. "Breast-feeding" means the practice of allowing a working mother, with privacy and dignity, to feed her child milk from her breasts.
- B. "Breast-pump" means any electric or manual device used to mechanically remove milk from a human breast.
- C. "Commission" shall mean the Navajo Nation Labor Commission.
- D. "Employer" shall have the same meaning as set forth in the Navajo Preference in Employment Act, 15 N.N.C. § 603(C).
- E. "Infant child" means a child between birth and the age of twelve (12) months, who is being breast-fed by a working mother.
- F. "ONLR" means the Office of Navajo Labor Relations.
- G. "Working mother" means an employee, as defined in the Navajo Preference in Employment Act, 15 N.N.C. § 603(L), who is the natural mother engages in the provision of services to an employer for compensation, whether as an employee, agent or servant.

- H. "Workplace" means the place in which a working mother engages in the provision of services to an employer for compensation, whether as an employee, agent, or servant.
- § 804. Provision for Breast-Feeding or Use of a Breast Pump in the Workplace
 - A. All employers doing business within the territorial jurisdiction of the Navajo Nation, or engaged in any contract with the Navajo Nation, shall provide to each working mother opportunities to engage in breast-feeding of their infant child, or use of a breast pump at the workplace.
 - B. The provision of an opportunity to engage in breast-feeding or use of a breast pump shall consist of the following:
 - 1. A clean and private area or other enclosure near the employee's workspace, and not a bathroom, to allow a working mother to engage in breast-feeding or use of a breast pump; and
 - 2. A sufficient number of unpaid and flexible breaks within the course of the workday to allow a working mother to engage in breast-feeding or use of a breast pump.
 - C. All employers shall, within 90 days after the effective date of this § 804, or the date on which an employer commences business within the territorial jurisdiction of the Navajo Nation, whichever is later, file with the ONLR a written plan that provides to working mothers opportunities for breastfeeding or use of a breast pump in the workplace.
 - D. The failure of an employer to comply with this section shall be deemed to be an adverse action against the employee, a failure of the employer to provide a safe and clean working environment, and a failure to provide employment conditions which are free of prejudice, intimidation and harassment, for the purpose of the Navajo Preference in Employment Act, 15 N.N.C. § 604(B).

§ 805. Enforcement

Compliance with this Act shall be monitored and enforced by the ONLR in the same manner as set forth in the Navajo Preference in Employment Act, 15 N.N.C. § 610.

§ 806. Hearings

The Navajo Nation Labor Commission is authorized to conduct hearings involving allegations of violation of this Act, in the same manner as set forth in the Navajo Preference in Employment Act, 15 N.N.C. § 611.

§ 807. Remedies and Sanction

If, following notice and hearing, the Commission funds that an employer has violated this Act, the Commission is authorized to enter one or more remedial orders, in the same manner as set forth in the Navajo Preference in Employment Act, 15 N.N.C. § 612.

§ 808. Appeal and Stay of Execution

Any party may appeal a decision of the Commission to the Navajo nation Supreme Court in the same manner as set forth in the Navajo Preference in Employment Act, 15 N.N.C. § 613.

Section Four. Effective Date

The provisions of this Act shall become effective in accord with 2 N.N.C. § 221(B).

Section Five. Codification

The provisions of this Act which amend sections of the Navajo Nation Code shall be codified by the Office of Legislative Counsel.

Section Six. Saving Clause

Should any provisions of this Act be determined invalid by the Navajo Nation Supreme Court, or the District Courts of the Navajo Nation, without appeal to the Navajo Nation Supreme Courts, or any other court of competent jurisdiction, those portions of this Act which are not determined invalid shall remain the law of the Navajo Nation.

CERTIFICATION

I hereby certify that the foregoing resolution was duly considered by the Navajo Nation Council at a duly called meeting at Window Rock, Navajo Nation (Arizona), at which a quorum was present and that same was passed by a vote of 64 in favor, and 0 opposed, this 22^{nd} day of October, 2008.

Lawrence T. Horgan Speaker Navajo Nation Council Date

Motion: Young Jeff Tom Second: Roy Laughter

ACTION BY THE NAVAJO NATION PRESIDENT:

- 1. I hereby sign into law the foregoing Legislation, pursuant to 2 N.N.C. § 1005(C) (10), on this _____ day of NOV_0_3_2008. Dr. Joe Shirley, Jr., President Navajo Nation
- 2. I hereby veto the foregoing Legislation pursuant to 2 N.N.C. §1005(C) (11), this ______ day of _______, 2008 for the reason(s) Expressed in the attached letter to the Speaker.

Dr. Joe Shirley, Jr., President Navajo Nation

THE NAVAJO NATION

JONATHAN NEZ | PRESIDENT MYRON LIZER | VICE PRESIDENT



October 26, 2020

AD21-037

Jason John, Director NAVAJO NATION DEPARTMENT OF WATER RESOURCES Post Office Box 678 Fort Defiance, Arizona 86504

RE: BODAWAY-GAP WELL, STORAGE TANK AND PIPELINE

Dear Mr. John:

The Office of Navajo Labor Relations (ONLR) received your request for prevailing wage rates for the above reference project. Please find attached the ONLR wage rates which are applicable to the highway / utilities construction project.

Pursuant to the NPEA Section 607(B)(1) "...In all cases where construction is contemplated for which prevailing wage rates have not been set, the contract letting entity shall submit to ONLR a written request for a project prevailing wage scale. Such request shall be submitted not less than 60 days prior to the scheduled date for bid solicitation and shall include detailed information on the anticipated construction classifications, nature' of the project and completion plans...."

The ONLR respectfully requests that Navajo Nation Department of Water Resources to review the requirements of the Navajo Preference in Employment Act (NPEA) before any work begins. If a Pre-Construction Conference is scheduled, the ONLR Office at (928) 871-6800 is to be notified and a representative will explain the applicable laws to the general contractor and subcontractors, where necessary.

Should you have any questions, contact our office at (928) 871-6800. Thank You.

Sincerely,

Michael Armijo, CEA OFFICE OF NAVAJO LABOR RELATIONS

ATTACHMENTS



OFFICE OF NAVAJO LABOR RELATIONS PREVAILING WAGE

Wage Decision: ONLR20-0459HU

Date Issued: October 26, 2020

HIGHWAY / UTILITIES CONSTRUCTION

Highway / Utilities Construction includes the construction, alteration or repairs of roads, streets, highways, runways, parking areas and most other paving work and/or electrical transmission/water lines, solar system, substations and site preparations which are part of streets, highway, utility and light engineering projects.

BODAWAY-GAP WELL, STORAGE TANK AND PIPELINE NAVAJO NATION DEPARTMENT OF WATER RESOURCES

Effective January 1, 2020

Trade Classifications:	Hourly Rate:	
Carpenter	\$ 20.42	
Cement Mason	\$ 17.82	
Concrete Finisher	\$ 18.73	
Electrician	\$ 21.55	
Flagger	\$ 13.79	
Ironworker	\$ 22.50	
Laborer	\$ 15.61	
Mechanic	\$ 19.77	
Painter	\$ 18.83	
Plumber	\$ 22.25	
Truck Drivers:	Hourly Rate:	
Dump Truck	\$ 18.25	
Tank Truck	\$ 17.80	
Water Truck	\$ 18.37	
Equipment Operators:	Hourly Rate:	
Backhoe	\$ 19.51	
Blade	\$ 19.77	
Bloom	\$ 18.16	
Bulldozer	\$ 19.77	
Compactor (Rubber/Steel)	\$ 18.34	
Crane	\$ 20.81	
Driller	\$ 21.85	

Forklift	\$ 17.69	
Front End Loader	\$ 17.69	
Laydown Machine	\$ 19.77	
Motor Grader	\$ 19.77	
Paver	\$ 18.59	
Roller	\$ 18.34	
Scraper	\$ 19.51	
Track Hoe	\$ 19.51	
Trencher	\$ 19.51	

The rates listed above are required minimum ONLR Prevailing Wage Rates. Contractors may pay rates above these rates. The ONLR Director will add wage rates for unlisted classifications needed for work only after review and approval. Overtime is one and one - half time the basic rate for hours worked over forty hours in one week. Foremen will receive an additional \$6.00 per hour. Where Federal Funds are involved, the Davis-Bacon rates apply. Other exceptions may apply in accordance with the *Navajo Preference in Employment Act (NPEA)*, Section 7(E). Apprentices must be enrolled in a recognized apprenticeship program as required by Section 7(A)(6) of the NPEA. The appropriate apprentices. These wages apply only to the BODAWAY-GAP WELL, STORAGE TANK AND PIPELINEconstruction project.

APPROVED:

Ronald M. Curtis, Program Manager I

- ----

REVISED 1/2/2020 marmijo

NAVAJO PREFERENCE IN EMPLOYMENT ACT

NPEA ORIENTATION Check List

INITIAL	<u>EXHIBIT</u>	DESCRIPTION
		 erence in Employment Act (information) NPEA Requirement Letter <u>Navajo Preference in Employment Act</u> Poster
	(B) Office of Na	vajo Labor Relations (information) • ONLR Office w/ Staffs
	(C) Start New V	Vorkers Out Right
	(D) Manpower I	Projection Report (Start/End Dates:)
	(E) List of All S	ubcontractors (Start/End Dates:)
	(F) Job Descrip	tion – Non-Discriminatory
·		and Radio Station Advertisement • Navajo Preference Statement • Job Services
	(H) Affirmative	Action Regulation
		for use of non-Navajo • Employer Interview Report • Justification
	(J) Conditions	for Employment Expressed to Applicant – Orientation on Employer Policies
	(K) Written Not	ification for any Employee Action
	(L) Weekly Mar	npower Reports
	(M) Weekly Cer	tified Payroll Reports
	(N) Contractors	 /Subcontractor's Reports Construction Progress Report (bi-weekly) Project Completion Report
	(O) Wage Rates	(Decision #:) ***Submit copy of issued wage decision to ONLR***
		Submit copy of issued wage decision to UNLR

Company Name (please print)

Company Representative - Name and Title (please print)

Company Representative Signature

Project Name and Location

OFFICE OF NAVAJO LABOR RELATIONS



NAVAJO PREFERENCE IN EMPLOYMENT ACT

PACKET INCLUDES:

Forms and Information

- 1. Employer Interviews Report.
- 2. "Start New Workers Out Right" sheet.
- 3. <u>Navajo Preference in Employment Act</u> Poster **Post at Job Site.**
- 4. Contractor/Subcontractor's Manpower Projection Report.
- 5. Weekly Manpower Reports.
- 6. Weekly Certified Payroll Reports.
- 7. Project Completion Report Form.

The ONLR strongly recommends that all contractors use apprentices or trainees as well as female applicants on the project. Interested parties should call the ONLR for more information. The ONLR strongly recommends that contractors make every effort to recruit and hire Navajos (see NPEA, Section 4.A.(1.) and Section 4.B.(6.)).

Contractors found in non-compliance of the NPEA shall be notified by the ONLR. Attempts will be made to resolve disputes or discrepancies informally. If no resolution can be reached, the ONLR will take whatever administrative action(s) or remedies necessary. Should this occur, the contractor will be notified in writing. If no response is received by the specified date, the ONLR will proceed with other actions including filing an ONLR Charge.

Contractors are responsible for hiring Navajo workers. All contractors are required to advertise in the area using a radio station and newspaper including the Navajo Preference Statement in the advertisement. Contractors will advertise vacancies 7–10 days.

- 1. Contractor(s) or subcontractor(s) shall provide a detailed job summary or description, along with wage rates or salary, for all or any position considered "specialized" by the employer.
- 2. The contractor and its subcontractor(s) shall retain the right to reject any job applicants; however, if the contractor or its subcontractor(s) is unable to recruit or hire Navajo, the contractor shall have:
 - (a) the burden to justify the rejection of every Navajo applicant in each employee craft or category in which the contractor or its subcontractor(s) was unable to meet its requirements; and
 - (b) the burden of substantiating the criteria used in hiring such employee craft on category as relevant to the job being performed.

Navajo Occupational Safety and Health Administration (NOSHA) monitor all construction activities on the Navajo Nation. Any questions or assistance regarding safety issues, NOSHA can be contacted at (928) 871-6742.

At least **two weeks prior to completion of project**, the contractor shall complete the Project Completion Report form and submit to the ONLR (the form is provided in this packet).

PLEASE CALL IF THERE ARE ANY QUESTIONS OR CONCERNS. THANK YOU.

CHRONO No.

DATE

Name, Title Company Name Mailing Address City, State, Zip Code

RE: NPEA REQUIREMENT LETTER Project Title

Dear Mr./Ms.:

Thank you for contacting our office regarding your upcoming project.

Enclosed is the NPEA Requirement Letter along with the NPEA Orientation Checklist.

If you have any other questions, please call our office at (928) 871-6800.

Sincerely,

Name, Title Office of Navajo Labor Relations DIVISION OF HUMAN RESOURCES

cc: Window Rock ONLR Chrono File

ATTACHMENT

CHRONO No.

Name, Title Company Name Mailing Address City, State, Zip Code

RE: NPEA REQUIREMENT LETTER Project Title

Dear Mr./Ms.:

The Office of Navajo Labor Relations ("ONLR") monitors construction projects on the Navajo Nation to ensure all contractors and/or subcontractors comply with the <u>Navajo Preference in</u> <u>Employment Act</u> ("NPEA"). The requirements are as follows:

- A. Give preference in employment to enrolled members of the Navajo Nation:
 - 1. Advertise all job vacancies in at least one newspaper and radio station serving the Navajo Nation. Note: All job announcements and advertisements shall specify a Navajo employment preference statement.
- B. Establish written necessary qualifications/job descriptions for each employment position in their work force, a copy of which shall be provided to applicants or candidates at the time they express an interest in such position.
- C. Use non-discriminatory job qualifications and selection criteria in employment. Any Navajo applicant or candidate who demonstrates the necessary qualifications for an employment position:
 - 1. Is to be selected by the employer in the case of hiring, promotion, transfer, upgrading, recall and other employment opportunities with respect to such position;
 - 2. To be retained by the employer in the case of the reduction-in-force affecting such class of positions until all non-Navajos employed in that class of position are laid off; and

Date

NPEA Requirement Letter Page Two

- 3. Among of pool of applicants or candidates who are solely Navajos, the Navajo with the best qualifications is to be selected or retained.
- D. Provide a fringe benefit plan that does not discriminate against Navajos in terms of coverage due to Navajo cultural or religious traditions or beliefs.
- E. File with the ONLR a written Navajo Affirmative Action Plan (Program). An employer-sponsored cross-cultural program shall be an essential part of the affirmative action plans required by the NPEA. Such program shall primarily focus on the education of non-Navajo employees, including management and supervisory personnel, regarding the cultural and religious traditions or beliefs of Navajos, and their relationships to the development of employment policies that accommodate such traditions and beliefs.
- F. Maintain a safe and clean working environment free of prejudice, intimidation, and harassment.
- G. Not penalize, discipline, discharge, nor take any adverse action against any Navajo employee without a written notice showing just cause. This notice shall be given to the employee at the time of the adverse action.
- H. Post in a conspicuous place on its premises, a Navajo preference policy notice.
- I. For each Contractor/Subcontractor to be utilized on the project, the ONLR will require the following information:
 - 1. <u>Contractor/Subcontractor Manpower Projection Report</u>. A list of all classifications and number of workers that will be required. This shall be submitted two weeks before start of work.
 - 2. <u>Job Description</u> for each classification, listing experience, tool requirements, etc.
 - 3. <u>Name of Individual</u> who will conduct the interview and hiring.
 - 4. <u>Employer Interview Report</u> shall be submitted with the first certified payroll report.
 - 5. <u>Weekly Manpower Report</u> shall be submitted with each week's certified payroll report.

NPEA Requirement Letter Page Three

- 6. <u>Certified Payroll Report</u> shall be submitted with each week's manpower report.
- 7. <u>Navajo Affirmative Action Program</u> shall be submitted two weeks before start of work.
- 8. <u>Location</u> of office and telephone number(s).
- 9. <u>Name of Individual</u> designated as contact person at the job site.
- 10. <u>List of Key Personnel</u> the contractor anticipates on bringing to the job site. These positions are usually the project superintendent and/or an individual with signatory authority. The contractors and/or subcontractors will be required to justify other positions not normally considered "key" personnel.
- 11. Job Summary and Duration of the Project.

The ONLR will provide an overview of NPEA requirements and in-depth orientation for all contractors. If you have any questions, call our office at (928) 871-6800.

Sincerely,

Name, Title Office of Navajo Labor Relations DIVISION OF HUMAN RESOURCES

cc: Window Rock ONLR Project/Chrono File

NOTICE OF THE NAVAJO PREFERENCE IN EMPLOYMENT ACT

Employers must post this notice in a conspicuous place on its premises where notices to employees and job applicants are customarily posted.

Title 15 N.N.C. Chapter 7 requires that all employers doing business within the boundaries of the Navajo Nation or engaged in any contracts with the Navajo Nation, shall give preference in employment to enrolled members of the Navajo Nation and submit an affirmative action program.

Navajo Preference in Employment Act ("NPEA") applies to:

* Hiring* Termination* Transfers* Recalls* Promotion* Reduction-in-force* Training* Recruitment

NPEA requires employers doing business within the territorial jurisdiction of the Navajo Nation to:

- Provide applicant with written job descriptions.
- Provide training to enhance the skills of Navajo Employees.
- Not discipline or discharge Navajo employees without just cause and written notification.
- Provide a work place free of prejudice, intimidation and harassment.
- Pay established Prevailing Wages for construction work.
- Provide Navajo Affirmative Action Program to employ Navajos in all job classifications including supervisory and management positions.

The ONLR requires employers to receive a NPEA orientation prior to commencing work on the Navajo Nation.

If you think your rights have been violated or see other possible violations of the Navajo Preference, call or write to the Office of Navajo Labor Relations for more information.

OFFICE OF NAVAJO LABOR RELATION

Post Office Box 1943 * Window Rock, Arizona 86515 Phone: (928) 871-6800 * Fax: (928) 871-7088

Copy of the <u>Navajo Preference in Employment Act</u> are available at the above office and at WWW.ONLR.NAVAJO-NSN.GOV

B

OFFICE OF NAVAJO LABOR RELATIONS

The purpose of the Office of Navajo Labor Relations is as follows:

- A. To monitor and enforce the <u>NAVAJO PREFERENCE IN EMPLOYMENT ACT</u> (NPEA), Title
 15 NNC Chapter 7.
- B. To implement and carry out the labor policies of the Navajo Nation as established by the Navajo Nation Council.
- C. To act as administrative agency for matter relating to employment preference in hiring, recruitment, promotion, lay-off, termination, transfer and other areas of employment.
- D. To gather information from employers, employees, labor organization and governmental agencies relating to employment, compensation and working conditions.
- E. To recommend and propose policies, rules, regulations, specific Navajo Preference Plans to Human Services Committee of the Navajo Nation Council.

OFFICE OF NAVAJO LABOR RELATIONS

WINDOW ROCK ONLR OFFICE Post Office Box 1943 Window Rock, Arizona 86515 Telephone: (928) 871-6800 Fax: (928) 871-7088 Website: http://www.onlr.navajo-nsn.gov

OFFICE OF NAVAJO LABOR RELATIONS

ADMINISTRATION STAFF

PROGRAM MANAGER I

Ronald M. Curtis Phone Number: (928) 871-6545 Email: **rmcurtis@navajo-nsn.gov**

CONSTRUCTION EMPLOYMENT ANALYST

Michael Armijo Phone Number: (928) 871-6843 Email: michaelarmijo@navajo-nsn.gov

LABOR COMPLIANCE OFFICER

Gililand Damon Phone Number: (928) 871-7431 Email: gililanddamon@navajo-nsn.gov

ADMINISTRATIVE ASSISTANT

Shervonna Begay, Administrative Assistant Phone Number: (928) 871-6801 Email: sherbegay@navajo-nsn.gov

OFFICE ASSISTANT

Antoinette Nez Phone Number: (928) 871-6800 Email: **antnez@navajo-nsn.gov**

LABOR COMPLIANCE OFFICER

Eugene Kirk Phone Number: (928) 871-7429 Email: ekirk@navajo-nsn.gov

OUR MAILING ADDRESS

Post Office Box 1943 Window Rock, AZ 86515 Telephone: (928) 871-6800 Fax: (928) 871-7088 Website: http://www.onlr.navajo-nsn.gov

OUR PHYSICAL ADDRESS Morgan Blvd. SDTD Bldg. #2740 "C"

Window Rock, AZ 86515

GENERAL DIRECTIONS TO OUR OFFICE

When driving to Navajo Nations President's Office you will pass the Navajo Nation Police Department, Fire Station and Administration Building One and Two. About ¹/₄ mile you will turn west on Morgan Blvd. and you will see Education Center our office is directly across on the north side of Morgan Blvd. in the Staff Development and Training Department Room "C". You can call for directions at (928) 871-6800.

START NEW WORKERS OUT RIGHT



EXECUTIVE SUMMARY

The safer construction top-management, project-management and foreman give more orientation to their workers new to the job than less safe managers. Research proves that attention to new workers is a key characteristic of safe, productive management. This information shows:

WHY orientating workers increases profits HOW to develop a new workers program tailored to your company

WHY NEW WORKERS PROGRAM INCREASES PROFITS

The facts show that construction companies which are putting their workers right to work without any orientation are spending needless dollars for accident costs, lost time, damaged materials and machinery, etc. These new workers are the ones who are having the accidents, accidents, which cost thousands in workers compensation costs.

The common construction practice of putting new workers directly on the job with no orientation is creating a very high accident rate for workers in their first few days and weeks on the job.

For most construction companies, it is their new workers – no matter how experienced they are – who are having the accidents. And these accidents are costing company profits.

Accidents to new workers can be substantially reduced by an orientation for employees new to the job. The investment of time to start a new worker out right will be repaid many times over when that worker works safely and does not have an accident.

Every accident creates many costs for your company. Insurance costs are one of the major costs. A recent study by Prof. Raymond Levitt of Stanford University, of 23 construction firms engaged in highway, heavy building, industrial and specialty trade construction found that companies with formal safety orientation programs for all new hires had an average insurance modification rates, 25% lower than their competitors who did not have any such programs. These reduced costs give a distinct advantage in the bidding process and allow for greater profits. Beyond these obvious costs yet equally important, is the fact that accidents have a very adverse impact on project morale and company reputation.

Orientation will pay off by reducing accidents. Few accidents mean more profits.

HOW TO DEVELOP YOUR COMPANY'S ORIENTATION PROGRAM

A successful company orientation program includes all new workers regardless of the number of years worked in the industry. It covers every worker new to the company, new to a particular job site or only new to a crew. This means that your new worker program needs three parts – each important.

- 1. Top management communication to new worker of company, commitments on safety, health, and expectations for each employee.
- 2. Project management orientation, including the special requirements for each project.
- 3. Foreman orientation to job and crew.

The worker who is new to the company is also new to the project and to the crew. Such people need the most orientation. They are unfamiliar with company policies and procedures. They are unfamiliar with job site conditions. They are unfamiliar with superintendents, foremen and fellow employees. They feel that they must prove themselves to the company, the superintendent, the foreman, and their fellow workers and to themselves.

Safety orientation, however, cannot stop with them. All employees, even those with company seniority, should receive safety orientation every time they are transferred to a new job site or crew. The particular organization and layout of the work and therefore the particular safety hazards at the job site are as unfamiliar to them as to a brand new employee. On many sites, even when there is no turnover in crews on the job, conditions change so much during the course of the job that all site employees need constant update orientation. Very productive safe superintendents stop their project workers for briefing sessions every time the work changes.

TOP MANAGEMENT'S ROLE IN ORIENTATION

Your company needs to develop two programs:

- 1. A New Worker Orientation-to-the-Company Program
- 2. A Management Training System to Insure Project and Crew Level Orientation

ESSENTIALS OF A COMPANY ORIENTATION PROGRAM

Your company program must be developed by upper management to suit the company. After a program is implemented, it needs to be reviewed and updated to guarantee that it is functioning as designed. The type of work and number of employees will govern the extent and formality of each company's program.

NEW WORKER ACTION STEPS:

Everyone new to your crew (no matter how experienced) is a new worker

- 1. Ask about last job.
- 2. Describe the new job.
- 3. Show worker around site; point out hazards.
- 4. Introduce worker to others
- 5. Describe your rules.
- 6. Give worker a test run on tools and equipment.
- 7. Keep an eye on the new worker during the first few days.
- 8. Check back to see how the worker is coming along.

Foremen and superintendents will be more willing to spend the necessary time on a new worker orientation if they are held accountable for accidents as part of their supervisory responsibilities.

START NEW WORKERS OUT RIGHT is only the first part of the **SAFER** program. The greatest reduction in accidents and the greatest increase in savings will result from combining orientation with the other four basic points of the safer program.

- 1. Account for all accidents so foremen and supervisors know that safety is an important part of their job performance.
- 2. Foremen and Managers plan safety into each job so the safety is an integral part of job operations.
- 3. Every week a toolbox/tailgate meeting is held so that what the new worker hears and learns in orientation is constantly backed up and emphasized.
- 4. Reinforce safe performance so that the new workers and all the others realize that foremen, supervisors, and the companies back their interest in safety with recognition of those who do a good job on safety.

Your company's program should also include:

- 1. An introductory letter to each employee from the company president welcoming the new worker, emphasizing the importance of safety to the company and to the president, and describing the worker's responsibility to help maintain a safe working environment.
- 2. A Company Safety Practices handbook issued to each new worker, which spells out the particular rules and requirements of your company.

In addition, there are a number of additional methods which construction companies have used successfully such as audio-visual presentations (films, slides, videotapes) to be viewed by each worker covering company safety policy, new employees checklists which are read by the employee before the worker begins work and which require the employee's signature of the compliance on their employment application, short booklets describing company project information, and company procedures including workweek, absentee and pay procedures, rules on safety and other basic company policies.

THE COMPANY PLANS FOR JOB SUPERINTENDENT AND FOREMAN ORIENTATION

While a company orientation program developed from the elements just described is effective in reducing accidents and accident costs, even more effective is company program combined with a strong program on the project and crew level. The most effective orientation programs depend upon the key personnel directly in contact with the new worker. The superintendent and foreman are committed to orientating the new hire.

The job superintendent has two responsibilities for orientation. First, he must communicate a project-wide commitment to safety and a continuing awareness and involvement in safety performances as well as productivity and quality. Secondly, he must be certain that the foremen understand the importance of orientation and are trained to carry it our properly. The superintendent should also take an active interest in the new worker, ensuring that the necessary safety information has been provided and that the new worker is adjusting well to the job.

The foreman is typically the most closely involved with the new worker and thus is a critical person in the orientation process. The company should expect the foreman to spend sufficient time with the new worker to start the new worker out right. Foremen who save their company money and their crewmembers' personal and economic loss by orienting their new crewmembers have well-developed methods for starting a new worker. These methods can be taught successfully to other foremen. Stanford Construction Safety Management Safety and Health Project have developed a foreman pocket card listing the new worker action steps. This card reminds the foremen what to do.



SAMPLE (Use Company Letterhead)

CONTRACTOR/SUBCONTRACTOR'S MANPOWER PROJECTION REPORT

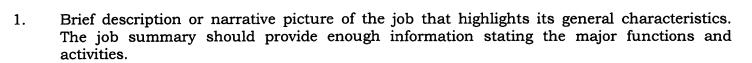
CONTRACTOR: PROJECT:			DATE:				
			LOCATIO				
ANTICIPATE	D START DAT	E:	END DA	END DATE:			
<u>CRAFT</u>	NUMBER <u>REQUIRED</u>	REMARKS	<u>CRAFT</u>	NUMBER <u>REQUIRED</u>	<u>REMARKS</u>		
Carpenter			Cement Finisher				
Electrician			Boilermaker				
Laborer	<u> </u>		Bricklayer		<u> </u>		
Drywall Installe Taper			Equipment Operator				
Pipefitter			Truck Driver		<u> </u>		
Plumber			Ironworker	<u> </u>	<u></u>		
Roofer			Painter				
Insulator			Soft Tile Setter				
Millwright			Sheet Metal Work	(er			
(Note: any Apprenticeship		ifications, i.e., 12	25-Ton Crane Operato	or, Testing Require	ments, Journeym	an or	
having subcont sub-contractor include the nan	OFFICE OF N Attn: Michael Post Office Bo	ach AVAJO LABOR RE Armijo, CEA	Signature:	ed Company Represen		ITED	

SUBCONTRACTORS LISTING

Information Required:

- 1. Name and addresses of all subcontractors. Include telephone numbers.
- 2. Name and title of position of company representative.
- 3. Brief description of what type of work the subcontractor will perform.
- 4. A Manpower Projection is required prior to start of work and a projected start and end date should be noted.
- **NOTE:** A pre-construction conference is required **<u>BEFORE</u>** any work is started. It is the subcontractor's responsibility to contact ONLR to arrange for a separate meeting before any work begins.

JOB DESCRIPTION



- 2. Avoid using ambiguous words, or those that leave themselves open to a number of possible interpretations.
- 3. Avoid using technical words unless you are sure they will be easily understood. If you must use them anyway, explain.
- 4. All employers (contractors and subcontractors) shall use non-discriminatory job qualification and selection criteria in employment.
- 5. Job descriptions shall contain those job-related qualifications which are essential to the performance of the basic responsibilities designated for each employment position, including any essential qualification concerning education, training and job-related experience, but excluding any qualifications relating to ability or aptitude to perform responsibilities in other employment positions. Demonstrated ability to perform essential and basic responsibilities shall be deemed satisfaction of "necessary qualifications".
- **NOTE:** A copy of a job description shall be provided to the applicants or candidates at the time they express an interest in such position (15 NNC 604.D.).

RADIO STATIONS



KNDN RADIO STATION

1515 West Main Street Farmington, New Mexico 87401 Telephone: (505) 325-1996 Telefax: (505) 327-2019

KTNN RADIO STATIO

Post Office Box 2569 Window Rock, Arizona 86515 Telephone: (928) 871-2582 Telefax: (928) 871-3479

<u>NEWSPAPER</u>

DAILY TIMES

Post Office Box 450 Farmington, New Mexico 87499 Telephone: (505) 325-4545 Telefax: (505) 564-4567

NAVAJO TIMES

Post Office Box 310 Window Rock, Arizona 86515 Telephone: (928) 871-1130 Telefax: (928) 871-1159

GALLUP INDEPENDENT

Post Office Box 1210 Gallup, New Mexico 87305 Telephone: (505) 863-6811 Telefax: (505) 722-5750

NAVAJO/HOPI OBSERVER

2224 East Cedar Avenue Flagstaff, Arizona 86004 Telephone: (928) 226-9696 Telefax: (928) 226-1115

NAVAJO PREFERENCE STATEMENT

NPEA Section 4(B). Specific Requirements for Navajo Preference

1. "All employers shall include and specify a Navajo employment preference policy statement in all job announcements and advertisements and employer policies covered by this Act".

JOB SERVICE

New Mexico Dept. of Labor

503 West Highway 66, Suite 13, 14, 16 Gallup, New Mexico 87301 (505) 863-8884/Fax: (505) 863-8995

New Mexico Dept. of Labor

600 West Arrington Street Farmington, New Mexico 87401 (505) 327-6126/Fax: (505) 326-6006 AZ Workforce Connection Post Office Box 3565

Window Rock, Arizona 86515 (928) 871-4131/Fax: (928) 871-4130

Dept. of Economic Security Adm.

Post Office Box 130 Tuba City, Arizona 86045 (928) 283-5201/Fax: (928) 283-4435

NPEA Section 4(B)(5): "All employers shall utilize Navajo Nation employment sources and job services for employee recruitment and referrals; provided, however, that employers do not have the foregoing obligations in the event a Navajo is selected for the employment who is a current employee of the employer."

AFFIRMATIVE ACTION REGULATIONS

I. INTRODUCTION

A. Pursuant to the <u>Navajo Preference in Employment Act</u> ("NPEA"), "all employers doing business within the territorial jurisdiction of the Navajo Nation, or engaged in any contract with the Navajo Nation shall give preference in employment to Navajos. Preference in employment shall include specific Navajo affirmative action plans and timetables for all phases of employment to achieve the tribal goals of employing Navajos in all job classifications including supervisory and management positions."

II. POLICY STATEMENT

- A. The employer's policy statement shall indicate the Owner/Chief Executive Officer's position on the subject matters; assign overall responsibility, reporting and monitoring procedure. Specific items to be mentioned, should include, but are not limited to:
 - 1. Providing employment and training opportunities for Navajo workers, including supervisory and management positions.
 - 2. Employment decisions and personnel actions shall be based on the principles, intent and purposes of the *Navajo Preference in Employment* <u>Act</u> ("NPEA").

III. APPOINTMENT OF A MANAGEMENT OFFICIAL TO IMPLEMENT NAVAJO AFFIRMATIVE ACTION PROGRAM

- A. A management official who has decision-making authority shall be appointed to implement and monitor the Affirmative Action Plan Program. His/Her responsibility will include, but are not limited to the following:
 - 1. Developing Navajo Affirmative Action Plan Program, policy statement, goals and objectives, and internal and external communication procedures.
 - 2. Identifying and/or assisting in the identification of problem areas in Section V. D.
 - 3. Determining and implementing corrective solution(s) identified under Section V. D. with the assistance of line supervisors.
 - 4. Designing and implementing audit and reporting systems that will:
 - a. Measure effectiveness of the employer's program.
 - b. Indicate and determine the need for remedial action(s).

- c. Determine the degree to which the employer's goal and objectives have been accomplished.
- 5. Serve as liaison between the employer and the Office of Navajo Labor Relations ("ONLR").

IV. ESTABLISHMENT OF GOALS AND TIMELINES

- A. The goals and timelines developed by the employers should be attainable based on analysis of the following:
 - 1. All positions/classifications currently held by non-Navajos,
 - 2. Qualifications required by the positions/classifications,
 - 3. Timelines for Navajo worker(s) to obtain qualifications for positions/classification(s) held by non-Navajos, and
 - 4. Identification of resources internally and externally to implement the plan.

V. WORKFORCE ANALYSIS

- A. The affirmative action plan should contain a workforce analysis, defined as a listing of each job title as it appears in applicable collective bargaining agreements or payroll records ranked from the lowest paid to the highest paid within each department or organizational unit including mid-management and top-management. Lines of progression for each unit or department must be identified through which employees could move upward. Where there are no formal progression lines or lines or usual promotional sequences, job titles should be listed in order of wages/salary ranges.
- B. An analysis of all positions/classifications of the employer, should be included, with explanation if Navajos are currently being under-utilized in any positions/classifications, "Under-utilization" is defined as having a fewer Navajos in any position/classification than would be expected by the availability of qualified Navajo workers.
- C. An in-depth analysis of the following shall be made:
 - 1. Composition of Navajo and non-Navajo employees by positions/classifications.
 - 2. Composition of applicant flow of Navajos and non-Navajos.
 - 3. Selection process including recruitment, job descriptions, interview criteria, written tests and final selection.

- 4. Retention, promotion, transfer, reduction in force and recall.
- 5. Apprenticeship program/trainings.
- 6. Company training formal and informal.
- D. If any of the following are identified in the analysis, a plan of corrective action must be established immediately:
 - 1. An under-utilization of Navajo employees.
 - 2. Vertical movement of Navajos occurs at a lesser rate than that of non-Navajos.
 - 3. The selection process eliminates a significantly higher percentage of Navajos than non-Navajos.
 - 4. Position/job descriptions are inaccurate in relation to actual duties and function.
 - 5. Testing and/or test forms having adverse impact at a higher rate on Navajos than non-Navajos.
 - 6. Non-support of the company's affirmative action policy by employees' supervisors or managers.
 - 7. No formal criteria established for evaluating the effectiveness of the affirmative action program.

VI. UNIONS AND LABOR ORGANIZATIONS

- A. Where employers are signatory to collective bargaining agreements, the union organizations and the employer shall file a joint employer union affirmative action plan to the Office of Navajo Labor Relations pursuant to NPEA, Section 4.A.2.
- B. The joint employer union affirmative action policy shall specifically include a clause that the employer and the labor organization will provide preference in employment to Navajos.
- C. When providing preference in employment to Navajos, the affirmative action policy shall require the following:
 - 1. The employer shall specifically request Navajo workers for work to be done on the Navajo Nation. The employer shall not accept referrals of non-Navajos for work on the Navajo Nation, so long as potentially qualified Navajos are available, through respective local union halls.

- 2. The labor organization shall first refer all Navajos on the labor organization's referral list (s), regardless of their relative position on those lists.
- 3. The labor organization shall take necessary steps to recruit additional Navajo members so as to meet manpower requests for work to be conducted on the Navajo Nation.

VII. ENFORCEMENT

- A. The designated company management official shall be responsible for compliance with the requirements of these Rules and Regulations.
- B. Employers and organizations not in compliance will be subjected to formal charges in accordance with provisions of the *Navajo Preference in Employment* <u>*Act*</u>.
- C. Failure to comply with these Rules and Regulations or failure to submit an affirmative action policy may result, in addition to formal charges, corrective action by the Office of Navajo Labor Relations, including but not limited to, compelled hiring and/or training of Navajo workers.

VIII. EFFECTIVE DATE

- A. These Regulations shall become effective 180 days from the date of approval by the Health, Education and Human Services Committee of the Navajo Nation Council.
- B. Within 90 days of the effective date, employers must have submitted an affirmative action plan to the Office of Navajo Labor Relations.

IX. AMENDMENT

A. This regulation shall be amended from time to time as deemed necessary by the Health, Education and Human Services Committee of the Navajo Council.

ONLR/01-01-18

OFFICE OF NAVAJO LABOR RELATIONS EMPLOYER INTERVIEW REPORT

Project

*N = Navajo NN= Non-Navajo Contractor

Location

Position

DATE	APPLICANT	N/NN	ADDRESS/TELEPHONE	INTERVIEWER	RESULTS

CONDITION FOR EMPLOYMENT EXPRESSED TO APPLICANT



- 1. Explain or inform worker what's expected of him/her. The work rules or conducts.
- 2. Each employee should know what their position is; rate of pay, and given a written personnel action form.
- 3. Thorough orientation on company/employer policies and procedures.

WRITTEN NOTIFICATION FOR ANY EMPLOYEE ACTION

 "All employers shall not penalize, discipline, discharge nor take any adverse action against any employee without just cause. A written notification to the employee citing such cause for any of the above actions is required in all cases." (15 NNC 604.B.(8.)) K

	SAMPLE
(Use	Company Letterhead)

Date:	
Company Name Company Address Company City, State, Zip Code Telephone Number Fax Number	
RE: WEEKLY MANPOWER REPORT FOR WEEK ENDING: Duration of Project: Start Date:	
Total Work Force (*): *Justification for hiring non-Navajo employee:	
Important Notice: Each Weekly Manpower shall have a Re corresponding Certified Payroll Report attached.	epresentative Name & Title (Printed)
	Signature

Copy to: OFFICE OF NAVAJO LABOR RELATIONS Attn: Michael Armijo, CEA Post Office Box 1943 Window Rock, Arizona 86515

Page 2 of 2

WEEKLY MANPOWER REPORT For Week Ending: _____

	NAV	'AJO	NON-NA	VAJO
	Male	Female	Male	Female
Project Superintendent				
Project Foreman				
Carpenter				
Electrician				
Laborer				
Drywaller Installer/Taper				
Plumber				
Pipefitter				
Truck Driver				
Equipment Operator				
Ironworker		·		
Roofer		- <u></u>		
Painter	<u></u>			<u>.</u>
Soft Tilesetter				
Insulator				
Cement Mason				. <u></u>
Apprentice		<u></u>		
Other (Specify Craft)				
TOTALS:				

(List Only those Classifications Utilized During that Week)



NAME OF CONTR	VCTOR	NAME OF CONTRACTOR OR SUBCONTRACTOR:	OR:	ADDRESS/ TELEPHONE NO.:					<u> </u>	WAGE DECISION NO.	ON NO.	
PAYROLL NO.	FOR	FOR WEEK ENDING:	PROJE	PROJECT NAME:		LOCATION:	:NO		CONTRACT NO.	CT NO.		1
(I)	(2)	(3)		(4) DAY AND DATE	(9)	6		DEDU	(8) DEDUCTIONS		(6)	
NAME OF EMPLOYEE	NN/N+	WORK CLASSIFICATION	ULOY 2L	S M T W T F S TOTAL HOURS	RATE OF PAY	GROSS AMOUNT EARNED	FICA	WITH- HOLDING TAX	OTHER	TOTAL	NET WAGES PAID FOR WEEK	
				HOURS WORKED EACH DAY								
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			50									
			0									
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(2) * N/Navajo or NN/non-Navajo (PLEASE INDICATE)

PAYROLL STATEMENT OF COMPLIANCE

,	(Name of signatory party)	(Title)
o hereby	y state:	
(I)	That I pay or supervise the payment of the	e persons employed by
	on th	e
(Contractor or subcontractor)	e(Building or work)
lav of	; that during the payroll perio	od commencing on the day of 20
ill persor	, 20 and ending the	day of 20 the full weekly wages earned, that no rebates have
	vill be made either directly or indirectly to or	
		Group the full
	(Contractor or subcontractor)	from the full
veekly w		ctions have been made either directly or indirectly
		permissible deductions ad defined in Regulations,
an 1 7 (2)	OCFR Subtitle A), issued by the Secretary of	f Labor under the Copeland Act, as amended (48
	OCFR Subtitle A), issued by the Secretary of , 63 Stat. 108, 72 Stat 967; 75 Stat 357; 40 U	f Labor under the Copeland Act, as amended (48
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Stat. 948	, 63 Stat. 108, 72 Stat 967; 75 Stat 357; 40 U	f Labor under the Copeland Act, as amended (48 J.S.C. 267c), and described below:
(2)	, 63 Stat. 108, 72 Stat 967; 75 Stat 357; 40 U That any payrolls otherwise under this cor	f Labor under the Copeland Act, as amended (48 J.S.C. 267c), and described below:
(2) (2) (2)	, 63 Stat. 108, 72 Stat 967; 75 Stat 357; 40 U That any payrolls otherwise under this cor ct and complete; that the wage rates for labor	f Labor under the Copeland Act, as amended (48 J.S.C. 267c), and described below: ntract require to be submitted for the above period rers or mechanics contained therein are not less
(2) re correction the s	, 63 Stat. 108, 72 Stat 967; 75 Stat 357; 40 U That any payrolls otherwise under this con ct and complete; that the wage rates for labor applicable wage rates contained in any wage	f Labor under the Copeland Act, as amended (48 J.S.C. 267c), and described below: ntract require to be submitted for the above period rers or mechanics contained therein are not less determination incorporated into the contract; that
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(2) re correc han the a he classi (3) apprentic	, 63 Stat. 108, 72 Stat 967; 75 Stat 357; 40 U That any payrolls otherwise under this cor ct and complete; that the wage rates for labor applicable wage rates contained in any wage fications set forth therein for each laborer or That any apprentices employed in the abov eship program registered with the State appr ceship and Training, United States Departme	f Labor under the Copeland Act, as amended (48 J.S.C. 267c), and described below: ntract require to be submitted for the above period rers or mechanics contained therein are not less determination incorporated into the contract; that mechanic conform with the work he performed. we period are duly registered in a bona fide renticeship agency recognized by the Bureau of ent of Labor.

- → In addition to the basic hourly wage rates paid to each laborer or mechanic listed in the above referenced payroll, payments of fringe benefits as listed in the contract have been or will be made to appropriate programs for the benefit of such employees, except as noted in Section 4(c) below.
- (b) WHERE FRINGE BENEFITS ARE PAID IN CASH
- Each laborer or mechanic listed in the above referenced payroll has been paid, as indicated on the payroll, an amount not less than the sum of the applicable hourly wage rate plus the amount of the required fringe benefits as listed in the contract, except as noted in Section 4(c) below.

(c) EXCEPTIONS

(c) EXCEPTIONS	
EXCEPTION (CRAFT)	EXPLANATION
•·····································	
REMARKS	d
NAME AND TITLE	SIGNATURE

NAME AND IIILE	SIGNATURE
THE WILLFUL FALSIFICATION OF ANY SUBJECT THE CONTRACTOR OR SUBC PROSECUTION. SEE SECTION 1001 OF 1 OF THE UNITED STATES CODE.	ONTRACTOR TO A CIVIL OR CRIMINAL

Date _

	SAMPLE	
(Use	Company Letterhead)	

PROJECT STATUS REPORT

Date:		
PROJECT TITLE:		
Duration of Project: START:	Completion:	
Job Location:		
Check Appropriate Spaces:		
Complete – No employees or w	orkers on site.	
Near Completion, will be comp	leted by:	
Other:		
Additional Work Project: FROM:	ТО:	
Description of additional work required:		
Company: _		
Representative Name:		<u> </u>
Title:	·	

IMPORTANT NOTICE

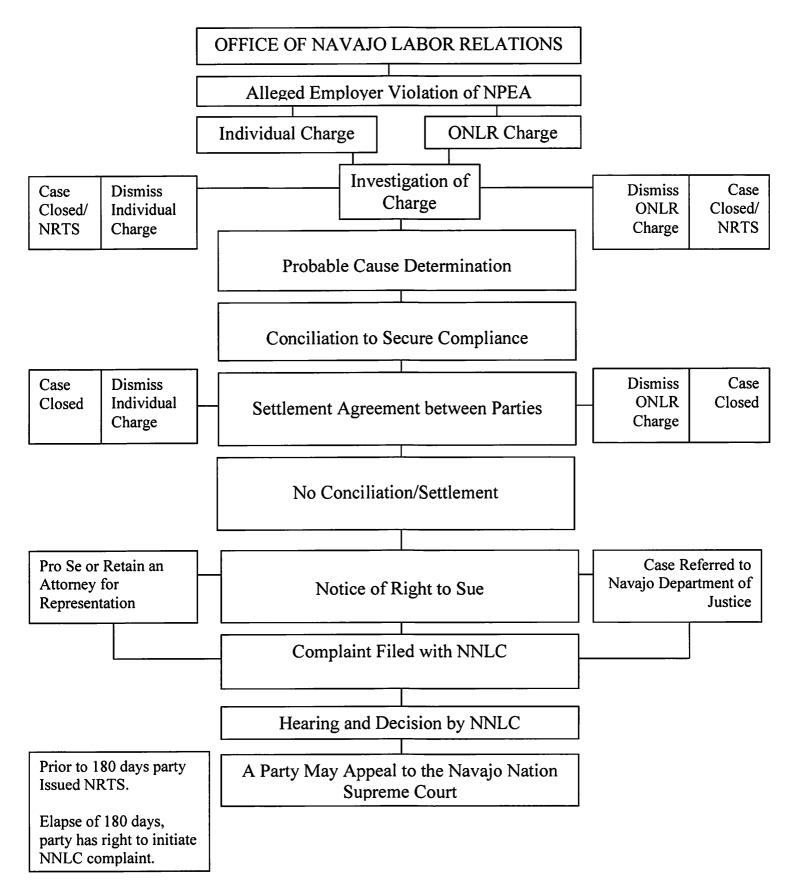
In the event contractor/subcontractor returns to perform additional work on this project, Office of Navajo Labor Relations must be contacted and a manpower projection report shall be submitted to ONLR before any work is to start. Form can be faxed to the Office of Navajo Labor Relations at:

> Office of Navajo Labor Relations at (928) 871-7088

NOTE: Please fill out this form within two weeks of completion of project.

Copy to: OFFICE OF NAVAJO LABOR RELATIONS Attn: Michael Armijo, CEA Post Office Box 1943 Window Rock, Arizona 86515

INVESTIGATION PROCESS FLOW CHART



THE NAVAJO NATION



JONATHAN NEZ | PRESIDENT MYRON LIZER | VICE PRESIDENT

REQUEST FOR PREVAILING WAGE RATE DECISION

1	Project Title:
2	Physical Location of Jobsite (including county)
	Physical Address:
	City/State/Zip Code:
	County:
3	Estimated Bid Opening Date:
4	Funding Source (who is funding the project):
5	Estimated Cost of the Classification of Construction
	Highway/Utilities:
	Building:
	Residential:
	Heavy Engineering:
6	Description/Scope of Work (be specific):
7	Duration of Construction Project
	Beginning Date:
	Ending Date:
8	Address to where wage detemination should be sent to
	Contact Person/Title:
	Name of Contracting Agency:
	Address:
	City/State/Zip Code:
	Telephone Number:
	Fax Number:
	Email Address:

OFFICE OF NAVAJO LABOR RELATIONS POST OFFICE BOX 1943 * WINDOW ROCK, ARIZONA 86515 * PHONE: (928) 871-6800 * FAX: (928) 871-7088 WWW.ONLR.NAVAJO-NSN.GOV

THE NAVAJO NATION

JONATHAN NEZ | PRESIDENT MYRON LIZER | VICE PRESIDENT



REQUEST FOR PREVAILING WAGE RATE DECISION

	REQUES	I FUR PI	REVAILING	WAGE RATE DECISION	
1	Project Title: Bod	away-Gap V	Vell, Storage Tar	nk, and Pipeline Project	
2	Physical Location of Physical Address: City/State/Zip Code: County:	Habitiin E 0.25 mile	Elementary Scho s southwest of th -Gap, Arizona	II 4.25 miles north of Tsinabaas ol and ends at existing Gap Tank ne elementary school.	
3	Estimated Bid Openi	ng Date:	January 2021		
4	Funding Source (who	o is funding t	the project):	Navajo Nation Department of Wat	<u>er Resourc</u> es
5	Estimated Cost of th	e Classificati	ion of Construct	ion	
	Highway/Utilities:	\$6,182,1 ⁻	12		
	Building:				
	Residential:				
	Heavy Engineering:				
6	Description/Scope o 80,000 gallon welde and regional Bodawa	d-steel stora	ge tank and a $\overline{10}$	stall a new precast well house, const D-inch pipeline connecting the well, st em.	ruct a new torage tank
7	Duration of Construc	ction Project	t		
	Beginning Date: D	ecember 20	20		
	Ending Date: D	ecember 20	21		
8	Address to where wa	age detemin	ation should be	sent to	
	Contact Person/Title		Jason John, D	irector	
	Name of Contracting	g Agency:	Water Manage	ment Branch, NNDWR	
	Address:		P.O. Box 678		
	City/State/Zip Code:		Ft. Defiance, A	rizona 86504	
	Telephone Number:		(928) 729-414	1	
	Fax Number:				

jasonjohn@navajo-nsn.gov

Email Address:

THE NAVAJO NATION



JONATHAN NEZ | PRESIDENT MYRON LIZER | VICE PRESIDENT

Jason John, Director The Navajo Nation Department of Water Resources Post Office Box 678 Fort Defiance, Arizona 86504

January 4, 2020

Dear Mr. John,

Pursuant to RDCJN-17-20 and 25 CFR 169.4 (b) (3) (iii) Tribal Authorization Access can be authorized to a wholly owned and operated Navajo Nation entity without the Bureau of Indian Affairs approval. This Resources and Development Committee Resolution also authorizes the Director of the Navajo Land Department (NLD) Division of Natural Resources to give approval of these Right-of-Ways.

The Right-of-Way consisting of $1,392,615\pm$ square feet and/or $31.969\pm$ acres, across Navajo Nation Trust Lands otherwise known as the Western Navajo Pipeline Phase 1 - Bodaway/Gap Well, Pipeline and Storage Tank Water Supply and Distribution Improvement Project is **approved**. You are authorized to construct, operate and maintain the mentioned Right-of-Way.

Thank you for your application to the Navajo Land Department / General Land Development Department. If you have any questions or inquiries, please contact the Navajo Land Department at (928) 871-6447.

Sincerely,

THE NAVAJO NATION

1-Th

Jonathan Nez, President

Docume	ent No.	015193	<i>N</i> (Date Issued:	10/01/2	020
		EX	ECUTIVE OFFICIAL	REVIEW		
Title of D	Document:	TAA DWR Bodaway/G	ap Well, Storage Tank	Contact Name: YAZZ	ZIE, ELERINA	В
Program	n/Division:	DIVISION OF NATUR	AL RESOURCES			
Email:		e_yazzie@navajo-nsn.	gov	Phone Number:	928-871-6	447
Bu	siness Site	e Lease			Sufficient	Insufficient
	Division:			Date:		
		e Controller:	sued within 30 days of th	Date: e initiation of the E.O. revie		
		e Attorney General:		Date:		
Inv 1.	vestment) o Division:		ing and/or Management	ans, (i.e. Loan, Loan Gua Authority of Leasing tra Date: Date:	nsactions	
		-		uests, Budget Modificati		
		anagement and Budget:		Date:		
		e Controller:	5	Date:		
3.	Office of th	e Attorney General:		Date:		
Na	vajo Housi	ng Authority Request f	or Release of Funds			
1.	NNEPA:			Date:		
2.	Office of th	e Attorney General:		Date:		
Lea	ase Purcha	ase Agreements				
1.		e Controller:		Date:		
2.		ndation only) le Attorney General:		Date:		
_ Gr	ant Applica	ations				
1.	Office of M	anagement and Budget:		Date:		
		e Controller:		Date: Date:		
3.	Office of th	e Attorney General:		Date:		
Co		ocal Ordinances (Local		tion of an Approving Aut Plans of Operation/Divis		
1.	Division:			Date:		
2.	Office of th	ne Attorney General:				
Re	linquishme	ent of Navajo Membersh	nip			
1.	Land Depa	rtment:		Date:		
				Date:		
3.	Office of th	e Attorney General:		Date:		

EOR# 15193

	Land Withdrawal or Relinquishment for Commercial Purposes		Sufficient	Insufficient
	1. Division:	Date:		
	2. Office of the Attorney General:	D (
	Land Withdrawals for Non-Commercial Purposes, General Land			
	1. NLD	Date:		
	2. F&W	_ Date:		H
	3. HPD			
	4. Minerals	_ Date: Date:		H
	5. NNEPA	_ Date:		H
	6. DNR			H
	,7. DOJ	_ Date: Date:		H
\mathbf{M}	Rights of Way			
	1. NLD	Date:		
	2. F&W	_ Date:		H
	3. HPD	Date:		
	4. Minerals	Date:		님
	5. NNEPA	Date:	- 8	
	6. Office of the Attorney General	Date: 12/3//20		H
	7. OPVP Star	Date: U(0/2)		 H
	Oil and Gas Prospecting Permits, Drilling and Exploration Permi		g Lease	
	1. Minerals	Date:		
	2. OPVP	Date:		H
	3. NLD	Date:	- 8	
	Assignment of Mineral Lease			
	1. Minerals	Date:		
	2. DNR	Date:		
	3. DOJ	Date:		
_	ROW (where there has been no delegation of authority to the Na			e Nation's
	consent to a ROW)			
	1. NLD	Date:		
	2. F&W	Date:		
	3. HPD	Date:		
	4. Minerals	Date:		
	5. NNEPA	Date:		
	6. DNR	Date:		
	7. DOJ	Date:		
	8. OPVP	Date:		
	OTHER:			
- (- 173 51)	1	Date:		
	2.	Date:		
	3.	Date:		
	4.	Date:		
	5.	Date:		
				4

Pursuant to 2 N.N.C. § 164 and Executive Order Number 07-2013

			Tier 1	Docume	nt Voti	ng Result	S
User Name (Facility)	Job Title	Department	Vote	State of the local division of the	1.1	Vote Date	
Najamh Tariq (Navajo Land Title Data System - Windowrock AZ)		Department of Water Resources		no comments	No Reply	10-Nov-2020	
Pam Kyselka F&W (Navajo Land Title Data System - Windowrock AZ)	Review	Fish and Wildlife	Approved	no comments	No Reply	09-Nov-2020	yar
Rebecca Gilchrist MIN (Navajo Land Title Data System - Windowrock AZ)	Reviewer		Approved	no comments	No Reply	02-Dec-2020	M
Tamara Billie NNHP (Navajo Land Title Data System - Windowrock AZ)	Reviewer	Historic Preservation Department	Approved	1. HPD-18- 443 stipulates that site AZ-K-44- 33 will be flagged and avoided. HPD-20- 218 stipulates that site AZ-K-44- 55 will e flagged and avoided.	1. No Reply	10-Nov-2020	Famenfaile

	Tier 2 Document Voting Results						
User Name (Facility)	Job Title	Department	Vote Cast	Comments	Replies	Vote Date Signiture	
Leanna Begay (Navajo Land Title Data System - Windowrock AZ)	Review	Fish and Wildlife	Approved	no comments	No Reply	07-Dec-2020	
Richard Begay NNHP (Navajo Land Title Data System	Nation Historic Preservation Officer	Preservation Department	Approved 1	Please note conditions of compliance on CRCF	Reply	03-Dec-2020	

Rill M Beyks Robert O. allen Windowrock AZ) **Robert Allan Deputy** DNR Approved no 14-Dec-2020 No DNR Director Administration comments Reply (Navajo DNR Land Title Data System Windowrock AZ) Navajo Nation Approved 1. This vote is 1. No 09-Dec-2020 Steven Technical Prince MIN Reviewer Minerals contingent Reply Stwend Opince (Navajo Management upon the Land Title uploaded Data System TAA Terms and Windowrock Conditions, AZ) dated 12.08.2020, permanently being included in the application approval package. NLD W. Mike NLD Approved no 02-Dec-2020 No Halona Department comments Reply (NLTDS -Manager III Admin)

Appendix C: Rights-of-Way and Easements Obtained by Owner

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Bodaway-Gap Contract 2 Bid Issue NN Right-of-Way Standard Terms and Conditions for Trust Land 7/21/15

EXHIBIT "_D_"

NAVAJO NATION RIGHT-OF-WAY TERMS AND CONDITIONS

NAVAJO NATION Department of Water Resources (GRANTEE)

- 1. The term of the right-of-way shall be for <u>TWENTY</u> (20) years, beginning on the date the rightof-way is granted by the Secretary of Interior.
- 2. Consideration for the right-of-way is assessed at $\frac{1,452,630.97}{1,452,630.97}$ and shall be paid in full to the Controller of the Navajo Nation, in lawful money of the United States, and a copy of the receipt for such payment provided to the Navajo Nation Minerals Department, or its successor, within <u>10</u> days of approval of and consent to the grant of the right-of-way by the Navajo Nation.

If consideration has been waived, the Navajo Nation contributes the amount listed above to the project because the project serves a public purpose and will benefit Navajo residents.

- 3. The Grantee may develop, use and occupy the right-of-way for the purpose(s) of <u>construction</u>, operation, & maintenau of <u>Phase 1 - Bodaway-Gap Well</u>, <u>Pipeline and Tank Project</u>. The Grantee may not develop, use or occupy the right-of-way for any other purpose, nor allow others to use or occupy the right-of-way for any other purpose, without the prior written approval of the Navajo Nation and the Secretary of the Interior. The approval of the Navajo Nation may be granted, granted upon conditions or withheld in the sole discretion of the Navajo Nation. The Grantee may not develop, use or occupy the right-of-way for any unlawful purpose.
- 4. In all activities conducted by the Grantee within the Navajo Nation, the Grantee shall abide by all laws and regulations of the Navajo Nation and of the United States, now in force and effect or as hereafter may come into force and effect, including but not limited to the following:
 - a. Title 25, Code of Federal Regulations, Part 169; subject to the terms of this right-of-way.
 - b. All applicable federal and Navajo Nation antiquities laws and regulations, with the following additional condition: In the event of a discovery all operations in the immediate vicinity of the discovery must cease and the Navajo Nation Historic Preservation Department must be notified immediately. As used herein, "discovery" means any previously unidentified or incorrectly identified cultural resources, including but not limited to archaeological deposits, human remains, or location reportedly associated with Native American religious/traditional beliefs or practices;
 - c. The Navajo Preference in Employment Act, 15 N.N.C. §§ 601 et seq., and the Navajo Nation Business Opportunity Act, 5 N.N.C. §§ 201 et seq.; and
 - d. The Navajo Nation Water Code, 22 N.N.C. § 1101 et seq. Grantee shall apply for and submit all applicable permits and information to the Navajo Nation Water Resources Department, or its successor.
- The Grantee shall ensure that the air quality of the Navajo Nation is not jeopardized due to violation of applicable laws and regulations by its operations pursuant to the right-of-way.

NN Right-of-Way Standard Terms and Conditions for Trust Land 7/21/15

- 6. The Grantee shall clear and keep clear the lands within the right-of-way to the extent compatible with the purpose of the right-of-way, and shall dispose of all vegetation and other materials cut, uprooted or otherwise accumulated during any surface disturbance activities.
- 7. The Grantee shall reclaim all surface lands disturbed related to the right-of-way, as outlined in a restoration and revegetation plan, which shall be approved by the Navajo Nation Environmental Protection Agency (NNEPA) prior to any surface disturbance. The Grantee shall comply with all provisions of such restoration and revegetation plan and shall notify the Director of the NNEPA immediately upon completion of the surface disturbance activities so that a site inspection can be made.
- 8. The Grantee shall at all times during the term of the right-of-way and at the Grantee's sole cost and expense, maintain the land subject to the right-of-way and all improvements located thereon and make all necessary and reasonable repairs.
- The Grantee shall obtain prior written permission to cross existing rights-of-way, if any, from the appropriate parties.
- 10. The Grantee shall be responsible for and promptly pay all damages when they are sustained.
- 11. The Grantee shall indemnify and hold harmless the Navajo Nation and the Secretary of the Interior and their respective authorized agents, employees, landusers and occupants, against any liability for loss of life, personal injury and property damages arising from the development, use or occupancy or use of right-of-way by the Grantee.
- 12. The Grantee shall not assign, convey, transfer or sublet, in any manner whatsoever, the right-of-way or any interest therein, or in or to any of the improvements on the land subject to the right-of-way, without the prior written consent of the Navajo Nation and the Secretary of the Interior. Any such attempted assignment, conveyance or transfer without such prior written consent shall be void and of no effect. The consent of the Navajo Nation may be granted, granted upon conditions or withheld in the sole discretion of the Navajo Nation.
- 13. The Navajo Nation may terminate the right-of-way for violation of any of the terms and conditions stated herein. In addition, the right-of-way shall be terminable in whole or part by the Navajo Nation for any of the following causes:
 - a. Failure to comply with any term or condition of the grant or of applicable laws or regulations;
 - A non-use of the right-of-way for the purpose for which it is granted for a consecutive two year period; and
 - c. The use of the land subject to the right-of-way for any purpose inconsistent with the purpose for which the right-of-way is granted.
 - d. An abandonment of the right-of-way.
- 14. At the termination of this right-of-way, the Grantee shall peaceably and without legal process deliver up the possession of the premises, in good condition, usual wear and tear excepted. Upon the written request of the Navajo Nation, the Grantee shall provide the Navajo Nation, at the Grantee's sole cost and expense, with an environmental audit assessment of the premises at least sixty (60) days prior to delivery of said premises.
- 15. Holding over by the Grantee after the termination of the right-of-way shall not constitute a renewal or extension thereof or give the Grantee any rights hereunder or in or to the land subject to the right-of-way or to any improvements located thereon.

NN Right-of-Way Standard Terms and Conditions for Trust Land 7/21/15

- 16. The Navajo Nation and the Secretary of the Interior shall have the right, at any reasonable time during the term of the right-of-way, to enter upon the premises, or any part thereof, to inspect the same and any improvements located thereon.
- 17. By acceptance of the grant of right-of-way, the Grantee consents to the full territorial legislative, executive and judicial jurisdiction of the Navajo Nation, including but not limited to the jurisdiction of the Navajo Nation, including but not limited to the jurisdiction to levy fines and to enter judgments for compensatory and punitive damages and injunctive relief, in connection with all activities conducted by the Grantee within the Navajo Nation or which have a proximate (legal) effect on persons or property within the Navajo Nation.
- 18. By acceptance of the grant of right-of-way, the Grantee covenants and agrees never to contest or challenge the legislative, executive or judicial jurisdiction of the Navajo Nation on the basis that such jurisdiction is inconsistent with the status of the Navajo Nation as an Indian nation, or that the Navajo Nation government is not a government of general jurisdiction, or that the Navajo Nation government does not possess full police power (i.e., the power to legislate and regulate for the general health and welfare) over all lands, persons and activities within its territorial boundaries, or on any other basis not generally applicable to a similar challenge to the jurisdiction of a state government. Nothing contained in this provision shall be construed to negate or impair federal responsibilities with respect to the land subject to the right-of-way or to the Navajo Nation.
- 19. Any action or proceeding brought by the Grantee against the Navajo Nation in connection with or arising out of the terms and conditions of the right-of-way shall be brought only in the Courts of the Navajo Nation, and no such action or proceeding shall be brought by the Grantee against the Navajo Nation in any court of any state.
- 20. Nothing contained herein shall be interpreted as constituting a waiver, express or implied, of the sovereign immunity of the Navajo Nation.
- 21. Except as prohibited by applicable federal law, the law of the Navajo Nation shall govern the construction, performance and enforcement of the terms and conditions contained herein.
- 22. The terms and conditions contained herein shall extend to and be binding upon the successors, heirs, assigns, executors, administrators, employees and agents, including all contractors and subcontractors, of the Grantee, and the term "Grantee," whenever used herein, shall be deemed to include all such successors, heirs, assigns, executors, administrators, employees and agents.
- 23. There is expressly reserved to the Navajo Nation full territorial legislative, executive and judicial jurisdiction over the right-of-way and all lands burdened by the right-of-way, including without limitation over all persons, including the public, and all activities conducted or otherwise occurring within the right-of-way; and the right-of-way and all lands burdened by the right-of-way shall be and forever remain Navajo Indian Country for purposes of Navajo Nation jurisdiction.
- 24. The Navajo Nation reserves the right to grant rights-of-way within the right-of-way referenced herein for utilities, provided that such rights-of-ways do not unreasonably interfere with the Grantee's use of the right-of-way.

Z:\NRU\DNR\Land\Rights of Way\Terms and Conditions\2015-07-21 FORM Standard ROW Fee Land Terms and Conditions



THE NAVAJO NATION DEPARTMENT OF WATER RESOURCES

P.O. Box 678 · Fort Defiance, Arizona 86504 · Phone: (928) 729-4003 · Fax: (928) 729-4029

JONATHAN NEZ President MYRON LIZER Vice-President

August 12, 2020

Steven Chischilly, Jr., Environmental Specialist Navajo Nation General Land Development Department P.O. Box 2249 Window Rock, Arizona 86515 [150360]

Subject: Western Navajo Pipeline Phase 1 – Bodaway-Gap Well, Storage Tank, and Pipeline Project Tribal Access Authorization Application

Dear Steven:

Navajo Department of Water Resources' Water Management Branch has prepared the Tribal Access Authorization (TAA) application for the construction, operation, and maintenance of the Bodaway-Gap Well, Pipeline and Tank water supply and distribution improvements project. The project location is in the vicinity of the Tsinaabaas Habitiin Elementary School. The application package for the TAA is in accordance with Title 25, CFR 169. The improvements for the project are listed below.

New TAA Establishment:

- Construct a new well in the Coppermine Chapter, approximately 3.0 miles north of the existing Bodaway-Gap wells, along Navajo Route 20 (Coppermine Road). See Results of Survey and Legal Description for the well site.
- 2. Construct a new 80,000-gallon storage tank approximately 3.0 miles northeast of the existing Gap Tank. See Results of Survey and Legal Description for the tank site.
- 3. Construct a new pump house for the new Bodaway-Gap Well. See Results of Survey and Legal Description for the well site.
- 4. Construct a new 10-inch, 41,880 linear foot pipeline that will tie-in the existing water system near the Gap Tank with the new Bodaway-Gap Well and new Boda-way-Gap Tank. See Results of Survey and Legal Description for the pipe align-ment.

Temporary Right-of-Way Establishment:

 The development of the new well requires drilling rig equipment for drilling a 14.75-inch hole approximately 1,000 feet below ground surface. See the Results of Sur-vey and Legal Description for the well site. The project will provide treated water supply, storage and a transmission main for the delivery of water to the Bodaway-Gap water system. Note that at the completion of construction and inspection, Water Management Branch will transfer the facilities to Navajo Tribal Utility Authority for operation and maintenance.

Included with this letter of application are the following:

- 1. Letter of Application
- 2. Survey of Right-of-Way
- 3. Environmental Assessment that includes:
 - a. Biological Resources Compliance Form
 - b. Cultural Resource Compliance Form
- 4. Bodaway-Gap and Coppermine Chapter Support Resolutions

The timeline for the project is as follows.

- 1. Secure Right-of-Way by mid-September 2020.
- 2. Begin bidding in October 2020.
- 3. Award bid to contractor in November 2020.
- 4. Start Construction in December 2020.

Please contact me at <u>jasonjohn@navajo-nsn.gov</u> or Mr. Steven Brenchley at <u>sbrenchley@BrwnCald.com</u> of Brown and Caldwell if there are any questions.

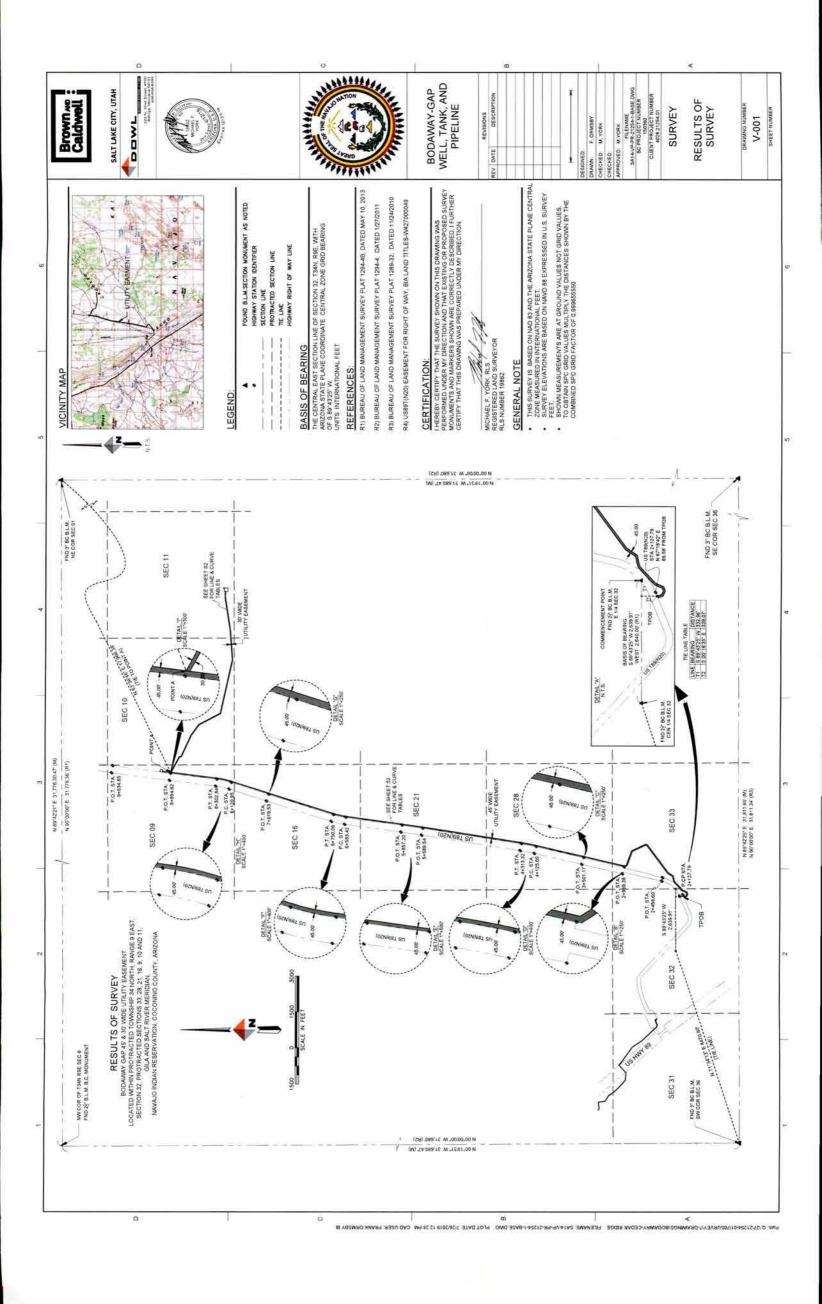
Regards,

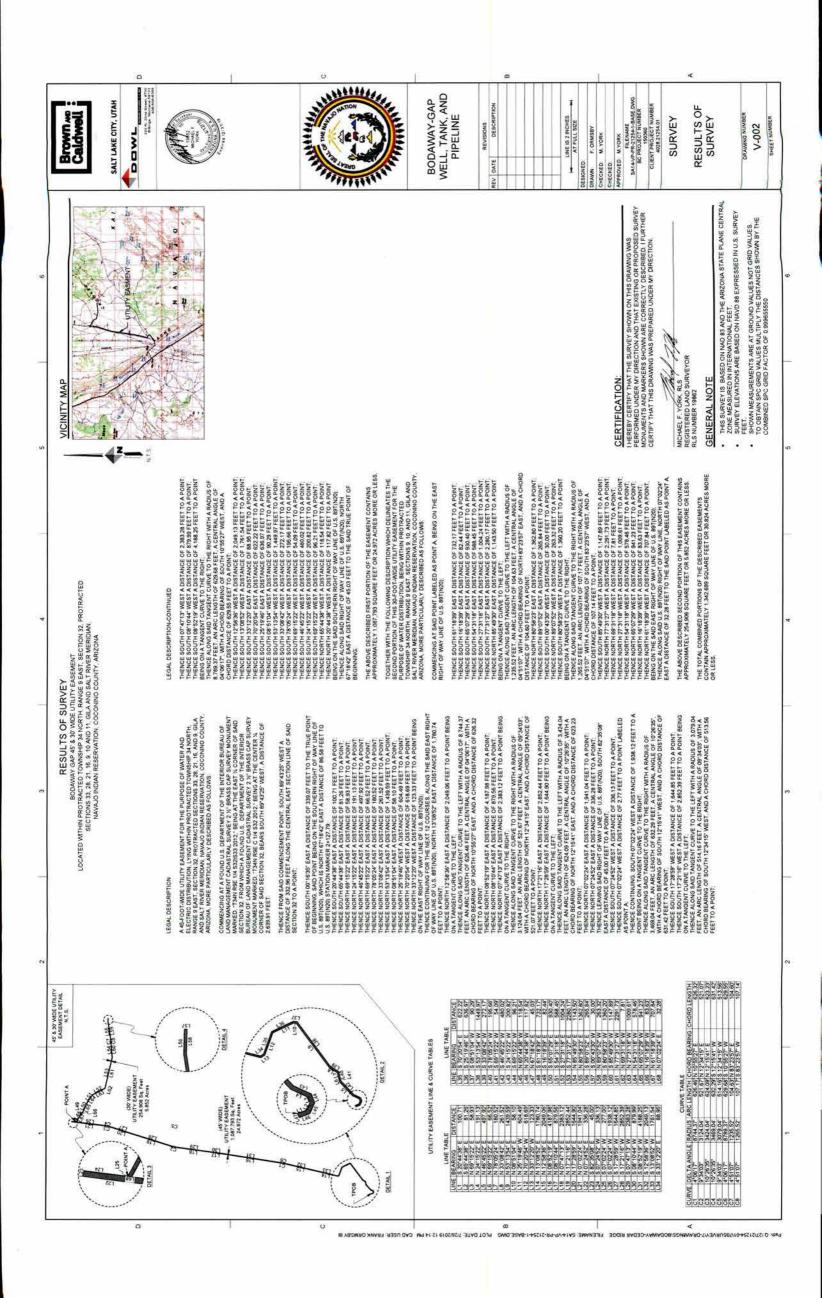
Jason John, Director Navajo Department of Water Resources

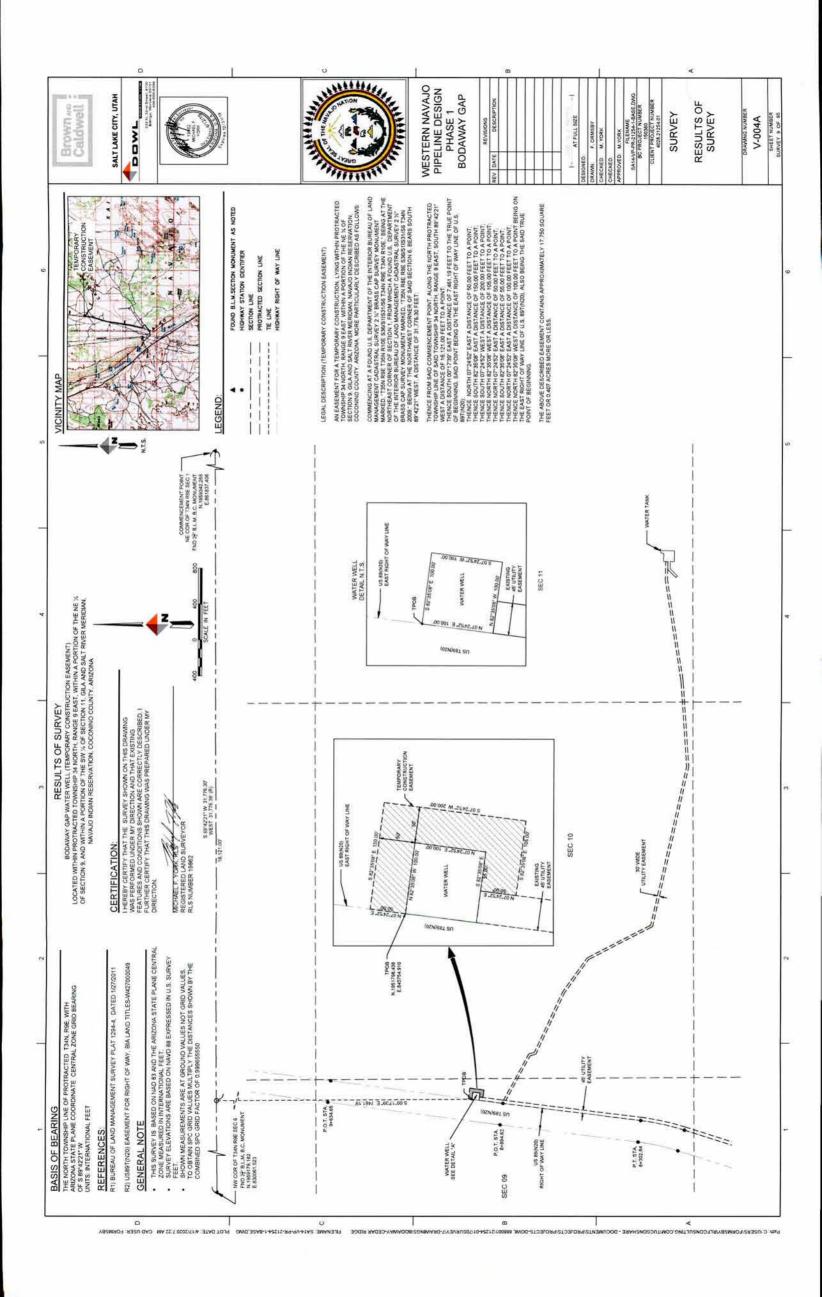
cc: Elerina, Yazzie, Department Manager, Navajo Nation General Land Development Department Steven Brenchley, Project Manager, Brown and Caldwell Mike Halona, Department Manager III, Navajo Land Department April Bowman, Realty Specialist, Bureau of Indian Affairs

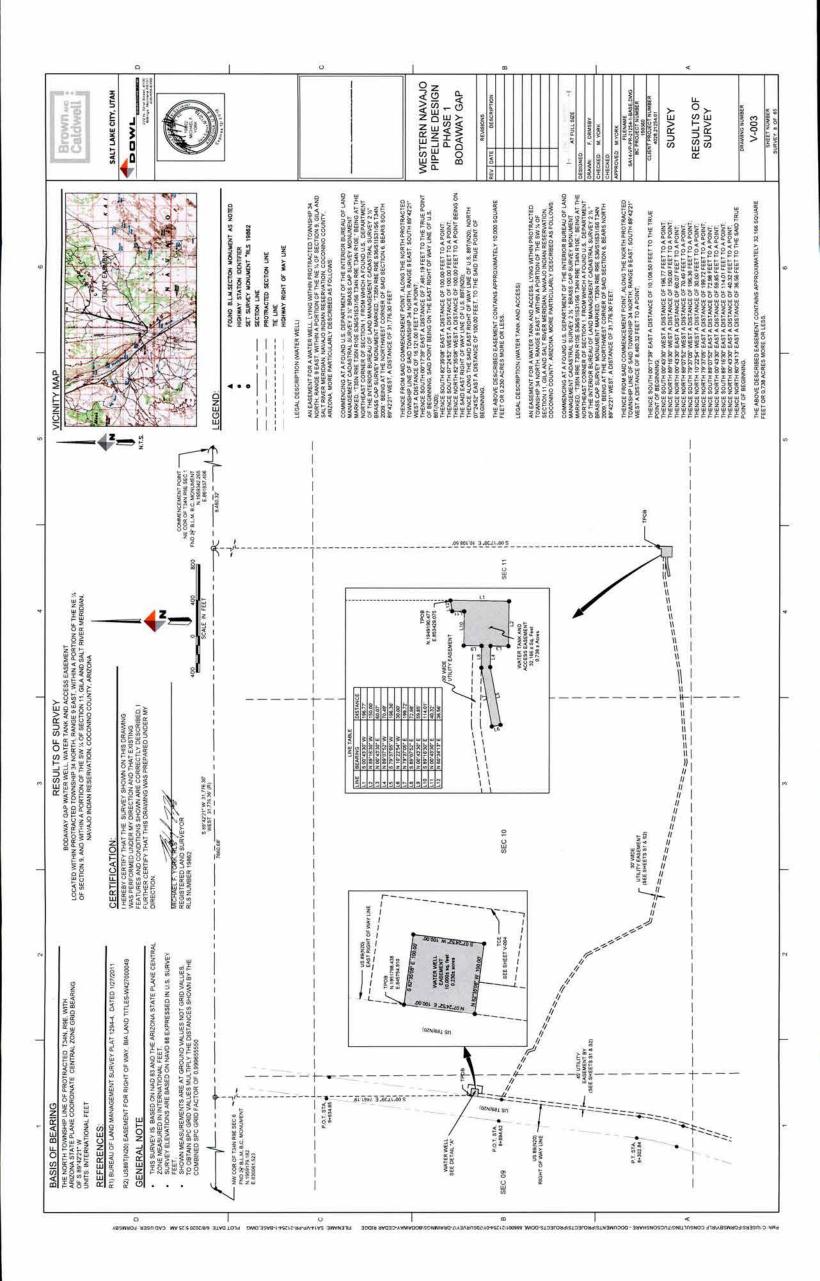
Attachments (5)

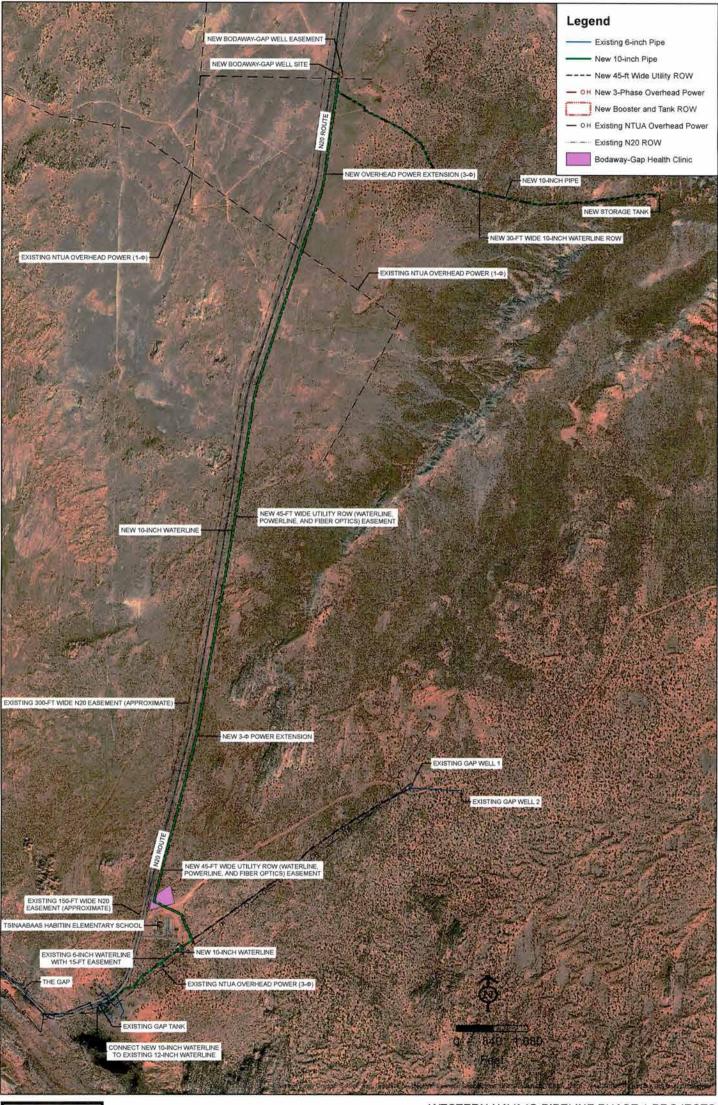
- 1. Attachment A: Bodaway-Gap Well, Pipeline and Storage Tank Project; PDF File: Figure 1-1. Bodaway-Gap New Well, Piping and Storage Tank Project.pdf
- 2. Attachment B: Survey of Right-of-Way; PDF File: Bodaway-Gap Project_Survey Sheets.pdf
- Attachment C: Bodaway-Gap Chapter Support Resolution; PDF File: Bodaway-Gap Chapter Resolution.pdf
- 4. Attachment D: Coppermine Chapter Support Resolution; PDF File: WNP resolution Coppermine Chapter.pdf
- 5. Attachment E: Revised Environmental Assessment: Western Navajo Pipeline, Phase 1 Bodaway-Gap Well and Pipeline Project; PDF File: Final Revised EA WNP Bodaway-Gap 052020.pdf. This document contains the Biological and Cultural Compliance in Appendix A and B.











Brown NO Caldwell

WESTERN NAVAJO PIPELINE PHASE 1 PROJECTS Figure 1-1. Bodaway-Gap Well, Pipeline and Storage Tank Project





Lee Yazzie, Jr Bodaway/Gap-Grazing Member District III Unit III PO Box 1546 The Gap, AZ 86020 Cell Phone: (928)-280-5141 Email:lyazziejr@navajo-nsn.gov

"Representing the Diné People of Shadow Mountain, Big Canyon, Hidden Springs, Bodaway, The Gap, Cedar Ridge, Bitter Springs, and Navajo Springs area"

October 2nd,2020

General Land Development Department Division of Natural Resources P.O. Box 69 St. Michaels, Arizona 86511 Telephone: (928) 871-6447 Fax: (928) 871-7039

Subject: None Grazing Permittee within the proposed waterline extension.

Greeting,

I the Bodaway/Gap Grazing Member have reviewed the map email by Mr. Howard Martinez on October 2nd, 2020 there are no Grazing Permittee's within that area of waterline extension.

Please if any question please contact me at the above number.

Sincerely,

Lee Yaggie, Jr 10/2/2020

Lee Yazzie, Jr

Bodaway/Gap Grazing Member

Cc:

Elerina, Yazzie, Department Manager, Navajo Nation General Land Development Department Steven Brenchley, Project Manager, Brown and Caldwell Mike Halona, Department Manager III, Navajo Land Department April Bowman, Realty Specialist, Bureau of Indian Affairs District III Grazing Committee Member



BODAWAY/GAP CHAPTER

An Enterprise of the Navajo Nation

P.O. Box 1546 - The Gap, AZ 86020 Phone: (928) 283-3493 Fax: (928) 283-3496 Email: bodaway@navajochapters.org Raymond Yellowman, President Leonard Sloan, Vice-President Bessie Zahne, Secretary/Treasurer

Lee Yazzie, Grazing Official Herbert Zahne, Farm Board Paul Begay, Honorable Council Delegate

VACANT, Chapter Manager VACANT, Administrative Assistant

WESTERN NAVAJO AGENCY RESOLUTION OF THE BODAWAY/GAP CHAPTER

Naaltsoos Bee Adah Nihoditaahii

Resolution No: BA-007-040-19

RESOLUTION OF THE BODAWAY/GAP CHAPTER IN SUPPORT OF THE WESTERN NAVAJO PIPELINE, PHASE I PROJECT.

WHEREAS:

- 1. The Bodaway/Gap Chapter is a duly certified Chapter Pursuant to 26 N.N.C., Section 3 and Pursuant to 11 N.N.C., Part 1, Section 10; and
- Pursuant to 26 N.N.C., Section 1 (B), the Bodaway/Gap Chapter is delegated the government authority to make decisions over local matters consistent with Navajo Law, custom, and tradition; and under 11 N.N.C., Part 1, 10, the Bodaway/Gap Chapter is also delegated the authority to make local decisions in the best interest and welfare of the community members; and
- 3. Pursuant to 26 N.N.C., Section 103 (A), the members of each Chapter, at a duly called meeting are authorized to oversee the authority delegated to the Chapter pursuant to this Act; and
- 4. The Navajo Nation has declared pursuant to Section 10 of the Navajo Nation Water Code, 22 N.N.C., Section 301 (7) (1995), the water resources of the Navajo Nation are essential to provide a permanent homeland for the Navajo People; and protection of such water resources is essential in order to protect the health, welfare, and the economic security of the citizens of the Navajo Nation; and
- 5. In 2016, the Navajo Nation completed the "Regional Water Plan for Tuba City Nine Chapters" ("Plan"), which recommended that "short term" water system infrastructure and supply improvements be made to provide for the water needs of the study area through approximately the year 2035; and
- 6. The "short term" improvements recommended in the Plan were organized into a design and construction project known as the Western Navajo Pipeline, Phase I project (Project), as generally described in the October 23, 2017 Western Navajo Pipeline Project Conforming Document (WNP Conforming Document); and
- Navajo Nation Council has appropriated funds for, and directed the Navajo Nation Department of Water Resources, Water Management Branch, to undertake, the planning, design, and construction of the Project in a manner consistent with the Plan; and

- The portion of the Project that would convey water to the Bodaway/Gap Chapter service area includes:
 1) a new well, storage tank, and pipeline connecting the wall to the existing Gap water system; and 2) two new booster pump stations and pipeline increasing water delivery capacity to Cedar Ridge; and
- 9. An opportunity exists for the Gap Chapter, Water Management Branch and Indian Health Service Office of Environmental Health (IHS-OEH), to cooperate on a portion of the Project near the Gap community for their mutual benefit; and
- 10. By cooperating in the design and funding of the new Gap well and storage tank, the Project can be expanded to expedite extension of water service to dozens of existing homes in the Former Bennett Freeze are that do not currently have service and provide needed fire storage for some of Gap's residences as a reduced cost to all stakeholders.

NOW THEREFORE BE IT RESOLVED THAT:

- 1. The Bodaway/Gap Chapter supports the design and construction of the Project as described in the WNP Conforming Documents; and
- 2. The Bodaway/Gap Chapter endorses the alignments and locations of the Project pipelines, well, storage tank and booster pump stations as currently designed; and
- The Bodaway/Gap Chapter requests the cooperation of IHS-OEH, and Water Management Branch, in the design of the Gap well, storage tank, and pipeline to the benefit of all stakeholders and the residents of the Gap, especially those in the Former Bennett Freeze area; and
- 4. The Bodaway/Gap Chapter requests that IHS-OEH proceed with design and construction of the Koko extension projects, building upon the Western Navajo Pipeline Phase I project improvements.

We hereby certify that the foregoing resolution was considered at a duly called meeting of the Bodaway/Gap Chapter, Navajo Nation, Arizona, at which a quorum was present and that same was passed by a vote of 23 in favor, DD opposed, and DH abstained, this 6th day of August 2019.

ranklin Martin Motion:

Raymond D. Yellowman, President

Bessie Zahne, Secretary/Treasurer

Honorable Paul Begay, 24th Navajo Nation Council Delegate

arn Second:

Leonard Sloan, Vice President

bsent

Lee Yazzie, Grazing Official

COPPERMINE CHAPTER

CHAPTER PRESIDENT

Sid Whitehair

CHAPTER VICE PRESIDENT

Lola Smith

CHAPTER

SECRETARY/TREASURER

Valerie Fowler



THE NAVAJO NATION Western Navajo Agency- District One P.O. Box 1323 Page, Arizona 86040 Telephone No. (928) 691 - 1109

COUNCIL DELEGATE Tachoney Slim Jr. GRAZING MEMBER

Calvin Begay COMMUNITY SERVICE

COORDINATOR

Vacant

CO-06- 078 -18 RESOLUTION OF THE COPPERMINE CHAPTER OF THE NAVAJO NATION SUPPORTING THE WESTERN NAVAJO PIPELINE, PHASE 1 PROJECT

WHEREAS:

- 1. Pursuant to 26 N.N.C., Section 3, and 11 N.N.C., Section 10, The Coppermine Chapter is a duly recognized and certified chapter of the Navajo Nation Government; and
- 2. Pursuant to N.N.C., Chapter 1: Navajo Nation Chapter, Section 1., (B)(1) & (2), The Navajo Nation Council Delegated to Chapter Governmental authority with respect to local matters consistent with Navajo Law, including custom and tradition and allows chapter to make decisions to govern with responsibility and accountability to community membership; and
- 3. Pursuant to 26 N.N.C. Section 103 (A), the members of each Chapter, at a duly called meeting are authorized to oversee the authority delegated to the Chapter pursuant to this Act; and
- The Navajo Nation has declared pursuant to Section 10 of the Navajo Nation Water Code, 22 N.N.C. Section 301 (7) (1995), the water resources of the Navajo Nation are essential to provide a permanent homeland for the Navajo People; protection of 4. such water resources is essential in order to protect the health, the welfare, and the economic security of the citizens of the
- In 2016 the Navajo Nation completed the "Regional Water Plan for Tuba City Nine Chapters" ("Plan"), which recommended that "short term" water system infrastructure and supply improvements be made to provide for the water needs of the study 5. area, including Coppermine Chapter, thorough approximately the year 2035; and
- The "short term" improvements recommended in the plan were organized into a design and construction project known as the Western Navajo Pipeline, Phase 1 Project ("Project"), as generally described in the Oct. 23, 2017 Western Navajo Pipeline 6. Project Conforming Document ("WNP Conforming Document"); and
- The Navajo Nation Council has appropriated funds for, and directed the Navajo nation Department of Water Resources Water Management Branch (Water management Branch), to undertake, the planning, design, and construction of the Project 7. in a manner consistent with the Plan; and
- The portion of the Project that would convey water to the Coppermine Chapter Service Area includes a new well, a storage tank, and a pipeline, connecting the well to the existing Gap Water System which is described in more detail in the WNP 8. Conforming Document, prepared by the engineering firm of Brown and Caldwell; and
- An opportunity exists for the Cameron Chapter, Water Management Branch, Indian Health Service Office of Environmental Health (HIS-OEH), and Tuba City Regional Health Care Corporation (TCRHCC) to cooperate on a portion of the Project for 9. their mutual benefit of all parties; and
- 10. By cooperating in the design and funding of the new well, storage tank, and pipeline, the project can be expanded to facilitate and expedite extension of water service to dozens of existing homes in the Former Bennett Freeze Area that do not currently have service and provide needed fire storage for a new health clinic as well as for residents at a reduced cost to all stakeholders.

NOW THEREFORE BE IT RESOLVED THAT:

- 1. The Coppermine Chapter supports the design and construction of the Project as described in the WNP Conforming
- The Coppermine Chapter endorses the alignments and locations of the Project pipelines, storage tank and booster pump 2. stations located within the Chapter boundaries as currently designed; and
- The Coppermine Chapter requests the cooperation of HIS-OEH, Water Management branch, and TCRHCC in the design of the new well, storage tank, and pipeline to the benefit of all stakeholders and residents of the Chapter, especially those within 3.
- the Former Bennett Freeze Area; and The Coppermine Chapter requests that TCRHCC participate in funding the Gap water system improvements that directly benefit the proposed health clinic to be constructed within the next few years along Navajo Route 20. 4.

CO-06- 078-18

CERTIFICATION

We, hereby certify that the foregoing resolution was duly considered at a duly-called meeting of the Coppermine Chapter, Coppermine (Navajo Nation), Arizona, at which a quorum was present and the same was passed by a vote of 35 in favor, <u>00</u> opposed, <u>13</u> abstained on this 15^{TH} day of JUNE 2018.

Motion: Paul Begay

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Second: Wilford Lane

N

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Sid Whitehair, PRESIDENT

Valerie Fowler, SECRETARY/TREASURER

mille

Lola Smith, VICE PRESIDENT

Appendix D: Construction Permit Obtained by Owner

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Bodaway-Gap Contract 2 Bid Issue

THE NAVAJO NATION



JONATHAN NEZ | PRESIDENT MYRON LIZER | VICE PRESIDENT

JUN 16 2021

Steve Brenchley Brown and Caldwell 6955 Union Park City, Suite 270 Salt Lake City, Utah 84047

Re: Western Navajo Pipeline Phase 1-Bodaway-Gap Well, Storage Tank, and Pipeline

Dear Mr. Brenchley:

The Engineering Section of the Public Water Systems Supervision Program has completed a review of the above referenced project. The construction permit is approved and attached herewith. Please note and consider our comments that are attached to the permit.

1. <u>After completion of the construction</u>, Brown and Caldwell must verify/confirm, by field measurements, the design/control measures for the different construction activities associated with the approved projects versus the design parameters/assumptions as per regulations. This will assure compliance with the minimum design requirements per Navajo Nation Primary Drinking Water Regulations.

The project engineer can proceed with the construction work. <u>Please submit</u> a construction completion report and schedule a field inspection after the construction is complete.

Attached is invoice 511005-21-1928 for \$1,901.43, there was a 6% Navajo Nation tax charge added as indicated on the invoice. If you have any question, please call the Engineering Section of the Public Water Systems Supervision Program at (928) 871-7755.

Sincerely,

hashe

Ronnie Ben, Department Director Surface and Groundwater Protection Department Navajo Nation Environmental Protection Agency

Attachments: Construction Permit Invoice for Construction Permit Fee Fee Schedule for Construction Permit

PWSSP file - NTUA Bodaway-Gap, NN0403009

Navajo Nation Environmental Protection Agency Public Water Systems Supervision Program

P.O. Box 339

Window Rock, Arizona 86515Phone #: (928) 871-7755Fax #: (928) 871-7818Website: http://www.NavajoPublicWater.orgE-mail: Engineers@NavajoPublicWater.org

Construction Permit for Public Water System

Project Name/Number: Western Navajo Pipeline Phase I-Bodaway-Gap Well, Storage Tank, and Pipeline

PWSSP File: Bodaway-Gap-NTUA

Project Location: Bodaway Gap Chapter, Arizona; NAD1983 UTM zone grid

Project Type: (Check all that apply)

PWS Name: Bodaway-Gap-NTUA

New Public Water SystemXExtension/Modification to Existing SystemNew Ground/Surface Water SourceWater Treatment Plant

	Bottle Water System
X	Water Line and Appurtenances
	Booster Station
	Other

PWSID: NN0403009

Project Owner:

Name	Navajo Nation Dept of Water Resource
Address	PO Box 678 Ft Defiance, AZ 86504
Contact Person	Jason John
Phone/Fax	928-729-4003

Project Engineer:

Troject Eliginoon.			
Name	Steve Brenchley		
Company	Brown and Caldwell		
Address	6975 Union Park Center Suite 490 Midvale, Utah 84047		
Phone/Fax	801-316-9810		

This is to certify that the application package of the above-mentioned project has been reviewed by the Engineering Section of the Public Water Systems Supervision Program of the Navajo Nation Environmental Protection Agency and is found to comply with the Navajo Nation Safe Drinking Water Act and the Navajo Nation Primary Drinking Water Regulations. The project is approved for the construction on this day of ________ is 2021 with the conditions set forth In the attachment.

Ronnie Ben, Department Director Navajo Nation Environmental Protection Agency

Attachment: Conditions for the Construction Permit

- 1. The construction permit shall be void if the construction does not start within one year of the approval date, or is halted for more than one year, or is not completed within three years after the date construction begins, unless a permit extension is obtained from the NNEPA.
- 2. The NNEPA must be notified of the construction start date at least seven (7) days in advance of construction.
- 3. The NNEPA personnel may enter the construction site at any time to conduct inspection and sampling.
- 4. Any deviation from the approved plans and specifications which could change hydraulic conditions and operation of the public water system must be approved by the Director prior to making such deviation in the field.
- 5. The construction permit shall not diminish the duty of owner, operator, and the project engineer to comply with the applicable acts and regulations and industry standards and to provide adequate system design and performance.
- 6. Please note the comments provided below for due consideration, typographical errors may be corrected in the final post-construction submission

Ronnie Ben, Department Director Navajo Nation Environmental Protection Agency

THE NAVAJO NATION

JONATHAN NEZ | PRESIDENT MYRON LIZER | VICE PRESIDENT



Invoice

Invoice #: 511005-21-1928

Bill To:

Invoice Date: June 14, 2021

Ship To:

Brown and Caldwell Attn: Accounts Payable 6955 Union Park Center, Suite 270 Salt Lake City, Utah 84047

Navajo Nation EPA Public Water Systems Supervision Program PO Box 339 Window Rock, AZ. 86515

ltem	Description	
Construction Permit WCP-0160	Western Navajo Pipeline Phase I Bodaway-Gap Well, Storage Tank, and Pipeline	\$1,793.80
	Subtotal:	\$1,793.80
	Тах @6%:	\$107.63
	Balance:	\$1,901.43
	Received CK#295-873	<1,901.43>
	Balance Due:	\$ 00.00

Please remit to address below within 30 days. **Company Check/Money Order or Cashier's Check ONLY**: Navajo EPA-Public Water Systems Supervision Program PO Box 339 Window Rock, Arizona 86515 Phone: (928)871-7755 Fax: (928)871-7818 Email: info@navajopublicwater.org Website: www.navajopublicwater.org



Appendix E: Water Use Permit

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Bodaway-Gap Contract 2 Bid Issue

Department of Water Resources Technical, Construction and Operations Branch P.O. Box 678 Fort Defiance, Arizona 86504 Ph. No. (928) 729-4132/Fax No. (928) 729-4421 www.watercode.navajo-nsn.gov

WATER USE PERMIT

WUP NO:

VALID FROM ______to _____

NOTE: This permit is valid only upon signature of the Branch Director, Technical, Construction and Operations Branch (TCOB), or Director, Department of Water Resources (DWR) or Division Director, Division of Natural Resources (DNR). Please read Water Use Permit information sheet before completing this form.

APPLICANT:				
LAST NAME			FIRST; OR COMPANY NAME	
MAILING AD	DRESS:			
CITY:		STATE:	ZIP CODE:	
CONTACT PH	ERSON:	TELE	EPHONE NO:	
EMAIL ADDR	RESS:			
* * * * * * * * *	* * * * * * * * * * * * * * * * *	* * * * * * * * * * * * * * * * * * *	*******	
DATE RECEI	VED:	DATE C	COMPLETED	
\$25.00 Filing F	See Received	Receipt No	Initial	
	IDEN	TIFIED WATER SOURCE T	TO BE USED	
() Spring No:			Name:	
() Stockpond Name/No:		() Lake/Re	eservoir Name:	
() Well No:		() Injection Well No:		
Amount of wat	ter requested:			
() Other Desc	cription/Name:		Grazing District:	
Chapter:		(Chapter Code:	
State:	() AZ/Arizona	() NM/New Mex	exico () UT/Utah	
County:	() AP/Apache	() MK/McKinley	ey () SJ/San Juan	
	() NA/Navajo	() VL/Valencia		
	() CO/Coconino	() BL/Bernalillo () SD/Sandoval		
		() SD/Sandovai () SO/Socorro	1	
		() RA/Rio Arrib	ba	
		() SA/San Juan		
Quad. No: (7.5	min. Series)			
UTM COORD	DINATES: X (East)	Y (North)	ZONE	
NE SE SW NV	V / NE SE SW NW / NI	E SE SW NW		
10 Acre	40 Acre	160 Acre Section	on Township Range	

	TTD	NO	
w	UP	NO:	

LAND STATUS				
() TRUST () FEE WATERSHED NAME:				
PRIMARY: () Domestic () Municipal () Livestock () Irrigation Agriculture	CONSUMPTIVE	WATER USE NEEDE () Recreation () Industrial () Mining () Commerci	nal	
() Wildlife and Fish ************************************		**********		* * * * * * * * * * * * * * *
TYPE OF LIVESTOCK:	() HorsesNo:() CattleNo:() Other:			No: No:
TYPE OF CROPS:	 () Row (ie., corn) () Forage-Hay-Pasta () Small Grains () Horticulture (ie., 2) 		Acres	
TYPE OF WILDLIFE:	() Large Game	No: No: No:		Game No: No:
IF WATER IS USED FOR IND DESCRIBING SOURCE AND				PPLY PLAN
SEASON OF MAXIMUM USE MAXIMUM RATE OF USE: _	: () Spring	() Summer () GPM	() Fall () CFS	() Winter
EXPECTED DATE WATER U EXPECTED VOLUME OF WA				gallons)
METHOD OF WATER DIVER			()	Gate or Gravity Flow
METHOD OF WATER CONV	EYANCE:	() Ditch () () Other:	Canal ()	Pipeline () Truck
ATTACH AN 8 ½" X 11" MAP SCENARIO/ LOCATION OF V			TIFIED WATER	SOURCE AND
AMOUNT OF WATER:()		LOW OR DISCHARG		 () Direct () Indirect () Injection
IS DISCHARGE TREATED IS QUALITY AFFECTED FEDERAL/UIC PERMIT:	() YES () N	IO IS TEMPER	RATURE AFFEC RMIT NUMBER	

CONDITIONS

- 1. Purpose of definition the Technical Construction and Operations Branch (TCOB), Navajo Nation Department of Water Resources (Department) and "Permittee" means entity, company, water user and its successors.
- 2. Permittee agrees to comply with the terms and conditions of the Water Use Permit and the Navajo Nation Water Code. Permittee understands and agrees that failure to comply with the permit shall result in forfeiture of this permit.
- 3. This permit may be revoked if:
 - A. Permittee is not in compliance with any conditions set forth in this permit.
 - B. Permittee is in violation of any provision of the Navajo Nation Water Code.
 - C. Insufficient water supplies are present for whatever reason or terms.
 - D. For any other due cause as a result of negative findings from investigation that is performed by both department and permittee.
- 4. Permit is valid only for the terms specified and shall expire at the end of the term or at the completion of the proposed project or required water usage, whichever comes first. Permittee's rights to obtain water will be limited to the allocated amount. Permittee does not have authority to transfer, convey, or allocate the water subject to this permit to any third party or for any other project not specified herein. It is further agreed between the parties that this permit does not give the Permittee the right to haul water for hire on the Navajo Reservation, or on land subject to the jurisdiction of the Navajo Nation.
- 5. Permittee agrees to pay for the water used at the applicable water use rate fee. Payment must be made by Permittee within ten working days of receipt of the invoice. The fees for this permit will be adjusted annually over the next five (5) years by multiplying the fee amount that is in effect at the time of an adjustment by the CPI change. The new fee amount shall take effect immediately. CPI change means the amount reported as the "12 months Percent Change" under the column for "Annual" in the Consumer Price Index All Urban Consumers, U.S. City Average, All Items, Base Periods 1982-84=100 (not seasonally adjusted), as published by the Bureau of Labor Statistics of the United States Department of Labor ("BLS") for the calendar year prior to the year in which the CPI Adjustment is being made. If the applicable BLS publication ceases to be compiled or published, then such other available data or index as the Navajo Nation determines would be the most comparable to such index shall be used. An Annual Consumer Price Index adjustment from the Bureau of Labor Statistics will be used for the compounded water use rate and current effective annual interest rate. The annual billing period will be from January through December. Any restructuring of water use fees or water rate increase by the Resources and Development Committee of the Navajo Nation Council will be effective immediately.
- 6. Permittee agrees to submit meter readings or other evidence showing the quantity of water withdrawn pursuant to this permit to the TCOB office at the end of the term or at the completion of the proposed project or required water usage, whichever comes first. The water use data will be submitted by the Permittee.
- 7. Any breach of this permit or any failure to pay in full for the water used by due date will be a breach of this permit and the Navajo Nation may terminate this permit upon any breach by giving the Permittee notice of such termination in writing not less than ten (10) days prior to the effective date of termination, provided that if, Permittee remedies any such breach within said ten (10) days period, the permit will remain in effect. Said notice shall state the grounds upon which the termination is being made. It will be a breach of this permit and grounds for termination thereof, if Permittee obtains, or attempts to obtain any other water from any source within the jurisdiction of the Navajo Nation other than the source or sources permitted in this permit.
- 8. Permittee agrees to obtain a Water Use Permit for each place of withdrawal of water in conjunction with the place of use prior to making use of such source. Authorization granted under this permit is only for the stated use of the indicated water source location. Permittee is responsible for obtaining any applicable permit from the appropriate department/agency that may be required for the proposed work
- 9. Permittee agrees to hold harmless and indemnify the Navajo Nation against any and all losses, costs, damages, claims, expenses or other liability whatsoever, rising out of, or connected with Permittee's services under this permit including but not limited to, any accident or injury to person or property.

CONDITIONS

- 10. All disputes arising from the subject matter of this permit or the performance thereof will be settled in the Navajo Nation Courts and under the laws of the Navajo Nation. Nothing herein shall be construed as a waiver of the sovereign immunity of the Navajo Nation, pursuant to 1 N.T.C. §351 et seq.
- 11. Permittee agrees to maintain the immediate area in a safe and sanitary manner, free of unnecessary debris.
- 12. If permittee hires sub-contractors to haul water covered by Water Use Permit, Permittee must notify the Navajo TCOB office of sub-contractors in writing.
- 13. In case of a Tribal Well, no more than two-thirds of the water in the water tank will be withdrawn. Before further withdrawals are to be made from a water tank, the water level in the tank must be allowed to rise back to the original level.
- 14. It is agreed that the Department of Water Resources reserves the right to limit the quantity of water that can be taken under this permit to the above stated amount or less, to limit or restrict the sources of the Navajo Nation and in the best interests of the Navajo Nation. Such limitation will be imposed at the discretion of the Director, Department of Water Resources.
- 15. Permittee agrees to allow reasonable entry upon their premises by Navajo Nation Employees engaged in the administration of this permit.
- 16. When insufficient water supplies are present for whatever reason or terms, the following priority of uses shall be considered in the order in which they are listed: 1) Domestic and municipal uses 2) Stock watering uses 3) Agriculture uses 4) Instream needs, for fish, wildlife conservation and recreation uses 5) Economic development uses including industrial and power uses.

Permittee's	Signature
-------------	-----------

Date _____

OFFICIAL USE ONLY	
() Yes () No Technical Reviewer	Date
Approved/Disapproved: Branch Director, TCOB, DWR, DNR	Date
If Disapproved State Reasons:	

Revised 08/10/17

Appendix F: NTUA Required Forms

Application for Permission to Tap Existing Water Line NTUA Certificate of House Wiring/Meter Loop Compliance NTUA Project Request (Request for Electrical Service) Water Line Pressure Test Certification THIS PAGE LEFT INTENTIONALLY BLANK

Bodaway-Gap Contract 2 Bid Issue

Navajo Tribal Utility Authority Certificate of House Wiring/Meter Loop Compliance

NTUA requires that a certification be made by a registered or licensed electrician concerning the installation of meter loop(s) prior to service being connected by NTUA. The certificate of the installation acknowledges the existence of NTUA standards as applicable portions of the National Electric Code (NEC). NTUA complies with the latest edition of the NEC at the time of meter loop installation. One form is required for each residence involved.

Consumer Name:
Mailing Address:
Physical Address:
Home/Building Description:
Color: TYPE: House [] Mobile Home [] Hogan [] Business [] Pole [] Other:
Nearest Neighbor:
Chapter/Project Name:

I certify that the wiring referenced above was performed under my supervision and is in compliance with the (year) ______ issue of the National Electric Code, the NTUA Standards and the standards of the State of ______ and residence is ready for electric with a _____Amp Service.

It is understood that the installation is controlled by the most restrictive code or regulation.

ACKNOWLEDGED by Licensed Electrician	
•	
•	

(print name)	
(signature)	(date)
License #:	
State:	
Company:	
Telephone:	
Mailing Address:	
	(signature) License #: State: Company: Telephone: Mailing Address:

NTUA Form 5413 (2/04)

Request Taken By:

Date

NAVAJO TRIBAL UTILITY AUTHORITY Project Request	TILITY Reques	AUTHORITY st		
Title		Customer Name		
Location		Address		
Description of Residence/Structure				
[] House [] Hogan [] Trailer [] Permanent Foundation [] Other:		Phone No.		
	Diet	Work Order	Preliminary Estimate	Final Est
Work Order Check List Dist C.R.R/SC Dist Engr Wiring/Piping Affidavit From:	Dist. Foreman	Work Order Cost Summary	Preliminary Estimate	Final Est
Service Entrance Inspected by:		Construction Cost		
Approved by: Date Approved:		Removal Cost		
AMPS: VOLTS: TYPE:		Salvage Credit		

	TECO'ed by Date	Order Package Close:	TECO'ed by Date	ZCAP - Field Inspection:	TECO'ed by Date	Device No.:	Meter Installation No.:	Notification No.:	TECO'ed by Date	Device No.:	Transformer Installation No.:	Notification No.:	TECO'ed by Date	ZRET for Removal No.:	Notification No.:	TECO'ed by Date	ZCAP - Construction:	Notification No.:	TECO'ed by Date	ZČAP - ES & D:	TECO'ed by Date	AUC Asset No.:	Project I.D. No.:	TECO'ed by Date	ZPT1 No.:	Notification No. to Engineering Technician:	Contract No.:	BP No.:	Date:
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Work Order Check List	Dist C.R.R/SC	Dist Engr	Dist. Foreman
Wining/Piping Affidavit From:			
Service Entrance Inspected by:			
Approved by: Date Approved:			
AMPS: VOLTS: TYPE:			
Field Survey by:			
Designed by: Estimated by:			
Bill of Material			
Deposit: Downpayment: P.O.:			
Land User Consent:			
Arch Survey: Encroachment Permits:	18 - F 14		1.25
As Built Information	6		
District CRR Reviewed			
Remarks/Comments			

Interview Interview
--



NAVAJO TRIBAL UTILITY AUTHORITY

UTILITIES RIGHT-OF-WAY AGREEMENT

	hereby grants to the Navajo
Tribal Utility Authority, a permanent right-of-way for const	truction, operation and maintenance of service,
thirty (30) feet in width and feet i	in length; over, across, and upon the lands described in the
accompanying map attached hereto and by this reference	made a part hereof.
In consideration of the grant herein made, the	e Navajo Tribal Utility Authority hereby agrees to:
1. Construct and maintain the Right-of-Way	y in a workmanlike manner.
2. To restore the lands as nearly as may be	possible to their original condition upon the completion
of construction.	
	, grantor(s), hereby agrees to allow
	the points herein before mentioned during all reasonable hours as
may be deemed necessary by the Navajo Tribal Utility Aut	
	sent have executed this Agreement this day of
·	
Project I.D. No.:	-
Job Order No	
Detailed Location	
Chapter	
	C#
Navajo Tribal Utility Authority	Grantor (Signature)
Verified by:	Addroop
	Address
Name:	Grazing Permit/Homesite No:
Name	
Title	C#
	Grantor (Signature)
District:	
Address:	Address
City: State: Zip	Grazing Permit/Homesite No:
Home Office: KAYENTA TUBA CITY SHIPROCK P.O. BOX 170 P.O. BOX 37 P.O. BOX 398 P.O. BOX 1749 EDEFENDED A 29504 KAYENTA A 29503 TUBA CITY A 295045 SUIDPOCK NM 27	
FT. DEFIANCE, AZ 86504 KAYENTA, AZ 86033 TUBA CITY, AZ 86045 SHIPROCK, NM 87 (928) 729-5721 (928) 697-3574 (928) 283-5421 (505) 368-4639	9 (928) 674-5470 (928) 729-5727 (928) 657-3258 (505) 786-5566
	oportunity provider and employer. form completely)

WATER LINE TEST	CERTIFICATION			Page	of _	
	ON OF LINE TESTED:					
			(Vicinity/Sta	ate)		
DATE(S) TEST WAS	CONDUCTED ON:					
TEST SECTION LOC	CATION IS BASED ON:	Project Dra	wing's Name	& Project Num	nber	
	ng Agency H OF PIPE USED ON THIS	PROJECT IS		of Drawings		FEET
TEST INFORMATIO						_
Sign	ature:					
Nam	e, Organization:					
Addr	ess, Telephone Number:					
Date	of this Report:					
TEST RESULTS:	APPROVED (/) DISAPPROVED (/)					
TEST REVIEWED A	ND RETURNED TO SENDE	ER BY:				
NTU	A Headquarters Operations	;		Da	ate	
COMMENTS:						

PRESSURE TEST DATA SHEET

Date:

Gage's Manufacturer Name and Model Number (2 required): 1. _____

Page _____ of _____

2._____

-

Conducted by: ____

(contractor/NECA representative)

Observed by: ______ (NTUA/IHS representative)

-

Des	ection Line signation . to Sta.)	Pipe Pressure Rating (psi)	Test Pressure at Pump (psi)	Gage Response Check (√)	Observ Test Pres Range Pump (p	sure at	Total Leakage (gallons/2 hr)	Allowal Leaka (gallons/	ge
Highest Po	oint in Elevation	=	_ Lowest Poin	t in Elevation	=	Tes	t Pump Elevation	ו ו =	
Descriptior	n of Test Pump	Location							
Differentia	in Elevation fro	om Highest Poir	nt to Lowest P	oint =		feet x 0	.433 =	F	osi
Differential	l in Elevation fro	om Pump Locat	ion to Lowest F	Point =		feet x	0.433 =		psi (A)
Test Press	sure at Pump =	(pipe press ra	psi – _ ting)	(A)	psi =	test p	press at pump)	psi	
Q = (N • D	• P ^{1/2}) ÷ 7400								
Where:	N = Num D = Nom	vable leakage ber of Joints of inal Pipe Diame Pressure Rating	eter in Inches	ested					
For	_ inch (PVC/P	'E/DI)	Q = [()•()•()] ÷ 740	00 =		gal/hr
For	_ inch (PVC/P	E/DI)	Q = [()•()•()] ÷ 740	00 =		gal/hr
For	_ inch (PVC/P	'E/DI)	Q = [()•()•()] ÷ 740	00 =		gal/hr
					SUN	Ι ΤΟΤΑ	\L =		gal/hr
	TOTAL AL	LOWABLE LEA	AKAGE FOR T	EST SECTIO	N = SUM TO	DTAL X	2 =	ga	al/2 hrs

PERMISSION TO TAP AN EXISTING NTUA WATER LINE

1. REQUESTER.

.

	a.	NAME : TITLE : ORGANIZATION : ADDRESS :	
	b.	TELEPHONE NUMBER : ADDRESS :	
		TELEPHONE NUMBER :	
2.	PERSON TRIBAL	RESPONSIBLE FOR T UTILITY AUTHORITY.	AP CONSTRUCTION AND ITS ACCEPTANCE BY NAVAJO
		NAME : TITLE : ORGANIZATION : ADDRESS :	
		TELEPHONE NUMBER :	
3.			(ING NAVAJO TRIBAL UTILITY AUTHORITY FOR SERVICE COMPLETED AND APPROVED.
		NAME : TITLE : ORGANIZATION : ADDRESS :	
		TELEPHONE NUMBER :	
4.	DATE R	EQUEST IS SUBMITTED	TO NAVAJO TRIBAL UTILITY AUTHORITY.
		DATE :	
5.	SUBMIT	TED TO.	
		NAME : TITLE : NTUA OFFICE :	
6.	SPECIF	ICATIONS AND DRAWING	S OF PROPOSED CONSTRUCTION ATTACHED.

YES

NO

PAGE TWO

7.	ACTUAL	SERVICES.

ACTUAL NUMBER	:	
METER SIZE	:	
TYPE OF SERVICE	:	

8. WATER DEMAND/CUSTOMER REQUESTED FLOW AND MINIMUM DELIVERY PRESSURE AT THE METER OUTLET.

NODMAT		a		
NORMAL	•	gpm		
PEAK	:	 gpm		
PRESSURE	:	 psi		
@ ELEVATION OF	· ·	 feet	above	MSL

FIRE FLOW DEMAND IS NOT GUARANTEED AND IS ONLY WHAT THE SYSTEM WILL 9. PROVIDE.

FOR NTUA INFORMATION: Flow and minimum delivery pressure at the meter outlet.

	Sprin Syst	Total Fire Hydrant Flow	
QUANTITY	:	 	gpm
DURATION	:		minutes
PRESSURE	:		psi
SIMULTANEOUS USE	:	 	(YES/NO)

10. REQUESTED TIME(S) AND DATE(S) OF ACTUAL EXECUTION OF THE TAP.

TIME(S)/DATE(S) : _____

11. I AGREE TO THE APPLICATION OF NAVAJO TRIBAL UTILITY AUTHORITY (NTUA) CONSTRUCTION METHODS, MATERIAL STANDARDS, LINE TEST PROCEDURES, DISINFECTION REQUIREMENTS, "CONSTRUCTION WATER" POLICY, AS-BUILT DRAWING REQUIREMENTS, AND TARIFF REQUIREMENTS AS THEY PERTAIN TO TAPPING THE EXISTING NTUA WATER LINE, CONSTRUCTING UTILITIES TO BE TRANSFERRED TO NTUA FOR OPERATIONS AND MAINTENANCE, AND SERVICES PROVIDED BY NTUA THEREAFTER.

·	SIGNATURE	DATE
. <u> </u>	SIGNATURE	DATE
·	SICNATURE	DATE

SIGNATURE

Nov 98

PERMISSION TO TAP (WATER) PAGE THREE

12.	ASSIGNED	NTUA	INSPECTOR'S	NAME.
-----	----------	------	-------------	-------

INSPECTOR NAME :

13. IS THIS SERVICE DOWNSTREAM FROM A PREVIOUSLY MASTER METERED AREA?

	YES	NO	
14.	REVIEWED BY.		
	DISTRICT MANAGER OR: SUB-OFFICE SUPV.	NAME	DATE
15.		CONSTRUCTION DRAWINGS REVIEWED	AND APPROVED
	<u>BY</u> .		
	SIGNATURE	TITLE	DATE
16.	APPROVED TIME(S) AND DATE(S)	OF EXECUTION OF THE TAP.	
	TIME(S)/DATE(S) :		
17.	PERMISSION TO TAP APPROVED B	<u>Y</u> .	

NTUA OPERATIONS DEPARTMENT

DATE

Appendix G: Hydrostatic Test Pressure and Disinfection Requirements

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Bodaway-Gap Contract 2 Bid Issue

NAVAJO AREA STANDARDS & CONSTRUCTION REQUIREMENTS

Reviewed by NAVAJO NATION and IHS STANDARDS COMMITTEE



TECHNICAL SPECIFICATIONS FOR MATERIALS AND WORKMANSHIP FOR WATER AND WASTEWATER FACILITIES

MARCH 2002

1

2.07 Separation Between Residence and Sewer Lagoons. TP 2-2 IP 3.0 WATER MAINS, WATER SERVICE LINES AND APPURTENANCES. TP 3-1 3.01 Scope of Work. TP 3-1 3.02 Water Mains. TP 3-1 3.02.01 Polyvinyl Chloride Pipe and Fittings (PVC). TP 3-1 3.02.02 Water Mains. TP 3-2 3.02.03 Connections to Existing Mains. TP 3-2 3.03.01 Gate Valves. TP 3-3 3.03.01 Gate Valves. TP 3-3 3.03.02 Valve Boxes. TP 3-3 3.03.03 Valve Boxes. TP 3-3 3.04 Fire Hydrant Connections and Auxiliary Gate Valves. TP 3-4 3.04.01 Fire Hydrant and Guard Installation. TP 3-4 3.04.02 Hydrant Connections and Auxiliary Gate Valves. TP 3-4 3.05 Thrust Blocking. TP 3-5 3.06.01 Water Main Crossings. TP 3-5 3.06.02 Road Crossings. TP 3-5 3.07.01 Polyethylene Pipe (PE). TP 3-5 3.07.02 Service Line Fittings and Connections. TP 3-6 3.07.03<		System	TP 2-2
TP 3.0 WATER MAINS, WATER SERVICE LINES AND APPURTENANCES TP 3-1 3.01 Scope of Work. TP 3-1 3.02 Water Mains. TP 3-1 3.02.01 Polyvinyl Chloride Pipe and Fittings (PVC). TP 3-1 3.02.02 Water Main Installation. TP 3-2 3.02.03 Connections to Existing Mains. TP 3-2 3.03.04 Gate Valves. TP 3-3 3.03.05 Gate Valves. TP 3-3 3.03.01 Gate Valves. TP 3-3 3.03.02 Valve Boxes. TP 3-3 3.03.03 Valve Installation. TP 3-4 3.04.02 Hydrant Assembly. TP 3-4 3.04.02 Hydrant Connections and Auxiliary Gate Valves. TP 3-4 3.04.03 Fire Hydrant and Guard Installation. TP 3-4 3.06 Water Main Crossings. TP 3-5 3.06.01 Wash Crossings. TP 3-5 3.07.02 Road Crossings. TP 3-5 3.07.03 Saddels. TP 3-5 3.07.04 Corporation Stops. TP 3-6 3.07.05 Curb Stop Boxes. TP 3-6 3.07.06 Curb Stop Boxes. TP 3-7 3.07.07 Water Boxes. TP 3-7 3.07.08 Meter Yokes/Coppersetters. TP 3-7 3.07.10 Domestic Stop Valve Boxes.	2.07	Separation Between Residence and Sewer Lagoons	TP 2-2
3.01 Scope of Work. TP 3-1 3.02 Water Mains. TP 3-1 3.02.01 Polyvinyl Chloride Pipe and Fittings (PVC). TP 3-1 3.02.02 Water Main Installation. TP 3-2 3.02.03 Connections to Existing Mains. TP 3-2 3.03.01 Gate Valves. TP 3-3 3.03.01 Gate Valves. TP 3-3 3.03.02 Valve Boxes. TP 3-3 3.03.03 Valve Boxes. TP 3-3 3.04 Fire Hydrant Assembly. TP 3-4 3.04.01 Fire Hydrant Connections and Auxiliary Gate Valves. TP 3-4 3.04.02 Hydrant Connections and Auxiliary Gate Valves. TP 3-4 3.04.03 Fire Hydrant and Guard Installation. TP 3-4 3.06.01 Fire Hydrant crossings. TP 3-5 3.06.02 Road Crossings. TP 3-5 3.06.02 Road Crossings. TP 3-5 3.07.01 Polyethylene Pipe (PE). TP 3-5 3.07.02 Service Line Fittings and Connections. TP 3-6 3.07.03 Saddles. TP 3-6 3.07.04 Corporation Stops. <td< td=""><td></td><td></td><td></td></td<>			
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3.02.01 Polyvinyl Chloride Pipe and Fittings (PVC)	3.01	Scope of Work	TP 3-1
3.02.01 Polyvinyl Chloride Pipe and Fittings (PVC)	3.02	Water Mains	TP 3-1
3.02.02 Water Main Installation. TP 3-2 3.03.03 Connections to Existing Mains. TP 3-3 3.03.04/ves For Water Mains. TP 3-3 3.03.01 Gate Valves. TP 3-3 3.03.02 Valve Boxes. TP 3-3 3.03.03 Valve Installation. TP 3-3 3.03.03 Valve Installation. TP 3-4 3.04.01 Fire Hydrant Assembly. TP 3-4 3.04.02 Hydrant Connections and Auxiliary Gate Valves. TP 3-4 3.04.03 Fire Hydrant and Guard Installation. TP 3-4 3.04.03 Fire Hydrant and Guard Installation. TP 3-4 3.06.01 Water Crossings. TP 3-5 3.06.02 Road Crossings. TP 3-5 3.07.01 Polyethylene Pipe (PE). TP 3-5 3.07.02 Service Line Fittings and Connections. TP 3-6 3.07.03 Saddles. TP 3-6 3.07.04 Corporation Stops. TP 3-6 3.07.05 Curb Stop Boxes. TP 3-7 3.07.06 Curb Stop Boxes. TP 3-7 3.07.07 Water Meters. TP 3-7			TP 3-1
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		3	

inch diameter PVC-DWV pipe shall be cut so that the top of the adapter extends 3 to 6-inches above ground surface.

3.08 Water Service Line Installation

Water service lines and appurtenances shall be installed in accordance with TP 1.0, Excavation, Trenching, and Backfilling for Water and Sewer Utilities, and TP 2.0, Water and Sewer Line Separation Requirements. A minimum of 3 feet of cover is required for water service lines.

Service lines shall be cut using tools specifically designed to leave a smooth, even, and square end on the pipe. The cut ends shall be reamed to the full inside diameter of the pipe. Pipe ends are to be connected using fittings which seal to the outside surface of the pipe which shall be cleaned to a sound smooth finish before installation. Splices shall be kept to a minimum and no splices shall be made within 10 feet of any sewer line.

All 1-inch service connections to water mains 4-inches or larger shall be made using saddles (tap tees are permitted for new construction). Service connections to 2-inch pipe shall be made using tees. Particular care shall be exercised to assure that the main is not damaged by the installation of the saddle. The saddle shall be aligned on the water main so that it is at a 45 degree angle above the springline of the pipe. The hole drilled into the pipe through the saddle shall be no smaller than 1/8-inch less than the size of the saddle.

Where required, the Contractor shall reconnect existing water service connections to the new water mains using materials specified herein. Individual pressure reducing valves, where required, shall be installed on a tandem meter yoke as shown on the standard detail. Prior to installation of the meter and connection to the building or house, the entire water service line and appurtenances shall be flushed.

3.09 Pressure Tests

Where any section of a waterline is provided with concrete thrust blocking for fittings or hydrants, the pressure tests shall not be made until at least 48 hours after installation of the concrete thrust blocking unless otherwise approved by the Owner.

3.09.01 Pressure Test

All test equipment, labor, water for testing, appurtenances and material, and performance of all operations in accordance with the specifications are the responsibility of the Contractor.

All pipelines shall be tested for water tightness up to the individual service meter or domestic stop. The test equipment will not be provided, but is subject to inspection by the Owner. Arrangements for water used in pipeline testing and payment for the water shall be coordinated with the Operating Utility. Pressure gauges used in testing shall be graduated at a maximum in 5 psi increments. Two gauges will be used simultaneously for verification of the gauges' functionality. Prior to the test, the pipeline will be pressured to 10 psi above the test pressure. The pressure will then be decreased to the test pressure so that gauge responsiveness can be observed.

The test pressure shall be at least 160 psi measured at the lowest point of elevation in the test section. No section shall be tested that is greater than one mile in length or that has greater than 25 psi pressure change due to elevation. The test shall be conducted in such a manner that existing mains, services lines, and service user's plumbing are not damaged. Damage caused by testing shall be corrected at the expense of the Contractor. All connections, blow-offs, hydrants, house services up to the meter yoke or domestic stop, and valves shall be tested with the main as far as is practicable. When testing piping systems designed to operate above 160 psi, special considerations shall be arranged with the Operating Utility.

No air testing shall be allowed.

The test section shall be filled slowly with potable water and all air shall be vented from the line. The test shall not begin until the pipe has been filled with water for at least 24 hours to allow for absorption. The test shall have a minimum duration of two hours with the two hour period beginning when the test pressure is attained and the pump ceases operation.

No pipe installed shall be accepted if the leakage is greater than that determined by the following formula:

$$Q = \frac{N^* D^* (P)}{7400}^{1/2}$$

in which,

Q = allowable leakage in gallons per hour

- N = number of joints in the pipeline being tested, this "N" being the standard length of pipe furnished divided into the length being tested with no allowance for double gasket joint caused by use of couplings instead of integral bell pipe or for joints at branches, blow-offs, fittings, etc.
- D = nominal diameter of pipe in inches
- P = the test pressure in psi gauge as discussed in the third paragraph of this procedure

During the test, the test pressure should not lose more than 5 psig without being pumped back up to the test pressure. The totals of the gallons of water required to hold the test pressure during the two hours plus the amount of water required to return the line to the test pressure at the end of the test period is the total leakage. If the total leakage is less than the allowable, the line can be accepted. All visible leaks will be repaired regardless of the amount of leakage. Should the test on any section of the pipeline show leakage greater than the allowable leakage, the Contractor shall locate and repair the defective pipe, fitting, or joint until the leakage is within the allowable leakage for the two hour test duration.

3.09.02 Observation of Tests

The Owner is to witness the pressure testing of waterlines. Prior to the test, the Contractor shall have all equipment set up completely, ready for operation and shall have previously successfully performed the test to verify that the test section will pass. The Contractor shall notify both the Owner and the Operating Utility a minimum of three working days in advance of the date that the Contractor plans to perform the pressure tests.

The Owner shall observe the testing to verify that the testing was performed according to the specifications and that the test data were properly and accurately recorded. The Owner will complete the required certification forms and submit them to the Operating Utility for approval. A letter of approval or disapproval of the test results will be sent from the Operating Utility to the Contractor.

3.10 Disinfection

A liquid chlorine solution shall be introduced continuously into one end of the system and allowed to flow along and through all lines and appurtenances to be disinfected until a minimum of 50 ppm of chlorine is detected at representative points throughout the line. A contact period of 24 hours shall be maintained before the system is flushed out with clean water until a maximum of 0.4 ppm chlorine residual is detected. All valves shall be operated several times during the 24 hour contact period.

After disinfection, the Contractor shall collect bacteriological samples for testing at his expense. The analysis shall be performed by a laboratory certified by the State Health Department or the U.S. Environmental Protection Agency. If a positive result (unsatisfactory bacteriological test) is obtained, the system shall be disinfected and retested by the Contractor. This shall be repeated until a negative result (satisfactory bacteriological test) is obtained. Disinfection by introducing granular or tablet chlorine compounds in each pipe length is not an acceptable method of disinfection.

EXHIBIT A OF TP-3 WATER LINE PRESSURE TEST CERTIFICATION

Location of Line Tested:				Date of Test:		
A)(Vicinity/State)				ы)(Р	roject's Drawi	ng Name)
C)(Project's Sheet No.)					roject's Drawi	
(1	roject s Si	neet NO.)		(P	Toject s Drawi	ng No.)
Gauges Man	ufacturer &	k Model: 1)				
		2) _				
Standard Ler	igth of Pip	e in Test Secti	on:	Fe	et.	
Test Section						
~			(Parcel, L	ine No., etc.)		
Length	Line Size	Pipe Pressure Rating	Test Pressure	Observed Pressure Range	Total Leakage (gal./	Total Leakage (gal./
(StaSta.)	(Inch)	(Psi)	(Psig)	(Psig)	2hrs.)	2hrs.)
					2	
The above te	st informa	tion is certified	l by:		ć.	
Signature	•	:				
Name, O	rganization	1 :				
Address,	Telephone	No. :				
		:				
Date of the	his Report					
Certificat	tion Receiv	ved by : Ope	rating Utility	Or Engineering	n	Date
Test Rest Passed (ults Checke) Faile	ed by :				
Copy of App	roval of th					
Date			Operating Ut	ility Engineerin	g	

EXHIBIT A OF TP-3

Allowable Leakage:

 $Q = \frac{N\tilde{D(P)}^{1/2}}{7400}$

Q = Gallon per Hour

P = Test Pressure (psig) = _____

Allowable Leakage (2 Hour Test) = $2Q = \underbrace{N\tilde{D}(P)^{1/2}}_{7400}$ X 2 = _____ (Gal.)

Are the pressure gauges graduated at a maximum of 5 psi increments?

Was the line pressured to 10 psi above the test pressure so that the gauge responsiveness could be observed?

Is the length of the test section less than one mile?

Is the elevation difference between the highest and lowest points in the test section less than 57 feet?

Are the pipes in the test section the same pressure rating?

Time - Description of Acti		Gauge Reading	Amount of Wate Added	r
Total Time:	hrs.		Total:	gals.

Verified By:

Operating Utility's Representative/Date

Title

EXHIBIT A OF TP-3

Test Section:

(Parcel, Line No., Etc.)

Length	Line Size (inch)	Pipe Pressure Rating	Test Pressure	Observed Pressure Range	Total Leakage (gal./	Total Leakage (gal./
(stasta.)	(inch)	(psi)	(psig)	(psig)	2hrs.)	2hrs.)
						-

Exhibit A: Geotechnical Investigation Report

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Bodaway-Gap Contract 2 Bid Issue 3 July 2018 Wood Project No. 17-517-00016.002

GEOTECHNICAL ENGINEERING STUDY REPORT

BODAWAY-GAP SUPPLY WELL & PIPELINE NAVAJO INDIAN RESERVATION, ARIZONA

Submitted To:

Brown and Caldwell 6975 Union Park Center, Suite 490 Midvale, Utah 84047-4135



Submitted By:

Wood Environment & Infrastructure Solutions, Inc. 8519 Jefferson, N.E. Albuquerque, New Mexico 87113





Wood Environment & Infrastructure Solutions, Inc. 8519 Jefferson Street N.E. Albuquerque, New Mexico 87113 T: 505-821-1801 www.woodplc.com

3 July 2018 Wood Job No. 17-517-00016.002

Brown and Caldwell 6975 Union Park Center, Suite 90 Midvale, Utah 84047-4135

RE: **GEOTECHNICAL ENGINEERING STUDY BODAWAY-GAP SUPPLY WELL & PIPELINE** NAVAJO INDIAN RESERVATION, ARIZONA

Attn: Mr. Steven Brenchley, P.E.

Our Geotechnical Engineering Study Report on the referenced project is enclosed. The report includes the results of test drilling, laboratory analyses and recommended criteria for foundation design, slab support and related earthwork.

Should any questions arise concerning this report, we would be pleased to discuss them with you.

Respectfully submitted,

Wood Environment & Infrastru FREED alph E. Crockett, P.E. PROFESSIONA Associate Geotechnical Engineer

REC:rrk

Copies: Addressee (3)

Reviewed by:

esanne Claus for

David Varela, P.E. Associate Geotechnical Engineer



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1.0 INTRODUCTION

This report is submitted pursuant to a geotechnical engineering study made by this firm for the proposed waterline and well house near Bodaway-Gap, Arizona. The objectives of this study were to evaluate the physical properties of the soils underlying the site and provide recommendations for foundation design, slab support and related earthwork.

2.0 PROPOSED CONSTRUCTION

We understand that the project consists of approximately 33,600 linear feet of new waterline, a new steel water tank and a new well. The waterline will be 10-inches in diameter and embedded about 4 feet below finished grade.

Should final design details vary significantly from those outlined above, the Project Manager should be notified for review and possible modification of recommendations.

3.0 INVESTIGATION

3.1 Subsurface Investigation

Sixteen (16) exploratory borings were drilled along the pipeline alignment to depths of 5 feet (auger refusal) to 10 feet below existing grade utilizing a truck-mounted CME rotary drill rig equipped with an 8-inch O.D. hollow stem auger. Additionally, an exploratory boring was drilled at the water tank site to a depth of 20 feet and one at the well site to a depth of 10 feet. Standard penetration testing and open-end drive sampling were performed at selected intervals in the borings. During the field study, the soils encountered were continuously examined, visually classified, and logged. Results of the field study are presented in Appendix A, which includes a brief description of drilling and sampling equipment and procedures, a site plan showing the boring locations, and logs of the test borings.

3.2 Laboratory Analysis

Moisture content determinations were made on all open-end drive samples recovered. Dry densities were determined on selected relatively undisturbed 2.42-inch I.D. "ring" samples. Results of these tests are shown on the boring logs.

Grain-size analysis and Atterberg limits tests (P.I.) were performed on selected samples to aid in soil classification. A consolidation test was performed on a select relatively undisturbed 2.42-inch I.D. "ring" sample. Results of these are located in Appendix B of this report.



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4.0 SITE CONDITIONS & GEOTECHNICAL PROFILE

4.1 Site Conditions

At the time of the field study, the waterline alignment consisted of undeveloped flat to rolling hills terrain. Vegetation consisted of moderate to heavy growth of native grasses, weeds and shrubs, and sparse cedar trees. Sandstone outcrops were observed throughout the area.

4.2 Geotechnical Profile

As indicated by the exploratory borings, the geotechnical profile of the project area consisted of silty sand (SM), silty, clayey sand (SC-SM) and relatively clean sand (SP-SM) overlying sandstone bedrock. The silty sand is generally fine grained, nonplastic and moderately firm to hard. The clayey, silty sand is fine grained, of low plasticity and hard. The relatively clean sand generally contains some silt, is fine to medium grained, nonplastic and moderate.

The underlying sandstone bedrock, encountered at between 0.5 and 7.5 feet below existing grade, is generally fine grained, and moderately weathered. The sandstone was typically drillable with the hollow-stem augers to depths of 10 feet below grade, with the exception of Borings B-8, B-9, B-11 and B-16 where refusal was encountered at about 5 feet.

4.3 Soil Moisture & Groundwater Conditions

Groundwater was not encountered in any of the borings. Measured soil moisture contents ranged from 1 percent to 6 percent.

5.0 DISCUSSION & RECOMMENDATIONS

5.1 Analysis of Results

Some of the near surface native soils are soft and moisture sensitive, and are, therefore, not considered suitable foundation materials in their present condition. Accordingly, it is recommended that the foundations for the well house be supported on shallow foundation system bearing on the underlying weathered sandstone bedrock or on structural fill extending to the weathered sandstone bedrock. The water tank should be supported on a minimum of 3.0 feet of structural fill. Detailed recommendations for foundation design are presented in the following sections of this report.



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5.2 Foundations

5.2.1 Foundations – Well House

Shallow continuous or monolithic-type footings bearing at uniform depths below finished grade, in conjunction with the recommended site preparation and moisture protection provisions, are recommended for support of the well house. A safe soil bearing pressure of 3,000 psf is recommended for the design of shallow spread-type footings bearing on weathered sandstone bedrock or structural fill extending to the weathered sandstone bedrock. Structural fill should extend laterally away from the footings a depth equal to 2/3rds the thickness of the fill below the footing. Minimum depths of footings should be 2.5 feet below the lowest adjacent finished grade for perimeter footings. Two feet, 1.33 feet and 1.0 foot are the minimum recommended widths of square, continuous or monolithic footings, respectively.

The bearing pressure recommended above applies to full dead plus realistic live loads and can be safely increased by one-third for total loads including wind or seismic forces.

Total vertical movements of footings, designed as recommended above, are estimated not to exceed 3/4-inch for moisture contents of the native soils encountered during test drilling or compaction moisture contents introduced during placement of the structural fill. Differential movements are estimated to be 50% of maximum vertical movements. Significant moisture increases above these contents could create additional movements and could create excessive movement in some areas of the site. Accordingly, the site drainage and moisture protection provisions recommended in Section 5.5 are critical design considerations.

5.2.2 Shallow Foundations - Water Tank

A foundation system consisting of a concrete ring wall and a granular soil base course placed on a minimum thickness of 3.0 feet of compacted structural fill is recommended for the support of the water tank. This foundation system may be successfully used provided the recommendations concerning site preparation and moisture protection provisions presented in the following sections of this report are followed.

The perimeter of the steel tank should be supported by a continuous concrete footing having a minimum width of 18 inches. The footing should support the steel sides, roof of the tank and the edges of the steel plate comprising the bottom of the tank. The ring wall foundation should enclose the granular material, which lies directly beneath the tank floor. A net allowable bearing pressure of 3,000 pounds per square foot is recommended for ring wall foundations and tank bottom slabs placed on a minimum thickness of 3.0 feet of structural fill. The structural fill should extend laterally a minimum distance of 2 feet beyond the tank perimeter.

Prior to the placement of structural fill, it is recommended the native soil be scarified to a depth of 8 inches, brought to optimum moisture content up to plus 3 percent of optimum moisture content and compacted. Compaction of the soil should be accomplished by mechanical means to obtain a density of not less than 95





percent of maximum dry density. Optimum moisture content and maximum dry density should be determined in accordance with ASTM D 1557.

It is recommended that a minimum thickness of 8 inches of tank bedding materials be placed below the tank base. The bedding material should conform to the tank manufacturer's requirements regarding corrosion protection. In addition, the material should be relatively uniform in gradation, having a maximum particle size of ¼ inch and no more than 5 percent by weight passing the No. 200 sieve.

The footing should be eccentrically loaded and should be properly designed with circumferential reinforcement. For frost protection, it is recommended that the footing be embedded a minimum of 2.5 feet below the lowest adjacent finished grade.

5.3 Lateral Earth Pressures

The ultimate passive soil resistance against edges of footings, stem walls, etc., with properly compacted backfill, should be considered as being equal to forces exerted by a fluid of 350 pounds per cubic foot unit weight. A coefficient of friction of 0.40 is recommended for computing lateral resistance between the bases of footings and slabs and the fill soils in analyzing lateral loads.

5.4 Site Grading & Slab Support

Recommendations relative to site grading for slab support are presented in Appendix C. The site grading recommendations presented herein will result in subgrade preparation which will provide adequate support for slab-on-grade floors.

The use of granular base for structural support of lightly loaded slabs is not considered necessary. However, should it be desired as a working surface, a course of granular base can be placed beneath concrete floor slabs. Where used, granular base should meet the following grading requirements as determined in accordance with ASTM C136.

Sieve Size	Percent Passing
<u>(Square Openings)</u>	by Dry Weight
1 inch	100
3/4 inch	85-100
No. 4	45-95
No. 200	0-8

The granular base should have a plasticity index of no greater than 3 when tested in accordance with ASTM D4318. The coarse aggregate should have a percent of wear, when subjected to the Los Angeles abrasion test (ASTM C131), of no greater than 50. Granular base should be compacted to at least 95 percent of ASTM D1557 maximum dry density, or 70 percent of ASTM D4253 maximum relative density, as applicable.



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5.5 Site Drainage & Moisture Protection

Moisture increases in the native subsoils would reduce their support value and increase foundation and floor slab movements. Proper moisture protection measures are, therefore, considered a critical design feature. Positive site drainage should be provided during construction and maintained thereafter. Where slabs do not immediately adjoin the structures, the ground surface should be sloped away from the perimeters in a manner to allow flow along the drainage lines at a minimum grade of 4.0 percent to points at least 15.0 feet away from the structures by nonerosive devices at the ground surface. In no case should long-term ponding of water be allowed within 20 feet of the perimeters of the structures. The possibility of moisture infiltration beneath the well house, in the event of plumbing leaks, should be considered in the design and inspection of underground water conduits.

All backfill in various areas of the project, including footing and stem wall backfill and backfill of all utility lines, should be compacted as recommended in Section 5.4 and Appendix C. This is considered necessary to minimize rapid infiltration of surface waters and possible lateral migration of water along loosely backfilled areas.

5.6 Pipe Installation

5.6.1 Soil Support and Installation

It is our understanding that the pipeline will be installed using open-trench excavation methods. As indicated by the exploration borings, the soils encountered along the alignment have the ability to provide adequate support for the pipes. Some additional compaction effort may be required in isolated areas where loose soils are encountered at the pipe embedment elevation. Differential settlement in the pipes should not exceed ³/₄ of an inch for 20-foot pipe sections if the recommended site preparation and backfill requirements outlined are followed.

Bedding materials used to support the proposed pipeline should consist of a granular bedding material. A minimum of twelve inches of granular bedding material should be placed and compacted along the top and sides of the pipe. A minimum of six inches of bedding material should also be placed beneath the pipe. The granular bedding material should be compacted to achieve a density of not less than 90 percent of the maximum dry density as determined by ASTM D 1557. Granular bedding should satisfy the requirements provided in Appendix C, Section 5.B.(2).

5.6.2 Trench Backfill

Trench backfill should consist of native or imported soil free from debris or deleterious materials. The backfill should have a plasticity index not exceeding 12 and should satisfy the requirements for trench backfill provided in Appendix C, Section 5.B.(3). It is anticipated that most of the soils encountered along the alignment will satisfy the requirements for backfill material. Additionally, some blending of native soils may be performed to achieve a greater percentage of materials that satisfy the requirements for backfill.



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Backfill should be placed in trenches and compacted in lifts no greater than eight inches in compacted thickness. Backfill in areas greater than 10 feet from existing or proposed paved streets or structures (nonstructural areas) should be compacted to a density of not less than 85 percent from the top of pipe bedding to the ground surface. Backfill in areas less than 10 feet from existing or proposed paved streets or structures (structural areas) should be compacted to a density of not less than 90 percent from the top of pipe bedding to about three feet below finished grade. The remaining zone, three feet below finished grade, should be compacted to a density of not less than 95 percent. Final dimensions should be adjusted for pavement section thickness.

Moisture content at the time of compaction should be within 2 percent of optimum moisture content. Optimum moisture content and dry density for each soil type used should be determined in accordance with ASTM D 1557.

5.7 Excavation Conditions and Slopes

The soils throughout the project area that will be encountered during earthwork are generally non-to slightly cemented and can be excavated with normal earth moving equipment. However, the weathered sandstone may require heavy excavation equipment capable of ripping. It should be noted that more dense sandstone bedrock was encountered along the pipeline alignment at Boring Nos. 8 through 11.

Also, some areas of loose silty sand were noted, which are prone to significant caving and sloughing in open excavations. Groundwater was not encountered during the field study and therefore dewatering efforts are not anticipated to be required.

Based upon the results of our study, the sandy soils encountered along the majority of the alignment classify as OSHA Type C soils and side slopes of the short term trench excavations should be no steeper than 1.5 to 1 (horizontal to vertical) to a depth of 10 feet. Although not anticipated for this project, trench excavations greater than 20 feet in depth will require a special design by a registered engineer. Short term excavations are those that are open less than 72 hours. Long term trench excavation in Type C soils should be no steeper than 2 to 1 to a depth of 10 feet. As discussed above, caving and sloughing conditions may be expected during excavations. These conditions can reduce the overall stability of the excavations leading to a slope failure. The contractor should be prepared to bench excavations beyond the 1.5:1 slope or provide alternate methods of soil support such as trench shields or shoring systems should unstable conditions exist. Cuts in the sandstone bedrock can be made with 1-1/4:1 side slopes.

It appears the alignment has appreciable space to allow for open excavations with the recommended slope angles without impacting nearby structures. However, should specific portions of the alignment encroach upon existing structures; a shoring system can be used. Although trench shields will probably be the preferred method of trench stabilization, sheet piles or other methods (such as pneumatic or hydraulic systems) may be designed by the contractor's engineer. All shoring, including trench shields, should be designed using lateral loads described in Section 5.8.



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It is recommended that a representative of the geotechnical engineer periodically observe temporary cut slopes at the time of excavation to assess their stability. All excavations should be provided with berms or other installations to prevent surface runoff from entering the excavation or impacting the excavation slopes. Construction equipment and materials, including soil stockpiles should not be placed within five feet or one half of the total excavation depth; whichever is greater, from the edge of trench excavations. The exception to this recommendation is the presence of small soil berms constructed for temporary drainage purposes.

The above recommendations for temporary excavation slopes are based on geotechnical considerations only. These recommendations do not consider requirements that might be imposed by OSHA, or other governmental agencies. For all open excavations and trenches OSHA and other governing entities' regulations should be followed in the process of planning.

5.8 Lateral Loads

Temporary retaining structures should be designed using "at-rest" and active earth pressures of 55 pounds per cubic foot (pcf) and 35 pcf, respectively.

An allowable passive pressure equivalent to an earth pressure of 350 pcf is recommended for anchor blocks. No increase in the allowable passive pressure is recommended for "test" conditions.

5.9 Frictional Resistance

For smooth surfaced pipelines, such as PVC, a frictional resistance of 0.2 is recommended. For pipelines with somewhat roughened surfaces, such as concrete coated pipes, a coefficient of friction of 0.3 may be used. In addition, concrete anchor blocks may use a coefficient of friction of 0.35. It is not recommended that frictional resistance be combined with passive resistance for stability analysis of pressure pipelines.

6.0 CONSTRUCTION OBSERVATION & TESTING

Recommendations presented in previous sections of this report are predicated on there being continuous observation and testing by the geotechnical engineer during earthwork operations. Verification of recommended excavation, site grading, and required degree of compaction should be performed in accordance with "Guide Specifications for Earthwork" in Appendix C.

The recommendations presented in this report are based upon a limited number of subsurface samples obtained from four sampling locations. The samples may not fully indicate the nature and extent of the variations that actually exist between sampling locations. For that reason, among others, we recommend Wood be retained to observe earthwork construction. It should be noted if variations or other latent conditions become evident during earthwork construction, it will be necessary for Wood to review these conditions and modify its recommendations.



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APPENDIX A

Test Drilling Equipment & Procedures

Unified Soil Classification

Terminology Used to Describe the Relative Density, Consistency or Firmness of Soils

Site Plan

Logs of Test Borings



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TEST DRILLING EQUIPMENT & PROCEDURES

Drilling Equipment - Truck-mounted drill rigs powered with gasoline or diesel engines are used in advancing test borings. Drilling through soil or softer rock is performed with hollow-stem auger or continuous flight auger. Carbide insert teeth are normally used on the auger bits so they can often penetrate rock or very strongly cemented soils which require blasting or very heavy equipment for excavation. Where refusal is experienced in auger drilling, the holes are sometimes advanced with tricone gear bits and NX rods using water or air as a drilling fluid.

Sampling Procedures - Dynamically driven tube samples are usually obtained at selected intervals in the borings by the ASTM D1586 procedures. In most cases, 2-inch O.D., 1-3/8-inch I.D. samplers are used to obtain the standard penetration resistance. "Undisturbed" samples of firmer soils are often obtained with 3-inch O.D. samplers lined with 2.42-inch I.D. brass rings. The driving energy is generally recorded as the number of blows of a 140-pound, 30-inch free-fall drop hammer required to advance the samplers in 6-inch increments. However, in stratified soils, driving resistance is sometimes recorded in 2 or 3-inch increments so that soil changes and the presence of scattered gravel or cemented layers can be readily detected and the realistic penetration values obtained for consideration in design. These values are expressed in blows per foot on the logs. "Undisturbed" sampling of softer soils is sometimes performed with thin-walled Shelby tubes (ASTM D1587). Where samples of rock are required, they are obtained by NX diamond core drilling (ASTM D2113). Tube samples are labeled and placed in water-tight containers to maintain field moisture contents for testing. When necessary for testing, larger bulk samples are taken from auger cuttings.

<u>Continuous Penetration Tests</u> - Continuous penetration tests are performed by driving a 2-inch O.D. blunt nosed penetrometer adjacent to or in the bottom of borings. The penetrometer is attached to 1-5/8-inch O.D. drill rods to provide clearance to minimize side friction so that pene-tration values are as nearly as possible a measure of end resistance. Penetration values are recorded as the number of blows of a 140-pound, 30-inch free-fall drop hammer required to advance the penetrometer in one-foot increments or less.

Boring Records - Drilling operations are directed by our field engineer or geologist who examines soil recovery and prepares boring logs. Soils are visually classified in accordance with the Unified Soil Classification System (ASTM D2487), with appropriate group symbols being shown on the logs.

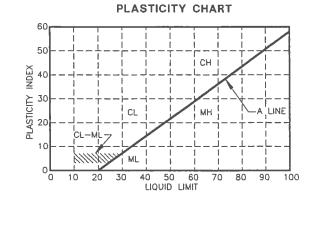
A-1

UNIFIED CLASSIFICATION SYSTEM FOR SOILS

Soils are visually classified by the Unified Soil Classification System on the boring logs presented in this report. Grain-size analysis and Atterberg Limits Tests are often performed on selected samples to aid in classification. The classification system is briefly outlined on this chart. For a more detailed description of the system, see "The Unified Soil Classification System" ASTM Designation: D2487.

MAJOR DIVISION			GRAPH GI SYMBOLSY		TYPICAL DESCRIPTION	
(e)		CLEAN GRAVELS		0.0.0	GW	Well graded gravels, gravel—sand mixtures or sand—gravel—cobble mixtures.
el S el S No. 4 sieve)	ELS of coarse No. 4 siev	(Less than 5% passes No. 200 sieve)			GP	poorly graded gravels, gravel—sand mixtures, or sand—gravel—cobble mixtures.
LS 0 sieve)	GRAVELS (50% or less of c fraction passes No.	GRAVELS WITH FINES	Limits plot below "A" line & hatched zone on plasticity chart		GM	Silty gravels, gravel—sand—silt mixtures.
COARSE-GRAINED SOILS than 50% passes No. 200 sieve)	frac ((More than 12% passes No. 200 sieve)	Limits plot above "A" line & hatched zone on plasticity chart		GC	Clayey gravels, gravel—sand—clay mixtures.
ARSE-GR	se va)		EAN SANDS		sw	Well graded sands, gravelly sands.
C((Less th	JDS 2% of coarse No. 4 sieve)	(Less than 5% passes No. 200 sieve)			SP	Poorly graded sands, gravelly sands.
	SANDS (Mare than 50% of traction passes No.	SANDS WITH FINES	Limits plot below "A" line & hatched zone on plasticity chart		SM	Silty sands, sand—silt mixtures.
		(More than 12% passes No. 200 sieve)	Limits plot above "A" line & hatched zone on plasticity chart		sc	Clayey sands, sand—clay mixtures.
FINE-GRAINED SOILS (50% or more passes No. 200 sieve) AVS SILTS AVS SILTS AVS UNITS PLOT BELOW NITE & TONE ON HATCH ZONE ON	TS OT BELOW INE & ZONE ON M CHART	SETS OF LOW PLASTICITY (Liquid Limit Less Than 50)			ML	norganic silts, clayey silts with slight plasticity.
	SIL LIMITS PL "A" U HATCH 7 PLASTICT	SILTS OF HIGH PLASTICITY (Liquid Limit More Than 50)		1	мн	Inorganic silts of high plasticity, silty soils, elastic silts.
	CLAYS CLAYS LIMITS PLOT ABOVE "A" LINE & HATCH ZONE ON PI \STICITY CHART	CLAYS OF LOW PLASTICITY (Liquid Limit Less Than 50)			CL	Inorganic clays of low to medium plasticity, gravelly clays, sandy clays, silty clays, lean clays.
	CLJ "A" U "A" U HATCH	CLAYS OF HIGH PLASTICITY (Liquid Limit More Than 50)			сн	Inorganic clays of high plasticity, fat clays, silty and sandy clays of high plasticity.

NOTE: Coarse-grained soils with between 5% & 12% passing the No. 200 sieve and fine-grained soils with limits plotting in the hatched zone on the plasticity chart to have dual symbol.



DEFINITIONS OF SOIL FRACTIONS

SOIL COMPONENT	PARTICLE SIZE RANGE
Boulders Cobbles Gravel Fine gravel Sand Coarse Medium Fine Fine (silt or clay)	Above 300mm (12in.) 300mm to 75mm (12in. to 3in.) 75mm (3in.) to No. 4 sieve 75mm to 19mm (3in. to 3/4in.) 19mm (3/4in.) to No. 4 sieve No. 4 to No. 200 No. 4 to No. 10 No. 10 to No. 40 No. 40 to No. 200 Below No. 200 sieve

A-2

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TERMINOLOGY USED TO DESCRIBE THE RELATIVE DENSITY, CONSISTENCY OR FIRMNESS OF SOILS

The terminology used on the boring logs to describe the relative density, consistency or firmness of soils relative to the standard penetration resistance is presented below. The standard penetration resistance (N) in blows per foot is obtained by ASTM D1586 procedure using 2" O.D., 1-3/8" I.D. samplers.

1. <u>Relative Density</u> Terms for description of relative density of cohensionless, uncemented sands and sandgravel mixtures.

<u>N</u>	Relative Density
0-4	Very loose
5-10	Loose
11-30	Medium dense
31-50	Dense
50+	Very dense

2. <u>Relative Consistency</u> Terms for the description of clays which are saturated or near saturation.

<u>N</u>	Relative Consistency	Remarks
0-2	Very Soft	Easily penetrated several inches with fist
3-4	Soft	Easily penetrated several inches with thumb
5-8	Medium stiff	Can be penetrated several inches with thumb with moderate effort
9-15	Stiff	Readily indented with thumb, but penetrated only with great effort
16-30	Very stiff	Readily indented with thumbnail
30+	Hard	Indented only with difficulty by thumbnail

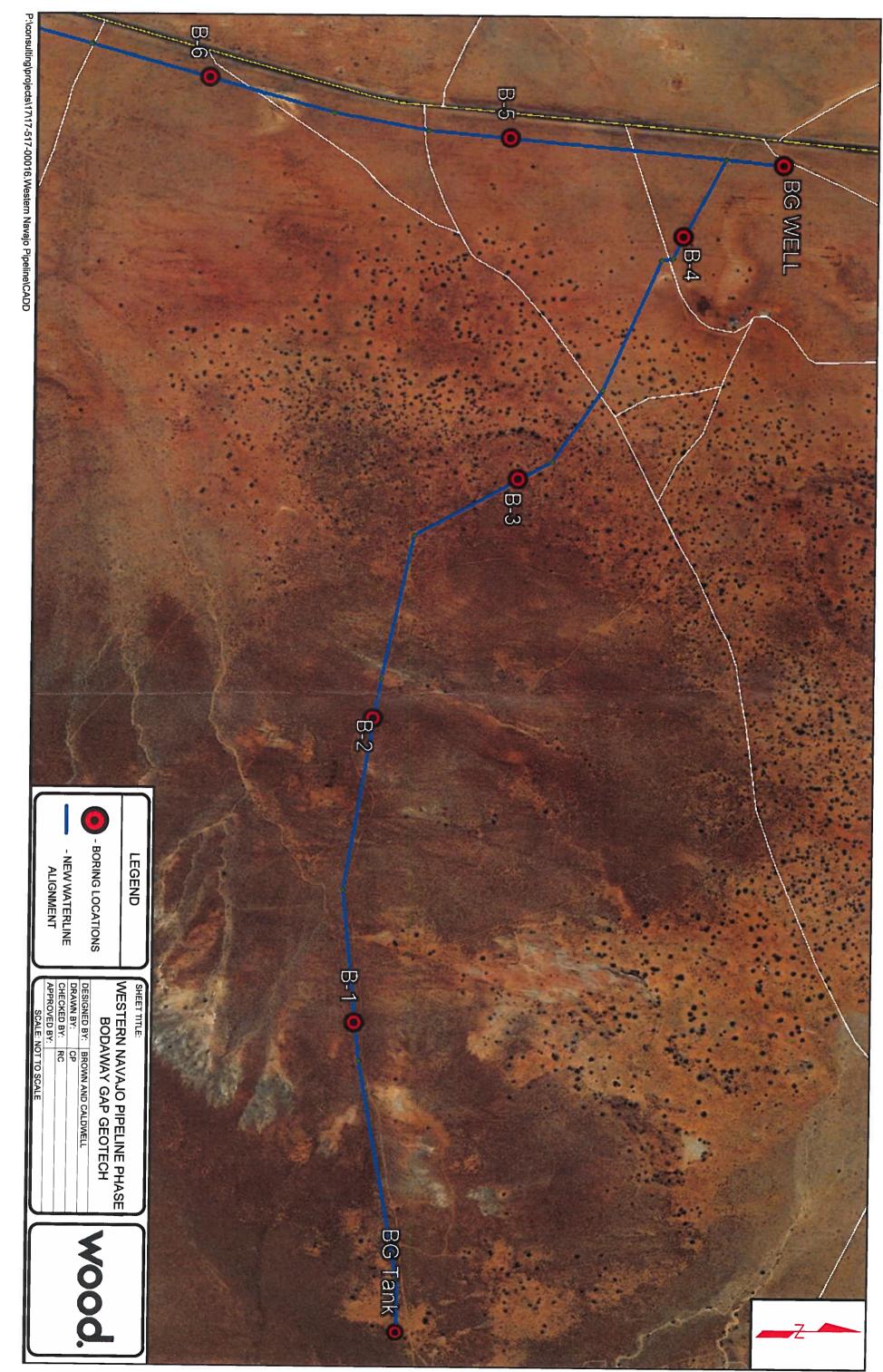
3. <u>Relative Firmness</u> Terms for the description of partially saturated and/or cemented soils which commonly occur in the Southwest including clays, cemented granular materials, silts and silty and clayey granular soils:

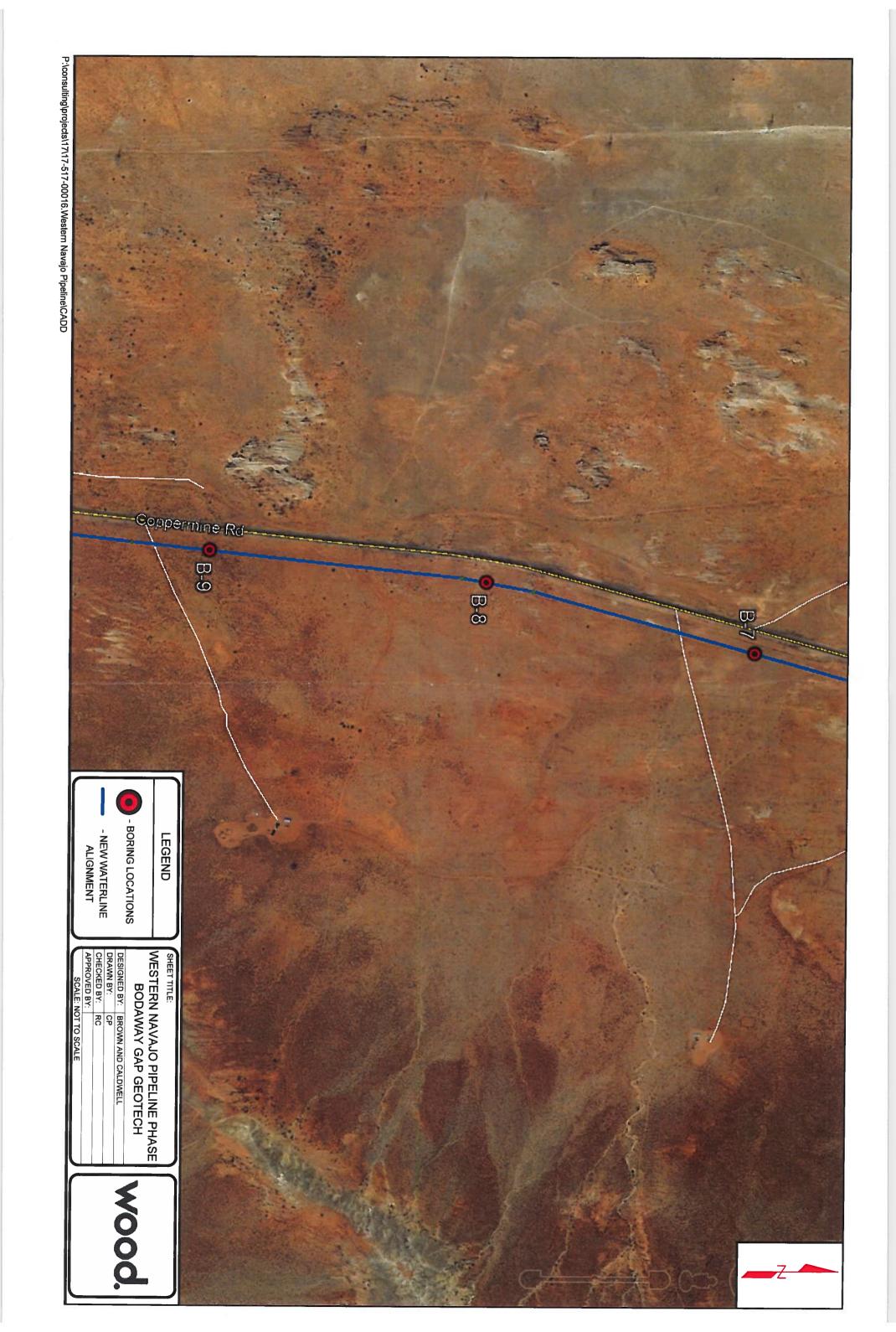
<u>N</u>	Relative Density
0-4	Very soft
5-8	Soft
9-15	Moderately firm
16-30	Firm
31-50	Very firm
50+	Hard

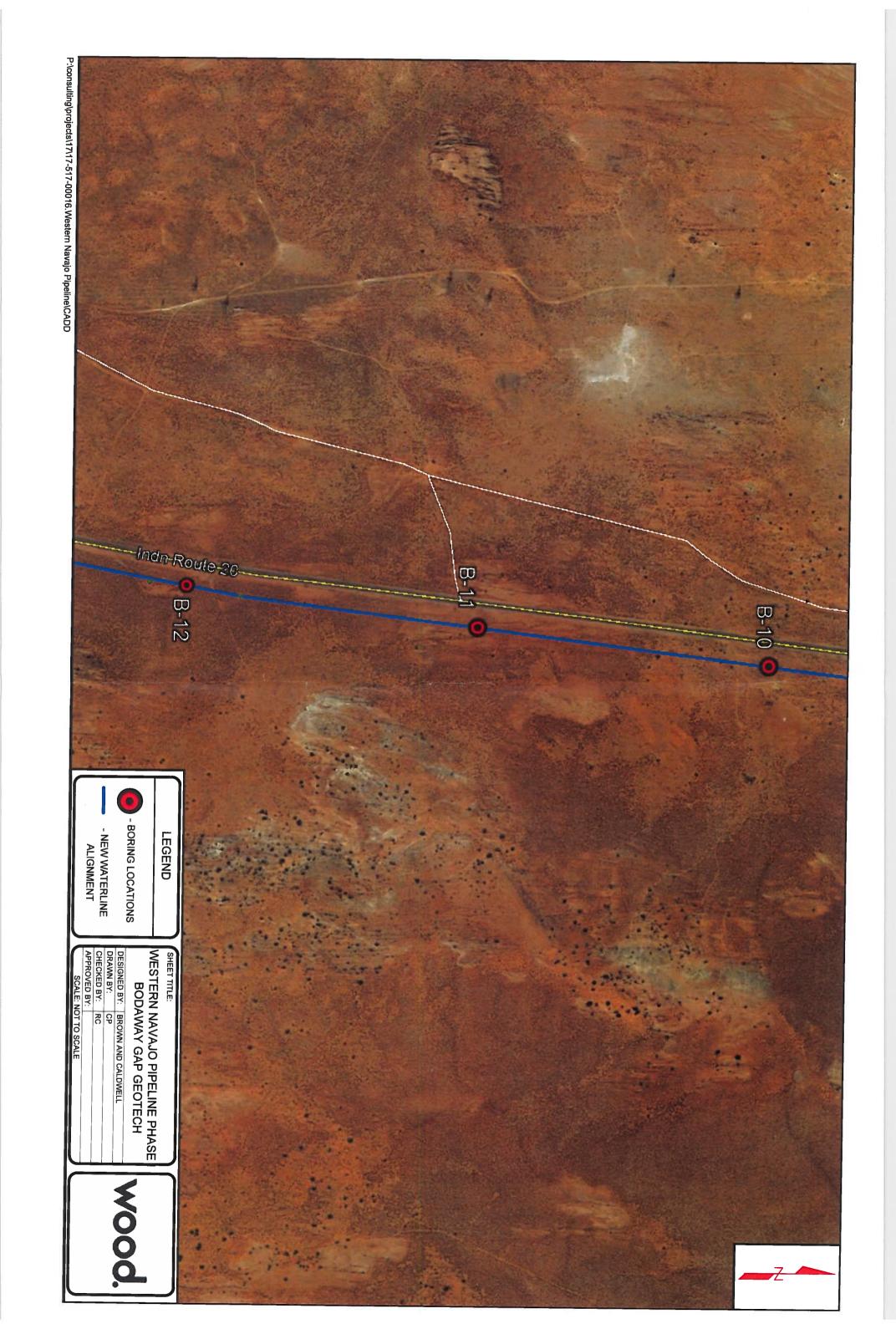
"Wood' is a trading name for John Wood Group PLC and its subsidiaries

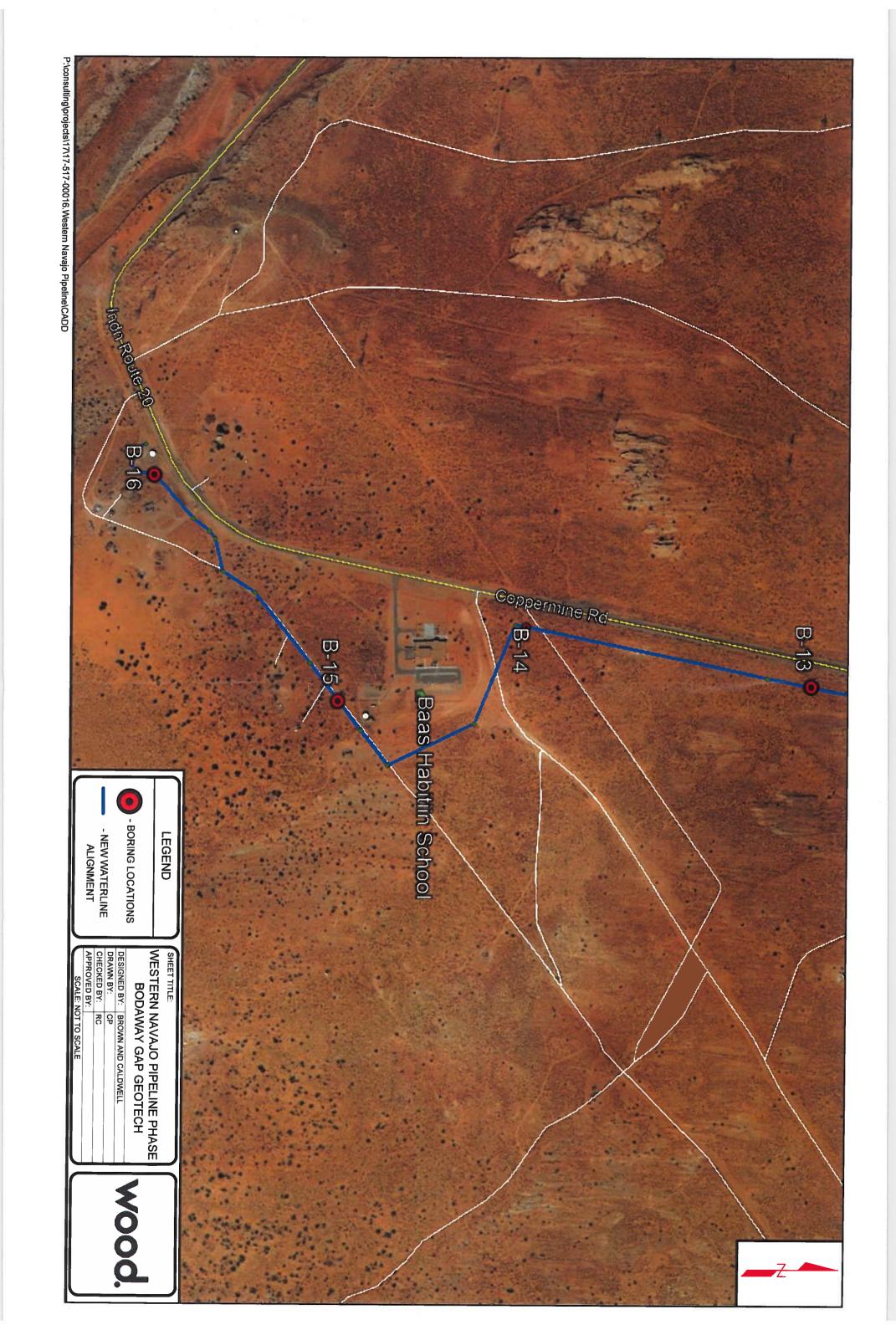
A-3











	Bo	odaway			Arizona	3 F11450	1, Douav	way-Qap	p Well and Pipline	Page 1 of 1
	4/*	/10/18							-	BORING NO. BG Well
י עסס	E&IPR	OJECI	NO.	•		<u> </u>	17517000)16.002	LOOAHON	See Boring Location Diagram
	ve g ttance	lical	el	Sample Type	Blows/ft. 140 lb. 30* free-fall drop hammer	Dry Density Ibs. per cubic foot	ure ant of Veight	Unified Soil Classification	RIG TYPE_ BORING TYPE SURFACE ELEV DRILLING CO.	CME-75 H.S.A N/A
	Relative Drilling Resistance	Graphical Log	Sample	Samp	1	Dry Di Ibs. p(cubic	and the second second second second	Unifie Soil Class	REMARKS	VISUAL CLASSIFICATION
0	t	10.23	∇	s			5	SP	medium dense	SAND fine-grained, nonplastic, rust-brown
1	l		X.	j.J	(*****)	•••••••••••••••••••••••••••••••••••••••				
ļ			H	[]						
J				<u> </u>	[]					
J		0.12	Ť	SA			2			WEATHERED SANDSTONE fine-grained, nonplastic, tan
- J	[1 1910		()					5	nonplastic, tan
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5	finning		1							
				U	50/4"		2			
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Ţ		1 899		17	[······]					
ļ	[]	1 1999	X		50/0*					
1			\times	5	50/3*		1			
ļ		1 1117		(and		*****			1	
J	[]			1.7					1	
10	[]		V	S	50/4"		2		2	trace iron oxide
۲		-		2	50/4				-	Stopped augers at 10.0'
1		1		1					X	Stopped sampler at 10.3
1		1	1 - 1 I		L					1.10
J	(mennerer)	4	·····							
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ļ	(1						-		
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)	[t	2222	1.7						
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1		1		1					s.	
25			****	1000				*****	ð	
	(GROUNDV	WATE	=R				AMPLE		Wood Environment & Infrastructure
[DEPTH				DATE		A-Auger C	Cuttings;	NR-No Recovery	WOOD ERVIOLINGIA & HILLASS ASSAS
Ţ	None		1	_			BS-Bulk S S-2" O.D.	., 1.38" I.I	.D. tube sample	
Ţ			- L					ົວມວະເກ	D. tube sample	

ROJE	В	odaway				e Phase	I, Bodav	way-Gap	o Well and Pipline	Page 1 of 1
	4/ E & I PF	/10/18					7517000	16 002		BORING NO. BG Tank
					Ŀ				BORING TYPE SURFACE ELEV.	See Boring Location Diagram CME-75 H.S.A N/A
	e ance	cal	0	e Typ	11. 30" amm	ensity r oot	re at of eight	icatio	DRILLING CO.	<i>1</i>
Feet	Relative Drilling Resistance	Graphical Log	Sample	Sample Type	Blows/ft. 140 lb. 30" free-fall drop hamme	Dry Density Ibs. per cubic foot	Moisture Content Percent of Dry Weight	Unified Soil Classification	REMARKS	VISUAL CLASSIFICATION
Ō			, , /	s	11		2	SP	medium dense	SAND predominantly fine grained, nonplastic,
			.Å.						2	rust-brown to tan
ļ			1	¥				•••••		
			NY	S A	35		6	SC-SM	very firm	SILTY CLAYEY SAND fine grained, trace calicum carbonate, nonplastic, tan
5				· · ·	00	100	4			CAND with site to a second to O(4) modiling
					23	109	4	SP-SM	medium dense	SAND with silt, trace gravel to 3/4", medium grained, nonplastic, yellowish brown, trace iron oxide
				ŝ	80/11"		2			WEATHERED SANDSTONE fine grained, nonplastic, tan
10										
10				(s	51		2			
		· · · · · ·		. .						
		-		.						
									-	
15				s	51		4			
					· • • • • • • • • • • • • • •		• • • • • • • • • • • • • • •		•	
				•						
20				7 s	42		6			
				1-						Stopped augers at 20.0'
		1							-	Stopped sampler at 21.5'
2000 2007 2007		•							× .	
		1								
25										
20				[
	DEPTH HOUR DATE				SAMPLE TYPE A-Auger Cuttings; NR-No Recovery BS-Bulk Sample			Wood Environment & Infrastructure		
₹ [None						U-3" O.D	2.42" .[D. tube sample D. tube sample	
							T-3" O.D.	thin wall	ed Shelby tube	

ΓE _	4/	/10/18		<u> </u>	Arizona				-	BORING NO. B-1
	E&IPR		Г NC).		1	17517000	016.002		See Boring Location Diagram
	ve g tance	nical	e	Sample Type	Blows/ft. 140 lb. 30" free-fall drop hammer	ensity ar foot	ure int feight	Unified Soil Classification	RIG TYPE BORING TYPE SURFACE ELEV. DRILLING CO.	CME-75 H.S.A N/A
reptri Feet	Relative Drilling Resistance	Graphical Log	Sample	Samp	Blows/ft. 140 lb. 30" free-fall drop hamm	Dry Density Ibs. per cubic foot	Moisture Content Percent of Dry Weight	Unifier Soil Classi	REMARKS	VISUAL CLASSIFICATION
0			X	7 S	7		1	SP-SM	loose to medium dense	SAND with silt, fine-grained, nonplastic, rust-brown
				/	12		1		•	
5				7 S	8		1			
				 	50/4"					WEATLEDED SANDOTONS (inc. groined
	······		X		00/4	· · · · · · · · · · · · · · · · · · ·	1	· · · · · · · · · · · · · · · · · · ·		WEATHERED SANDSTONE fine-grained, nonplastic, tan
10		100		< <u>s</u>	50/4"		1		1 2	Stopped augers at 10.0'
ļ										Stopped sampler at 10.3'
ļ										
								0	8	
15					· · · · · · · · · · · · · · · · · · ·					
	· · · · · · · · · · · · · · · · · · ·				• • • • • • • • • • • • • •	********				
				· · · · · ·						
20	·····								- - 	
	·····							1		
25	25									
20							S	AMPLE	TYPE	
Ā	G DEPTH None				DATE	1	A-Auger C BS-Bulk S	Cuttings; Sample	NR-No Recovery	Wood Environment & Infrastructure

TE		/10/18		<u>P.</u>	Arizona					BORING NO. B-2		
	E&IPR		r no).		1	17517000	16.002		See Boring Location Diagram		
	Relative Drilling Resistance	iical	le	Sample Type	Blows/ft. 140 lb. 30" free-fall drop hammer	Dry Density Ibs. per cubic foot	ure int Veight	Unified Soil Classification	RIG TYPE BORING TYPE SURFACE ELEV. DRILLING CO.	CME-75 H.S.A		
Feet	Relati Drillin Resis	Graphical Log	Sample	Samp	Blows 140 lt free-fi drop	Dry D Ibs. p cubic	Moisture Content Percent of Dry Weight	Unifie Soil Class	REMARKS	VISUAL CLASSIFICATION		
0				A	19				medium dense	SAND with silt, fine-grained, nonplastic, rust-brown		
				S	50/4"		1			WEATHERED SANDSTONE fine grained, nonplastic, tan		
5				 S	50/2"		1					
				S	50/1"		2					
10				- 	50/2"		3			Stopped augers at 10.0' Stopped sampler at 10.16'		
	· · · · · · · · · · · · · · · · · · ·					********		*********				
15				•								
		-						+ + + + + + + + + + + + + + + + + + + +	1			
20												
25												
25	1 1						S	AMPLE	TYPE			
∑ ▼	G DEPTH None	GROUNDV			DATE		A-Auger C BS-Bulk S	Cuttings; I Sample	NR-No Recovery	Wood Environment & Infrastructure		

TE.		0/18		- / -	Arizona					BORING NO. B-3		
	E & I PRO		NO			_1	7517000	16.002	LOCATION	See Boring Location Diagram		
	ve J ance	iical	٥	Sample Type	Blows/ft. 140 lb. 30" free-fall drop hammer	ensity sr oot	ure nt eight	Unified Soil Classification	RIG TYPE BORING TYPE SURFACE ELEV. DRILLING CO.	CME-75 H.S.A N/A		
Feet	Relative Drilling Resistance	Graphical Log	Sample	Sampl	Blows 140 lb free-fa drop h	Dry Density Ibs. per cubic foot	Moisture Content Percent of Dry Weight	Unifie Soil Classi	REMARKS	VISUAL CLASSIFICATION		
0				ŝ	51			SP-SM	very dense	SAND with silt, fine-grained, nonplastic, rust-brown		
										WEATHERED SANDSTONE fine-grained, nonplastic, rust-brown		
			\square	S	50/2"	NR						
			····									
5					E0/0							
			X	S	50/3"		2					
						*********		*******				
	********		\ge	ŝ	50/4"	******	2					
10		all a pa	×<	3	50/2"		1			Stopped augers at 10.0'		
										Stopped sampler at 10.16		
4 13 23												
				· · ·				11111111111111 1111111				

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15												
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00												
20												
							ļ					

25						****						
							S	AMPLE	TYPE			
Г					ATE		A-Auger C	Cuttings; I	NR-No Recovery	Wood Environment & Infrastructure		
Ā	None	100					BS-Bulk S S-2" O D). tube sample			
T			1					0.40110	. tube sample			

DODE & LIPROJECT NO.	TE _	- 4/	/10/18	y-Ga							BORING NOB-4		
Image: Second state Image: Second state	DOD	E&IPP	OJECT	Í NO	<i>J</i>		1	7517000	016.002	LOOATION			
0 x		ve g tance	iical	e	le Type	/ft. . 30* all	ensity er foot	ire nt nt of /eight	d lifeation	RIG TYPE BORING TYPE SURFACE ELEV.	CME-75 H.S.A		
0 3 12 3 SP-SM medium dense SAND with silt, fine-grained, nonplastic, nut-brown 5 3 50/4* 2 10 WEATHERED SANDSTONE fine-grained, nonplastic, nust-brown 10 3 50/4* 2 10 Stopped augers at 10.0° 10 3 50/4* 2 10 Stopped augers at 10.0° 15 3 50/4* 3 Stopped augers at 10.0° 15 3 50/4* 3 Stopped augers at 10.0° 15 3 50/4* 3 50/4* 10 20 3 50/4* 3 50/4* 10 21 3 50/4* 3 50/4* 10 22 3 50/4* 3 50/4* 10 23 3 50/4* 3 50/4* 10 24 3 50/4* 3 50/4* 10 25 3 50/4* 3 50/4* 10 26 3 50/4* 3 50/4* 10 10	ruepun in Feet	Relativ Drillinç Resist	Graph Log	Sampl	Sampl	Blows/ 140 lb. free-fa drop h	Dry De Ibs. pe cubic	Moistu Conter Percei Dry W	Unifiec Soil Classi	REMARKS	VISUAL CLASSIFICATION		
5 5 50/4" 2 10 2 5 50/4" 2 10 2 3 5 50/4" 2 10 2 3 5 50/4" 2 10 2 3 5 50/4" 2 10 2 3 5 50/4" 2 10 2 3 5 50/4" 2 10 2 3 5 50/4" 2 10 2 3 5 50/4" 2 11 3 3 5 50/4" 3 12 3 3 5 50/4" 10.16" 20 3 3 3 5 50/4" 10.16" 20 3 3 3 3 5 5 10.16" 20 3	0				7 s	12		S		medium dense	rust-brown		
10 5 50/3" 2 10 5 50/3" 2 10 5 50/3" 2 115 5 50/3" 2 20 5 50/3" 2 21 5 50/3" 2 22 5 50/3" 2 23 5 50/3" 2 24 5 50/3" 2 25 5 50/3" 2					S	50/4"		2			WEATHERED SANDSTONE fine-grained, nonplastic, rust-brown		
10 > 3 50/2 3 15	5	********			A S	50/4"		2					
10 > 3 50/2 3 11					 								
15 Stopped augers at 10.0° 20 Stopped sampler at 10.16° 21 Stopped sampler at 10.16°					- S	50/3"		2					
15	10			×	 	50/2"		3-			Stopped augers at 10.0		
20 25					•		*******				Stopped augers at 10.0 Stopped sampler at 10.16		
20									1 2000 00000000 1 2000 0000000 2 2000 0000000				
20	15				• • • •				· · · · · · · · · · · · · · · · · · ·				
20 25						•							
25		·····	-			• • • • • • • • • • • • • • • • • • •							
25	20		-										
						•			· · · · · · · · · · · · · · · · · · ·				
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	25												

TC			<u>/-Ga</u>	<u>.p.</u>	Arizona	-			#1) Col	BORING NO. B-5		
ATE _ OOD	4/1 E & I PR	/10/18 ROJEC1	TNC	0.			17517000	016.002				
		1			Blows/ft. 140 lb. 30" free-fall drop hammer			c	RIG TYPE BORING TYPE	See Boring Location Diagram CME-75 H.S.A N/A		
repun in Feet	Relative Drilling Resistance	Graphical Log	Sample	Samp'	Blows/ 140 lb free-fc drop l	Dry Density Ibs. per cubic foot	Moisture Content Percent of Dry Weight	Unified Soil Classi	REMARKS	VISUAL CLASSIFICATION		
0				s.	1		3	SM	firm	SILTY SAND fine-grained, nonplastic, rust-brown		
			M:::	≤ :s:	50/4"		1			WEATHERED SANDSTONE fine-grained, nonplastic, tan		
5			W	≤ s	5 50/3"	******	2		2 2			
				·								
				< 'S'	50/2"		2		- - 			
10	****		2	. <u>≥ 'i</u> j	50/2"				*	Stopped augers at 10.0'		
				·					e a	Stopped sampler at 10.16		
	•••••				• • • • • • • • • • • • • • • • • • •				4 20 20	51 St.		
15	******					<pre>////////////////////////////////////</pre>						
	·····											
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20					• • • • • • • • • • • • • • •			· · · · · · · · · · · · · · · · · · ·	- - -			
								•				
25	1 1		<u> </u>	·] · · ·								
₽	G DEPTH None			_	DATE		A-Auger C BS-Bulk S	Sample	: <u>TYPE</u> ; NR-No Recovery .D. tube sample	Wood Environment & Infrastructure		

TE		/10/18	-Ga	<u>p, /</u>	Arizona					BORING NO. B-6
	E & I PR			<i>.</i>			17517000	016.002	LOCATION	See Boring Location Diagram
					Blows/ft. 140 lb. 30* free-fall drop hammer			_	RIG TYPE BORING TYPE SURFACE ELEV. DRILLING CO.	CME-75 H.S.A N/A
Feet	Relative Drilling Resistance	Graphical Log	Sample	Samp	Blows/ 140 lb free-fa drop F	Dry Density Ibs. per cubic foot	Moisture Content Percent of Dry Weight	Unified Soil Classi	REMARKS	VISUAL CLASSIFICATION
0			X	S				SP-SM	medium dense	SAND with silt, fine-grained, nonplastic, rust-brown
			X	s	50/6"		1			WEATHERED SANDSTONE fine-grained, nonplastic, rust-brown to tan
			[]						i l	
5	·····		X	S	50/3"		2		,	
			 X	s	50/3"		4	· · · · · · · · · · · ·		
				3	50/3		1			
10				14.994 14.49						
				S	50/1"	NR				Stopped augers at 10.0' Stopped sampler at 10.08'
			****							Supper sampler at 10.00
	*****		****] 		*********					
								I III III III		
				1923					-	
15		l		300					1	
ļ		i.	1.554) 1.544							
ļ		i								
		I								
		i								
ļ		i							5	
20		i								
2.0		i						100100100		
ļ		i								
		i							e.	
		i			**********				4	
	*****	l								
	******	l								
25						1111111111				
	G	ROUNDV	NATE	R			<u>S</u>	AMPLE		Wood Environment & Infrastructure
	DEPTH	HOU	R	D	DATE	1	BS-Bulk S	Sample	NR-No Recovery	
₹	None						S-2" O.D.	., 1.38" I.F	D. tube sample D. tube sample	

		/10/18		ap, /				240.000		BORING NO. <u>B-7</u>		
100	Eäirn	IUJEC I). —	T		17517000	116.002		See Boring Location Diagram CME-75		
	Relative Drilling Resistance	nical	ale	Sample Type	Blows/ft. 140 lb. 30" free-fall drop hammer	Dry Density Ibs. per cubic foot	Moisture Content Percent of Dry Weight	Unified Soil Classification	RIG TYPE BORING TYPE SURFACE ELEV. DRILLING CO.	ME-75 H.S.A N/A		
Feet	Relatí Drillin Resis	Graphical Log	Sample	Samp	Blows 140 lt free-fi drop	Dry D Ibs. p cubic	Moist Conte Perce Dry V	Unifie Soil Class	REMARKS	VISUAL CLASSIFICATION		
0				7 S.	13		4	SP-SM	1	SAND with silt, fine-grained, nonplastic, rust-brown		
1				S S	50/5.5"		3			WEATHERED SANDSTONE fine-grained, nonplastic, rust-brown		
								,				
5				≤ s	50/5"		2		•			
						· · · · · · · · · · · · · · · · · · ·						
	********			≤ 's'	50/3"	• • • • • • • • • • • • • • • • • • • •	2					
10	••••••											
		-			50/2"		3			Stopped augers at 10.0' Stopped sampler at 10.16'		
15												
						-						
				•								
20												
				· · · · · · · · · · · · · · · · · · ·				-				
25												
						1	A-Auger (SAMPLE Cuttings;	TYPE NR-No Recovery	Wood Environment & Infrastructure		
∑ ▼	DEPTH None	HOU	<u>/R</u>	L	DATE		BS-Bulk S S-2" O.D.	Sample ., 1.38" I.I	.D. tube sample D. tube sample			

PROJE							<u>; I, Boda</u>	way-Gap	p Well and Pipline	Page 1 of 1
DATE		Bodaway 1/10/18	/-Ga	<u>р</u> , /	Arizona				25	BORING NO. B-8
	E&IPR		۲ NC).		1	7517000	016.002	LOCATION	See Boring Location Diagram
	ve g tance	lical	e	Sample Type	Blows/ft. 140 lb. 30" free-fall drop hammer	ensity er foot	ire nt /eight	Unified Soil Classification	RIG TYPE BORING TYPE SURFACE ELEV. DRILLING CO.	CME-75 H.S.A
Depth in Feet	Relative Drilling Resistance	Graphical Log	Sample	Samp	Blows/ 140 lb free-fc drop h	Dry Density Ibs. per cubic foot	Moisture Content Percent of Dry Weight	Unifier Soil Class	REMARKS	VISUAL CLASSIFICATION
0				s					very dense	SAND with silt, fine-grained, nonplastic, rust-brown
			T	S A			2			WEATHERED SANDSTONE fine-grained, nonplastic, rust-brown
5	*******									
5		Ultra are	×	S S	50/3"	<u></u>	2			Stopped augers at 5.0' Rufusal at 5.25' due to Sandstone
10		•								
					•					
15				· · · · ·						
	· · · · · · · · · · · · · · · · · · ·			· · · · · · · · · · · · · · · · · · ·						
20				• • • •						
				· · · · ·						
25										
¥ ₹	DEPTH None	GROUNDV			DATE		A-Auger (BS-Bulk S S-2" O.D. U-3" O.D.	Sample)., 1.38" I.E). 2.42" I.D	<u>TYPE</u> NR-No Recovery D. tube sample D. tube sample led Shelby tube	Wood Environment & Infrastructure

PROJE						e Phase	I, Boda	way-Gap	Well and Pipline	Page 1 of 1
			-Ga	р, /	Arizona					
DATE	4/ E&IPR	10/18 OJECT	NO).		1	7517000	16 002		BORING NO. B-9
					,			10.002	LOCATION	See Boring Location Diagram CME-75
	e ance	ical	Ð	Sample Type	ft. 30" ammer	ensity r oot	re nt eight	Unified Soil Classification	BORING TYPE SURFACE ELEV. DRILLING CO.	H.S.A N/A
Depth in Feet	Relative Drilling Resistance	Graphical Log	Sample	Sample	Blows/ft. 140 lb. 30" free-fall drop hammer	Dry Density Ibs. per cubic foot	Moisture Content Percent of Dry Weight	Unified Soil Classif	REMARKS	VISUAL CLASSIFICATION
0			X	ŝ	50/3"		4	SP-SM	very dense	SAND with silt, fine-grained, nonplastic, rust-brown
	+	1111				******				WEATHERED SANDSTONE fine-grained,
										nonplastic, rust-brown
	••••••		\geq	ŝ	50/3"		2			
	••••••]	50/5		£			
1										
5			~							
					50/2"-					Stopped augers at 5.0' Rufusal at 5.16' due to Sandstone
							• • • • • • • • • • • • •			
10				.						
				.						
				.						
			1	.				• • • • • • • • • • • • •		
15										
				.						
			}	.						
		1								
20										
					•					
8				-						
]								
25										
	1		I	1		1	-			
-		GROUNDV			,			AMPLE	<u>TYPE</u> NR-No Recovery	Wood Environment & Infrastructure
	DEPTH	HOU	R	0	DATE		BS-Bulk S	Sample		
⊻ ▼	None		_				S-2" O.D.	., 1.38" I.I	D. tube sample D. tube sample	
<u>-</u>									ed Shelby tube	
									·	

E		/10/18	-04	μ, η	Arizona				-	BORING NO. B-10
	E&IPR).		1	17517000	016.002		See Boring Location Diagram
					ft. 30" ammer			Ę	RIG TYPE BORING TYPE	CME-75 H.S.A
Feet	Relative Drilling Resistance	Graphical Log	Sample	Sample Type	Blows/ft. 140 lb. 30 [*] free-fall drop hammer	Dry Density Ibs. per cubic foot	Moisture Content Percent of Dry Weight	Unified Soil Classif	REMARKS	VISUAL CLASSIFICATION
0							1.1	1	very dense	SAND with silt, fine-grained, nonplastic, rust-brown
ļ				ŝ	50/6"	9	1			WEATHERED SANDSTONE fine-grained, nonplastic, tan
	······	1 1111		 		3	·····			
		1 11 11	.			Televiser				
5		1 88	·	. !					i.	
5		1	∑ 	S	50/2"		1		2	
1			1						2.1	
1										
/			25	s	50/2"		1			
1		1 873								
1									ð.	
10			<u> </u>	- 						
10		-]3	50/2"			· · · · · · · · · · · · · · · · · · ·		Stopped augers at 10.0'
1				·						Stopped sampler at 10.16
1										
						,	,			
,	[!	1								
15	[]	1								
15	!	1								
	/	1		•		•				
		1								
		1								
20		1			•					
20		1								
		1								
		1								
		1								
		-								
25										
	(GROUNDV	WATI	ER				SAMPLE		Wood Environment & Infrastructure
	DEPTH				DATE		BS-Bulk S	Sample	; NR-No Recovery	
$\overline{\nabla}$	None						S-2" O.D	., 1.38" I	.D. tube sample	

PROJE							I, Boda	way-Ga	p Well and Pipline	Page 1 of 1
		lodaway	/-Ga	<u>.p, /</u>	Arizona				-	BORING NO. B-11
	4/ E&IPR	/10/18 ROJECT).		4	17517000	016 002		
	T			/• T	τ		T	10.002	LOOAHON	See Boring Location Diagram CME-75
/				17	'				RIG TYPE BORING TYPE	H.S.A
1				Be	je j			5	SURFACE ELEV.	N/A
	ance	cal	0	e T	amr 30°	nsity oot	nt of eight	icati	DRILLING CO.	10
Depth in Feet		Graphical Log	Sample	Sample Type	Blows/ft. 140 lb. 30" free-fall drop hammer	Dry Density Ibs. per cubic foot	Moisture Content Percent of Dry Weight	Unified Soil Classification	REMARKS	VISUAL CLASSIFICATION
0	•••••		$\overline{\nabla}$	s			3	SP-SM	very dense	SAND with silt, fine-grained, nonplastic,
			<u> </u>	1						rust-brown
		1 1111		!		,				WEATHERED SANDSTONE fine-grained, nonplastic, rust-brown
				t		18150	••••••		E.	
		1 1.1.1	×		50/3"		2			
			Į	'					4 N	
5				اين	50/2	NR				
	+	1			JU/2					Stopped augers at 5.0' Rufusal at 5.16' due to Sandstone
		1								Rufusal at 5.16 due to Sanustone
	1	1								
		1								
		4								
	/	1						-		
		1		'				-		
10		1								
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L	1				-	-	5	SAMPLE	TYPE	
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∑ ▼	NUNE		+				S-2" U.U.	., 1.38" I.) 2 42" I.'	.D. tube sample D. tube sample	
- <u></u> -									lied Shelby tube	
									-	

PROJE						e Phase	I, Boda	.way-Gaj	p Well and Pipline	Page 1 of 1
		odaway-	<u>-Ga</u>	<u>.р, /</u>	Arizona				-	
	4/ E&IPR	/10/18 30.IECT		7		1	7517000	016 002	-	BORING NO. B-12
			T	·• —	1			10.002	LOCATION	See Boring Location Diagram CME-75
	(1							BORING TYPE	H.S.A
	e l			ype	j - L	2		tion		N/A
	g tanc	lical	<u>e</u>	E T	ham 30'	ensit er foot	line of veigh	d	DRILLING CO.	
Depth in Feet	Relative Drilling Resistance	Graphical Log	Sample	Sample Type	Blows/ft. 140 lb. 30* free-fall drop hammer	Dry Density Ibs. per cubic foot	Moisture Content Percent of Dry Weight	Unified Soil Classification	REMARKS	VISUAL CLASSIFICATION
0	[+		ŧ	ŝ			T	SP-SM		SAND with silt, fine-grained, nonplastic,
	[]		r X		['	[]	l			rust-brown
	<u> </u>		\downarrow	+	<u> </u> '	<u> </u>	<u> </u>			WEATHERED CANDOTONE fine grouped
				. !	!					WEATHERED SANDSTONE fine-grained, nonplastic, rust-brown
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	1	GROUNDW	MAT	.cB		1		SAMPLE		Wood Environment & Infrastructure
Γ	DEPTH				DATE		A-Auger (Cuttings;	; NR-No Recovery	WOOD Environment & Inirastructure
⊻	None	1					BS-Bulk S S-2" O.D.		.D. tube sample	
Y						1	U-3" O.D.). 2.42" I.[D. tube sample	
							Т -3" О. <i>.</i> .	. thin wai	lled Shelby tube	

TE_		10/18		_					<u>e</u>	BORING NO. B-13
000	E&IPR	OJECI	NU	/. 	T		17517000	<u>)16.002</u>	LOCATION	See Boring Location Diagram
	ve g tance	lical	ole	Sample Type	Blows/ft. 140 lb. 30" free-fall drop hammer	ensity er foot	ure int Veight	Unified Soil Classification	RIG TYPE_ BORING TYPE SURFACE ELEV DRILLING CO.	CME-75 H.S.A N/A
Feet	Relative Drilling Resistance	Graphical Log	Sample	Samp	Blows/ 140 lb free-fc drop h	Dry Density Ibs. per cubic foot	Moisture Content Percent of Dry Weight	Unifier Soil Class	REMARKS	VISUAL CLASSIFICATION
0				/s	and the second s		- Contraction of the second	SP-SM		SAND with silt, fine-grained, nonplastic, rust-brown
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				/ s	50/3"		4			WEATHERED SANDSTONE fine-grained, nonplastic, rust-brown
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₽	G DEPTH None				DATE		A-Auger (BS-Bulk S	Sample	<u>TYPE</u> NR-No Recovery .D. tube sample	Wood Environment & Infrastructure

PROJE						e Phase	I, Bodav	way-Gaj	p Well and Pipline	Page 1 of 1
-		Bodaway	/-Ga	p, /	Arizona				-	BORING NO. B-14
DATE	E&IPF	/10/18 ROJECT		<u>).</u>		1	7517000	116 002	£	
			T	÷	T,		T317000	10.002	LOOATION	See Boring Location Diagram CME-75
					1	1	1	1		H.S.A
	0		1	be	Jer .			u	SURFACE ELEV.	N/A
	d le	ical	<u>_</u>	le Ty	/ft. 30" lamn	ensit ir foot	ire nt of	ficati	DRILLING CO.	
Depth in Feet	Relative Drilling Resistance	Graphical Log	Sample	Sample Type	Blows/ft. 140 lb. 30" free-fall drop hammer	Dry Density Ibs. per cubic foot	Moisture Content Percent of Dry Weight	Unified Soil Classification	REMARKS	VISUAL CLASSIFICATION
0				s	11		2	SM	moderately firm to	SILTY SAND fine-grained, nonplastic,
					ļ!		[hard	rust-brown
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	********		\mathbb{N}	7 ŝ	87/7"		1			
				<u></u>	!					WEATHERED SANDSTONE fine-grained, nonplastic, rust-brown
	******		<u> </u>	.	!		*******		2	nonplastic, rust-brown
5	*******		<u>}</u>							
5			\ge	ŝ	50/6"	NR				
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ii.		GROUND						AMPLE Cuttings;	NR-No Recovery	Wood Environment & Infrastructure
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C. L									lled Shelby tube	

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TE		/10/18	/-Ga	<u>, ib' i</u>	Arizona				-	BORING NO. B-15
	E&IPR		ΓΝΟ	J.		4	17517000	016.002		
				e	t. 30" ammer				RIG TYPE BORING TYPE	See Boring Location Diagram CME-75 H.S.A N/A
Depth in Feet	Relative Drilling Resistance	Graphical Log	Sample	Sample Type	Blows/ft. 140 lb. 30" free-fall drop hamme	Dry Density Ibs. per cubic foot	Moisture Content Percent of Dry Weight	Unified Soil Classification	REMARKS	VISUAL CLASSIFICATION
0	•••••			S			3	SP-SM		SAND with silt, fine-grained, nonplastic, rust-brown

1			-	<u> s</u>	73/10"	0.00	1			WELFNERE CANDOTONE Fine grained
				<u> </u>						WEATHERED SANDSTONE fine-grained, nonplastic, rust-brown
5			 X	s	50/4"		2			
1				·]						
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1			\geq	≤ s	50/4"		2			
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1]			• • • • •	•					
10					50/2"	NR			<u></u>	Stopped augers at 10.0'
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ſ	DEPTH				DATE		A-Auger (BS-Bulk s	Cuttings;	; NR-No Recovery	Wood Environment & Infrastructure
⊻ ▼	None								.D. tube sample	

TE _		/10/18		<u> </u>	Arizona				•	BORING NO. B-16
	E&IPR	OJECT	í NO	١.		1	17517000	<u>J16.002</u>		See Boring Location Diagram
	/e J tance	ical	0	Sample Type	Blows/rt. Blows/rt. 140 lb. 30" free-fall drop hammer	ansity ar foot	re nt eight	Unified Soil Classification	RIG TYPE BORING TYPE	CME-75 H.S.A
Eeet Feet	Relative Drilling Resistance	Graphical Log	Sample	Sampl	Blows/ft. 140 lb. 30" free-fall drop hamm	Dry Density Ibs. per cubic foot	Moisture Content Percent of Dry Weight	Unifiec Soil Classi	REMARKS	VISUAL CLASSIFICATION
0				/ s			2	SP	dense	SAND with silt and gravel to 1", well-graded, nonplastic, brown
	<u> </u>	l 115	-	+	<u> </u>					WEATHERED SANDSTONE fine-grained,
1	(*************************************		\geq	ŝ	50/6"	£	3			nonplastic, tan
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5				<u> s</u>	50/3"	NR				
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/	1	1		1)						
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ſ							A-Auger C	Cuttings;	; NR-No Recovery	Wood Environment & Infrastructure
⊻	DEPTH None	I HOU	/H		DATE		BS-Bulk S	Sample		
Ť			+				S-2 U.L.	., 1.30	.D. tube sample .D. tube sample	

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APPENDIX B

Laboratory Testing Procedures

Classification Test Data

Consolidation Test Data

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LABORATORY TESTING PROCEDURES

<u>Consolidation Tests</u> Soiltest or Clockhouse apparatus of the "floating-ring" type are employed for the onedimensional consolidation tests. They are designed to receive one inch high, 2.5 inch O.D. brass liner rings with soil specimens as secured in the field. Procedures for the tests generally are those outlined in ASTM D2435. Loads are applied in several increments to the upper surface of the test specimen and the resulting deformations are recorded at selected time intervals for each increment. For soils which are essentially saturated, each increment of load is maintained until the deformation versus log of time curve indicates completion of primary consolidation. For partially saturated soils, each increment of load is maintained until the rate of deformation is equal or less than 1/10,000 inch per hour. Applied loads are such that each new increment is equal to the total previously applied loading. Porous stones are placed in contact with the top and bottom of the specimens to permit free addition or expulsion of water. For partially saturated soils, the tests are normally performed at in situ moisture conditions until consolidation is complete under stresses approximately equal to those which will be imposed by the combined overburden and foundation loads. The samples are then submerged to show the effect of moisture increase and the tests continued under higher loadings. Generally, the tests are continued to about twice the anticipated curve due to overburden and structural loads, with a rebound curve then being established by releasing loads.

<u>Expansion Tests</u> The same type of consolidometer apparatus described above is used in expansion testing. Undisturbed samples contained in brass liner rings are placed in the consolidometers, subjected to appropriate surcharge loads and submerged. The loads are maintained until the expansion versus log of time curve indicates the completion of "primary swell".

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ድ :	frown & Ca	Brown & Caldwell Consultants	ultants													Report Date: April 24, 2018	2018	
>	PO Box 8045 Walnut Creek,	CA	94596	a).												Project #: 17-517-00016.02 Work Order #: 1	00016.02	
Attention: J	Julia Pierson	F														Sampled By: Carlton Pine	Pine	
Project Name: V B	Vestern Na Iodaway Gi	Western Navajo Pipeline Phase I Bodaway Gap Supply Well & Transmiss	ie Phas Vell & T	e I ransmis	ş											Date Sampleu: 4/10/2010 Siava Analysis (ASTM C147,04/C136,06)	10 C117_AAIC136	-06)
Project Manager:	John Leeper	_									SOU S / ACCDECATES	U L				Plasticity Index (ASTM D4318-10) Plasticity Index (ASTM D4318-10) Soil Classification (ASTM D2487-10)	D2487-10)	(00)
									20157		Sil	Sieve Sizes	se			Sieve Re-	Sieve Result are as Percent Passing.	rcent Passin
Sample Location	Soil Class.	L.L. P.I.	#200	#200 #100	#50	#40	#30	#16 #	#10 #	* 8#	#4 1/	1/4" 3/8"	s" 1/2"		1.	1 1/4" 1 1/2" 2"	3" 6" 13	Lab 12" Number
BG Tank 5.0-6.0'	SP-SM	NN NP	6.9	13	25	34	38	44	51	54	67	œ	82 85	96	100			18-0153-03
BG Tank 2.5-5.0'	SC-SM	21 4	18	41	20	81	86	06) 93	94	98	10	100					18-0153-08
BG Well 2.5-5.0'	SM	NV NP	13	47	92	96	97	97	97 9	98	66	1(100					18-0153-14
B-1 @ 5.0-6.5'	SP-SM	NV NP	4.6	28	67	86	97	97	86	98	66	1(100					18-0153-17
B-2 @ 0.0-5.0'	SP-SM	NV NP	12	42	77	92	97	98	98	98	66	1(100					18-0153-25
B-3 @ 5.0-5.2'	GP-GM		5.9	19	28	29	29	29	29	29	29	ŝ	30 31	52	100			18-0153-27
B-4 @ 0.0-5.0'	SP-SM	NV NP	10	38	79	92	96	96	96	67	66	10	100					18-0153-35
B-5 @ 0,0-1,5'	SM	NV NP	14	37	72	84	86	87	88	89	93	D	96 97	100	0			18-0153-36
B-6 @ 2.5-3.0'	SP-SM		10	28	71	89	94	95	96	96	97	σ	99 100	0				18-0153-42
B-7 @ 2.5-2.9'	SM		14	49	70	74	76	78	80	81	87	96	6 100	0				18-0153-46
B-8 @ 2.5-5.0'	SM	NV NP	16	41	83	06	91	92	63	93	95	6	98 98	3 100	0			18-0153-53
B-10 @ 0.0-5.0'	SP-SM	NV NP	8.3	22	73	98	66	100										18-0153-61
B-12 @ 2.5-2.9'	SP-SM		10	50	87	89	06	91	92	92	95	0	98 100	0				18-0153-65
B-13 @ 0.0-5.0'	SP-SM	NV NP	1	48	83	92	95	96	97	67	66	1(100					18-0153-73
B-14 @ 2.5-3.6'	SM	NV NP	15	74	93	95	95	96	97	67	66	1	100					18-0153-75
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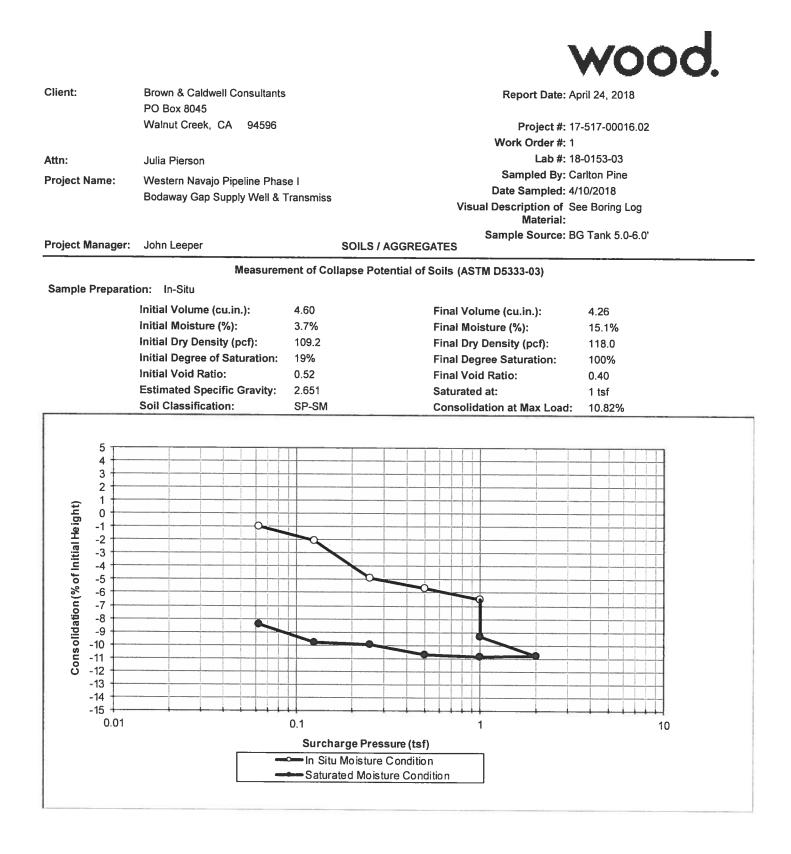
AMEC Environment & Infrastructure, Inc. 8519 Jefferson NE Albuquerque, NM 87113 Tel 5058211801 Fax 5058217371

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	Brown & Caldwell Consultants	aldwell	Consult	tants												R	eport D	Report Date: April 24, 2018	il 24, 2	2018		
	PO Box 8045 Walnut Creek, CA	45 ek, C	A 94596	96													Proje	Project #: 17-517-00016.02	517-00	016.02		
	Julia Pierson	Ĕ														ν. Ν	Work Order #: 1 Sampled By: C	Vork Order #: 1 Sampled By: Carlton Pine	lton Pi	ine		
Project Name:	Western Navajo Pipeline Phase I	avajo F	ipeline 1	Phase I												Dat	e Samp	Date Sampled: 4/10/2018	0/2018	~		
	Bodaway Gap Supply Well & Transmiss	sap Su	pply We	il & Tra	nsmiss											Sier Plas	ve Anal ticity In	Sieve Analysis (ASTM C117-04/C136-06) Plasticity Index (ASTM D4318-10)	TM C	117-04/ 4318-11	(C136-0 0)	(9
er:	Project Manager: John Leeper	sr	i						so	NLS / A	GGRE	SOILS / AGGREGATES				Soil Cl	assifica	Soil Classification (ASTM D2487-10)	TM D	2487-1((0	
												Sieve Sizes	Sizes					Sieve	e Resu	ult are a	as Perc	Sieve Result are as Percent Passing.
Sample Location	Soil Class.	L.L.	L.L. P.I. #200 #100 #50	¹ 200 #	100 #5	50 #40	0 #30	0 #16	#10	8#	#4	1/4" 3	3/8" 1/	1/2" 3/	3/4' 1'	1" 11/4"11/2" 2" 21/2" 3"	12" 2	2 1/2	. 3.	6"	12"	Lab Number
B-15 @ 0.0-5.0'	SP-SM	NV NP	ЧN	5	47 77	7 84	4 88	88	89	89	91		94 6	97 10	100							18-0153-81
B-16 @ 0.0-1.5'	SW-SM	NV NP		8.7	14 2	20 23	3 25	5 31	38	40	53		71 7	77 8	89 100	Q						18-0153-82

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APPENDIX C

Specifications for Earthwork

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SPECIFICATIONS FOR EARTHWORK

1. SCOPE

Includes all clearing and grubbing, removal of obstructions, general excavating, grading and filling and any related items necessary to complete the grading for the entire project in accordance with these specifications.

2. SUBSURFACE SOIL DATA

Subsurface soil studies have been made, and the results are available for examination by the contractor. The contractor is expected to examine the site and determine for himself the character of materials to be encountered.

No additional allowance will be made for rock removal, site clearing and grading, filling, compaction, excess excavation due to loose materials or shallow groundwater conditions, disposal or removal of any unclassified materials.

3. CLEARING AND GRUBBING

- **A. General:** Clearing and grubbing will be required for all areas shown on the plans to be excavated or on which fill is to be constructed.
- **B. Clearing:** Clearing shall consist of removal and disposal of vegetation as well as down timber, snags, brush and rubbish within the areas to be cleared.
- **C. Grubbing:** Stumps, matted roots and roots larger than 3 inches in diameter shall be removed from fill soils used as pipe trench backfill. Materials as described above shall not be used or allowed to remain within 18 inches of finished subgrade in either cut or fill sections and shall be removed. Areas disturbed by grubbing will be filled as specified hereinafter for STRUCTURAL FILL.

4. EARTH EXCAVATION

- **A.** Earth excavation shall consist of the excavation and removal of suitable soil for use as backfill or embankment, as well as, the satisfactory disposal of all vegetation, debris and deleterious materials encountered within the area to be graded and/or in a borrow area.
- **B.** Excavated areas shall be continuously maintained such that the surface shall be smooth and have sufficient slope to allow water to drain from the surface. Excavation trenches shall be bermed or controlled to prevent surface runoff from entering the trenches.

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5. STRUCTURAL FILL

A. General: Structural fill shall consist of controlled fill constructed in areas indicated on the grading plans.

B. Materials:

(1) **Physical Characteristics:** Structural fill material shall consist of soil that conforms to the following physical characteristics:

Sieve Size	Percent Passing
(Square Openings)	<u>by Weight</u>
3 inch	100
3/4 inch	70 - 100
No. 4	40 - 100
No. 200	15 - 50

The plasticity index of the material, as determined in accordance with ASTM D 4318, shall not exceed 12. The structural fill material shall be free from roots, grass, other vegetable matter, clay lumps, rocks larger than 3 inches in any dimension, or other deleterious materials.

(2) Granular Pipe Bedding: Material shall consist of a granular material that conforms to the following physical characteristics:

Sieve Size	Percent Passing
<u>(Square Openings)</u>	<u>by Weight</u>
3/4 inch	100
1/2 inch	90 - 100
3/8 inch	40 - 70
No. 4	0 - 15
No. 80	0 - 5
No. 4	0 - 15

The granular bedding material shall be nonplastic as determined in accordance with ASTM D 4318. The material shall be free from roots, grass or other vegetable matter, clay lumps or other deleterious materials.

(3) Trench Backfill: Material shall consist of soil that conforms to the following physical characteristics:

Sieve Size	Percent Passing
<u>(Square Openings)</u>	<u>by Weight</u>
4 inch	100
No. 200	0 - 25

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wood.

The plasticity index of the material, as determined in accordance with ASTM D4318, shall not exceed 12. The trench backfill material shall be free from roots, grass or other vegetable matter, clay lumps or other deleterious materials.

(4) **Site Soil:** Site soil from cuts may be used for structural fill, granular pipe bedding and trench backfill provided they meet the requirements in paragraph 5.B.(1), 5.B.(2) and 5.B.(3). The results of this soil study indicate that some of the soils encountered along the pipeline alignment will meet the requirements for structural fill and backfill materials. Import will likely be required for bedding materials required for the project. Some blending of native materials may be required to meet the requirements for structural fill and trench backfill.

(5) **Borrow:** When the quantity of suitable material required for backfill or embankments are not available within the limits of the job site, the contractor shall provide sufficient materials to construct the fills and embankments to the lines, elevations and cross sections as shown on the drawings from borrow areas. The contractor shall obtain from owners of said borrow areas, the right to excavate material, shall pay all royalties and other charges involved, and shall pay all expenses in developing the source including the cost of right-of-way required for hauling the material.

C. Construction:

(1) <u>Foundations – Well Site</u>: The footing areas shall be overexcavated to such an extent as to support the footings entirely on weathered sandstone bedrock or on structural fill extending on the sandstone bedrock. Overexcavation shall extend laterally a distance equal to 2/3rds the thickness of the structural fill or a minimum distance of 2.0 feet beyond the footing perimeters. The building area shall be overexcavated so as to provide for a minimum of 1.0 foot of structural fill below all floor slabs. Prior to placement of any fill or construction of pavements, the exposed native soils shall be scarified to a minimum depth of 8 inches and watered as necessary to bring upper 1.0 foot to the optimum moisture content or above, and compacted to a minimum of 95 percent of ASTM D1557 maximum dry density.

(2) Foundations – Water Tank: Treatment shall include all foundations and tank base for the project.

Site preparation shall consist of overexcavating the native soils to such an extent as to provide for a minimum of 3.0 feet of structural fill below the tank foundations and tank bottom. Site preparation at the base of excavation shall consist of scarifying the native soils to a depth of 8 inches. The scarified soil shall then be brought to optimum moisture content or above and compacted.

(3) **Pipeline Bedding Treatment:** Site preparation for the installation of the pipeline shall consist of scarifying the native soil to a depth of 8 inches, watering as necessary to bring to within plus or minus 2 percent of optimum moisture content and compacting. A minimum of 12 inches of granular bedding material shall be placed and compacted along the top and sides of the pipes. A minimum of 6 inches of granular bedding material shall be placed and compacted below the pipes. The granular bedding material shall be



wood.

compacted to a density of not less than 90 percent of the maximum dry density. Moisture content at the time of compaction shall be within 2 percent of optimum as determined by ASTM D 1557.

(4) **Compaction:** All fill required beneath paved areas or fills required to support structural loadings shall be spread in layers not exceeding 8 inches, watered as necessary and compacted. Moisture content at the time of compaction shall be within plus or minus 2 percent of optimum moisture content. Compaction of the fill shall be accomplished by mechanical means only to obtain a density of not less than 95 percent of maximum dry density for the trench backfill and pipe pit excavation fills. Fill required outside of paved areas or fills not required to support structural loadings shall be compacted to 90 percent of maximum dry density. Optimum moisture content and maximum dry density for each soil type used shall be determined in accordance with ASTM D 1557. Where vibratory compaction equipment is used, it shall be the contractor's responsibility to insure that the vibrations do not damage nearby buildings or other adjacent property.

(5) Weather Limitations: Controlled fill shall not be constructed when the atmospheric temperature is below 35 degrees F. When the temperature falls below 35 degrees, it shall be the responsibility of the contractor to protect all areas of completed surface against any detrimental effects of ground freezing by methods approved by the geotechnical engineer. Any areas that are damaged by freezing shall be reconditioned, reshaped and compacted by the contractor in conformance with the requirements of this specification without additional cost to the owner.

D. Slope Protection & Drainage: The edges of the controlled fill embankments shall be graded to the contours shown on the drawings and compacted to the density required in paragraph 5.C.(3). Embankment slopes steeper than 1 vertical to 3 horizontal shall be protected from erosion.

6. INSPECTION & TESTS

A. Field Inspection & Testing: The owner shall employ the services of a registered, licensed geotechnical engineer for consultation during all controlled earthwork operations. The geotechnical engineer shall provide continuous on-site observation and testing by experienced personnel during construction of controlled earthwork. The contractor shall notify the engineer at least two working days in advance of any field operations of the controlled earthwork, or of any resumption of operations after stoppages. Tests of fill materials and embankments will be made at the following suggested minimum rates:

(1) One field density test for each 1,000 lineal feet of prepared trench per 8-inch lift in nonstructural areas. In structural areas, one field density test for each 250 lineal feet of prepared trench per 8-inch lift.

(2) One field density test in the building area for each 2,500 square feet of original ground surface prior to placing fill.

(3) One field density test for each 500 square feet of prepared subgrade and each 8-inch lift of structural fill below foundations and slabs.





(4) One moisture-density curve for each type of material used, as indicated by sieve analysis and plasticity index.

B. Report of Field Density Tests: The geotechnical engineer shall submit, daily, the results of field density tests required by these specifications.

C. Costs of Tests & Inspection: The costs of tests, inspection and engineering, as specified in this section of the specifications, shall be borne by the owner.

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Exhibit B: Environmental Assessment

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Bodaway-Gap Contract 2 Bid Issue SERVING INDIAN COUNTRY SINCE 1995

WWW.ETD-INC.COM ENVIRONMENTAL COMPLIANCE | PROJECT MANAGEMENT | COMMUNITY RELATIONS

May 20, 2020

Myles Lytle Bureau of Indian Affairs, Navajo Region P.O. Box 1060 Gallup, New Mexico 87505

RE: Revisions to EA-19-35175: Environmental Assessment for the Western Navajo Pipeline, Phase I: Bodaway/Gap Well and Pipeline Project

Dear Myles:

ETD Received a FONSI for this EA (EA-19-35175) on August 13, 2019. Since then, Navajo Nation Department of Water Resources discovered a need for an additional ROW to the project to accommodate a drain line at the proposed water tank, adding 0.2-acre to the project Area of Potential Effect. ETD obtained all the updated clearances (Cultural and Biological) and updated the EA to reflect the changes to the ROW. The only revisions made to the EA are described below:

- Section 1.1 Summary Updated the APE to 31.8 acres; New impacts will be 30.4 acres
- Section 2.1 Proposed Action Updated the description to be more concise in the introduction and updated (D) to reflect the new 325' drain line and updated ROW
- Sections 3.5 and 4.5 Cultural Resources Added the findings of the new cultural survey for the drain line; made findings more concise and removed Figure 4; added one more site to avoid in the mitigation measures
- Section 4.13 Summary of Mitigation Measures Updated Cultural Resources Mitigation Measures to include a new site to avoid.
- Section 7 References Added the new Cultural Resources Inventory Report citation (Burke 2020)

Please accept our revised EA. I also attached a copy of the FONSI with the comments in areas that need to be revised. The areas that have comments include the project descriptions on pages 1 and 2 as well as minor edits to items #9 and #10. If you have any questions, please contact me at (928) 779-6032.

Sincerely,

2 Miller

Kristin Miller, Environmental Scientist ETD, Inc.

2020

Revised Environmental Assessment:

Western Navajo Pipeline, Phase I Bodaway/Gap Well and Pipeline Project, Coconino County, Arizona

ETD, Inc. Consulting and Applied Research

Environmental Assessment May 2020 (Revised)

Project: Western Navajo Pipeline, Phase I: Bodaway/Gap Well and Pipeline Project

Bodaway/Gap Chapter, Navajo Nation, Coconino County, Arizona

Prepared for:

Brown and Caldwell 6975 Union Park Center, Suite 490 Midvale, Utah 84047

and the Lead Federal Agency:

Bureau of Indian Affairs Navajo Regional Office P.O. Box 1060 Gallup, New Mexico 87301

Prepared by:

ETD, Inc. 2101 N. 4th Street, Suite 201 Flagstaff, Arizona 86004

Contact:

Eunice Tso Principal Tel: (928) 779-6032

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Acronyms

APE	Area of Potential Effect
BE	Biological Evaluation
BIA	Bureau of Indian Affairs
CERCLA	Comprehensive Environmental Response, Compensation, and Liability Act
CRI	Cultural Resources Inventory
EA	Environmental Assessment
ESM	EnviroSystems Management, Inc.
FEMA	Federal Emergency Management Agency
FONSI	Finding of No Significant Impact
GHG	Greenhouse Gas
10	Isolated Occurrence
LUST	Leaking Underground Storage Tank
NAAQS	National Ambient Air Quality Standards
NEPA	National Environmental Policy Act
NNDFW	Navajo Nation Department of Fish and Wildlife
NNDWR	Navajo Nation Division of Water Resources
NNHHPD	Navajo Nation Heritage and Historic Preservation Department
NPDES	National Pollutant Discharge Elimination System
NRCS	National Resource Conservation Service
NRHP	National Register of Historic Places
NTUA	Navajo Tribal Utility Authority
N20	Navajo Route 20
RCRA	Resource Conservation and Recovery Act
ROW	Right-Of-Way
SWPPP	Storm Water Pollution Prevention Plan
ТСР	Traditional Cultural Properties
TES	Threatened, Endangered, and Sensitive
TSCA	Toxic Substances Control Act
USEPA	U.S. Environmental Protection Agency
USFWS	U.S. Fish and Wildlife Service
USGS	U.S. Geological Survey
UST	Underground Storage Tank
WMB	Water Management Branch
WRCC	Western Regional Climate Center

1. Introduction

1.1 Summary

The Navajo Nation Water Management Branch (WMB) proposes to develop water infrastructure systems to expand the use of Lake Powell water to Navajo Chapters throughout Western Navajo Agency. Phase I of the Western Navajo Pipeline involves planning and construction of various water infrastructure components facilities in the communities of LeChee, Bodaway/Gap, and Cameron Chapters. This Environmental Assessment (EA) covers the Bodaway-Gap Pipeline alignment. Under the proposed action, the Navajo Nation WMB will install 32,805 feet (6.2 miles) and 21,298 feet (4.0 miles) of new water and power distribution lines (respectively), as well as one (1) new well, one (1) new storage tank with a drain line and access road connection, and one (1) new altitude valve that controls the rate of flow. The Area of Potential Effect (APE) for the entire project will be 31.8 acres; 30.4 acres will be new impacts. Once completed, the waterline will be turned over to the Navajo Tribal Utility Authority (NTUA) for operation and maintenance.

NTUA will apply for a Right-of-Way (ROW) for the proposed action from Bureau of Indian Affairs (BIA)'s Navajo Regional Office in Gallup, New Mexico. The BIA, who is identified as the Lead Agency, will approve or deny the ROW application. This federal action triggers the National Environmental Policy Act (NEPA) process. This Environmental Assessment (EA) has been prepared to meet the requirements of NEPA. It follows the BIA 59 IAM 3-H NEPA Guidebook (2012). No significant impacts to the environment were identified in this EA and it is expected that the BIA will issue a Finding of No Significant Impact (FONSI).

1.2 Sequencing NEPA with Other Related Laws

NEPA regulations encourage that EAs be prepared concurrently with other relevant federal statutory and regulatory requirements, such as the evaluation and consultation under the Endangered Species Act (ESA), National Historic Preservation Act (NHPA) Section 106 Consultation, and Clean Water Act permits (e.g. Section 401 and 404 permits) and similar Navajo Nation laws. The NEPA process must be coordinated with a Navajo Nation's environmental review process to ensure that the following federal and tribal statutes and regulations that apply to activities under the proposed action are addressed:

- National Environmental Policy Act (16 U.S.C. § 470 et seq.) and regulations (40 CFR 1500)
- National Historic Preservation Act [16 U.S.C. § 470 et seq.]
- Navajo Nation Cultural Resource Protection Act (NNC § 1001)
- Endangered Species Act [16 U.S.C. § 1531 et seq.]
- Navajo Endangered Species List (RCS-41-08)
- Navajo Nation Biological Resource Land Use Clearance Policies and Procedures (RCMA-44-038)
- Clean Water Act [33 U.S.C §1251 et seq.]
- Navajo Nation Clean Water Act (C.J.Y.-81-99)
- Farmland Protection [7 CFR 658]

1.3 Purpose and Need for Project

The purpose of the Western Navajo Pipeline project is to supplement the current water supply for areas that are reliant on limited groundwater supplies. Phase I of the project was developed by integrating goals and objectives of NTUA, Indian Health Service, and WMB for a regional water infrastructure system. Without the Western Navajo Pipeline, very little water from Lake Powell could be put to beneficial use. Communities like Bodaway/Gap, a community of 1,704 people with 474 houses would continue to rely on limited ground water supplies. Future development including fire stations, laundromats, and restaurants would be limited without the project.

1.4 Location

The proposed project is located near the junction of US Highway 89 and Navajo Route 20 (N20), known as "The Gap." This area is also the point where Tuba City, Coppermine, and Bodaway-Gap's Chapter boundaries meet. While the project extent passes through a small area in the southern portion of Coppermine Chapter and a small area in the northwestern portion of Tuba City Chapter, it is mostly in the Bodaway-Gap community. The legal location is as follows: Sections 9-11, 16, 21, 28, 32 & 33 in Township 34 North, Range 9 East. The reference maps (USGS 7.5' Arizona quadrangles) are: *The Gap* and *Toh Bih Nosteny*.

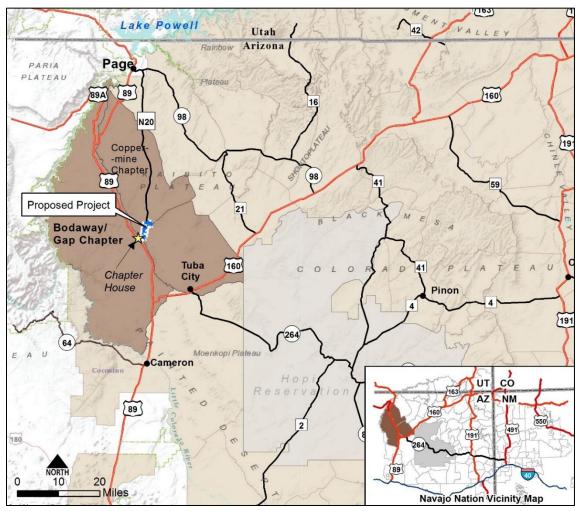


Figure 1. General location map showing the proposed project.

2. Alternatives (Including the Proposed Action)

Below we describe the proposed action and no action scenarios. There were no alternative actions selected for this project.

2.1 Proposed Action

Under the proposed action, the Navajo Nation WMB and NTUA will install new water and power lines along the east side of N20, northeast of The Gap. The various components include:

- A. 4.6 miles of new water distribution line, 4.0 miles of new power lines, and (1) altitude control valve within a new 45-foot-wide ROW (25.1 acres)
- B. 1.6 miles of new water distribution line within a new 30-foot-wide ROW (5.8 acres);
- C. One (1) new well in a 10,000 square-foot (0.2 acre) ROW;
- D. One (1) new storage tank with a 30-feet-long access road connection and 325 feet-long drain line in a 32,170 square-foot (0.7 acre) ROW;

Overall, the APE for the project is 31.8 acres. Only 1.4 acres will take place within an existing ROW. 30.4 acres of the APE will result in new impacts. See **Figure 2** for a topographic map showing the project alignment.

2.2 No Action

Under the no action alternative, the proposed water line would not be constructed and there would be no impact to the natural environment. If other portions of the Western Navajo Pipeline are completed and this part is not, the waterline must be rerouted in order to bring water to communities south of LeChee. If the Western Navajo Pipeline is not complete, these communities must rely on a depleting groundwater supply in order to meet the communities' fresh water needs.

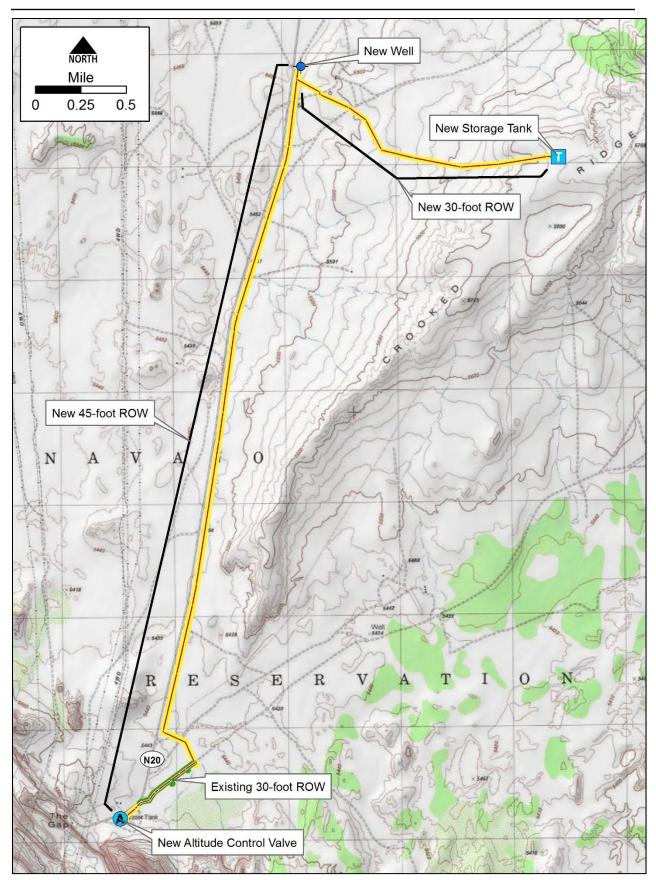


Figure 2. Topographic map showing the project's extent and ROWs.

3. Description of the Affected Environment

This Chapter describes the existing conditions in and around the project site and establishes the baseline data upon which the impacts have been evaluated in Chapter 4.

3.1 Land Resources

This section discusses the geology, topography, soils and mineral resources in the area of the proposed project.

3.1.1 Geology

The project area lies within the Colorado Plateau, a land of scenic beauty characterized by sparsely vegetated plateaus, mesas, deep canyons, and barren badlands. The Colorado Plateau encompasses about 140,000 square miles in the four corners region, drained principally by the Colorado River and its tributaries the Green, San Juan, and Little Colorado Rivers (Foos 1999). The structure of the plateau is dominated by ten major basement-cored uplifts associated with monoclines, which were constructed during the Late Cretaceous through early Tertiary Laramide orogeny (Davis, G.H. and Bump, A.P. 2009). The project area lies on the east side of the Echo Cliffs Monocline on the Kaibeto Plateau.

Rock units exposed in the area are part of the Glen Canyon Group. This group was formed during the early Jurassic (180-210 Ma) (AZGS 2000). It is described as conspicuously red, cross-bedded Wingate Sandstone and conspicuously cross-bedded, eolian, red to buff Navajo Sandstone, forming prominent cliffs in northern Arizona. These two sandstone units are separated by variably colored siltstone, silty sandstone, and sandstone of the Kayenta and Moenave Formations. Atop Crooked Ridge east of the project extent, early Pleistocene to late Pliocene surficial deposits overlay the Glen Canyon formation. There are no faults were found in the region (AZGS 2000).

3.1.2 Topography

The terrain of the project area is composed of deep canyons, open desert, and towering red rock cliffs (LSR Innovations 2004). Elevations in the area range from 7,000 feet on the Echo Cliffs monocline to 3,000 feet at the bottom of the Colorado River. The elevation across the project extent is as high as 5,570 feet to as low as 5,430 feet. The project area is situated next to Crooked Ridge, a natural feature east of the Echo Cliffs monocline.

3.1.3 Soils

Several soil types are found throughout the project area. **Table 1** presents a summary of the soil data that was obtained from the U.S. Department of Agriculture, National Resource Conservation Service (NRCS)'s Web Soil Survey (2018). In descending order, starting with the most prominent soil type, they are as follows: Mido, loamy substratum-Arches-Ustic Haplocalcids complex, crooked ridge (54.4% of pipeline APE; 69.2% of well pad APE); Mespun-Councelor-Mespun, limy substratum complex (22.8% of pipeline APE); Arches-Rock outcrop-Mido complex (10.9% of pipeline APE), Sandoval family-Ustic Haplocambids complex (8.3% of pipeline APE, 30.8% of well pad APE); Mido-Arches-Ustic Haplpcalcids complex (3.0% of pipeline APE); and Mespun-Rock outcrop-Nalcase complex (0.7% of pipeline APE). Overall, the soils in the project area have little to no frequency of ponding or flooding. No soils are classified as prime farmlands, unique farmlands, or farmlands of statewide importance.

Table 1. Soils at the Project Sites					
Soil Type/Slopes	Parent Material	Typical Profile	Drainage Class	Runoff Class	Hydric
Mido, 2-15% slopes	Eolian sands derived from sandstone over residuum weathered from sandstone	Sand (0-35 in.); Fine sand (35-60 in.)	Excessively drained	Negligible	No
Arches, 2-5% slopes	Eolian sands over residuum weathered from sandstone OR eolian sands derived from sandstone	Sand (0-2 in.); Fine sand (2- 5 in.); Loamy sand (5-10 in.); Bedrock (10-20 in.)	Excessively drained	Low to Negligible	No
Ustic- Haplocalcids, crooked ridge	Eolian sands derived from sandstone over lactustrine deposits	Sand (0-4 in.); Loamy sand (4-18 in.); Gravelly sandy Ioam (18-25 in.); Sandy Ioam (25-60 in.)	Well drained	Low	No
Mespun, 0-10% slopes	Eolian sands derived from sandstone	Fine sand (0-60 in.)	Excessively drained	Low	No
Councelor, 0-5% slopes	Eolian sands derived from sandstone over lacustrine deposits over residuum weathered from sandstone	Fine sand (0-2 in.); Loamy fine sand (2-13 in.); Fine sandy loam (13-25 in.); Fine sand (25-35 in.); Channery fine sand (35-60 in.)	Somewhat Excessively drained	Very low	No
Mespun, limy substrate, 0-10% slopes	Eolian sands derived from sandstone over lacustrine deposits	Fine sand (0-60 in.)	Somewhat Excessively drained	Low	No
Mido, loamy substratum, 2- 10% slopes	Eolian sands derived from sandstone and/or colluvium derived from sandstone	Sand (0-24 in.); Gravelly sand (24-58 in.); Sandy clay loam (58-65 in.)	Excessively drained	Low	No
Sandoval family, 0-2% slopes	Eolian sands derived from sandstone over lacustrine deposits over residuum weathered from sandstone	Clay loam (0-2 in.); Clay (2- 11 in.); Sandy clay loam (11- 19 in.); Fine sand (19-29 in.)	Well drained	Negligible	No
Ustic Haplocambids, 0-5% slopes	Eolian sands derived from sandstone over lacustrine deposits over residuum weathered from sandstone	Clay loam (0-10 in.); Clay (10-28 in., 34-43 in.); fine sand (28-34 in., 43-45 in.)	Well drained	Negligible	No
Mespun, 0-10% slopes	Navajo sandstone residuum weathered from sandstone and/or regional eolian sands derived from sandstone	Sand (0-30 in.); fine sand (30-60 in.)	Excessively drained	Negligible	No
Nalcase, 1-3% slopes	Navajo sandstone residuum weathered from sandstone and/or regional eolian sands derived from sandstone	Sand (0-2 in.); Fine sand (2- 5 in.); Loamy sand (5-8 in.); Bedrock (8-20 in.)	Somewhat Excessively drained	Negligible	No

3.1.4 Mineral Resources

According to spatial data downloaded from USGS's Mineral Resource Data System (MRDS), there are no mineral resources in the immediate vicinity of the project site (2008). The nearest mineral resource is

located nine miles south of the project. This resource, called "Willow Springs Area", is an occurrence of Bentonite.

3.2 Water Resources

This section discusses the surface water, ground water, and floodplains found in and around the project site.

3.2.1 Surface Water

The Little Colorado River is the major drainage in the project area. The Little Colorado River's major tributaries include Silver Creek, Zuni River, Puerco River, Cottonwood Wash, Polacca Wash, Dinnebito Wash, and Moenkopi Wash. The nearest surface water, Hamblin Wash, runs parallel to Echo Cliffs and flows south to join the Moenkopi Wash.

Wetlands observed in the project areas are mainly ephemeral ponds and ephemeral streambeds (USFWS 2017). The east arm of the distribution line that connects to the storage tank intersects with one of these wetlands.

3.2.2 Ground Water

Ground water in the project area comes from the N-Aquifer. The N-Aquifer occurs north of the Little Colorado River and has an areal extent of 6,250 square miles. The Navajo and Wingate Sandstones are the main water-bearing units in the N-Aquifer. Groundwater flow direction varies, but it is generally south and west or north and west. The aquifer is generally unconfined, but there are artesian conditions in the Black Mesa area (ADWR 2014). Its western boundary is the Echo Cliffs Monocline where water from the N-Aquifer discharges at many springs.

Well data from the Navajo Nation Water Management Branch show three (3) wells within one mile of the project area, two (2) of which draw from the Moenkopi Formation at depths of 125 and 180 feet below ground surface and one (1) that draws from the Shinarump Formation at 100 feet. Other wells in the area draw from the Navajo Sandstone ranging from 430 to 610 feet below ground surface and the Redwall Limestone at 3,440 feet below ground surface. These wells are found at elevations ranging from 5,350 feet to 6,030 feet.

3.2.3 Floodplains

Federal Emergency Management Agency (FEMA) has no printed floodplain maps in the Navajo Nation. The reason is because the project is in an areas designated as "Zone D" by FEMA. Zone D designates areas with possible, yet undetermined flood hazards, and no analysis of flood hazards has been conducted.

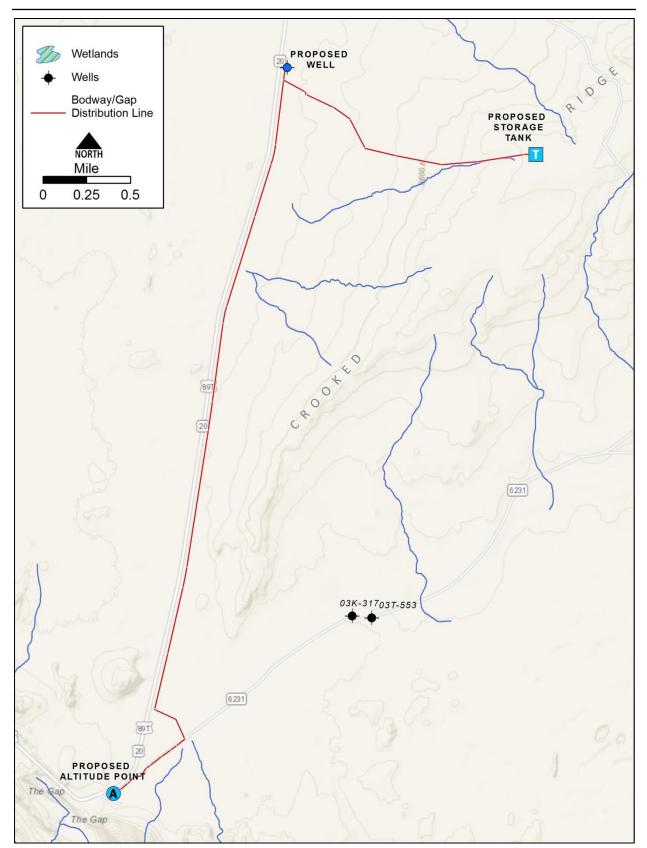


Figure 3. Wetlands, steams, and wells in the project area. (Data from USFWS National Wetlands Inventory, 2016; Navajo Nation Department of Water Resources, 2009)

3.3 Air Resources

This section discusses air resources in terms of quality/visibility and climate/meteorology which exist in and around the project site.

3.3.1 Quality/Visibility

Air quality on the Navajo Nation and surrounding areas is generally good. While it is "unclassified" for the National Ambient Air Quality Standards (NAAQS), it is assumed to be in attainment of these standards according to maps posted on the U.S. Environmental Protection Agency (USEPA) website (USEPA March 2017).

3.3.2 Climate/Meteorology

Climate and meteorological data was retrieved from the Western Regional Climate Center (WRCC) website (2017). In the project region, average annual precipitation is 5.66 in., which is scattered more or less throughout the year. The project area receives a minuscule amount of snowfall on average (1.9 in.), which occurs mainly in December and January. The average maximum temperature occurs in July, reaching 97.4°F, and the average minimum temperature occurs in January, reaching 47.6°F. Prevailing winds in this region are generally from the west.

There will be direct greenhouse gas (GHG) emissions associated with mobile combustion from heavy equipment travelling to and leaving the project site. There will be indirect GHG emissions associated with process emissions (i.e. heavy metals) from bought materials used to make up the water line and its components. There will also be indirect, yet minor GHG emission as a result of power generation to the booster pump stations. Overall, the project will have minimal GHG emissions that are principally associated with its construction.

3.4 Biotic Resources

This section discusses the biological communities, including vegetation and wildlife; threatened, endangered, and sensitive (TES) species; and agricultural activities found in and near the project site. A list of TES species was requested from the Navajo Nation Department of Fish and Wildlife (NNDFW). Upon receipt, a biological field survey was conducted on March 15-16, 2018 to determine the presence/absence of any sensitive species and/or preferred habitat in the project area.

3.4.1 Description of Biotic Communities

The project area lies within the Great Basin Desertscrub biotic community, as described by Brown (1994). The Great Basin Desertscrub evolved from both cold and warm-temperate vegetation, setting it apart from other North American deserts which exclusively evolved from warm-temperate and tropical-subtropical vegetation and wildlife. Species diversity is characteristically low in all major communities of this biome. Major plant dominants in this biome include sagebrushes (*Artemisia*), saltbrushes (*Atriplex*), Winterfat (*Ceratoides lanata*), rabbitbrushes (*Chrysothamnus*), blackbrushes (*Coleogyne*), hopesages (*Grayia*), and horsebrushes (*Tetradymia*).

3.4.2 Vegetation and Wildlife

The most common vegetation species observed in the project area include the fourwing saltbrush (*Atriplex canescens*), sand sagebrush (*Artemisia filifolia*), snakeweed (*Gutierrezia sarothrae*), blackbrush, (*Coleogyne ramosissima*), Mormon tea (*Ephedra* spp.), prickly pear cactus (*Opuntia* spp.), pale evening

primrose (*Oenothera pallida*), sixweeks fescue (*Vulpia octoflora*), and tansyleaf tansyaster (*Machaeranthera tanacetifolia*). Non-native species found in the area includes red brome (*Bromus rubens*), cheatgrass (*Bromus tectorum*), Russian thistle (*Salsola tragus*), redstem stork's bill (*Erodium cicumtarium*), and prickly lettuce (*Lactuca serriola*).

The project area provides potential habitat for a variety of wildlife species, although the presence of the adjacent highway may decrease habitat quality. Wildlife species observed during the survey include common raven (*Corvus corax*), Eurasian collared-dove (*Streptopelia decaocto*), savannah sparrow (*Passerculus sandwichensis*), woodrat (*Neotoma* sp.), and fence lizard (*Sceloprous* sp.).

3.4.3 Threatened, Endangered, and Sensitive (TES) Species

A Biological Evaluation (BE), prepared for the NNDFW, was completed for the project in order to determine impacts to TES Species that are found or potentially occur in the project area. The BE was conducted by a biologist from EnviroSystems Management, Inc. (ESM). A field survey on March 15-16, 2018 determined there was no presence of any sensitive species or preferred habitat in the project area. Table 2 summarizes the findings of the impact determination to TES species in the area.

Table 2. Summary of TES Species Impact Determination				
Common Name	Scientific Name	Habitat Presence in Project Area	Impact Determination	
		Birds		
Golden eagle	Aquila chrysaetos	Possible nesting habitat near project areas; nests located in 1 mile of the proposed ROW in the vicinity of Echo Cliffs near the Gap, but unknown whether or not they are active.	May effect individuals, not likely to adversely affect species or its habitat	
Ferruginous hawk	Buteo regalis	No good nesting or foraging habitat within project boundary.	No effect to the species or its habitat	
Peregrine falcon	Falco peregrinus	No good nesting or foraging habitat within project boundary.	No effect to the species or its habitat	
California condor	Gymnogyps californianus	No good nesting or foraging habitat within project boundary.	No effect to the species or its habitat	
		Plants		
Welsh's milkweed	Asclepias welshii	Some parts of the project area provides some marginal habitat for this species, but much of the project area has been disturbed. No individuals were detected during the survey.	No effect to the species or its habitat	
Beath milk- vetch	Astragalus beathii	Although individuals have been detected within 3 miles of the project corridor, it does not cross the Moenkopi geologic unit. No individuals were detected during the survey.	No effect to the species or its habitat	

3.4.4 Agriculture

Small family farms and livestock grazing, mainly sheep, cattle and horses, are part of the agricultural activities within the Navajo Nation. No large-scale agricultural or livestock operations are found in this area. Furthermore, the soils found in the project site are not classified as prime or unique farmland (NRCS 2017).

3.5 Cultural Resources

A Cultural Resources Investigation (CRI) was completed by ESM on March 16, 2018 for the project under permit B18205 in accordance with Navajo Nation Heritage and Historic Preservation Department (NNHHPD) guidelines. The results of the CRI were compiled into a report, "Western Navajo Regional Supply Pipeline (WNP) Bodaway-Gap Waterline Project Cultural Resources Inventory along Coppermine Road/Navajo Route 20, Coconino County, Arizona," by Blayne R. Brown of ESM on May 1, 2018. A drain line was added to the tank design in 2019 and the drain line area was inspected by Mathilda Burke, Archaeologist of M Burke Consulting, on February 7 and 12, 2020. The results of this CRI were compiled into a report called, "A [CRI] of the Western Navajo Pipeline Bodaway-Gap Waterline (ADD 1) Proposed Drain Line Easement located in Bodaway-Gap Chapter, Coconino County, Arizona." The reports are summarized below.

3.5.1 Archaeological Resources

An archival review was performed at the NNHHPD office in Window Rock, Arizona. The review identified four (4) previously recorded archaeological sites within 100 meters / 328 feet of the project area. Thereafter, the archaeologists conducted a Class III pedestrian inventory by walking parallel transects spaced 15 meters apart. Both surveys resulted in the identification and documentation of three (3) new sites (AZ-K-44-52, AZ-K-44-53, and AZ-K-44-55) and 16 isolated occurrences (IOs) of prehistoric and historic (pre-1968) temporal affiliation. The IOs do not require further management consideration as their research potential has been exhausted by the survey-level recording. Site AZ-K-44-52 was determined ineligible to the National Register of Historic Places (NRHP) and does not warrant mitigation of negative impacts to the site. Sites AZ-K-44-53 and AZ-K-44-55 are recommended eligible to the NRHP. The project's APE was adjusted to avoid these sites while staying within the surveyed areas.

3.5.2 Traditional Cultural Properties (TCP), Historic, and Religious Properties

A TCP records search was conducted at the NNHHPD TCP Office and there are no known TCPs within the project area (ESM 2018, Burke 2020). An ethnographic interview with a local resident concerning TCPs reveals a family burial plot on top of Crooked Ridge, about 330 feet northeast of the water tank ROW.

3.6 Socioeconomic Conditions

This section discusses the employment and income; demographics and trends; and lifestyles, cultural values, attitudes, and expectations; and community infrastructure in the Bodaway-Gap Chapter area.

3.6.1 Employment and Income

According to the American Community Survey's 5-Year Estimates, the median household income in 2015 in Bodaway-Gap was \$20,313 with per capita income of \$10,159 (U.S. Census 2015). About 7.1% of the working population is unemployed and 44.9% of the total population lives at or below the poverty level (U.S. Census 2015). The biggest industries in Bodaway-Gap include: retail trade; arts, entertainment, and

recreation, and accommodation and food services; educational services, and health care and social assistance; and construction.

3.6.2 Demographics and Trends

According to the 2010 U.S. Census, there were approximately 1,704 people living within Bodaway-Gap. There were 474 houses with an average household size of 3.59. The median age in Bodaway is 28.7 years and 99.1% of the population is Native American/Alaskan Native.

It is prudent to note that the U.S. Census Bureau has experienced a number of unique problems in counting the American Indian population since it first began such population counts in the 1800s. Many of those problems center on political, cultural, and geographical considerations. The latest census count revealed American Indians living on American Indian Reservations were undercounted by 4.88% during the 2010 census (U.S. Census Bureau 2012).

3.6.3 Lifestyles, Cultural Values, Attitudes, and Expectations

Many of the residents in Bodaway-Gap Chapter have jobs or attend school, so they generally support infrastructure that improves quality of life. While some live traditional Navajo aspects of life, they expect the mix of contemporary life to continue within their communities.

3.6.4 Community Infrastructure

Infrastructure systems found in the Bodaway-Gap area are described below:

- **Roads and Accessibility**. The main road through the project area is N20. The project is located right outside of the N20 ROW and can be easily accessed using access roads right off of the road.
- **Power**. The electrical power infrastructure in the project area is owned and operated by Navajo Tribal Utility Authority (NTUA). The project will require overhead power, which will be included in the 45-foot ROW parallel to N20.
- *Water*. Water utilities in the project area are owned and operated by NTUA. The proposed project will improve water systems in the Bodaway-Gap area by providing a new source of fresh water to the area. Once completed by WMB, the water infrastructure will be owned and operated by NTUA.
- *Wastewater*. Wastewater utilities on the Navajo Nation are scarce. Most residential homes with wastewater are connected to a sewer lagoon. Otherwise people utilize their own septic tank systems or dry outhouses.
- **Solid Waste**. Solid waste in the area is taken to a local transfer station, which is then hauled by a Waste Management service to a nearby landfill. Most waste in the Western Navajo Agency goes to the Cinder Lake landfill near Flagstaff, Arizona.

3.7 Environmental Justice

The proposed project is principally located in the Bodaway-Gap Chapter where approximately 99.1% of the population is Native American (U.S. Census 2010). Environmental justice has been defined as the pursuit of equal justice and equal protection under the law for all environmental statutes and regulations without discrimination based on race, ethnicity, and/or socioeconomic status. No environmental justice issues were identified.

3.8 Indian Trust Resources

Local natural resources that may be considered Indian Trust Resources in Bodaway-Gap includes water resources (i.e. springs and established wells) (LSR Innovations 2004).

3.9 Environmental Module

Sites regulated under the Resource Conservation and Recovery Act (RCRA), the Comprehensive Environmental Response, Compensation, and Liability Act (CERCLA), and the Toxic Substance Control Act (TSCA) are discussed in this section. The information presented below was obtained from the USEPA's EnviroFacts website and field observation.

3.9.1 RCRA Subtitle C Sites

Subtitle C program identifies the criteria and establishes various requirements for the three categories of hazardous waste handlers: (1) generators; (2) transporters; and (3) treatment, storage, and disposal facilities. The proposed project will not generate, handle, or store hazardous waste on or near the project site as part of the proposed action. No such sites were found near the project area (USEPA October 2017).

3.9.2 RCRA Subtitle D Sites

Subtitle D regulates the disposal of solid waste. A small amount of solid waste including construction waste will be generated during the course of construction. The contractor who will construct and bury the pipeline will be responsible for proper disposal of any solid waste. No RCRA Subtitle D sites can be found in the vicinity of the project site (USEPA October 2017).

3.9.3 RCRA Subtitle I Sites

Subtitle I regulates active underground storage tanks (UST) and abandoned and often leaking USTs (LUSTs). Based on the field visit, no RCRA Subtitle I UST sites occur on or near the project sites and no USTs will be installed as part of the proposed project.

According to USEPA data, Bodaway-Gap has quite a few UST sites (October 2016). The closest USTs are two (2) currently in-use at a local gas station at The Gap. Others (both in and out of use) are located at the old Gap Trading Post and the Cedar Ridge Trading Post. As far as LUST sites go, there is one (1) site with a suspected release at the Gap Trading Post.

3.9.4 CERCLA Sites

Based on USEPA data and field observation, there are no CERCLA sites on or near the proposed project area (USEPA October 2017). There are many abandoned uranium mines in this area identified by the USEPA Superfund Program (USEPA 2017). As discussed in **Section 3.1.4**., Mineral Resources, the nearest Superfund/abandoned uranium mine site (Charles Huskon No. 5) is about 10 miles south of the project area.

3.9.5 Toxic Substance Control Act (TSCA) Sites

TSCA sites do not occur on or near the project sites (USEPA October 2017). No toxic substances will be used, generated, handled, or stored on or near the project sites as part of the construction or operation of the proposed project.

3.10 Resources/Land Use Patterns

The following land uses or practices occur in this region: transportation use network; land use plans; agriculture; outdoor recreation, fishing, and hunting; and timber harvesting.

3.10.1 Transportation Use Network

The main thoroughfare through Bodaway-Gap is Highway 89, but the project area is along N20. From both roads, numerous other paved and dirt roads provide access throughout Bodaway-Gap and neighboring Chapters.

3.10.2 Land Use Plans

Most Navajo Nation Chapters have a land use plan and update it every five (5) years. Currently, the land use plan for Bodaway-Gap Chapter is unavailable.

3.10.3 Agriculture

Agricultural practices of the Bodaway-Gap Chapter area are discussed above in Section 3.4.5.

3.10.4 Outdoor Recreation, Fishing, and Hunting

This Navajo Nation has many opportunities for outdoor recreating and fishing. However, none of these areas are found on or around the proposed project site. No hunting occurs in this area.

3.10.5 Timber Harvesting

There is currently no timber harvesting occurring on the Navajo Nation, sans for local firewood collection in some wooded areas.

3.11 Other Values

This section discusses wilderness areas, sound and noise, public health and safety, and the visual setting within the project area.

3.11.1 Wilderness Areas

The nearest designated wilderness areas are the Saddle Mountain Wilderness Area and the Paria Canyon-Vermillion Cliffs Wilderness Area. They are situated about 21 miles west and 27 miles northwest, respectively.

3.11.2 Sound and Noise

Man-made sound and natural noise sources near the project site includes traffic along N20, wind, thunder, and rain.

3.11.3 Public Health and Safety

For safety services, Bodaway-Gap Chapter is served by the Tuba City Police District and the Arizona Department of Public Safety (LSR Innovations 2004). While there are no fire stations in Bodaway-Gap, Tuba City provides firefighting services to Bodaway-Gap residents. The BIA provides firefighting services for wildfires where they may occur. For health services, most Bodaway-Gap residents go to the Tuba City Regional Hospital located in Tuba City, Arizona (LSR Innovations 2004). Residents may also go to two (2) other facilities that are further away: Flagstaff Medical Center in Flagstaff, Arizona and the Page Medical Center in Page, Arizona (2004).

3.11.4 Visual Setting

This area is in an area of scenic beauty, yet no scenic byways or scenic areas protected by law occur in the project area. However, the water line will be underground and will not impact the visual setting once the project is complete.

4. Environmental Consequences of the Proposed Action

This section discusses the impacts to the natural and human environments on and near the project site as a result of the proposed and alternative actions. Mitigation measures that reduce or eliminate impacts are discussed where appropriate.

4.1 Land Resources Impacts

4.1.1 Topography

The proposed project will be constructed within the existing topography with little or no modifications. No effect to the existing topography is anticipated as a result of either the proposed or no-action alternative.

4.1.2 Soils

Grading, excavating, and trenching of the soils and bedrock are part of the proposed action. In disturbed areas, storm water run-off from a non-stabilized construction site can result in soil erosion. Under Section 402 of the Clean Water Act, all construction site operators engaged in clearing, grading, and excavating activities that disturb more than one acre or more must obtain coverage under a National Pollutant Discharge Elimination System (NPDES) General Construction permit for storm water discharges. The permit requires a Storm Water Pollution Prevention Plan (SWPPP) that outlines best management practices for preventing soil erosion. With adherence to this mitigation measure, soil erosion will be short-term and minor. Under the no-action alternative, there will be no effect to soils.

<u>Mitigation Measure</u>: Identify best management practices to prevent soil erosion, develop a SWPPP, and obtain coverage under a NPDES permit from the USEPA.

4.1.3 Mineral Resources

Due to the absence of mineral resources in the immediate project area, there will be no effect to mineral resources as a result of either the proposed action or the no-action alternative.

4.2 Water Resources

4.2.1 Surface Water

Grading, excavating, and trenching of the soils and bedrock are part of the proposed action. In disturbed areas, storm water run-off from a non-stabilized construction site can pick up trash, debris, sediments, loose soils, and pollutants such as oil, grease, and other toxins, from the construction site and deposit them into nearby washes. Under Section 402 of the Clean Water Act, the proposed project requires coverage under an NPDES permit in order to prevent impacts to water quality. With this mitigation measure, the impact to water sources will be negligible to minor, and short-term.

<u>Mitigation Measure</u>: Identify best management practices to prevent construction site surface runoff from depositing into washes, develop a SWPPP, and obtain coverage under a NPDES permit from USEPA.

4.2.2 Ground Water

Under the proposed action, there will be excavation to bury a new water line and connections to booster pump stations. However, this will not involve deep excavation that would affect underground aquifers. The proposed action will utilize ground water resources and bring water to communities in the Western Navajo Agency. The impact to ground water will be minor to moderate and long-term. Under the no-action alternative, there will be no effect to ground water.

4.2.3 Floodplains

Due to the distance to nearby streams or drainages, there will be no effect to floodplains as a result of the proposed project.

4.3 Air Resources

4.3.1 Quality/Visibility

During grading, excavating, and trenching activities, soils in non-stabilized construction sites become loose and create dust. During windy days, which is typical for the area, the potential for airborne dusts increases, temporarily impacting the quality/visibility at the work site and surrounding area. Exhaust emissions (carbon monoxide) from motorized equipment will also be present during construction activities. Best management practices for dust and emissions abatement, such as applying water to the ground before and after construction activities and creating barriers during construction, can alleviate impacts to workers and drivers along N20. Once construction activities commence, the impact to the air quality and visibility will cease and there will be no effect to air quality or visibility. Under the no-action alternative, there will be no effect to air quality and/or visibility.

<u>Mitigation Measure</u>: Identify best management practices for dust and emissions abatement during construction activities and implement them during construction.

4.3.2 Climate/Meteorology

The overall impact of the proposed action to the regional climate is temporary and negligible. Most impact stems from construction activities, which are short-term and minor. GHG emissions will be miniscule. There will be no effect to the regional climate/meteorology as a result of the proposed action or no-action alternative.

4.4 Biotic Resources

4.4.1 Vegetation and Wildlife

Some individuals may experience minor and short-term impacts during construction activities from noise, dust, and ground-clearing activities. However, this impact will be short-term and minor. Under the no-action alternative, there will be no effect to vegetation and wildlife. Invasive plants could potentially be spread from the existing invasive plant community or brought in by construction equipment. In order to limit the potential establishment of invasive species and encourage native species growth, the following best management practices should be following to incorporate weed prevention and control into the project:

- All construction and maintenance vehicles brought to the site from other areas would be cleaned thoroughly, especially on the undercarriage area, prior to entering the project site. This will help prevent inadvertent transportation of noxious/invasive weed seed or material into the action area.
- Water used for dust abatement and other construction activities would be obtained from a source free of invasive plant seeds.

4.4.2 Threatened, Endangered, and/or Sensitive (TES) Species

ESM concluded that there would be no significant effect to any TES species as a result of the proposed project if conservation measures listed below are implemented. The NNDFW concurred with this finding and issued a Biological Resources Compliance Form, which is attached as **Appendix A**.

Mitigation Measures:

- Proposed project construction and land clearing activities should avoid the Migratory Bird breeding season (March 15th - August 15th), or pre-action surveys will be required and completed to determine nesting on-site, if any. The surveys would include a 50-meter (165-foot) buffer outside the edge of disturbance. Removal or disturbance of nesting habitat (i.e. trees and shrubs) will not be allowed within 50 meters of an active nest at any point in time beginning from the avian egg incubation period and lasting until fledging is complete (juveniles fly from the nest and do not return).
- All construction and ground-clearing activities will follow the Navajo Nation Golden and Bald Eagle Nest Protection Regulations including potential seasonal restrictions between February 1 and July 15, if an occupied nest is located less than one mile from the ROW.

4.4.3 Agriculture

No farms or farming activities were observed in the project corridor. Soils at the project site are not considered prime or unique farmlands (NRCS 2017). There will be no effect to agriculture as a result of either the proposed action or the no-action alternative.

4.5 Cultural Resources

Two (2) National Register of Historic Places (NRHP)-eligible sites were identified and recorded within the project area near the water tank ROW: Sites AZ-K-44-53 and AZ-K-44-55. AZ-K-44-55 was also found to be eligible for protection under the Archaeological Resources Protection Act (ARPA). No other significant cultural resources were identified. Because both sites are eligible to the NRHP, the following measures are required:

<u>Mitigation Measure</u>: Sites AZ-K-44-53 and AZ-K-44-55 will be flagged with a 50-foot buffer zone by a qualified archaeologist prior to construction to ensure no disturbances occur to either site.

<u>Cultural Resources Discovery Clause</u>: In the event of a discovery ["discovery" means any previously unidentified or incorrectly identified cultural resources including but not limited to archaeological deposits, human remains, or locations reportedly associated with Native American religious/traditional beliefs or practices], all operations in the immediate vicinity of the discovery must cease, and NNHHPD must be notified at (928) 871-7198.

If avoidance is not feasible, mitigation measures in the form of archaeological data recovery must be performed before development is allowed to proceed within this area. As long as the sites are flagged and avoided, there will be no effect to Sites AZ-K-44-53 and AZ-K-44-55. NNHHPD concurred with these findings and issued Cultural Resources Compliance Forms for the project, which are attached in **Appendix B**.

4.6 Socioeconomic Conditions

The proposed project will have no direct effect to employment, income, demographics, or trends within the Bodaway-Gap community. The increase in water infrastructure in the community will be a direct benefit to the fresh water capacity in Bodaway-Gap and meet the lifestyles and expectations of residents. The increase in water capacity in this area can indirectly benefit the area by being more attractive to private businesses and other commercial and industrial services. An increase in economic development can bring employment and income to this community. The proposed project will also have a long-term benefit to water infrastructure in Bodaway-Gap.

The no-action alternative would have no direct impact to employment, income, demographics, trends, lifestyles, or expectations of the Bodaway-Gap community. Any existing water shortages in this community would not be addressed and an alternative water project would need to be implemented.

4.7 Environmental Justice

The majority of residents in Bodaway-Gap are considered minority and/or low-income populations that will benefit from increased water infrastructure in their community. There will be no effect to environmental justice as a result of the proposed project.

Under the no-action alternative, any existing water shortages in this community would not be addressed and an alternative water project would need to be implemented. There will be a minor, yet long-term impact to environmental justice as a result of the no-action alternative.

4.8 Indian Trust Resources

The proposed project takes place entirely on Navajo Tribal Trust land. However, the project will have no impact on grazing activities due to the distance to the highway. There will be no effect to Indian Trust Resources as a result of either the proposed action or no-action alternative.

4.9 Environmental Module

There are two (2) in-use USTs at the gas station near the Gap. However, the proposed project will not come near these sites. Due to lack of nearby sites and the nature of the proposed action (i.e. water distribution), there will be no effect to RCRA Subtitle C, RCRA Subtitle D, RCRA Subtitle I, TSCA, and CERCLA sites as a result of either the proposed action or no-action alternative.

4.10 Resource/Land Use Patterns

4.10.1 Transportation Use Network

Construction will take place parallel to N20 outside of the ROW in some areas. Any impact as a result of construction (e.g. slowed traffic in construction areas) will be minor and short-term. There will be no effect to the transportation use network as a result of the no-action alternative.

4.10.2 Land Use Plans

There are no available land use plans for Bodaway-Gap. There will be no effect to land use plans in the area as a result of either the proposed action or no-action alternative.

4.10.3 Agriculture

Due to the absence of agriculture at the project site, there will be no effect to agriculture as a result of either the proposed action or no-action alternative.

4.10.4 Outdoor Recreation, Fishing, and Hunting

While there are many outdoor recreation, fishing, and hunting opportunities in the Navajo Nation, the proposed project does not occur in an area where these activities are permitted. There will be no effect to such resources as a result of either the proposed action or no-action alternative.

4.10.5 Timber Harvesting

Due to the absence of timber harvesting in the project area, there will be no effect to timber harvesting as a result of either the proposed action or no-action alternative.

4.11 Other Values

4.11.1 Wilderness Areas

Due to the absence of wilderness areas in the project area, there will be no effect to such resources as a result of either the proposed action or no-action alternative.

4.11.2 Sound and Noise

During construction, there will be short-term and minor impacts to the soundscape in the project area. These impacts can be mitigated using best management practices such as applying mufflers to construction equipment, building barriers around the construction site, and limiting construction activities to certain hours of the day. Under the no-action alternative, there will be no effect to sound and noise.

<u>Mitigation Measure</u>: Identify best management practices for sound abatement during construction activities and implement them during the construction of the proposed action.

4.11.3 Public Health and Safety

There will be no impact to public health and safety. Construction will take place outside of the highway ROW and it will not impede traffic. There will be no effect to public health and safety as a result of the proposed action or no-action alternative.

4.11.4 Visual Setting

During construction, there may be impacts to the visual setting along N20. These impacts will be minor and short-term. Because N20 is not a scenic by-way nor are there laws or regulations protecting the visual setting on the Navajo Nation, mitigation measures are not necessary. There will be no effect to the visual setting as a result of either the proposed action or no-action alternative.

4.12 Cumulative Impacts

Cumulative impacts result from the incremental impact of the action when added to other past, present, or reasonably foreseeable future actions regardless of what agency or person undertakes these actions. There will be direct, minor, and short-term impacts to soil, air quality, and noise level as a result of the proposed action. There will be a direct and long-term benefit to residents in the area as a result of a new clean water source. There will also be a direct and long-term impact to water resources in the area as the entire Western Navajo Pipeline gets established. However, no cumulative impacts are anticipated in consideration of existing and future plans in the area.

4.13 Summary of Mitigation Measures

4.13.1 Soils & Surface Water Mitigation

Identify best management practices to prevent soil erosion and storm water run-off, develop a SWPPP, and obtain coverage under a NPDES general permit from the USEPA.

4.13.2 Air Quality/Visibility Mitigation

Identify best management practices for dust and emissions abatement during construction activities and implement them during construction.

4.13.3 Cultural Resources Mitigation & Discovery Clause

- <u>Mitigation Measure</u>: Sites AZ-K-44-53 and AZ-K-44-55 will be flagged with a 50-foot buffer zone by a qualified archaeologist prior to construction to ensure no disturbances occur to either site.
- <u>Discovery Clause</u>: In the event of a discovery ["discovery" means any previously unidentified or incorrectly identified cultural resources including but not limited to archaeological deposits, human remains, or locations reportedly associated with Native American religious/traditional beliefs or practices], all operations in the immediate vicinity of the discovery must cease, and NNHHPD must be notified at (928) 871-7198.

4.13.4 Threatened, Endangered, and Sensitive Species Conservation Measures

- Proposed project construction and land clearing activities should avoid the Migratory Bird breeding season (March 15th - August 15th), or pre-action surveys will be required and completed to determine nesting on-site, if any. The surveys would include a 50-meter (165-foot) buffer outside the edge of disturbance. Removal or disturbance of nesting habitat (i.e. trees and shrubs) will not be allowed within 50 meters of an active nest at any point in time beginning from the avian egg incubation period and lasting until fledging is complete (juveniles fly from the nest and do not return).
- All construction and ground-clearing activities will follow the Navajo Nation Golden and Bald Eagle Nest Protection Regulations including potential seasonal restrictions between February 1 and July 15, if an occupied nest is located less than one mile from the ROW.

5. List of Agencies and Organizations Consulted

The information used in this analysis was obtained from reports, government databases, biological and archaeological field surveys, and direct communication either by phone or letters with the following agencies: Arizona Geological Survey, University of Arizona, University of Akron, U.S. Census Bureau, U.S. Department of Agriculture - National Resources Conservation Service, U.S. Department of Interior - Bureau of Indian Affairs, U.S. Environmental Protection Agency, U.S. Fish and Wildlife Service, U.S. Geological Survey, Federal Emergency Management Agency, Western Regional Climate Center, EnviroSystems Management, Inc., LSR Innovations, and Brown and Caldwell.

6. Document Preparer's Qualifications and Signature

This document has been prepared by Kristin Miller, Environmental Scientist, and Eunice L. Tso, Environmental Specialist, ETD, Inc. Ms. Tso has over 20 years' experience in environmental regulatory compliance in Indian Country and is an expert in the environmental policies and regulations that affect development in Indian country. She holds a M.S. Degree in Environmental Geology from Northern Arizona University. Kristin Miller has over five years of experience preparing environmental review documents under Eunice Tso. She holds a B.S. in Environmental Science from Northern Arizona University.

Kristin Miller, B.S. Environmental Science Environmental Scientist

May 20, 2020 Date

Eunice L. Tso, M.S. Geology Environmental Specialist

May 20, 2020

Date

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Appendix A: Biological Resources Compliance Form

NNDFW Review No. 18envs101

BIOLOGICAL RESOURCES COMPLIANCE FORM NAVAJO NATION DEPARTMENT OF FISH AND WILDLIFE P.O. BOX 1480, WINDOW ROCK, ARIZONA 86515-1480

It is the Department's opinion the project described below, with applicable conditions, is in compliance with Tribal and Federal laws protecting biological resources including the Navajo Endangered Species and Environmental Policy Codes, U.S. Endangered Species, Migratory Bird Treaty, Eagle Protection and National Environmental Policy Acts. This form does not preclude or replace consultation with the U.S. Fish and Wildlife Service if a Federally-listed species is affected.

PROJECT NAME & NO .: Bodaway-Gap Waterline

DESCRIPTION: The NTUA proposes to construct, operate, and maintain a new 32,805-ft. water distribution line and

21,298-ft. power distribution line. The project includes a 100 ft. x 100 ft. well site, 150 ft. x 150 ft. water storage tank

site, and 235-ft. drain line. The total area of effect would be 31.8 acres.

LOCATION: T34N, R09E, Coppermine and Tuba City Chapter, Coconino County, Arizona

REPRESENTATIVE: Jean Marie Rieck, EnviroSystems Management, Inc. for Navajo Tribal Utility Authority

ACTION AGENCY: Bureau of Indian Affairs and Navajo Nation

B.R. REPORT TITLE / DATE / PREPARER: BE of the Proposed Bodaway-Gap Waterline/MAY 2018/Megan

Hosterman, EnviroSystems Management, Inc.

SIGNIFICANT BIOLOGICAL RESOURCES FOUND: Area 1 & 3.

POTENTIAL IMPACTS

NESL SPECIES POTENTIALLY IMPACTED: [1] Aquila chrysaetos (Golden Eagle), G3, BGEPA, MBTA. FEDERALLY-LISTED SPECIES AFFECTED: NA

FEDERALLY-LISTED SPECIES AFFECTED: NA

OTHER SIGNIFICANT IMPACTS TO BIOLOGICAL RESOURCES: NA

AVOIDANCE / MITIGATION MEASURES: Project construction at the new easements will avoid the Golden Eagle breeding season of 15 JAN-15 JUL or surveys will be required.

CONDITIONS OF COMPLIANCE*: NA

FORM PREPARED BY / DATE: Pamela A. Kyselka/26 JUL 2018; amended on 11 MAR 2019; 24 FEB 2020

COPIES TO: (add categories as necessary)

	mmendation:	Signature	Date
Approval	pproval (with memo)	1 P-1. Th	_ 2/24/20
Disapproval (Gloria M Tom Director Nava	jo Nation Department of Fish and Wildlife
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		NNDFW -B.R.C.F.: FORM REVISED 12 N	01/ 2000

Appendix B: Cultural Resources Compliance Forms

					THE NAVAJO NATION HERITAGE & HISTORIC PRESERVATION DEPARTMENT PO Box 4950, Window Rock, Arizona 86515 TEL: (928) 871-7198 FAX: (928) 871-7886					
			URAL	RESO	URCES COMPLI	ANCE FORM				
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LEAD AGENC	CY:	BIA/N								
SPONSORS: PROJECT DE	SCPIPT	V 2. ET[Water F D Inc. 21	Resources	s, PO Box 678, Fort D Fourth Street, Suite 2	efiance, Arizona 86504 201, Flagstaff, Arizona 8600	4			
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LIST OF NON-ELIGIBLE PROPERTIES:	(<u>1) Site</u> AZ-K-44-52 (<u>16) IO</u>
LIST OF ARCHAEOLOGICAL RESOURCES:	(<u>1) Site</u> AZ-K-44-53
not limited to archaeological deposits, human remains, c	Jaman Rel: 03/13/19
Conditions: \checkmark Yes \square No Navajo Region Approval \checkmark Yes \square No \checkmark $3/14/2019$	Heritage & Historic Preservation Department

							THE NAVAJO NATION HERITAGE & HISTORIC PRESERVATION DEPARTMENT PO Box 4950, Window Rock, Arizona 86515 TEL: (928) 871-7198 FAX: (928) 871-7886						
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NAVA IO ANTIOLUTIEO DEDAUE VIO							Mathilda Burke B20020						
DATE INSPECTED:							02/7&12/ 2020						
DATE OF REPORT:							02/13/2020 & 03/08/2020						
TOTAL ACREAGE INSPECTED: METHOD OF INVESTIGATION:							2.88 – ac Class III pedestrian inventory with transects spaced <u>15</u> m apart.						
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