CONTRACT REQUIREMENTS AND SPECIFICATIONS
(BID SET)

2025 INDIVIDUAL WASTEWATER DISPOSAL FACILITIES

IHS PROJECT NOS. AL-23-C77 AND AL-24-D33

PUEBLO OF SAN ILDEFONSO

PREPARED BY

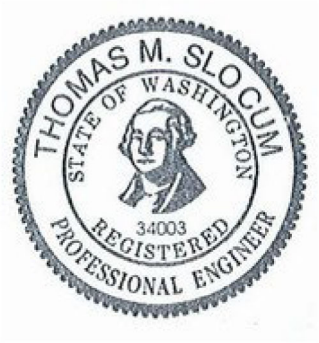
U.S. INDIAN HEALTH SERVICE
Albuquerque Area
Office of Environmental Health and Engineering
Division of Sanitation Facilities Construction
Santa Fe District Office

FEBRUARY 2025

These plans and contract specifications for the 2025 Individual Wastewater Disposal Facilities Project, Pueblo of San Ildefonso, IHS Project Nos. AL-23-C77 and AL-24-D33, were prepared by:

U.S. Indian Health Service
Santa Fe District Office
1700 Cerrillos Road
Santa Fe, New Mexico 87505

The plans and specifications were prepared by or under the supervision and direction of Mr. Tom Slocum, P.E., whose seal as a Professional Engineer is affixed below.



Thomas M. Slocum -S
Digitally signed by Thomas M. Slocum -S
Date: 2025.01.29 15:52:22 -07'00'

_____ Date:_____

_____ Date:_____
IHS Approval:

All questions about the meaning or intent of these documents shall be submitted only to the Engineer of Record, stated above, in writing for interpretations.

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IHS Project Nos. AL-23-C77 and AL-24-D33 Individual Wastewater Disposal Facilities

1. EJCDC NO. C-111

ADVERTISEMENT FOR BIDS FOR CONSTRUCTION CONTRACT

ADVERTISEMENT FOR BIDS

PUEBLO OF SAN ILDEFONSO
SAN ILDEFONSO PUEBLO, NM
2025 INDIVIDUAL WASTEWATER DISPOSAL FACILITIES

General Notice

Pueblo of San Ildefonso (Owner) is requesting Bids for the construction of the following Project:

2025 Individual Wastewater Disposal Facilities
IHS Project Nos. AL-23-C77 and AL-24-D33

Bids for the construction of the Project will be received at the **San Ildefonso Library Classroom** located at **1B Tunyo Po, Santa Fe, NM 87506**, until **Thursday March 13, 2025 at 2:00 pm** local time. Alternatively, bids may be sent electronically in PDF format to pm@sanipueblo.org. At that time the Bids received will be **privately** opened and read.

The Project includes the following Work:

Construct individual wastewater disposal facilities at four homes on San Ildefonso Pueblo. The work at Property 1 (Schedule A) includes installing a grinder pump system and connecting it to an existing sewer with approximately 250 lineal feet of 1.5" PVC effluent line. The work at Property 2 (Schedule B) includes installing a grinder pump system and connecting it to an existing septic pump tank with approximately 135 lineal feet of 1.25" PVC effluent line. The work at Property 3 (Schedule C) includes installing a combination septic & pump tank and connecting it to a new chamber drain field. The work at Property 4 (Schedule D) includes installing a new septic tank and connecting it to a new chamber drain field.

Bids are requested for the following Contract: **IHS Project Nos. AL-23-C77 and AL-24-D33**

The Project has an expected duration of 90 days.

Obtaining the Bidding Documents

Information and Bidding Documents for the Project can be found at the following designated websites:

Construction Reporter: www.constructionreporter.com

Bidding Documents may be downloaded from the designated website. Prospective Bidders are urged to register with the designated website as a plan holder, even if Bidding Documents are obtained from a plan room or source other than the designated website in either electronic or paper format. The designated website will be updated periodically with addenda, lists of registered plan holders, reports, and other information relevant to submitting a Bid for the Project. All official notifications, addenda, and other Bidding Documents will be offered only through the designated website. Neither Owner nor Engineer will be responsible for Bidding Documents, including addenda, if any, obtained from sources other than the designated website.

Pre-bid Conference

A pre-bid conference for the Project will be held on **Thursday February 27, 2025 at 2:00 PM** at **San Ildefonso Library Classroom** located at **1B Tunyo Po, Santa Fe, NM 87506**, followed by a site visit.

Attendance at the pre-bid conference is encouraged but not required.

Instructions to Bidders.

For all further requirements regarding bid submittal, qualifications, procedures, and contract award, refer to the Instructions to Bidders that are included in the Bidding Documents.

This Advertisement is issued by:

Owner: **Pueblo of Ildefonso**

By:	**John Gonzalez**	**Lou Baker**
Title:	**Tribal Administrator**	**Project Manager**
Date:	**February 3, 2024**	

2. EJCDC No. C-200

Instructions to Bidders

INSTRUCTIONS TO BIDDERS FOR CONSTRUCTION CONTRACT

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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 which registers plan holders.

ARTICLE 2—BIDDING DOCUMENTS

2.01 Bidder shall obtain a complete set of Bidding Requirements and proposed Contract Documents (together, the Bidding Documents). See the Agreement for a list of the Contract Documents. It is Bidder's responsibility to determine that it is using a complete set of documents in the preparation of a Bid. Bidder assumes sole responsibility for errors or misinterpretations resulting from the use of incomplete documents, by Bidder itself or by its prospective Subcontractors and Suppliers.

2.02 Bidding Documents are made available for the sole purpose of obtaining Bids for completion of the Project and permission to download or distribution of the Bidding Documents does not confer a license or grant permission or authorization for any other use. Authorization to download documents, or other distribution, includes the right for plan holders to print documents solely for their use, and the use of their prospective Subcontractors and Suppliers, provided the plan holder pays all costs associated with printing or reproduction. Printed documents may not be re-sold under any circumstances.

2.03 Owner has established a Bidding Documents Website as indicated in the Advertisement or invitation to bid. Owner recommends that Bidder register as a plan holder with the Issuing Office at such website, and obtain a complete set of the Bidding Documents from such website. Bidders may rely that sets of Bidding Documents obtained from the Bidding Documents Website are complete, unless an omission is blatant. Registered plan holders will receive Addenda issued by Owner.

2.04 Bidder may register as a plan holder and obtain complete sets of Bidding Documents, in the number and format stated in the Advertisement or invitation to bid, from the Issuing Office. Bidders may rely that sets of Bidding Documents obtained from the Issuing Office are complete, unless an omission is blatant. Registered plan holders will receive Addenda issued by Owner.

2.05 Plan rooms (including construction information subscription services, and electronic and virtual plan rooms) may distribute the Bidding Documents, or make them available for examination. Those prospective bidders that obtain an electronic (digital) copy of the Bidding Documents from a plan room are encouraged to register as plan holders from the Bidding Documents Website or Issuing Office. Owner is not responsible for omissions in Bidding Documents or other documents obtained from plan rooms, or for a Bidder's failure to obtain Addenda from a plan room.

2.06 *Electronic Documents*

A. When the Bidding Requirements indicate that electronic (digital) copies of the Bidding Documents are available, such documents will be made available to the Bidders as Electronic Documents in the manner specified.

1. Bidding Documents will be provided in Adobe PDF (Portable Document Format) (.pdf) that is readable by Adobe Acrobat Reader Version 2019 or later. It is the intent of the

Engineer and Owner that such Electronic Documents are to be exactly representative of the paper copies of the documents. However, because the Owner and Engineer cannot totally control the transmission and receipt of Electronic Documents nor the Contractor's means of reproduction of such documents, the Owner and Engineer cannot and do not guarantee that Electronic Documents and reproductions prepared from those versions are identical in every manner to the paper copies.

B. Unless otherwise stated in the Bidding Documents, the Bidder may use and rely upon complete sets of Electronic Documents of the Bidding Documents, described in Paragraph 2.06.A above. However, Bidder assumes all risks associated with differences arising from transmission/receipt of Electronic Documents versions of Bidding Documents and reproductions prepared from those versions and, further, assumes all risks, costs, and responsibility associated with use of the Electronic Documents versions to derive information that is not explicitly contained in printed paper versions of the documents, and for Bidder's reliance upon such derived information.

C. After the Contract is awarded, the Owner will provide or direct the Engineer to provide for the use of the Contractor documents that were developed by Engineer as part of the Project design process, as Electronic Documents in native file formats.

1. Electronic Documents that are available in native file format include:

a. Contract documents

b. Design drawings

2. Release of such documents will be solely for the convenience of the Contractor. No such document is a Contract Document.

3. Unless the Contract Documents explicitly identify that such information will be available to the Successful Bidder (Contractor), nothing herein will create an obligation on the part of the Owner or Engineer to provide or create such information, and the Contractor is not entitled to rely on the availability of such information in the preparation of its Bid or pricing of the Work. In all cases, the Contractor shall take appropriate measures to verify that any electronic/digital information provided in Electronic Documents is appropriate and adequate for the Contractor's specific purposes.

4. In no case will the Contractor be entitled to additional compensation or time for completion due to any differences between the actual Contract Documents and any related document in native file format.

ARTICLE 3—QUALIFICATIONS OF BIDDERS

3.01 To demonstrate Bidder's qualifications to perform the Work, Bidder must submit the following information with the Bid:

A. Written evidence establishing its qualifications such as ~~financial data,~~ previous experience, and present commitments.

B. A written statement that Bidder is authorized to do business in the state where the Project is located, or a written certification that Bidder will obtain such authority prior to the Effective Date of the Contract.

C. Bidder's state or other contractor license number, if applicable.

D. Subcontractor and Supplier qualification information.

E. Other required information regarding qualifications.

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.

ARTICLE 4—PRE-BID CONFERENCE

4.01 A non-mandatory pre-bid conference will be held at the time and location indicated in the Advertisement or invitation to bid. Representatives of Owner and Engineer will be present to discuss the Project. Bidders are encouraged to attend and participate in the conference; however, attendance at this conference is not required to submit a Bid.

4.02 Information presented at the pre-Bid conference does not alter the Contract Documents. Owner will issue Addenda to make any changes to the Contract Documents that result from discussions at the pre-Bid conference. Information presented, and statements made at the pre-bid conference will not be binding or legally effective unless incorporated in an Addendum.

ARTICLE 5—SITE AND OTHER AREAS; EXISTING SITE CONDITIONS; EXAMINATION OF SITE; OWNER'S SAFETY PROGRAM; OTHER WORK AT THE SITE

5.01 *Site and Other Areas*

A. The Site is identified in the Bidding Documents. By definition, the Site includes rights-of-way, 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.

5.02 *Existing Site Conditions*

A. *Subsurface and Physical Conditions; Hazardous Environmental Conditions*

1. The Supplementary Conditions identify the following regarding existing conditions at or adjacent to the Site:

a. Those reports of explorations and tests of subsurface conditions at or adjacent to the Site that contain Technical Data.

b. Those drawings known to Owner of existing physical conditions at or adjacent to the Site, including those drawings depicting existing surface or subsurface structures at or adjacent to the Site (except Underground Facilities), that contain Technical Data.

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.

B. *Underground Facilities:* Underground Facilities are shown or indicated on the Drawings, pursuant to Paragraph 5.05 of the General Conditions, and not in the drawings referred to in Paragraph 5.02.A of these Instructions to Bidders. Information and data regarding the presence or location of Underground Facilities are not intended to be categorized, identified, or defined as Technical Data.

5.03 *Other Site-related Documents*

A. In addition to the documents regarding existing Site conditions referred to in Paragraph 5.02.A, the following other documents relating to conditions at or adjacent to the Site are known to Owner and made available to Bidders for reference:

(none)

5.04 *Site Visit and Testing by Bidders*

A. Bidder is required to visit the Site and conduct a thorough visual examination of the Site and adjacent areas. During the visit the Bidder must not disturb any ongoing operations at the Site.

B. A Site visit is scheduled for **Thursday February 27 at 2:00 PM,** meeting at the **San Ildefonso Pueblo Library Classroom at 1A Tunyo Po, Santa Fe, NM 87506**. Maps to the Site will be made available upon request.

C. Bidders visiting the Site are required to arrange their own transportation to the Site.

All access to the Site other than during a regularly scheduled Site visit must be coordinated through the following Owner or Engineer contact for visiting the Site:
Lou Baker, Project Manager
pm@sanipueblo.org

Bidder must conduct the required Site visit during normal working hours.

D. Bidder is not required to conduct any subsurface testing, or exhaustive investigations of Site conditions.

E. On request, and to the extent Owner has control over the Site, and schedule permitting, the Owner will provide Bidder general 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. Bidder is responsible for establishing access needed to reach specific selected test sites.

F. Bidder must 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.

G. Bidder must fill all holes and clean up and restore the Site to its former condition upon completion of such explorations, investigations, tests, and studies.

5.05 *Owner's Safety Program*

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

5.06 *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 6—BIDDER'S REPRESENTATIONS AND CERTIFICATIONS

6.01 *Express Representations and Certifications in Bid Form, Agreement*

A. The Bid Form that each Bidder will submit contains express representations regarding the Bidder's examination of Project documentation, Site visit, and preparation of the Bid, and certifications regarding lack of collusion or fraud in connection with the Bid. Bidder should review these representations and certifications, and assure that Bidder can make the representations and certifications in good faith, before executing and submitting its Bid.

B. If Bidder is awarded the Contract, Bidder (as Contractor) will make similar express representations and certifications when it executes the Agreement.

ARTICLE 7—INTERPRETATIONS AND ADDENDA

7.01 Owner on its own initiative may issue Addenda to clarify, correct, supplement, or change the Bidding Documents.

7.02 Bidder shall submit all questions about the meaning or intent of the Bidding Documents to Engineer in writing. Contact information and submittal procedures for such questions are as follows:

A. Submit questions via email to IHS Project Engineer:
Tom Slocum
thomas.slocum@ihs.gov

7.03 Interpretations or clarifications considered necessary by Engineer in response to such questions will be issued by Addenda delivered to all registered plan holders. Questions received less than seven days prior to the date for opening of Bids may not be answered.

7.04 Only responses set forth in an Addendum will be binding. Oral and other interpretations or clarifications will be without legal effect. Responses to questions are not part of the Contract

Documents unless set forth in an Addendum that expressly modifies or supplements the Contract Documents.

ARTICLE 8—BID SECURITY (NOT REQUIRED)

8.01 ~~A Bid must be accompanied by Bid security made payable to Owner in an amount of 5 percent of Bidder's maximum Bid price (determined by adding the base bid and all alternates) and in the form of a Bid bond issued by a surety meeting the requirements of Paragraph 6.01 of the General Conditions. Such Bid bond will be issued in the form included in the Bidding Documents.~~

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, 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 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, in whole in the case of a penal sum bid bond, and to the extent of Owner's damages in the case of a damages-form bond. Such forfeiture will 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 7 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 7 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 (a) substantially completed and (b) ready for final payment, and (c) Milestones (if any) are to be achieved, are set forth in the Agreement.

9.02 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 10—SUBSTITUTE AND "OR EQUAL" ITEMS

10.01 The Contract for the Work, as 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 within 10 days of the issuance of the Advertisement for Bids or invitation to Bidders. Each such request must comply with the requirements of Paragraphs 7.05 and 7.06 of the General Conditions, and the review of the request will be governed by the principles in those paragraphs. 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 registered Bidders. Bidders cannot rely upon approvals made in any other manner.

10.02 All prices that Bidder sets forth in its Bid will 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.

ARTICLE 11—SUBCONTRACTORS, SUPPLIERS, AND OTHERS

11.01 A Bidder must be prepared to retain specific Subcontractors and Suppliers for the performance of the Work if required to do so by the Bidding Documents or in the Specifications. If a prospective Bidder objects to retaining any such Subcontractor or Supplier and the concern is not relieved by an Addendum, then the prospective Bidder should refrain from submitting a Bid.

11.02 The apparent Successful Bidder, and any other Bidder so requested, must submit to Owner a list of the Subcontractors or Suppliers proposed for the following portions of the Work within five days after Bid opening.

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

11.04 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 and Suppliers. Declining to make requested substitutions will constitute grounds for forfeiture of the Bid security of any Bidder. Any Subcontractor or Supplier, 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 7.07 of the General Conditions.

ARTICLE 12—PREPARATION OF BID

12.01 The Bid Form is included with the Bidding Documents.

A. All blanks on the Bid Form must be completed in ink and the Bid Form signed in ink. Erasures or alterations must be initialed in ink by the person signing the Bid Form. A Bid price must 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."

12.02 If Bidder has obtained the Bidding Documents as Electronic Documents, then Bidder shall prepare its Bid on a paper copy of the Bid Form printed from the Electronic Documents version of the Bidding Documents. The printed copy of the Bid Form must be clearly legible, printed on 8½ inch

by 11-inch paper and as closely identical in appearance to the Electronic Document version of the Bid Form as may be practical. The Owner reserves the right to accept Bid Forms which nominally vary in appearance from the original paper version of the Bid Form, providing that all required information and submittals are included with the Bid.

12.03 A Bid by a corporation must 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 must be shown.

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

12.05 A Bid by a limited liability company must 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 must be shown.

12.06 A Bid by an individual must show the Bidder's name and official address.

12.07 A Bid by a joint venture must be executed by an authorized representative of each joint venturer in the manner indicated on the Bid Form. The joint venture must have been formally established prior to submittal of a Bid, and the official address of the joint venture must be shown.

12.08 All names must be printed in ink below the signatures.

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

12.10 Postal and e-mail addresses and telephone number for communications regarding the Bid must be shown.

12.11 The Bid must contain evidence of Bidder's authority to do business in the state where the Project is located, or Bidder must certify in writing that it will obtain such authority within the time for acceptance of Bids and attach such certification to the Bid.

12.12 If Bidder is required to be licensed to submit a Bid or perform the Work in the state where the Project is located, the Bid must contain evidence of Bidder's licensure, or Bidder must certify in writing that it will obtain such licensure within the time for acceptance of Bids and attach such certification to the Bid. Bidder's state contractor license number, if any, must also be shown on the Bid Form.

ARTICLE 13—BASIS OF BID

13.01 *Unit Price*

A. Bidders must 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.

ARTICLE 14—SUBMITTAL OF BID

14.01 The Bidding Documents include 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 2 of the Bid Form.

14.02 A Bid must be received no later than the date and time prescribed and at the place indicated in the Advertisement or invitation to bid and ~~must be enclosed in a plainly marked package with the Project title, and, if applicable, the designated portion of the Project for which the Bid is submitted, the name and address of Bidder,~~ and must 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 must be enclosed in a separate package plainly marked on the outside with the notation "BID ENCLOSED." A mailed Bid must be addressed to the location designated in the Advertisement. Bids may be submitted electronically to the project manager at email pm@sanipueblo.org.

14.03 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 15—MODIFICATION AND WITHDRAWAL OF BID

15.01 An unopened 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.

15.02 If a Bidder wishes to modify its Bid prior to Bid opening, Bidder must withdraw its initial Bid in the manner specified in Paragraph 15.01 and submit a new Bid prior to the date and time for the opening of Bids.

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, the Bidder may withdraw its Bid, and the Bid security will be returned. Thereafter, if the Work is rebid, the Bidder will be disqualified from further bidding on the Work.

ARTICLE 16—OPENING OF BIDS

16.01 Bids will be opened **privately**.

ARTICLE 17—BIDS TO REMAIN SUBJECT TO ACCEPTANCE

17.01 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 18—EVALUATION OF BIDS AND AWARD OF CONTRACT

18.01 Owner reserves the right to reject any or all Bids, including without limitation, nonconforming, nonresponsive, unbalanced, or conditional Bids. Owner also reserves the right to waive all minor Bid informalities not involving price, time, or changes in the Work.

18.02 Owner will reject the Bid of any Bidder that Owner finds, after reasonable inquiry and evaluation, to not be responsible.

18.03 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, whether in the Bid itself or in a separate communication to Owner or Engineer, then Owner will reject the Bid as nonresponsive.

18.04 If Owner awards the contract for the Work, such award will be to the responsible Bidder submitting the lowest responsive Bid.

18.05 *Evaluation of Bids*

A. In evaluating Bids, Owner will consider whether 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.

B. In the comparison of Bids, alternates will be applied in the same order of priority as listed in the Bid Form. To determine the Bid prices for purposes of comparison, Owner will announce to all bidders a "Base Bid plus alternates" budget after receiving all Bids, but prior to opening them. For comparison purposes alternates will be accepted, following the order of priority established in the Bid Form, until doing so would cause the budget to be exceeded. After determination of the Successful Bidder based on this comparative process 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.

C. 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.

18.06 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.

18.07 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 19—BONDS AND INSURANCE

19.01 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, other required bonds (if any), and insurance. When the Successful Bidder delivers the executed Agreement to Owner, it must be accompanied by required bonds and insurance documentation.

19.02 Article 8, Bid Security, of these Instructions, addresses any requirements for providing bid bonds as part of the bidding process.

ARTICLE 20—SIGNING OF AGREEMENT

20.01 When Owner issues a Notice of Award to the Successful Bidder, it will 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 must 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 10 days thereafter, Owner will 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 21—PREVAILING WAGE RATES

21.01 The Contractor is required to pay workers employed on this contract minimum wages in accordance with the Davis-Bacon Act. The required minimum wages applicable to this contract are included as Exhibit E of the contract documents.

ARTICLE 22—INDIAN PREFERENCE

22.01 The invitation is open to all qualified firms; however, a Native American Preference procurement policy for awarding this contract has been added per Tribal guidelines and requirements. Award shall be made under unrestricted solicitation to the lowest responsive bid from a qualified Indian-owned economic enterprise or organization, if that bid is within budgetary limits established for the specific project or activity for which bids are being taken and no more than 5% higher than the total bid price of the lowest responsive bid from any qualified bidder.

22.02 Native-owned status is defined as follows: a firm (or joint venture) whose level of ownership and control by enrolled Indians (or Alaska Natives) each equal at least 51% of the total on a continuing basis for the duration of the contract. Native-owned bidders will be required to submit necessary documentation with their bids, as well as, prove their Native-owned status prior to receiving a contract (see Exhibit D)

22.03 Regardless of the Native-owned status of the successful offeror, notice is hereby given that the prime Contractor shall perform a minimum of 33.33% of the work, on a cost basis.

ARTICLE 23—TAXES

23.01 The Contractor will be responsible for paying the Tribal Gross Receipts Tax (See SC-7.10 of C-800 the Supplementary Conditions).

23.02 Owner is exempt from New Mexico state sales and use taxes on materials and equipment to be incorporated in the Work. Said taxes must not be included in the Bid. Refer to Paragraph SC-7.10 of the Supplementary Conditions for additional information.

3. Summary of Work and Project Site Photos

Project AL-23-C77 / AL-24-D33 San Ildefonso Pueblo

Summary of Work

Item No.	Work Item	Description	Technical Specification
Schedule A: Lillian Garcia Property			
1	Mobilization and Demobilization	Mobilization and demobilization of all materials, equipment and labor. Includes line locating and pot-holing as needed to identify existing utilities.	TP-01
2	Submittals and as-built drawings	Provision of all material submittals, as-built drawings and other project documentation to IHS for review and approval.	TP-01
3	4" PVC Sewer Service Line	Furnish and install 4-inch SDR-35 sanitary sewer line from the house connection to the grinder pump system.	TP-01, TP-07, Detail 1A
4	4" Two-way Sewer Service Line Cleanout	Furnish and install one 4-inch SDR-35 double cleanout and concrete collar at the location shown on the site plan.	TP-07, TP-02, Detail 7A
5	1 HP grinder pump system, installed	Furnish and install one Model DH071-93 E-One grinder pump system with Simplex Sentry controls, or equivalent to be approved by the Engineer. Includes electrical service connection and 2 bollards.	TP-16, Detail Sheet 7
6	Buried electrical cable	Furnish and install buried electrical cable from house service connection to the grinder pump controls.	TP-1603, 1604
7	1.5” PVC effluent discharge line	Furnish and install 1.5” PVC effluent line from the discharge of the E-One unit to the connection point at the sewer main. Includes replacing any removed fencing and crossing under the existing water main shown in the drawings.	TP-1303I, 1304D, Detail 13J
8	Connect effluent line to sewer main	Materials and installation of service tap to the existing sewer main.	TP-16, TP-704
9	Cap existing SSL	Stub off existing SSL at the existing house C.O. Remove the existing single C.O. in yard north of the house.	TP-1205
Schedule B: Michael Martinez Property			
1	Mobilization and Demobilization	Mobilization and demobilization of all materials, equipment and labor. Includes line locating and pot-holing as needed to identify existing utilities.	TP-01
2	Submittals and as-built drawings	Provision of as-built drawings and other project documentation to IHS for review and approval.	TP-01
3	4" PVC Sewer Service Line	Furnish and install 4-inch SDR-35 sanitary sewer line from the house connection to the grinder pump system.	TP-01, TP-07, Detail 1A

4	4" Two-way SSL Cleanout	Furnish and install one 4-inch SDR-35 double cleanout and concrete collars at the locations shown on the site plan.	TP-07, TP-02, Detail 7A
5	1 HP grinder pump system, installed	Furnish and install one Model DH071-74 E-One grinder pump system with Simplex Sentry controls, or equivalent to be approved by the Engineer. Includes above ground electrical service connection and 2 bollards.	TP-16, Detail Sheet 7
6	Buried electrical cable	Furnish and install buried electrical cable from house service connection to the grinder pump controls.	TP-1603, 1604
7	1.5" PVC effluent discharge line	Furnish and install 1.5" PVC effluent line from the discharge of the E-One unit to the connection point at the existing septic pump tank.	TP-1303I, 1304D, Detail 13J
8	Connect effluent line to existing pump tank	Connect the effluent line into the existing pump tank per the contractor's design and approval by the Engineer.	TP-13, Detail 12A & 13A
9	Abandon existing septic tank and SSL	Furnish and install a 4-port HDPE distribution box, riser and connections to the chamber drain field.	TP-1203C, 1204C, Detail 12G1
12	Chamber Drain Field	Furnish and install a chamber drain field per the drawings, includes all required piping & fittings.	TP-12, Detail 12B, 12C and 12H
13	Abandon existing clean-out and septic tank	Stub off existing SSL at the existing house C.O. Crush and backfill the existing septic tank in place.	TP-1205
Schedule C: Stephanie McReynolds Property			
1	Mobilization and Demobilization	Mobilization and demobilization of all materials, equipment and labor.	TP-01
2	Submittals and As-built drawings	Provision of as-built drawings and other project documentation to IHS for review and approval.	TP-01
3	4" PVC Sewer Service Line (SSL)	Furnish and install a 4-inch SDR-35 sanitary sewer line from the house connection to the new septic per the specs.	TP-01, TP-07, Detail 1A
4	4" Two-way SSL Cleanout	Furnish and install one, 4-inch SDR-35 double cleanout and concrete collar at the location shown on the site plan.	TP-07, TP-02, Detail 7A
5	Combination septic/pump tank and risers	Furnish and install a 1,500 gallon combination septic and pump tank with risers at the location shown on plans.	TP-1303E, Detail 13B
6	½ HP pump, controls and electrical hookup	Furnish and install a ½ HP, 115/230 volt single phase submersible effluent pump and control system at the pump tank. Includes above-ground electrical service connection.	TP-1303H, Detail 13B
7	Power hookup and buried electrical cable	Furnish and install buried electrical cable from house service connection to the pump controls.	TP-1303I

8	Effluent Discharge Line	Furnish and install 1.5” PVC force main between the pump and the distribution box. Includes all necessary pipefittings.	TP-1303J, 1304D, Detail 13J
9	Buried electrical cable	Installation of buried electrical cable from house service connection to the grinder pump controls.	TP-1603, 1604
10	Distribution Box	Furnish and install a 3-port HDPE distribution box, riser and connections to the chamber drain field.	TP-1203C, 1204C, Detail 12G1
11	Chamber Drain Field	Furnish and install a chamber drain field per the drawings. Work includes all required piping & fittings and over-excavation and backfilling with sand-amended soil.	TP-12, Detail 12B, 12C and 12H
12	Abandon Existing Clean Out and Septic Tank	Stub off existing cleanout at the service connection. Crush and backfill the existing septic tank in place.	TP 12-05

Item No.	Work Item	Description	Technical Specification
Schedule D: Shydez Martinez Property			
1	Mobilization and Demobilization	Mobilization and demobilization of all materials, equipment and labor.	TP-01
2	Submittals and as-built drawings	Provision of all material submittals, as-built drawings and other project documentation to IHS for review and approval.	TP-01
3	4" PVC Sewer Service Line	Furnish and install 4-inch SDR-35 sanitary sewer line from the house connection to the pump tank.	TP-01, TP-07, Detail 1A
4	4" Two-way Sewer Service Line Cleanout	Furnish and install one 4-inch SDR-35 double cleanout and concrete collar at the location shown on the site plan.	TP-07, TP-02, Detail 7A
5	Septic Tank	Furnish and install a 1,550-gallon septic tank.	TP-12, Detail 12A
6	Distribution Box	Furnish and install a 3-port HDPE distribution box, riser and connections to the drain field.	TP-1203C, 1204C, Detail 12G1
7	Chamber Drain Field	Furnish and install a chamber drain field per the drawings, includes all required piping & fittings.	TP-12, Detail 12B, 12C and 12H
8	Abandon Existing Septic Tank	Stub off existing service connection to the septic tank. Crush and backfill the tank in place.	TP 12-05

Project Site Photos

Schedule A: Lillian Garcia Property

View of the existing sewer service line (SSL) cleanout at the north wall of the house. The new SSL will connect to the house at the same location.

The proposed new effluent discharge line will run beneath this field to connect to the existing sewer main on the far side of the driveway.

.

An existing SSL cleanout located north of the house.
The existing SSL line will be capped and abandoned in place at this location.

Project Site Photos

Schedule B: Michael Martinez Property

View of the existing sewer service line (SSL) cleanout at the northwest corner of the house. The new SSL will connect to the house at the same location.

View of the west side of the house. The new effluent line will run parallel to the house, offset about 10 feet.

The proposed effluent line will connect to this existing pump tank near the SE corner of the house.

The existing septic tank located near this shed will be crushed and abandoned in place.

Project Site Photos

Schedule C: Stephanie McReynolds Property

The open space to the south of Stephanie McReynolds' house. San Ildefonso Pueblo's facilities department staff are testing the soil at the proposed location of the new drain field.

View of the existing sewer service line (SSL) cleanout at the west wall of the house. The new SSL will connect to the house at the same location.

Project Site Photos

Schedule D: Shydez Martinez Property

View of the Martinez house from the west. The proposed new drain field will be behind the house.

View of the location of the proposed drain field.
The existing shed on the right will be re-located.

View of the existing sewer service line (SSL) cleanout at the south wall of the house.
The new SSL will connect to the house at the same location.

View of the cleanout at the existing septic tank.
The existing tank will be crushed and abandoned in-place.

4. EJCDC No. C-410

Bid Form

BID FORM FOR CONSTRUCTION CONTRACT

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 1—OWNER AND BIDDER

1.01 This Bid is submitted to:

Lou Baker, Project Manager
San Ildefonso Pueblo
2 Tunyo Po
Santa Fe, NM 87506

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—ATTACHMENTS TO THIS BID

2.01 The following documents are submitted with and made a condition of this Bid:

A. Required Bid security;

B. List of Proposed Subcontractors;

C. List of Proposed Suppliers;

D. Evidence of authority to do business in the state of the Project; or a written covenant to obtain such authority within the time for acceptance of Bids;

E. Contractor's license number as evidence of Bidder's State Contractor's License or a covenant by Bidder to obtain said license within the time for acceptance of Bids;

F. Required Bidder Qualification Statement with supporting data

ARTICLE 3—BASIS OF BID

3.01 *Lump Sum and Unit Price Bids*

A. Bidder will perform the following Work at the indicated unit prices:

Item No.	Description	Unit	Estimated Quantity	Bid Unit Price	Bid Amount
Schedule A: Lillian Garcia Property					
1	Mobilization and Demobilization	LS	1	$	$
2	Submittals and as-built drawings	LS	1	$	$
3	4" PVC Sewer service line	LF	60	$	$
4	Two-way 4" SSL cleanouts	EA	1	$	$

5	1 HP grinder pump system, installed	LS	1	$	$
6	Buried electrical cable	LF	60	$	$
7	1.5" effluent discharge line	LF	250	$	$
8	Connect effluent line to sewer main	LS	1	$	$
9	Cap existing SSL	LS	1	$	$
				Subtotal Schedule A =	$
Schedule B: Michael Martinez Property					
1	Mobilization and Demobilization	LS	1	$	$
2	Submittals and as-builts	LS	1	$	$
3	4” PVC Sewer service line	LF	10	$	$
4	Two-way 4" SSL cleanouts	EA	1	$	$
5	1 HP grinder pump system, installed	LS	1	$	$
6	Buried electrical cable	LF	30	$	$
7	1.25" effluent discharge line	LF	135	$	$
8	Connect effluent line to existing pump tank	LS	1	$	$
9	Abandon existing SSL & septic tank	LS	1	$	$
				Subtotal Schedule B =	$
Schedule C: Stephanie McReynolds Property					
1	Mobilization and Demobilization	LS	1	$	$
2	Submittals and as-builts	LS	1	$	$
3	4” Sewer service line	LF	30	$	$
4	Two-way 4" SSL cleanout	EA	1	$	$
5	1500 gal. combination septic tank & risers	EA	1	$	$
6	1/2 HP pump, controls and electrical hookup	LS	1	$	$
7	Buried electrical cable	LF	35	$	$
8	1.5" effluent discharge line	LF	100	$	$
9	Drain field distribution box	EA	1	$	$
10	Chamber drain field	LF	96	$	$
				Subtotal Schedule C =	$
Schedule D: Sanchez Property Water Service Connections					
1	Mobilization and Demobilization	LS	1		
2	Submittals and as-builts	LS	1		
3	4” Sewer service line	LF	65		
4	Two-way 4" SSL cleanout	EA	1		
5	1500 gal. septic tank & risers	EA	1		
6	Drain field distribution box	EA	1		
7	Chamber drain field	LF	96		
8	Abandon septic tank	LS	1		
				Subtotal Schedule D =	$
				Total of All Unit Price Bid Items =	
				San Ildefonso Pueblo GRT (7.0%) =	
				Total =	

B. Bidder acknowledges that:

1. Each Bid Unit Price includes an amount considered by Bidder to be adequate to cover Contractor's overhead and profit for each separately identified item, and

2. Estimated quantities are not guaranteed, and are solely for the purpose of comparison of Bids, and final payment for all Unit Price Work will be based on actual quantities, determined as provided in the Contract Documents.

3.02 *Total Bid Price (Lump Sum and Unit Prices)*

Total Bid Price (Total of all Lump Sum and Unit Price Bids)	$

ARTICLE 4—TIME OF COMPLETION

4.01 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.

4.02 Bidder agrees that the Work will be substantially complete within 90 calendar days after the date when the Contract Times commence to run as provided in Paragraph 4.01 of the General Conditions, and will be completed and ready for final payment in accordance with Paragraph 15.06 of the General Conditions within 130 calendar days after the date when the Contract Times commence to run.

4.03 Bidder accepts the provisions of the Agreement as to liquidating damages.

ARTICLE 5—BIDDER'S ACKNOWLEDGEMENTS: ACCEPTANCE PERIOD, INSTRUCTIONS, AND RECEIPT OF ADDENDA

5.01 *Bid Acceptance Period*

A. 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.

5.02 *Instructions to Bidders*

A. Bidder accepts all of the terms and conditions of the Instructions to Bidders, including without limitation those dealing with the disposition of Bid security.

5.03 *Receipt of Addenda*

A. Bidder hereby acknowledges receipt of the following Addenda:

Addendum Number	Addendum Date

ARTICLE 6—BIDDER'S REPRESENTATIONS AND CERTIFICATIONS

6.01 *Bidder's Representations*

A. In submitting this Bid, Bidder represents the following:

1. Bidder has examined and carefully studied the Bidding Documents, including Addenda.

2. Bidder has visited the Site, conducted a thorough visual examination of the Site and adjacent areas, and become familiar with the general, local, and Site conditions that may affect cost, progress, and performance of the Work.

3. Bidder is familiar with all Laws and Regulations that may affect cost, progress, and performance of the Work.

4. Bidder has carefully studied the reports of explorations and tests of subsurface conditions at or adjacent to the Site and the drawings of physical conditions relating to existing surface or subsurface structures at the Site that have been identified in the Supplementary Conditions, with respect to the Technical Data in such reports and drawings.

5. Bidder has carefully studied the reports and drawings relating to Hazardous Environmental Conditions, if any, at or adjacent to the Site that have been identified in the Supplementary Conditions, with respect to Technical Data in such reports and drawings.

6. 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 the Technical Data identified in the Supplementary Conditions or by definition, with respect to the effect of such information, observations, and Technical Data on (a) the cost, progress, and performance of the Work; (b) the means, methods, techniques, sequences, and procedures of construction to be employed by Bidder, if selected as Contractor; and (c) Bidder's (Contractor's) safety precautions and programs.

7. Based on the information and observations referred to in the preceding paragraph, Bidder 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.

8. 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.

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

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

11. The submission of this Bid constitutes an incontrovertible representation by Bidder that without exception the Bid and all prices in the Bid are premised upon performing and furnishing the Work required by the Bidding Documents.

6.02 *Bidder's Certifications*

A. The Bidder certifies the following:

1. 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.

2. Bidder has not directly or indirectly induced or solicited any other Bidder to submit a false or sham Bid.
3. Bidder has not solicited or induced any individual or entity to refrain from bidding.
4. Bidder has not engaged in corrupt, fraudulent, collusive, or coercive practices in competing for the Contract. For the purposes of this Paragraph 8.02.A:
    a. 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.
    b. 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.
    c. 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.
    d. 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.

BIDDER hereby submits this Bid as set forth above:

Bidder:

_____

(typed or printed name of organization)

By: _____

(individual's signature)

Name: _____

(typed or printed)

Title: _____

(typed or printed)

Date: _____

(typed or printed)

If Bidder is a corporation, a partnership, or a joint venture, attach evidence of authority to sign.

Attest: _____

(individual's signature)

Name: _____

(typed or printed)

Title: _____

(typed or printed)

Date: _____

(typed or printed)

Address for giving notices:

_____

_____

Bidder's Contact:

Name: _____

(typed or printed)

Title: _____

(typed or printed)

Phone: _____

Email: _____

Address:

_____

_____

_____

Bidder's Contractor License No.: (if applicable) _____

5. EJCDC No. 522

Contract for Construction of a Small Project

CONTRACT FOR CONSTRUCTION OF A SMALL PROJECT

This Contract is by and between Pueblo of San Ildefonso (Owner) and _____ (Contractor).

Owner and Contractor hereby agree as follows:

ARTICLE 1 - THE WORK

1.01 Work

A. Work includes all labor, materials, equipment, services, and documentation necessary to construct the Project defined herein. The Work may include related services such as testing, start-up, and commissioning, all as required by the Contract Documents.

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

1. Schedule A: Install an individual sewage grinder pump system and install 250 lineal feet of effluent discharge line to connect it to an existing sewer.

2. Schedule B: Install an individual sewage grinder pump system and install 135 lineal feet of effluent discharge line to connect it to an existing septic pump tank. Crush and abandon an existing septic tank.

3. Schedule C: Install a combination septic & pump tank system and install 100 lineal feet of discharge line to connect it to a new chamber drain field. Crush and abandon an existing septic tank.

4. Schedule D: Install a new septic tank 65 lineal feet of discharge line to connect it to a new chamber drain field. Crush and abandon an existing septic tank.

5. The Site of the Work includes property, easements, and designated work areas described in detail in the Contract Documents but generally located at San Ildefonso Pueblo, approximately 20 miles north of Santa Fe.

ARTICLE 2 - CONTRACT DOCUMENTS

2.01 Intent of Contract Documents

A. It is the intent of the Contract Documents to describe a functionally complete project. The Contract Documents do not indicate or describe all of the Work required to complete the Project. Additional details required for the correct installation of selected products are to be provided by the Contractor and coordinated with the Owner and Engineer. This Contract supersedes prior negotiations, representations, and agreements, whether written or oral. The Contract Documents are complementary; what is required by one part of the Contract Documents is as binding as if required by other parts of the Contract Documents.

B. During the performance of the Work and until final payment, Contractor and Owner shall submit all matters in question concerning the requirements of the Contract Documents, or relating to the acceptability of the Work under the Contract Documents to the Engineer.

Engineer will be the initial interpreter of the requirements of the Contract Documents, and judge of the acceptability of the Work thereunder.

C. Engineer will render a written clarification, interpretation, or decision on the issue submitted, or initiate a modification to the Contract Documents.

D. Contractor, and its subcontractors and suppliers, shall not have or acquire any title to or ownership rights to any of the Drawings, Specifications, or other documents (including copies or electronic media editions) prepared by Engineer or its consultants.

2.02 Contract Documents Defined

A. The Contract Documents consist of the following documents:

1. This Contract.
2. Performance bond.
3. Payment bond.
4. Specifications.
5. Drawings.
6. Addenda, in any.
7. Exhibits to this Contract (enumerated as follows):
    a. Permit to Enter Tribal Lands
    b. San Ildefonso Water Usage Rates
    c. San Ildefonso Pueblo Responsibilities of Individuals Conducting Business on Tribal Lands
    d. San Ildefonso Business License Application
    e. Davis Bacon Wage Rates for Santa Fe County
8. The following which may be delivered or issued on or after the Effective Date of the Contract:
    a. Work Change Directives (EJCDC C-940).
    b. Change Orders (EJCDC C-941).
    c. Field Orders.
    d. Certificate of Substantial Completion (EJCDC C-625)

ARTICLE 3 - ENGINEER

3.01 Engineer

A. The Engineer for this Project is Indian Health Service

Tom Slocum, P.E.

Tel. 505-946-9583, email thomas.slocum@ihs.gov

ARTICLE 4 - CONTRACT TIMES

4.01 Contract Times

A. The Work will be substantially completed within 90 days after the Effective Date of the Contract and completed and ready for final payment within 130 days after the Effective Date of the Contract.

4.02 Liquidated Damages

A. Contractor and Owner recognize that time is of the essence in the performance of the Contract, and that Owner will incur damages if Contractor does not complete the Work according to the requirements of Paragraph 4.01. Because such damages for delay would be difficult and costly to determine, Owner and Contractor agree that as liquidated damages for delay (but not as a penalty) Contractor shall pay Owner $500.00 for each day that expires after the Contract Time for substantial completion.

4.03 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 or their subcontractors or suppliers.

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.

D. 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 or Contractor's subcontractors or suppliers.

4.04 Progress Schedules

A. Contractor shall develop a progress schedule and submit to the Engineer for review and comment before starting Work on the Site. The Contractor shall modify the schedule in accordance with the comments provided by the Engineer.

B. The Contractor shall update and submit the progress schedule to the Engineer each month. The Owner may withhold payment if the Contractor fails to submit the schedule.

ARTICLE 5 - CONTRACT PRICE

5.01 Payment

A. Owner shall pay Contractor in accordance with the Contract Documents at the following unit prices for each unit of Work completed:

Item No.	Description	Unit	Estimated Quantity	Bid Unit Price	Bid Amount
Schedule A: Lillian Garcia Property					
1	Mobilization and Demobilization	LS	1	$	$
2	Submittals and as-built drawings	LS	1	$	$
3	4” PVC Sewer service line	LF	60	$	$
4	Two-way 4" SSL cleanouts	EA	1	$	$
5	1 HP grinder pump system, installed	LS	1	$	$
6	Buried electrical cable	LF	60	$	$
7	1.5" effluent discharge line	LF	250	$	$
8	Connect effluent line to sewer main	LS	1	$	$
9	Cap existing SSL	LS	1	$	$
				Subtotal Schedule A =	$
Schedule B: Michael Martinez Property					
1	Mobilization and Demobilization	LS	1	$	$
2	Submittals and as-builts	LS	1	$	$
3	4” PVC Sewer service line	LF	10	$	$
4	Two-way 4" SSL cleanouts	EA	1	$	$
5	1 HP grinder pump system, installed	LS	1	$	$
6	Buried electrical cable	LF	30	$	$
7	1.25" effluent discharge line	LF	135	$	$
8	Connect effluent line to existing pump tank	LS	1	$	$
9	Abandon existing SSL & septic tank	LS	1	$	$
				Subtotal Schedule B =	$
Schedule C: Stephanie McReynolds Property					
1	Mobilization and Demobilization	LS	1	$	$
2	Submittals and as-builts	LS	1	$	$
3	4” Sewer service line	LF	30	$	$
4	Two-way 4" SSL cleanout	EA	1	$	$
5	1500 gal. combination septic tank & risers	EA	1	$	$
6	1/2 HP pump, controls and electrical hookup	LS	1	$	$
7	Buried electrical cable	LF	35	$	$
8	1.5" effluent discharge line	LF	100	$	$
9	Drain field distribution box	EA	1	$	$
10	Chamber drain field	LF	96	$	$
				Subtotal Schedule C =	$
Schedule D: Sanchez Property Water Service Connections					
1	Mobilization and Demobilization	LS	1		

2	Submittals and as-builts	LS	1		
3	4” Sewer service line	LF	65		
4	Two-way 4" SSL cleanout	EA	1		
5	1500 gal. septic tank & risers	EA	1		
6	Drain field distribution box	EA	1		
7	Chamber drain field	LF	96		
8	Abandon septic tank	LS	1		
				Subtotal Schedule D =	$
				Total of All Unit Price Bid Items =	
				San Ildefonso Pueblo GRT (7.0%) =	
				Total =	

B. Payment will be made in an amount equal to the total of all extended prices for actual Work completed. The extended price is determined by multiplying the unit price times the actual quantity of that Work item completed. Actual quantities installed will be determined by the Engineer.

ARTICLE 6 - BONDS AND INSURANCE

6.01 Bonds

A. Before starting Work, Contractor shall furnish ~~a performance bond and~~ a payment bond from surety companies that are duly licensed or authorized to issue bonds in the required amounts in the jurisdiction in which the Project is located. Each bond shall be in an amount 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 the completion of the correction period specified in Paragraph 7.12 but, in any case, not less than one year after the date when final payment becomes due.

6.02 Insurance

A. Before starting Work, Contractor shall furnish evidence of insurance from companies that are duly licensed or authorized in the jurisdiction in which the Project is located with a minimum AM Best rating of A-VII or better. Contractor shall provide insurance in accordance with the following:

1. Contractor shall provide coverage for not less than the following amounts, or greater where required by Laws and Regulations:

a. Workers’ Compensation:

State: New Mexico		Statutory
Employer’s Liability:		
Bodily Injury, each Accident	$	1,000,000
Bodily Injury By Disease, each Employee	$	1,000,000
Bodily Injury/Disease Aggregate	$	1,000,000

b. Commercial General Liability:

General Aggregate	$	3,000,000
Products - Completed Operations Aggregate	$	3,000,000
Personal and Advertising Injury	$	1,000,000
Each Occurrence (Bodily Injury and Property Damage)	$	1,000,000

c. Automobile Liability herein:

Combined Single Limit of:	$	1,000,000

d. Excess or Umbrella Liability:

Per Occurrence	$	5,000,000
General Aggregate	$	5,000,000

B. All insurance policies required to be purchased and maintained 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 insured and additional insured.

C. Automobile liability insurance provided by Contractor shall provide coverage 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.

D. Contractor's commercial general liability policy shall be written on a 1996 or later ISO commercial general liability occurrence form and include the following coverages and endorsements:

1. Products and completed operations coverage maintained for three years after final payment;
2. Blanket contractual liability coverage to the extent permitted by law;
3. Broad form property damage coverage; and
4. Severability of interest; underground, explosion, and collapse coverage; personal injury coverage.

E. The Contractor's commercial general liability and automobile liability, umbrella or excess, and pollution liability policies shall include and list Owner and Engineer and the respective officers, directors, members, partners, employees, agents, consultants, and subcontractors of each as 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.

1. Additional insured endorsements will 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). If Contractor demonstrates to Owner that the specified ISO endorsements are not commercially available, then Contractor may satisfy this requirement by providing equivalent endorsements.

2. Contractor shall provide ISO Endorsement CG 20 32 07 04, "Additional Insured—Engineers, Architects or Surveyors Not Engaged by the Named Insured" or its equivalent for design professional additional insureds.

F. Umbrella or excess liability insurance shall be written over the underlying employer's liability, commercial general liability, and automobile liability insurance. Subject to industry-standard exclusions, the coverage afforded shall be procured on a "follow the form" basis as to each of the underlying policies. Contractor may demonstrate to Owner that Contractor has met the combined limits of insurance (underlying policy plus applicable umbrella) specified for employer's liability, commercial general liability, and automobile liability through the primary policies alone, or through combinations of the primary insurance policies and an umbrella or excess liability policy.

G. The Contractor shall provide property insurance covering physical loss or damage during construction to structures, materials, fixtures, and equipment, including those materials, fixtures, or equipment in storage or transit.

H. 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 15.

ARTICLE 7 - CONTRACTOR'S RESPONSIBILITIES

7.01 Supervision and Superintendence

A. Contractor shall supervise 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, safety, and procedures of construction.

B. Contractor shall assign a competent resident superintendent who is to be present at all times during the execution of the Work. This resident superintendent shall not be replaced without written notice to and approval by the Owner and Engineer except under extraordinary circumstances.

C. Contractor shall at all times maintain good discipline and order at the Site.

D. 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.

7.02 Other Work at the Site

A. In addition to and apart from the Work of the Contractor, other work may occur at or adjacent to the Site. 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.

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 new, of good quality and 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 Subcontractors and Suppliers

A. Contractor may retain subcontractors and suppliers for the performance of parts of the Work. Such subcontractors and suppliers must be acceptable to Owner.

7.05 Quality Management

A. Contractor is fully responsible for the managing quality to ensure Work is completed in accordance with the Contract Documents.

7.06 Licenses, Fees and Permits

A. Contractor shall pay all license fees and royalties and assume all costs incident to performing 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.

B. Contractor shall obtain and pay for all construction permits and licenses unless otherwise provided in the Contract Documents.

7.07 Laws and Regulations; Taxes

A. Contractor shall give all notices required by and shall comply with all local, state, and federal 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. 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 if Contractor performs any Work or takes any other action knowing or having reason to know that it is contrary to Laws or Regulations.

C. Contractor shall pay all applicable sales, consumer, use, and other similar taxes Contractor is required to pay in accordance with Laws and Regulations.

7.08 Record Documents

A. Contractor shall maintain one printed record copy of all Drawings, Specifications, Addenda, Change Orders, Work Change Directives, Field Orders, written interpretations and clarifications, and approved shop drawings in a safe place at the Site. Contractor shall annotate them to show changes made during construction. Contractor shall deliver these record documents to Engineer upon completion of the Work.

7.09 Safety and Protection

A. Contractor shall be solely responsible for initiating, maintaining, and supervising all safety precautions and programs in connection with the Work.

B. 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.

C. All damage, injury, or loss to any property caused, directly or indirectly, in whole or in part, by Contractor, or anyone for whose acts the Contractor may be liable, shall be remedied by Contractor at its expense (except damage or loss attributable to the fault of Contract Documents or to the acts or omissions of Owner or Engineer and not attributable, directly or indirectly, in whole or in part, to the fault or negligence of Contractor).

D. 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.

E. In emergencies affecting the safety or protection of persons or the Work or property at the Site or adjacent thereto, Contractor shall 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.

7.10 Shop Drawings, Samples, and Other Submittals

A. Contractor shall review and coordinate the shop drawing and samples with the requirements of the Work and the Contract Documents and shall verify all related field measurements, quantities, dimensions, specified performance and design criteria, installation requirements, materials, catalog numbers, and similar information.

B. 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.

C. With each submittal, Contractor shall give Engineer specific written notice, in a communication separate from the submittal, of any variations that the shop drawing or sample may have from the requirements of the Contract Documents.

D. Engineer will provide timely review of shop drawings and samples.

E. Engineer's review and approval will not extend to means, methods, techniques, sequences, or procedures of construction or to safety precautions or programs.

F. Engineer's review and approval of a separate item does not indicate approval of the assembly in which the item functions.

G. 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.

H. Shop drawings are not Contract Documents.

7.11 Warranties and Guarantees

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.

7.12 Correction Period

A. If within one year after the date of substantial completion, 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 and without cost to Owner, correct such defective Work.

7.13 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 they may be liable.

ARTICLE 8 - OWNER'S RESPONSIBILITIES

8.01 Owner's Responsibilities

A. Except as otherwise provided in the Contract Documents, Owner shall issue all communications to Contractor through Engineer.

B. Owner shall make payments to Contractor as provided in this Contract.

C. Owner shall provide Site and easements required to construct the Project.

D. If Owner intends to contract with others for the performance of other work at or adjacent to the Site, unless stated elsewhere in the Contract Documents, Owner shall have sole authority and responsibility for such coordination.

E. The Owner shall be responsible for performing inspections and tests required by applicable codes.

F. 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, 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.

G. 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.

H. Owner shall furnish copies of any applicable Owner safety programs to Contractor.

ARTICLE 9 - ENGINEER'S STATUS DURING CONSTRUCTION

9.01 Engineer's Status

A. Engineer will be Owner's representative during construction. The duties and responsibilities and the limitations of authority of Engineer as Owner's representative during construction are set forth in this Contract.

B. Neither Engineer's authority or responsibility under this Article 9 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.

C. Engineer will make visits to the Site at intervals appropriate to the various stages of construction. Engineer will not be required to make exhaustive or continuous inspections on the Site to check the quality or quantity of the Work.

D. Engineer has the authority to reject Work if Contractor fails to perform Work in accordance with the Contract Documents.

E. Engineer will render decisions regarding the requirements of the Contract Documents, and judge the acceptability of the Work.

F. 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, 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.

ARTICLE 10 - CHANGES IN THE WORK

10.01 Authority to Change 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.

10.02 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 the Work which are: (a) ordered by Owner or (b) agreed to by the parties or (c) resulting from the Engineer's decision, 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

3. Changes in the Contract Price or Contract Times or other changes that embody the substance of any final binding results under Article 12.

B. 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 11 - DIFFERING SUBSURFACE OR PHYSICAL CONDITIONS

11.01 Differing Conditions Process

A. If Contractor believes that any subsurface or physical condition including but not limited to utilities or other underground facilities that are uncovered or revealed at the Site either differs materially from that shown or indicated in the Contract Documents or 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), 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. After receipt of written notice, Engineer will promptly:

1. Review the subsurface or physical condition in question;

2. Determine necessity for Owner obtaining additional exploration or tests with respect to the condition;

3. Determine whether the condition falls within the differing site condition as stated herein;

4. Obtain any pertinent cost or schedule information from Contractor;

5. 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

6. Advise Owner in writing of Engineer's findings, conclusions, and recommendations.

C. After receipt of Engineer's written findings, conclusions, and recommendations, Owner shall issue a written statement to Contractor 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.

ARTICLE 12 - CLAIMS AND DISPUTE RESOLUTION

12.01 Claims Process

A. The party submitting a claim shall deliver it directly to the other party to the Contract and the Engineer promptly (but in no event later than 10 days) after the start of the event giving rise thereto.

B. 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. All actions taken on a claim shall be stated in writing and submitted to the other party.

C. 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 45 days, the claim is deemed denied.

D. If the dispute is not resolved to the satisfaction of the parties, Owner or Contractor shall give written notice to the other party of the intent to submit the dispute to a court of competent jurisdiction unless the Owner and Contractor both agree to an alternative dispute resolution process.

ARTICLE 13 - TESTS AND INSPECTIONS; CORRECTION OF DEFECTIVE WORK

13.01 Tests and Inspections

A. Owner and Engineer 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.

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

C. If any Work 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.

13.02 Defective Work

A. Contractor shall ensure that the Work is not defective.

B. Engineer has the authority to determine whether Work is defective, and to reject defective Work.

C. Prompt notice of all defective Work of which Owner or Engineer has actual knowledge will be given to Contractor.

D. The Contractor shall promptly correct all such defective Work.

E. 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. 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.

ARTICLE 14 - PAYMENTS TO CONTRACTOR

14.01 Progress Payments

A. The Contractor shall prepare a schedule of values that will serve as the basis for progress payments. The schedule of values will be in a form of application for payment acceptable to Engineer. The unit price breakdown submitted with the bid will be used for unit price work. Break lump sum items into units that will allow for measurement of Work in progress.

14.02 Applications for Payments:

A. Contractor shall submit an application for payment in a form acceptable to the Engineer, no more frequently than monthly, to Engineer. Applications for payment will be prepared and signed by Contractor. Contractor shall provide supporting documentation required by the Contract Documents. Payment will be paid for Work completed as of the date of the application for payment.

B. 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.

14.03 Retainage

A. The Owner shall retain **[N.A.]** % of each progress payment until the Work is substantially complete.

14.04 Review of Applications

A. Within 10 days after receipt of each application for payment, the Engineer will either indicate in writing a recommendation for payment and present the application for payment to Owner or return the application for payment to Contractor indicating in writing Engineer's reasons for refusing to recommend payment. The Contractor will make the necessary corrections and resubmit the application for payment.

B. Engineer will recommend reductions in payment (set-offs) which, in the opinion of the Engineer, are necessary to protect Owner from loss because the Work is defective and requires correction or replacement.

C. The Owner is entitled to impose set-offs against payment based on any claims that have been made against Owner on account of Contractor's conduct in the performance of the Work, incurred costs, losses, or damages on account of Contractor's conduct in the performance of the Work, or liquidated damages that have accrued as a result of Contractor's failure to complete the Work.

14.05 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.

14.06 Substantial Completion

A. The Contractor shall notify Owner and Engineer in writing that the Work is substantially complete and request the Engineer issue a certificate of substantial completion when Contractor considers the Work ready for its intended use. 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. Engineer will make an inspection of the Work with the Owner and Contractor to determine the status of completion. If Engineer does not consider the Work substantially complete, Engineer will notify Contractor and Owner in writing giving the reasons therefor.

C. If Engineer considers the Work substantially complete or upon resolution of all reasons for non-issuance of a certificate identified in 14.06.B, Engineer will deliver to Owner a certificate of substantial completion which shall fix the date of substantial completion and include a punch list of items to be completed or corrected before final payment.

14.07 Final Inspection

A. Upon written notice from Contractor that the entire Work 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.

14.08 Final Payment

A. Contractor may make application for final payment after Contractor has satisfactorily completed all Work defined in the Contract, including providing all maintenance and operating instructions, schedules, guarantees, bonds, certificates or other evidence of insurance, certificates of inspection, annotated record documents and other documents.

B. The final application for payment shall be accompanied (except as previously delivered) by:

1. All documentation called for in the Contract Documents;

2. Consent of the surety to final payment;

3. 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;

4. A list of all disputes that Contractor believes are unsettled; and

5. 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.

C. 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.

14.09 Waiver of Claims

A. The making of final payment will not constitute a waiver by Owner of claims or rights against Contractor.

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.

ARTICLE 15 - SUSPENSION OF WORK AND TERMINATION

15.01 Owner May Suspend Work

A. At any time and without cause, Owner may suspend the Work or any portion thereof for a period of not more than 60 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.

15.02 Owner May Terminate for Cause

A. Contractor's failure to perform the Work in accordance with the Contract Documents or other failure to comply with a material term of the Contract Documents will constitute a default by Contractor and justify termination for cause.

B. If Contractor defaults in its obligations, 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. Owner may not proceed with termination of the Contract under Paragraph 15.02.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.

D. 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.

E. In the case of a termination for cause, if the cost to complete the Work, including related claims, costs, losses, and damages, exceeds the unpaid contract balance, Contractor shall pay the difference to Owner.

15.03 Owner May Terminate for Convenience

A. Upon seven days written notice to Contractor, 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.

15.04 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) 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 provided Owner does not remedy such suspension or failure within that time, either stop the Work until payment is received, or terminate the Contract and recover payment from the Owner.

ARTICLE 16 - CONTRACTOR'S REPRESENTATIONS

16.01 Contractor Representations

A. Contractor makes the following representations when entering into this Contract:

1. Contractor has examined and carefully studied the Contract Documents, and any data and reference items identified in the Contract Documents.

2. Contractor has visited the Site, conducted a thorough 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.

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

4. 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:

a. The cost, progress, and performance of the Work;

b. The means, methods, techniques, sequences, and procedures of construction to be employed by Contractor; and

c. Contractor's safety precautions and programs.

5. 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.

6. 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.

7. 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.

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

9. Contractor's entry into this Contract constitutes an incontrovertible representation by Contractor that, without exception, all prices in the Contract are premised upon performing and furnishing the Work required by the Contract Documents.

ARTICLE 17 - MISCELLANEOUS

17.01 Cumulative Remedies

A. The duties and obligations imposed by this Contract and the rights and remedies available hereunder to the parties hereto are in addition to, and are not to be construed in any way as a limitation of, any rights and remedies available to any or all of them which are otherwise imposed or available by Laws or Regulations, by special warranty or guarantee, or by other provisions of the Contract. The provisions of this paragraph will be as effective as if repeated specifically in the Contract Documents in connection with each particular duty, obligation, right, and remedy to which they apply.

17.02 Limitation of Damages

A. Neither Owner, 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.

17.03 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.

17.04 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.

17.05 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.

17.06 Controlling Law

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

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

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

OWNER:	CONTRACTOR:
_____	_____
By: _____	By: _____
Title: _____	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:
_____	_____
_____	_____
_____	_____
	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 Contract.)	

6. EJCDC No. C-615

Payment Bond

PAYMENT BOND

Contractor	**Surety**
Name:	Name:
Address *(principal place of business)*:	Address *(principal place of business)*:
Owner	**Contract**
Name: **San Ildefonso Pueblo**	Description *(name and location)*: **San Ildefonso Pueblo 2025 Individual Wastewater Disposal Systems** **IHS Project Nos. AL-23-C77 and AL-24-D33**
Mailing address *(principal place of business)*: **Office of the Governor** **2 Tunyo Po** **Santa Fe, NM 87506**	Contract Price: Effective Date of Contract:

Bond

Bond Amount:

Date of Bond:

(Date of Bond cannot be earlier than Effective Date of Contract)

Modifications to this Bond form:

☐ None ☐ See Paragraph 18

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

Contractor as Principal	Surety
_____ *(Full formal name of Contractor)*	_____ *(Full formal name of Surety) (corporate seal)*
By: _____ *(Signature)*	By: _____ *(Signature)(Attach Power of Attorney)*
Name: _____ *(Printed or typed)*	Name: _____ *(Printed or typed)*
Title: _____	Title: _____
Attest: _____ *(Signature)*	Attest: _____ *(Signature)*
Name: _____ *(Printed or typed)*	Name: _____ *(Printed or typed)*
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 is 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 will 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 will 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 non-payment 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 will 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.

8. The Surety's total obligation will 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 will 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 will 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 satisfying 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 will 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 will be applicable.

13. Notice and Claims to the Surety, the Owner, or the Contractor must be mailed or delivered to the address shown on the page on which their signature appears. Actual receipt of notice or Claims, however accomplished, will 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 will be deemed deleted here from and provisions conforming to such statutory or other legal requirement will be deemed incorporated herein. When so furnished, the intent is that this Bond will 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:

        16.1.1. The name of the Claimant;

        16.1.2. The name of the person for whom the labor was done, or materials or equipment furnished;

        16.1.3. 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;

        16.1.4. A brief description of the labor, materials, or equipment furnished;

16.1.5. The date on which the Claimant last performed labor or last furnished materials or equipment for use in the performance of the Construction Contract;

16.1.6. The total amount earned by the Claimant for labor, materials, or equipment furnished as of the date of the Claim;

16.1.7. The total amount of previous payments received by the Claimant; and

16.1.8. 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 is 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 will be deemed to be Subcontractor and the term Owner will be deemed to be Contractor.

18. Modifications to this Bond are as follows: **[Describe modification or enter "None"]**

7. EJCDC No. C-620

Payment Forms

(Contractor's Application for Payment)

Contractor's Application for Payment

Owner:	San Ildefonso Pueblo	**Owner's Project No.:**	
Engineer:	IHS	**Engineer's Project No.:**	23-C77 & 24-D33
Contractor:		**Contractor's Project No.:**	
Project:	2025 Individual Wastewater Disposal Systems		
Contract:			
Application No.:		**Application Date:**	
Application Period:	**From**	**to**	

1. Original Contract Price			$ -
2. Net change by Change Orders			$ -
3. Current Contract Price (Line 1 + Line 2)			$ -
4. Total Work completed and materials stored to date (Sum of Column G Lump Sum Total and Column J Unit Price Total)			$ -
5. Retainage			
a.	X $ -	Work Completed	$ -
b.	X $ -	Stored Materials	$ -
c. Total Retainage (Line 5.a + Line 5.b)			$ -
6. Amount eligible to date (Line 4 - Line 5.c)			$ -
7. Less previous payments (Line 6 from prior application)			
8. Amount due this application			$ -
9. Balance to finish, including retainage (Line 3 - Line 4)			$ -

Contractor's Certification

The undersigned Contractor certifies, to the best of its knowledge, the following:
(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 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.

Contractor:

Signature: **Date:**

Recommended by Engineer		**Approved by Owner**	
By:		**By:**	
Title:		**Title:**	
Date:		**Date:**	
Approved by Funding Agency			
By:		**By:**	
Title:		**Title:**	
Date:		**Date:**	

Progress Estimate - Unit Price Work

Contractor's Application for Payment

Owner: San Ildefonso Pueblo
Engineer: IHS
Contractor:
Project: 2025 Individual Wastewater Disposal Systems
Contract:

Owner's Project No.:
Engineer's Project No.: 23-C77 & 24-D33
Contractor's Project No.:

Application No.: **Application Period:** From to **Application Date:**

A	B	C	D	E	F	G	H	I	J	K	L
		Contract Information				Work Completed					
Bid Item No.	Description	Item Quantity	Units	Unit Price ($)	Value of Bid Item (C X E) ($)	Estimated Quantity Incorporated in the Work	Value of Work Completed to Date (E X G) ($)	Materials Currently Stored (not in G) ($)	Work Completed and Materials Stored to Date (H + I) ($)	% of Value of Item (J / F) (%)	Balance to Finish (F - J) ($)
Original Contract											
					-		-		-		-
					-		-		-		-
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					-		-		-		-
				Original Contract Totals	$ -		$ -	$ -	$ -		$ -

Progress Estimate - Unit Price Work

Contractor's Application for Payment

Owner:	San Ildefonso Pueblo	**Owner's Project No.:**	
Engineer:	IHS	**Engineer's Project No.:**	23-C77 & 24-D33
Contractor:		**Contractor's Project No.:**	
Project:	2025 Individual Wastewater Disposal Systems		
Contract:			

Application No.: _____ **Application Period:** **From** _____ **to** _____ **Application Date:** _____

A	B	C	D	E	F	G	H	I	J	K	L
		Contract Information				Work Completed					
Bid Item No.	Description	Item Quantity	Units	Unit Price ($)	Value of Bid Item (C X E) ($)	Estimated Quantity Incorporated in the Work	Value of Work Completed to Date (E X G) ($)	Materials Currently Stored (not in G) ($)	Work Completed and Materials Stored to Date (H + I) ($)	% of Value of Item (J / F) (%)	Balance to Finish (F - J) ($)
Change Orders											
					-		-		-		-
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					-		-		-		-
					-		-		-		-
				Change Order Totals	$ -		$ -	$ -	$ -		$ -
Original Contract and Change Orders											
				Project Totals	$ -		$ -	$ -	$ -		$ -

8. Technical Provisions

TP- 01: Trench Excavation & Backfill for Pipelines and Appurtenant Structures

TP-02: Concrete

TP-07: Sewer Service Lines

TP-12: Non-Aggregate Sewage Disposal Systems

TP-13: Individual Pressure-Dosed Sewage Disposal Systems

TP-16: Single Residence Lift Stations

TECHNICAL PROVISIONS

SECTION 01 - TRENCH EXCAVATION & BACKFILL FOR PIPELINES AND APPURTENANT STRUCTURES

TP-101 SCOPE:

Excavation, as used in these specifications refers to all construction activities necessary to install subsurface utilities in accordance with the plans and specifications. Such activities include, but are not limited to:

All necessary clearing, grubbing and site preparation; removal of all materials that may interfere with construction activities (except existing pipe work, conduits, utility structures or other items to be left in place) to the lines and grades indicated on the plans and otherwise described herein. The Contractor shall remove all construction trash from the site and transport to a legal disposal site.

Removal and/or storage of subsurface materials from trench and construction excavation areas to allow installation of designated utilities or structures. All suitable material removed from excavations shall be used, insofar as practicable, in the formation of embankments, fills and backfilling.

Preparation of sub-grades and backfilling of trench and construction areas upon completion of utility or structure construction.

All necessary bracing, shoring and protection (but not including tight sheeting in trenches and structure excavation ordered left in place by the Owner or Owner's Representative).

Final grading, dressing and cleanup of the construction site.

TP-102 SAFETY:

All trench excavation shall be coordinated in strict accordance with current OSHA requirements found in the Occupational Safety and Health Standards - Construction Standards for Excavations (29 CFR 1926, Subpart P).

Trenches shall be properly sheeted, shored, or sloped in accordance with the current OSHA standards. Trench excavation shall not proceed more than 500 feet in advance of pipeline work without the Owner or Owner's Representative's approval. All trenches shall be completely backfilled at the end of each working day, unless otherwise approved by the Owner or Owner's Representative. No excavation shall be left open without proper barricades and warning lights. Such devices shall conform to the Manual of Uniform Traffic Control Devices (ANSI D6.1) or such permits as are appended to these specifications.

The contractor shall be responsible for safety on the job site and shall designate a trained "competent person" knowledgeable in trench safety to supervise the work.

TP-103 SHORING AND SHEETING SYSTEMS:

Protection of employees in excavations shall conform to applicable OSHA Standards. Any trench protection and modification to trenching safety plans shall be submitted to the Owner or Owner's Representative in writing to be maintained as part of the record.

The Contractor shall install all shoring and sheeting systems required to prevent cave-ins and protect his employees and adjacent property and structures in accordance with current OSHA standards. No extra payment will be made for these items, the cost thereof being merged with and considered a part of the cost for the related excavation.

Before sheeting is withdrawn, or trench boxes moved forward, they shall be raised, in place, just above the pipe crown to safely allow the Contractor to completely fill any voids left in the pipe zone.

TP-104 ROAD, RAILROAD AND SPECIAL UTILITY CROSSINGS (IF REQUIRED):

The Contractor shall be responsible for compliance with all requirements of special crossing permits applicable to this project. Copies of such permits shall be included in the Appendix of these specifications. If no special crossing permits are appended, and such crossings are indicated on the plans, crossings will comply with all applicable provisions of Section 11 of the Technical Provisions in addition to those indicated under other provisions of this Section. At least two days notice shall be given to the Owner or Owner's Representative before work is done on any crossing.

TP-105 WORK WITHIN RIGHT-OF-WAYS & TRAFFIC CONTROL

When performing any work within the right-of-way of roads or railroads, the Contractor shall comply with the right-of-way permit for the installation including all of the requirements for traffic control and compaction. All work within the right-of-way of roads shall be performed in accordance with the "Standard Specifications for Construction of Roads and Bridges on Federal Highway Projects FP-03 U.S. Customary Units – Section 614." All work within the right-of-way of roads shall be performed in accordance with the latest edition of the Manual on Uniformed Traffic Control Devices (MUTCD)." In addition, the Contractor shall submit a traffic control plan to the project engineer for review and approval prior to any work within the right-of-way of any roads or railroads.

TP-106 DRAINAGE:

The Contractor shall control the grading in the vicinity of the excavation so that the ground surface is properly sloped to prevent water from running into the excavated areas. Water that has accumulated in the excavation from rainfall and/or surface runoff, or from any other cause which might have been prevented by proper care and foresight, shall be removed and the subgrade restored to its proper bearing capacity, all at the Contractor's expense.

TP-107 EXCAVATION:

A. General: All excavation, other than by drilling and blasting, undertaken with the excavation equipment commonly used in the industry for this type of excavated material shall be classified as common excavation.

All excavation shall be made by open cut method except as approved or specified. During excavation, materials suitable for backfill shall be neatly piled no closer than 24-inches from the edge of the excavation. All materials not required or not suitable for backfill shall be removed and wasted at locations designated by the Owner or Owner's Representative.

1. Width: The sides of all trenches for the installation of utility piping systems shall be as nearly vertical as soil conditions will permit from ground level to the pipe. Except for the trenching of 1-inch water service lines, the width of the trench shall not be less than 16-inches nor more than 24-inches wider than the outside diameter of the pipe barrel. Trench excavation shall be centered on pipe alignment such that a minimum clear space of 8-inches is provided on each side of the pipe. Trench width above the level of the top of the pipe may be as wide as necessary for shoring or sheathing and for proper installation of the work.

2. Depth: The trench shall be excavated to the depth that permits pipe to be laid at the elevations shown on the engineering drawings or with the required depth of cover specified by the Owner or Owner's Representative. Depth of cover shall be measured from the finished grade or the surface of the permanent improvement to the top of the pipe barrel.

3. Preparation: The bottom of the trenches shall be accurately shaped to line and grade and shall provide uniform bearing and support for each section of the pipe on specifically placed bedding material at every point along its entire length. Bell holes and depressions for joints shall be dug after the trench bottom has been graded and shall be only of such length, depth and width as required for properly making the particular type joint. Care shall be taken not to excavate below the depths indicated. Unauthorized over depths shall be backfilled with suitable bedding material at the Contractor's expense.

4. Previous Excavation: If the trench passes over a sewer or other previous excavation, the trench bottom shall (1) be compacted to provide support equal to that of the undisturbed native soil or (2) conform to the specific regulatory requirements that preclude damage to the existing installed facility.

5. Unstable Subgrade: Where soft, spongy or otherwise unsuitable material is encountered, which will not provide a firm foundation for pipe, the Owner will direct the extent to which removal and replacement shall be made with suitable material. Special pipe foundation material is NOT anticipated. However, if required, a price shall be negotiated between the Owner and Contractor for special pipe foundation material.

6. Underground Obstructions: The Contractor shall preserve intact any underground pipes, culverts or other utilities encountered during construction (except as hereinafter permitted) provided their location is such that they do not interfere with new pipelines or structures being installed. The Contractor shall notify all appropriate utility authorities of his construction schedule so they may be at the site to locate and protect their property. If any utilities or structures are accidentally broken or disturbed, they shall be replaced immediately to a condition at least equal to that in which they were found, all at the Contractor's expense. Couplings used to repair water service lines shall be brass compression couplings and couplings used to repair sewer service lines shall be solid sleeve couplings that provide a rigid connection between pipes. The repair work shall be done in a manner acceptable to the Owner or Owner's Representative and the utility company. Any existing water or sewer services that will intersect or interfere with the new pipelines or structures shall be rerouted by the Contractor in the manner indicated by the Owner or Owner's Representative. Existing water or sewer services from the mains to private property that interfere with trenching operations may be cut and replaced at the Contractor's option and expense, provided that users of such services are notified at least 2 hours in advance and that the use of such service shall in no case be interrupted for more than 4 hours and/or beyond the workday, unless specifically permitted in writing by the owner. Materials and construction for these items shall be as provided in other sections of these specifications. All new and existing water and sewer mains and water and sewer services shall be protected from freezing at all times during construction.

B. Rock: The inclusion of a bid item and estimated quantity for rock excavation in the bid schedule indicates that rock excavation is probable. However, the exclusion of this item from the bid schedule does not preclude the possibility that rock will be encountered; it merely indicates that it is not anticipated. If unanticipated rock is encountered, the Owner or Owner's Representative will negotiate a price for rock excavation with the contractor. The following paragraphs define solid rock and loose rock excavation.

Solid rock shall be defined as large masses of igneous, metamorphic, or sedimentary rock that, in the opinion of the Owner or Owner's Representative, cannot be

excavated without drilling, blasting, or the use of rippers or other specialized equipment. Any material excavated without the use of blasting or specialized ripping equipment shall not be considered rock.

Solid rock excavation shall be measured in cubic yards from the top of the rock to a point 4-inches below the invert of the installed pipe and an assumed 24-inches trench width, regardless of the actual trench width and depth excavated. For structures, the rock shall be profiled 12-inches outside the perimeter of the structure and computed based on a product of the profile of the rock and an assumed 24-inches outside the structure's perimeter and 6-inches below the structure's footing. The rock volume will be computed as the product of the profiled rock area, as measured by the Owner or Owner's Representative. The measurements shall be within the nearest 0.1-feet from the surface and no less than every 10-feet by one of the following methods:

1. Excavating and exposing the rock profile for measurement. This shall be the responsibility of the contractor and no additional payment shall be made for this excavation.

2. Rock profile determined by drilling without excavating and measurements taken prior to any blasting.

3. Rock profile measured after blasting and excavation. A 20% deduction shall be made in rock determination when this method is used to allow for expansion in ledge due to blasting.

Loose rock shall be defined as boulders and other detached stones each having a volume of 1 cubic yard or more. Loose rock shall be removed from the excavation in such a way that a clear distance of at least 4-inches exists between the rock and the bottom of the pipe and 6-inches exist between the rock and the bottom structure. Loose rock shall not be used for backfill. Loose rock excavation shall be measured in cubic yards, including the total volume of only those rocks or boulders that are individually over 1 cubic yard in volume.

Trench in which rock is encountered shall be excavated at least 4-inches deeper than the pipe invert and refilled to the required elevation with sand , gravel, or crushed rock passing a 3/4-inch mesh screen. Bedding material shall extend upward at least 12-inches above the pipe. Payment for this fill material shall be considered incidental to the rock excavation and no additional payment shall be made.

Should rock excavation be encountered, it shall be the responsibility of the Contractor to have an experienced powderman handle all blasting and be able to furnish proof of his/her credentials. The Contractor shall also inform all residents in the vicinity of proposed blasting activities and shall be responsible for any damage to persons or property as covered in the General Provisions.

C. Removal of Water: The contractor shall remove and dispose of all water entering the trenches and shall keep the trenches water free until the facilities are in

place and sealed against the entrance of water. Use of a trash pump for removal of nuisance water shall be at no extra cost and shall not be considered dewatering. In no case shall water, earth, or any foreign materials be allowed to enter the water main or sewer lines.

The removal of nuisance water is determined by pumping the water out of the trench with a heavy-duty 4" construction trash pump with a strainer for a minimum of 1 hour. The strainer shall be placed in a bed of pea gravel or a slotted PVC pipe in order to screen the debris.

All water removed from trenches shall be conveyed to natural drainage channels, storm sewers, or proper reservoirs as approved by Owner or Owner's Representative. Such removal of water shall be in a manner that prevents property damage, erosion, or sedimentation.

The inclusion of a bid item and estimated quantity for dewatering in the bid schedule indicates that dewatering is probable. However, the exclusion of this item from the bid schedule does not preclude the possibility that water will not be encountered, it merely indicates that it is not anticipated.

If continuous pumping with well points is required to maintain a satisfactory trench, and the contractor is so directed by the Owner or Owner's Representative, this work shall be considered as dewatering. Well points shall be set separately for each trench being dewatered. Dewatering shall be based on the actual number of lineal feet of trench dewatered and paid for at the negotiated price between the contractor and Owner or Owner's Representative.

D. Structural Excavation: Excavation for structures shall extend a sufficient distance from walls and footings to provide for forming, except where concrete for walls or footings is authorized to be deposited directly against excavated surfaces. Care shall be taken to avoid excavating below the depths indicated in the plans. Over-excavation shall be restored to proper elevation by filling with suitable granular bedding material at the Contractor's expense.

TP-108 BACKFILLING:

A. General: Trenches shall not be backfilled until the Owner or Owner's Representative has inspected and approved the pipe installation and jointing as being in compliance with the requirements of plans and specifications.

Bedding and backfill materials to a depth of 12-inches above the pipe shall be carefully deposited in layers not more than 6-inches thick, loose measurements, wetted to optimum moisture content and hand or mechanically compacted to at least 95% of the reference density for this material as described in the specification titled "Compaction Requirements, Methods and Testing. From 12 inches above the pipe to

ground surface, the excavation material shall be placed in layers not to exceed 12-inches, mounded and left in a uniform, neat condition.

Wherever trenches have not been properly filled, or if settlement occurs, they shall be reopened to the depth required for proper compaction and refilled and re-compacted as specified above and approved by the Owner or Owner's Representative.

Compaction methods and equipment may utilize hand and mechanical tampers and rollers. The equipment and procedures proposed by the Contractor shall be subject to the approval of the Owner or Owner's Representative.

B. Materials: All backfill material shall be approved in advance of installation by the Owner or Owner's Representative. Materials shall be obtained from areas approved by the Owner or Owner's Representative.

Backfill material will not be paid for separately, but shall be considered as subsidiary to and a part of the cost for the applicable contract bid item.

1. Embedment: Embedment is that material from the bottom of the trench to twelve inches above the pipe, and includes the pipe bedding material (upon which pipe is layed), haunching material (extending from pipe bottom to pipe centerline), and initial backfill material (extending from pipe centerline to 12 inches above pipe). Native soil used for embedment must be free from clods of earth or stones larger than 1 inch in any dimension, organic refuse, debris, frozen soil, and other objectionable material. If the native soil does not meet these criteria, the Contractor shall screen it (as applicable) or import special bedding material.

2. Imported Special Bedding Material: If required, special bedding material shall consist of sand, sandy gravel, or other suitable granular material having a maximum plasticity index of 6, with 100% of the bedding material smaller than 3/4-inches, and no more than 5% passing a No. 200 sieve.

3. Stabilization: Granular stabilization material shall be used to replace soft, spongy, or other unsuitable material, including rock encountered in excavation, to the depths necessary to support the pipe or structure. Stabilization materials shall be underlay bedding material (as applicable) and shall consist of suitable hard, durable granular material having a maximum size of 6-inches, graded so that a maximum of 20% passes a No. 4 sieve. Granular stabilization is not anticipated. If required, a price for granular stabilization shall be negotiated between the Contractor and the Owner.

4. Final Backfill: In general, final backfill will be that material originally excavated from the trench and will extend from 12 inches above the pipe to surface grade. Final backfill material shall be the same as that around the pipe except that the inclusion of a limited amount of stones up to 6-inches in diameter will be permitted.

C. Placement:

1. Embedment: Embedment shall be placed in 6-inch loose lifts and compacted as described herein. If over-excavation is required, bedding material is to be compacted to 95% of the maximum dry density as determined by the Standard Proctor density test (ASTM D-698). Haunching material shall be placed by hand and worked under the pipe haunch to provide adequate side support for the pipe. Haunching and initial backfill material shall be compacted to 95% of the maximum dry density as determined by the Standard Proctor density test (ASTM D-698).

2. Final Backfill: Final backfill shall not be placed until the embedment material is placed and compacted, and the Owner or Owners Representative have inspected and approved the installation. Final backfill shall be placed in lifts not to exceed 12-inches unless otherwise approved by the Owner or Owners Representative. Compaction shall be as defined in the Compaction Requirements, Methods, and Testing section.

3. Backfill for Road Subgrade: Under existing and proposed roadways, to a distance of 10-feet on either side of the road, bedding and backfill materials shall be carefully deposited in layers not more than 6-inches thick, loose measurements, wetted to optimum moisture content and mechanically compacted as described in the Compaction Requirements, Methods, and Testing section.

4. In areas where pavement is to be replaced, or in roads that are to be paved, no rocks or stones that will interfere with subgrade preparation shall be included in the backfill within 12-inches of the finished subgrade elevation. The upper 12-inch layer, forming the subgrade for pavements, shall be compacted to a density of at least 95% (ASTM D-698 - Modified Proctor Test). See Section 11 of the Technical Provisions where this is required.

5. Cement slurry can be substituted for compacted native backfill and subgrade if approved by Owner or Owner's Representative. The cement slurry shall consist of one sack of cement to one cubic yard of concrete sand and shall be placed from the concrete truck at a slump of 6 to 8 inches. Steel plates 5/8" thick are to be placed over the trench with at least 6 inches overlap on each side and edged with asphalt to prevent traffic movement. The backfill shall be allowed to set for a minimum of 12 hours before completing the asphalt patch. Slurry can typically be installed from the trench bottom to ground surface and no intermediary subgrade material is required for placement of asphalt patch.

6. Where trenches cross roads, streets, or driveways, backfilling shall be completed immediately following excavation and inspection. No trenches across roads shall remain open overnight. All crossings shall be backfilled, compacted and open to traffic at the end of each day's work. Major road crossings shall be excavated and backfilled in half widths of the traveled way so that at least one-half of the roadway is open to controlled traffic at all times during the work.

7. Backfill Around Structures: Backfill around structures shall conform to the same requirements as those for backfill around piping in unpaved areas, unless more stringent requirements are indicated in other sections of these specifications.

TP-109 COMPACTION REQUIREMENTS, METHODS, AND TESTING:

A. Minimum Density: Unless otherwise specified by applicable permits initial and final backfill and gravel resurfacing shall be compacted to the following minimum requirements. The minimum acceptable percent of compaction is the in place dry density divided by the reference density times 100. Compacted soil shall also be at plus or minus 2% of optimum moisture content.

TYPE	LOCATION	REQUIRED COMPACTION
I	Under any existing or proposed pavement, curb Gutter, sidewalk, roadway, shoulder, alley, slab, Footing, canal embankment, or when within 2 feet of above.	95%
II	Within any gas, electric, or telephone utility easement, Or within any street or road right-of-way outside the limits defined above as Type I.	90%
III	All other locations not defined above as Type I or Type II.	80% (or 100% of adjacent natural ground)

B. Reference Densities/Baseline Testing: The Contractor, at his expense, shall provide the reference densities for the various bedding and backfill materials used. All tests shall be performed by a certified soils testing laboratory approved by the Owner or Owner's Representative. If reference to natural ground is used, a nuclear gauge may be used to measure the density of the natural ground. The reference densities for compaction tests shall be established in accordance with ASTM D-698, Modified Proctor Test. The Contractor shall submit for approval a testing plan identifying proposed testing locations prior to the start of any excavation work.

Contractor shall provide copies of the Modified Proctor Tests with 5 point minimum moisture vs. density curves.

The contractor shall coordinate the collection of soil samples for proctor testing with the IHS construction inspector such that both parties are on-site during the collection of soil samples. This will ensure that enough samples are collected to provide for accurate density testing during construction by providing reference density for differing soil conditions within the project area.

C. Methods: Mechanical compaction is permitted. Water jetting methods are not permitted. The backfill shall be uniformly moistened to plus or minus 2% of optimum moisture content, placed in sufficiently thin layers to obtain the specified results, and compacted with hand and/or pneumatic tamp, roller, hydrohammer, or other device which will obtain the specified density without injury to the pipe or related structures.

D. Density Tests: Backfill density tests shall be performed in accordance with the latest versions of ASTM D-1556 (Sand Cone Method), ASTM D-2167 (Rubber Balloon Method), ASTM D-2216 (Moisture Content), ASTM D-2922 (Nuclear Density), and ASTM D-3017 (Nuclear Moisture Content). The Contractor will perform initial field density tests for each location listed in the next paragraph at the expense of the Contractor. Any additional tests due to failure of initial tests shall be at the expense of the Contractor.

The Contractor will perform at least one (1) compaction test every other lift at each two hundred and fifty (250) linear feet of Type I location. One compaction test will be performed every other lift on each five hundred (500) linear feet of trench at Type II or III locations. A minimum of one (1) compaction test shall be performed under each lift station base and a minimum of four (4) compaction tests shall be performed on each lift of material under proposed foundations or tanks. The exact test locations shall be specified by the Owner or Owner's Representative. The Owner may perform additional tests. If the results of any of the compaction tests indicate insufficient compaction, the area in question shall be reopened to a depth required for proper compacting, then refilled, compacted and retested, at the expense of the Contractor, until the compaction tests indicate that the necessary compaction requirements have been met. Two copies of the test results of any retesting performed by the Contractor shall be provided to the Owner, for approval, prior to any permanent surfacing. Any improperly placed backfill, or locations where settlement occurs, shall be reopened to the depth required for proper compaction, then refilled and compacted at the expense of the Contractor. The surface shall be restored and resurfaced, if necessary to the required grade.

TP-110 DISPOSAL OF EXCESS MATERIAL:

Excess material, including rock, broken concrete, bituminous materials, debris or other materials not suitable for backfill, shall be removed from the site and wasted in the disposal areas selected by the Contractor and approved by the Owner or Owner's Representative.

The disposal of such excess materials will not be paid for separately, but shall be considered as incidental to and a part of the cost for the applicable contract bid item.

TP-111 CLEANUP:

Upon completion of the work, the entire site shall be cleared of all debris, and ground surfaces shall be finished to smooth, uniform slopes and shall present neat and workmanlike appearance. All slopes shall be trimmed and dressed, and all surfaces graded such that effective drainage is assured.

Unpaved streets shall be graded smooth to the satisfaction of the Owner or Owner's Representative.

TP-112 TRENCH MAINTENANCE:

The Contractor shall, for a period of one year after completion and final acceptance of the work, maintain and repair any trench settlement that may occur and shall make suitable repairs to any pipe, pavement, or other structures that may become damaged as a result of backfill settlement.

TP-113 STORM WATER POLLUTION PREVENTION PLAN (SWPPP):

The Contractor shall prepare a Storm Water Pollution Prevention Plan (SWPPP) in accordance with the latest requirements of the Environmental Protection Agency's (EPA) National Pollutant Discharge Elimination System (NPDES) General Permit for Discharges from Large and Small Construction Activities. The SWPPP must be prepared in accordance with good engineering practices and must 1) Identify all potential sources of pollution which may reasonably be expected to affect the quality of storm water discharges from the construction site; 2) Describe practices to be used to reduce pollutants in storm water discharges from construction site; 3) Assure compliance with the terms and conditions of the NPDES General Permit.

If the Contractor is not experienced in the preparation of SWPPP, the contractor shall retain the services of an environmental firm regularly engaged in the preparation of

SWPPP to perform said service. The completed SWPPP must be approved by the Owner or Owner's Representative at least 14 calendar days before the start of construction so that a Notice of Intent can be sent to EPA.

The Contractor shall fully implement the SWPPP from the commencement of construction until final stabilization, as defined in the NPDES General Permit is achieved.

The Contractor shall maintain and update the SWPPP, as required in the NPDES General Permit, for the life of the project. Updates shall include amendments required as a result of the ineffective controls discovered through the course of inspections or investigations conducted by the Owner or Owner's Representative, site staff, or by local, state, tribal or federal officials. The Contractor shall submit a Notice of Intent to EPA to obtain permit coverage, modify the coverage as necessary, and terminate permit coverage once final stabilization is achieved.

TP-114 LINES AND GRADES:

The Engineer will give all lines, grades and building locations on the plans and will supply the contractor with the AutoCAD drawing to stake out the facilities to be installed. The CONTRACTOR shall be responsible for staking out pipeline centerlines with a lath every 200 feet or line-of-sight whichever is less. Bends, intersections, manholes, lift station centers and fence corners shall be staked by the CONTRACTOR and provided with two offsets for alignment. Elevation references will be provided as shown on the plans, at lift station and for sewer manholes. The Contractor shall be responsible for the preservation of the location and line and grade stakes when set, and if disturbed, shall have such stakes replaced.

TP-115 CLEARING & GRUBBING:

It is the contractor's responsibility to clear and grub the site prior to or during construction. The contractor shall remove all trees along the water and sewer main alignments. Trees may either be chipped with a woodchipper and placed over the trench for erosion control or disposed of at the Contractor's expense. Clearing and grubbing shall be done at the contractor's expense.

TP-116 SEEDING:

All disturbed areas shall be returned to their pre-construction vegetative state. The contractor shall submit a seed mix that is equivalent to the native vegetation in the

area of construction. The contractor shall protect the seed after it is placed with hay mulch, straw mulch, wood cellulose mulch, or as approved by the project engineer. A minimum of 20 pounds of seed per acre shall be placed. Seed shall be placed by either drill seeding at a depth of approximately 1 inch or broadcast seeding. If broadcast seeding is utilized, the contractor shall apply twice the minimum seeding rate (40 pounds of seed per acre). The contractor shall perform maintenance as needed to ensure that adequate vegetative growth and stabilization has taken place to minimize erosion after construction is completed.

TP-117 FROST PROTECTION:

A. Materials: The insulation shall be rigid extruded polystyrene insulation board, having a minimum compressive strength of 25 psi. The width shall be 2 feet for mains, service lines and effluent discharge lines less than 6-inches (nominal diameter). The thickness shall be 2-inches.

B. Placement: When indicated on the drawings and in the bid schedule, insulation shall be placed in areas where water lines, sewer lines, or effluent discharge lines are susceptible to freezing. The insulation shall be centered over the main with no more than 6 inches of compacted fill between the pipe and insulation. The Contractor shall grade fill so insulation lays flat and maintain a straight alignment of insulation. The Contractor shall lap insulation by 6 inches or stagger by 6 inches if composed or two layers. The thickness for the first lift of backfill over the insulation shall be a minimum of 8 inches. The Contractor shall not operate construction equipment directly on insulation and not compact the first lift with the backhoe-mounted compactor, or any other large compaction equipment. The remaining backfill shall be compacted using normal construction practices.

TP-118 REPAIRS TO DAMAGED UTILITIES

The contractor is responsible for repairing any utilities that they damage during construction at no cost to the Owner. Repairs shall be made in accordance with the requirements of each utility. Below are the requirements for making repairs to damaged water and sewer utilities.

Water Mains: If the damage is small a small crack or hole in the water main, the contractor shall install a stainless steel repair coupling equal to a Romac SS1, SS2, SS3 or Ford Style F1. If the damage is too large to repair with a repair coupling, the Contractor shall install new water main to replace the damaged water main. The repair must result in a watertight water main that does not leak. The new water main shall be DR-18, Class 235, C900 PVC water main per TP-4. The new water main shall be connected to the existing water main using restrained joint solid sleeve

couplings equal to Romac Alpha series restrained couplings.
Water Service Lines: If the damage is small a small crack or hole in the water service line, the contractor shall install a stainless steel repair coupling equal to a Ford Small Repair Clamp with Full Wrap Gasket FSC. If the damage is too large to repair with a repair coupling, the Contractor shall install new water service line to replace the damaged water service line. The repair must result in a watertight water service line that does not leak. The new water service line shall be 200 psi rated polyethylene water service line meeting TP-5 requirements. The new water service line shall be connected to the existing water service line using stab joint, compression joint, or pack joint brass fittings as specified in TP-5.
Sewer Mains & Service Lines: If the damage is small a small crack or hole in the sewer main or service line, the contractor shall install a stainless steel repair coupling equal to a Romac LSS1, LSS2, or LSS3. If the damage is too large to repair with a repair coupling, the Contractor shall install new sewer main or service line to replace the damaged sewer main. The repair must result in a watertight sewer main or service line that does not leak. The new sewer main shall be SDR-35 PVC sewer main meeting TP-6 requirements and the new sewer service line shall be SDR-35 PVC sewer service line meet TP-7 requirements. The new sewer main or service line shall be connected to the existing sewer main using solid sleeve couplings equal to Romac 501 sewer couplings.

TP-119 AS-BUILT DRAWINGS:

A. General: The as-constructed drawings shall be a record of the construction as installed and completed by the Contractor. They shall include all the information shown on the Contractor's set of drawings and a record of all deviations, modifications or changes from those drawings, however minor, which were incorporated in the work, all additional work not appearing on the contract drawings and all changes which are made after final inspection of the contract work.

B. As-Built Drawings: The Contractor shall mark up one set of paper prints to show the As-Built Drawing information. These Asbuilt Drawing prints shall be kept current and available on the job site at all times. All changes from the contract plans which are made in the work or additional information which might be uncovered in the course of construction shall be accurately and neatly recorded as they occur by means of details and notes. No construction work shall be concealed until the necessary record data has been recorded. The Asbuilt Drawing marked prints will be jointly inspected for accuracy and completeness by the Owner and a responsible representative of the construction Contractor prior to submission of each partial payment, as evidenced by the issuance of a receipt by the Owner indicating the adequacy of the information. Failure to keep the as-constructed marked prints on a

current basis shall be sufficient justification to withhold approval of request for payment or suspend pay estimates. The drawings shall show the following information, but not limited thereto.

1. The location and description of any utility lines or other installations of any kind or description known to exist within the construction area. The location includes dimensions to permanent features.
2. The location and dimensions of any changes from the contract drawings.
3. Changes in details of design or additional information obtained from working drawings specified to be prepared and/or furnished by the Contractor including but not limited to fabrication, erection, installation plans, and placing details, pipe sized, insulation materials, dimensions of equipment foundations, etc.
4. All changes or modifications which result from the final inspection.
5. All information as required in the technical provisions.

C. Electronic/Surveyed As-built Drawings: The contractor shall obtain the services of a surveyor licensed in the State of New Mexico to survey in the locations of all sanitation facilities installed by the project being constructed. The number and location of surveyed points must be sufficient to provide enough detail to accurately identify the location of the installed sanitation facilities. Points to be surveyed shall include, but not be limited to:

Water Mains & Services: gate valves, fire hydrants, flush hydrants, water meters, air/vacuum release valves, water/sewer crossings, water main bends, water service line connection, water main intersections, casing pipe, water main reducers, and other water main components installed under this project.

Other Water Facilities: wells, booster pumps, valve vaults, building corners, fence corners, water tanks (including base and overflow elevations), and other water main components installed under this project.

Sewer Mains & Services: manholes (including rim elevation, invert in elevation, and invert out elevation), terminal sewer main cleanout rim and invert, sewer service cleanout, new sewer service line connection, and other sewer components installed under this project.

Other Sewer Facilities: lift stations (including base elevation, rim elevation, invert in elevation, lead/lag pump on elevation, all pump off elevation, and high/low alarm elevation), valve vaults, gate or plug valves, air/vacuum valves, building corners, fence corners, treatment tanks (including rim elevations, invert in elevations, and

invert out elevations), treatment units, lagoons (including floor elevation, top of berm elevation, and invert elevations of all piping in transfer structures), and other sewer components installed under this project.

The contractor shall furnish the Owner with electronic asbuilts of the facilities installed on this project in ACAD format (dwg file). The project engineer will furnish the contractor with an electronic copy of the contract drawings in ACAD format and will provide control points for use by the contractor to draft the electronic asbuilt drawings. The labeling, linework, and format of the electronic asbuilts shall be similar to that of the contract drawings.

D. Review and Approval: One set of the preliminary As-built Drawings marked prints shall be delivered to the Owner before final inspection for his review and approval. The review by the Owner will be expedited; however, the Owner cannot guarantee to review more than one complex mechanical or electrical Record drawing sheet per working day. Upon disapproval of the As-built Drawings one set of marked prints will be returned to the Contractor for further work and resubmitted to the Owner.

E. Other: All costs incurred by the Contractor in the preparation and furnishing As-built Drawings shall be included in the contract price and no separate payment will be made for this work.

TP-119 MEASUREMENT AND PAYMENT:

A. General: Except for the following items, the cost of all work done by the Contractor as required under Section 01 of the Technical Provisions shall be merged with the pay items defined within the Measurement and Payment portions of other Sections of this contract.

B. Rock Excavation: Payment for rock excavation shall be at the unit price listed in the Bid Schedule based on the computed number of cubic yards removed. No differentiation payment will be made between solid or loose rock excavations.

C. Dewatering: Dewatering shall be based on the actual number of lineal feet completed. Payment for dewatering shall be at the contract unit price shown in the Bid Schedule. This price shall be full compensation for furnishing all labor, equipment, materials, and incidentals required for a complete dewatering installation.

D. Mobilization/Demobilization: Payment for mobilization/demobilization shall be at the unit price listed in the bid schedule. 60% of this line item may be requested upon complete mobilization to the job site and the remainder may be requested upon demobilization from the job site.

E. Storm Water Pollution Prevention Plan: Payment for the preparation and implementation of the SWPPP shall be paid on a lump sum basis as shown on the Bid Schedule. Payment shall be full compensation for plan preparation including required revisions for Owner's acceptance, updates to the SWPPP for the life of the project, permit application, inspections, installation and maintenance of controls, modification of controls as determined by inspections, removal of pollutants due to failed controls, and permit termination.

F. Seeding: Seeding shall be paid for on a lump sum basis to seed the site in accordance with these specifications. Payment for seeding shall be at the contract unit price shown in the Bid Schedule. This price shall be full compensation for furnishing all labor, equipment, materials, and incidentals required for complete installation.

G. Exploratory Time: Exploratory time shall be measured on an hourly basis for an actual period spent on locating the existing utility line exceeding two hours. Contractor shall follow these steps:

1. Call the representative from the operating Utility and make every effort to locate the existing utility line prior to excavation.

2. Locate the existing utility line for two hours at the Contractor's expense.

3. If the Contractor is unable to locate the existing utility line within two hours, the Contractor shall notify the Owner or Owner's Representative and both agree upon a start time. The start time shall be recorded. When the Contractor locates the existing utility line, the end time shall be recorded.

If the Contractor fails to notify the Owner or Owner's Representative when the Contractor will start locating the existing utility line, the Contractor will not be compensated. Payment for exploratory time shall be at the contract unit price shown in the Bid Schedule. This price shall be full compensation for furnishing all labor, equipment, materials, and incidentals required for locating the existing utility line.

H. Frost Protection: Payment for frost protection shall be based on the actual number of lineal feet completed. Payment for frost protection shall be at the contract unit price shown in the Bid Schedule. This price shall be full compensation for furnishing all labor, equipment, materials, and incidentals required for a complete installation.

TP-120 APPROVALS:

A. Stabilization material, if required

B. Bedding material, if required

C. Rock excavation method, if required

D. Dewatering procedures, if required

E. Baseline Proctor density test results (5 point moisture density curves)

F. Baseline testing location plan

G. Soil Testing Lab Certification

H. Stormwater Pollution Prevention Plan, if required

I. Blasting contractor and credentials, if required

J. Seed Mix

K. Insulation, if required

L. Traffic control plan, if required

TECHNICAL PROVISIONS

SECTION 02 - CONCRETE

TP-201 SCOPE

Furnish all labor, materials, equipment, and incidentals as required, and perform all operations in connection with the placement of concrete in accordance with the applicable drawings and these specifications.

TP-202 MATERIAL:

A. Cement: Portland cement shall conform to ASTM C150 Cement, Portland Type I, Type IA, Type II, Type IIA, Type III, or Type IIIA.

B. Aggregate: Aggregate shall be composed of clean, hard, durable, uncoated grains and crushed stone, free from detrimental amounts of clay, dust, soft or flaky particles, loam, shale, schist, slate, alkali, disintergrated stone, organic matter or other deleterious matter.

C. Water: All water used for concrete shall be of potable quality.

TP-203 CONCRETE REQUIREMENTS

Property		Minimum	Maximum
Cement Factor	(sacks per cu. Yd.)	6.0	---
Water-Cement Ratio	(gal. Per sack)	---	6.0
Entrained Air	(percent)	2.0	6.0
Slump	(inches)	1.0	4.0
Compressive Strength			
7 day	(psi)	1,800	
28 day	(psi)	3,000	

Concrete shall be uniformly plastic, cohesive and workable, i.e., can be placed without honeycomb and without voids in the surface. Workability shall be obtained without producing a separation of ingredients such that free water appears on the surface. In general, minimum amount of water required to produce a workable mixture shall be used.

TP-204 FREEZING WEATHER:

No concrete work shall be done if the air temperature is below 40 degrees ^{0}F, except with the approval of the Owner or Owner's Representative. If approval is given to work, the water and aggregate shall be heated to at least 80 degrees ^{0}F, before mixing.

In all cases where the air temperature is predicted to be below 40 degrees ^{0}F, the concrete shall be insulated for at least 72 hours by straw, blankets or other approved methods. No concrete shall be poured against frozen ground.

The use of salt or other compounds to prevent concrete from freezing shall not be permitted. Any work that has been injured by freezing shall be removed and replaced at the Contractor's expense.

TP-205 CURING:

Fresh concrete shall be adequately protected from heavy rains and mechanical injury. Concrete surfaces shall be kept moist by spraying with liquid membrane coating. Foundations and thrust blocks may be cured by covering with water saturated soil or backfill. All concrete shall be cured at least three days prior to stripping forms or structural loading.

TP-206 TRANSIT MIXED CONCRETE:

Ready-mixed concrete from a central batching plant and mixed in transit will be permitted with the Owner or Owner's Representative's approval. A plant batch certification sheet shall be provided by the concrete supplier listing the batch components for approval by the Owner or Representative.

TP-207 FIELD TESTING:

Four cylinders shall be taken for each 50 cubic yards of concrete placed or portion thereof. If the Owner or his/her representative suspects, by visual inspection, slump, or other tests, that any other concrete appears substandard, additional test cylinders shall be required. The Contractor shall provide cylinder molds at the construction site and shall have the cylinders tested by an approved laboratory, with the Contractor bearing all costs. If any test cylinder falls below 3000 psi at 28 days, this shall be sufficient cause to reject that portion of concrete. The Contractor shall remove and replace defective concrete with acceptable material at his own expense. The test cylinders shall comply with ASTM C31 for making and curing test specimens in the field. Additional information concerning testing is found in the SPECIAL PROVSIONS.

In addition, the contractor shall perform one slump test and one air entrainment test for each concrete truck.

Field testing will not be required for non-structural concrete placement such as pre-cast manhole

bases, concrete collars, yard hydrant concrete pads, fence post concrete anchors, monitoring well concrete pad, control panel concrete pad, cleanout collars, manhole collars, and drop manhole concrete encasements.

TP-208 PLACING CONCRETE:

Before placing concrete, the Contractor shall give 72-hour advance notice to permit proper inspection of forms and reinforcement by the Owner or Representative.

After completion of the mixing, the concrete shall be rapidly conveyed to and deposited in the forms. Consolidate the concrete, immediately after placing, by mechanical vibrating equipment, supplemented by hand-spading, roding, or tamping. Use equipment and procedures for consolidation of concrete in accordance with ACI recommended practices.

The concrete shall be placed in such a manner as to prevent excessive crawling and segregation of the aggregate. No concrete shall be used that has partially set before final placing, nor shall retempering of the concrete be permitted. All concrete shall be placed in the forms no more than 90 minutes after mixing.

TP-209 FORMS:

The Contractor shall provide forms that will produce correctly aligned concrete. The centering of the forms shall be true and rigid and thoroughly braced both horizontally and diagonally. Forms shall be sufficiently strong to carry the dead weight of the concrete as a liquid without deflection, and tight enough to prevent leakage of mortar. The inside of forms shall be coated with an approved oil or thoroughly wetted. The Owner or Representative shall be notified prior to removal of form work.

The final concrete structure shall be inspected for alignment, elevation, and concrete quality. Final concrete structure alignment and elevation shall be checked by use of land surveying instruments.

Should the concrete structure alignment, elevation, and/or quality test results be determined unsatisfactory by the Owner or Owner's Representative, the entire structure or parts of the structure will be rejected. All further alignment or elevation corrections, or any concrete removal and/or replacement, shall be at the Contractor's expense.

Honeycombed and void areas in the concrete shall be removed and patched to produce a sound concrete product by a method selected by the Contractor and approved by the Owner or Owner's Representative.

TP-210 MORTAR:

Mortar shall be made of one-part masonry cement, three parts sand, and only a sufficient amount of water to make a workable plastic mix. Retempered mortar shall not be used.

TP-211 GROUT:

Grout shall be made of one part Portland cement, two parts sand, and only a sufficient amount of water to make a workable plastic mix. Retempered grout shall not be used.

TP-212 MEASUREMENT AND PAYMENT:

Concrete and other work or materials required by this section shall not be measured and paid separately. Rather, they shall be included in the unit or lump sum bid prices of those items shown on the Bid Schedule that require the inclusion of such materials or work, even if not specifically mentioned within the measurement and payment sections of those particular pay items.

TP-213 SUBMITTALS:

A. Concrete testing laboratory

B. Certification of concrete strength by the concrete supplier and/or proposed concrete mix

C. Curing Compound

TECHNICAL SPECIFICATIONS

SECTION 07 - SEWER SERVICE LINES

TP-700 GENERAL:

The Contractor shall provide all labor, equipment and materials required to install the residence sewer service line indicated on the site layout plans. Installation shall include necessary fittings for connection to the building sewer stubout, tapping of the sewer, installation of the wye or tee as required. All permits, permissions or other authorizations required by the tribal or municipal utility authority for tapping and connection are the responsibility and cost of the Contractor.

TP-701 MATERIALS:

All pipe and fittings required for completion of the sewer service line installation shall meet the requirements of the latest revision of ASTM D 3034. All service line piping shall be 4 inches PVC unless otherwise directed. Pipe shall be nominal size, SDR-35, 0.125-inch minimum wall thickness.

TP-702 INSTALLATION:

Trenching and excavation for sewer service lines shall be in accordance with the provision of Section 01 . The grade from building to sewer main connection shall be uniform and not less than 2 percent. Any changes or deviations in line shall be made with bends not exceeding an angle of 45 degrees.

TP-703 CLEANOUTS:

Sewer service line cleanouts will be installed at the locations indicated in the plans. The cleanout shall be constructed of SDR-35 PVC with a cast iron ferrule equal to a Tyler 2-11. The cleanouts shall be installed with a brass hex socket plug equal to Tyler A Low Square Head cleanout plug. A clear silicon lubricant shall be applied to the cleanout plug to allow for easier removal. The cleanouts shall be constructed in the manner indicated in the detail drawings.

TP-704 SEWER MAIN CONNECTION:

Sewer service line connections to main lines shall be made in accordance with the details as shown on the drawings, or as indicated by the Owner or Owner's Representative. The Contractor shall connect the service line to the main with the appropriate sized sewer saddle or sewer wye as shown on the detail drawings. Sewer wyes shall be PVC. Sewer saddles shall be Romac "CB" or equal. The time and method of connection to existing mains shall be approved by the Owner or Owner's Representative prior to such connection. In no case shall a tapping method be approved that does not provide for a water tight connection to the sewer main.

TP-705 WATER AND SEWER CROSSINGS:

Where water service lines must cross sewer service lines or mains, and the water line is not a minimum of 18 inches above the sewer service line or main, special protection is required. In these instances, the sewer service line or main shall be reconstructed of ductile iron pipe of the same size as the original sewer service line or main for a distance of 10 feet on either side of the water/sewer crossing point. All existing sewer grades shall be maintained.

Water and Sewer Service Line Separation Within 5 ft. of House: This section shall apply to that portion of water and sewer service lines located within five feet of the house. All lines within five feet of the house will be considered as part of the house plumbing. For new construction all service lines shall have 10 foot minimum horizontal separation.

This can best be accomplished by having the water and sewer service lines exit the house 10 feet apart or from different sides. If the 10 foot separation cannot be maintained, and prior written approval is obtained from the Owner or Owner's Representative, and the top of the water service line is at least 12 inches below the bottom of the sewer service line, and the water and sewer service lines are continuous with no joints until the 10 foot separation requirement is met, service lines can be laid closer together than 10 feet.

TP-706 SEPTIC TANK ABANDONMENT

Where shown on the drawings and on the bid schedule, the contractor shall abandon existing septic tank(s) by pumping the tank, knocking a hole in the bottom of the tank to prevent accumulation of water, crush the top of the tank, and backfill with native fill material. The septic tank shall be pumped by a licensed septic tank pumping company and the septage shall be hauled to an approved septage disposal site.

TP-707 AS-BUILT DRAWINGS:

As-built drawings to be furnished by the Contractor for sewer service lines shall include two swing ties from permanent structures or facilities to each of the following:

A. Tapping point at sewer main
B. Intersection point with other utilities
C. Location of cleanouts
D. Point of connection to the house stubout.

TP-708 MEASUREMENT AND PAYMENT - SEWER SERVICE LINES:

A. Sewer Service Line: PVC sewer service pipe shall be measured in linear feet along the centerline of the pipe, including fittings. Payment for sewer service lines shall be at the contract unit price shown in the Bid Schedule, this price being full compensation for

furnishing all labor, equipment, materials, and incidentals required for a complete installation; including, excavation, bedding, stabilization material, pipe, sewer saddle or sewer wye, connections to the sewer service cleanout, fittings, trench backfilling, as-builts, and final clean-up.

B. Cleanouts: Payment for sewer service cleanouts shall be at the contract unit price shown on the Bid Schedule, and shall be full compensation for furnishing all labor, equipment, materials, and incidentals required for complete installation; including, excavation, connections to the tight line and house plumbing, as-builts, and final clean-up.

C. Septic Tank Abandonment: Payment for abandonment of the existing septic tank shall be at the contract unit price per job and shall be full compensation for pumping and crushing the existing concrete tank, backfilling the void left by the tank, and compacting the soil to prevent subsidence and to bring it to the same level as the surrounding grade. If the existing septic tank is any material other than concrete, the Contractor shall be paid at the contract unit price per job to pump and remove the existing septic tank. The Contractor shall be responsible for all costs associated with the removal, including, but not limited to transporting and disposing of the septic tank at a State licensed and approved waste disposal site located off the particular reservation where the work is to be performed. The payment shall also be full compensation for backfilling the void with soil from the designated area, and compaction to prevent subsidence and to bring it to the same level as the surrounding grade.

TP-709 SUBMITTALS:

All materials listed below will require that a submittal be provided to the Owner for approval prior to the start of any construction requiring those materials.

A. PVC Sewer Pipe for Service Lines
B. Service Line Cleanout
C. Sewer Main Saddle or Wye and Fittings
D. Permits - if required

TECHNICAL PROVISIONS

SECTION 12- NON-AGGREGATE SEWAGE DISPOSAL SYSTEMS

TP-1201 SCOPE:

The work covered by these specifications includes the furnishing of all labor, tools, equipment, material and performing all operations necessary to construct non-aggregate type individual sewage disposal facilities at indicated individual homesites and shown in the site plans.

TP-1202 GENERAL:

The individual sewage disposal systems and related facilities shall be constructed at the locations and of the sizes shown on the site plans. Field changes in location and orientation may be directed by the Owner or Owners Representative at the time of construction but shall not alter the total area of drainfield required. Excavation, trenching, and backfilling shall be in accordance with Section 01 of the Technical Provisions unless specifically altered under other requirements of this specification section.

TP-1203 MATERIALS:

A. Pipe and Fittings: Solid pipe and fittings utilized for septic tank and drainfield construction including sewer service line, cleanouts, distribution piping, observation ports and appurtenances shall be 4 inches diameter PVC pipe, conforming to ASTM 3034, SDR 35, unless otherwise specified herein or noted on the drawings, scope of work or bid schedule. All 4-inch perforated PVC pipe shall be solvent-weld joints, conforming to ASTM 3034, SDR 35. Perforations shall be 1/2 to 5/8 inch diameter holes on 5-inch centers in two rows spaces 90 to 120 degrees apart.

   Where prescribed, Schedule 40 PVC, 4-inch sewer service pipe be installed and shall conform to ASTM D 1785 with supporting fittings and pipe installation conforming to ASTM D 2466.

B. Cleanouts: Sewer service line cleanouts will be installed at the locations indicated in the plans. The cleanout shall be constructed of SDR-35 PVC with a cast iron ferrule equal to a Tyler 2-11. The cleanouts shall be installed with a brass hex socket plug equal to Tyler A Low Square Head cleanout plug. A clear silicon lubricant shall be applied to the cleanout plug to allow for easier removal. The cleanouts shall be constructed in the manner indicated in the detail drawings.

C. Septic Tank: Septic tanks shall be dual compartment with a minimum of 1000 gallon liquid capacity as measured below the invert of the outlet. The actual size of the septic tank shall be as shown on the drawings and in the bid schedule. The tanks, as shown in the detail drawings, shall be constructed of precast, reinforced concrete of sufficient strength to withstand hauling and handling stresses and shall meet all regulations of the State Health Department for the state which it is installed. Septic tanks shall be water-tight and shall have a 28 day compressive strength of at least 3,000 psi. All concrete used for septic tanks shall be batched with a chemical

resistant admixture for protection against hydrogen sulfide gas. The admixture shall be equal to Moxie 1800 Super-Admix as manufactured by Moxie International.

If noted in the Statement of Work or site plans, some sites may require installation of a special low profile septic tank. These tanks shall comply with all provisions for a standard tank but shall require a bury depth of no greater than 48 inches.

D. Effluent Filter: Effluent filters shall have a minimum diameter of 4 inch and a maximum filtration size of 1/16 inch. The filters shall be designed for a maximum daily flow of 800 gallons per day. The effluent filters shall be equal to a Zabel Filter Model A1800.

E. Septic Tank Manhole Risers: Manhole risers, a minimum of 24 inches in diameter, must be provided to provide access to the effluent filter and the inlet of the septic tank for pumping purposes. Risers shall be corrugated HDPE. Riser covers shall be equal to Polylok 24" HDPE heavy cover, part # 3008-HD or Tuf-Tite 24" heavy duty multi-purpose flat riser lid, and shall have stainless steel locking screws.

F. Distribution Boxes: Distribution boxes and covers shall be constructed in general conformance with the configuration indicated in the detail drawings with discharge hole locations as required to maintain design elevations. Boxes shall be fabricated from pre-cast concrete or injection molded HDPE with a separate outlet for each drainfield lateral. Each outlet shall be fitted with a speed leveler, as manufactured by Tuf-Tite or equal to facilitate equal distribution of effluent to each drainfield lateral. Concrete boxes shall be manufactured by a fabricator routinely involved in construction of distribution boxes and shall contain sufficient interior steel reinforcing sufficient to facilitate handling. Chipped and honey combed boxes shall not be approved. All concrete used for concrete distribution boxes shall be batched with a chemical resistant admixture for protection against hydrogen sulfide gas. The admixture shall be equal to Moxie 1800 Super-Admix as manufactured by Moxie International.

G. Distribution Box Risers: Distribution box risers shall be installed to provide access to the distribution box from the surface. Risers shall be at least the same dimensions as the distribution box and shall be attached to the distribution box to provide a watertight attachment. The distribution box cover shall have an effective locking device which meets the Owner or Owner's Representative's approval. Risers shall be corrugated HDPE. Riser covers be equal to Polylok 24" HDPE heavy cover, part # 3008-HD, or Tuf-Tite 24" heavy duty multi-purpose flat riser lid, and shall have stainless steel locking screws.

H. Manufactured Chambers: Drainfield chamber sections shall be constructed of high strength polyethylene plastic. Chambers shall be high capacity chambers equal to INFILTRATOR Quick4 Plus High Capacity Chambers (34" wide x 53" long x 14" high), ADS Arc 36 HC Chambers (34.5" wide x 63" long x 16" high), or approved equal. A minimum loading rating of AASHTO H-10 shall be required for wheel load protection.

I. In-Drain Modules: In-Drain modules shall be constructed of recycled plastic fins inner woven with bio-Matt and securely banded together into rigid modules, Eljen Type B or approved equal. Each module shall have the approximate dimensions of 36 inches wide by 48 inches long by 7 inches tall/deep.

J. Pea Gravel: Pea gravel shall be clean washed pea gravel between 1/8" to ¼" inches in diameter.

K. Filter Fabric: Should filter fabric soil protection be recommended by the chamber manufacturer as an integral part of the drainfield installation, the fabric material shall be a synthetic geotextile specifically intended for drainfield use as manufactured by Hancor, Inc. or approved equal. Fabric shall be approved by the Owner or Owner's Representative.

L. Sand: The sand layer under the In-Drain modules shall be washed concrete sand. The sand shall be medium to course with an effective size of .25 to 2.0 mm and no more than 5% passing a #200 sieve and no more than 10% passing a #100 sieve.

M. Gravel: Gravel for splash pads shall be clean, hard, durable and free of fines, coal, clay or other soft fragments and shall meet the approval of the Owner or Owner's Representative. Gravel shall vary in size from 3/4-inch to 1-1/2-inch.

N. Geosynthetic Aggregate: Drainfield sections shall be constructed of EZ flow manufactured 12 inch diameter bundles as manufactured by INFILTRATOR, or approved equal. The internal perforated pipe and coupling shall meet ASTM F405 and shall be 4 inches in diameter. The internal perforated pipe shall be surrounded with Styrofoam packing material that is encased within durable high strength netting material.

O. Observation Pipe: Observation pipes shall be constructed of solid 4-inch Schedule 40 PVC pipe and installed at the locations indicated on the drawings.

TP-1204 INSTALLATION:

Sewer Service Lines: All lines leading from the building stubout to the septic tank and from the septic tank to the distribution box shall be 4 inch solid, PVC pipe, laid at a minimum grade of 2%. Ten (10) linear feet of the sewer service piping both upstream and downstream of the septic tank shall be 4-inch schedule 40 type solid PVC pipe. The sewer service line shall be sealed with a rubber gasket or masonry grouted at connection points to the inlet and discharge openings of the septic tank. Grout shall conform to Section 02 of the Technical Provisions.

Plastic pipes with scratches, gouges, or grooves deeper than 10 percent of the wall thickness shall be rejected. Pipe joints and fitting installation shall be in accordance with manufacturer's recommendations. All pipes shall be approved by the Owner or Owner's Representative prior to backfilling.

B. Septic Tank: The septic tank shall be installed at the location shown in the plans and detail drawings. Excavation shall be the minimum required to provide placement of the tank. Prior to setting the tank, all rocks and other foreign material which might damage the tank upon placement shall be removed from the hole. The contractor shall set the tank on a 6-inch thick minimum bed of sand or gravel to facilitate leveling the tank. Prior to backfilling, the tank elevation shall be checked at all corners to assure that placement is level. Final backfill material shall be mounded 6 inches above the natural ground surface to allow for settlement. An effluent filter shall be installed on the septic tank outlet to prevent grease and solids carryover into the drainfield.

The Contractor shall install an approved covered riser which will provide access to the tank not more than 6 inches above nor less than 1 inch above finished grade. The riser system the Contractor proposes to use shall be submitted with the septic tank drawing and specifications for approval by the Owner or Owner's Representative. At a minimum, access risers shall be provided for the inlet and outlet of the septic tank. All septic tank risers shall be connected to the top of the tank with a Ram-Nek flexible gasket as manufactured by K.T. Snyder Company or equal and grouted to the top of the tank. A 3/8 inch minimum diameter rope shall be attached to the septic tank access cover and shall extend to within 6 inches of grade. The rope shall be secured to the inside septic tank riser to facilitate the removal of the access cover inside the riser. During and after construction the Contractor shall avoid driving over the tank.

C. Distribution Boxes: Distribution boxes shall be placed at the location indicated in the plans and detail drawings. The boxes shall be set on a 6 inch minimum bed of sand or gravel to facilitate leveling. Distribution boxes shall be installed level to assure that equal distribution is provided to each drainfield lateral. Equal distribution shall be checked by the Contractor in the presence of the Construction Inspector by filling the box with water to indicate equal overflow to the drainfield. The speed levelers shall be adjusted as needed to obtain equal flow to each drainfield lateral.

Any unused outlet openings shall be left sealed or shall be grouted as directed by the project engineer. The distribution box shall be installed such that the top of the distribution box is between 1 and 3 inches above finished grade. Distribution box extension collars shall be installed if necessary to bring the access cover up to grade. The distribution box riser shall be connected to the top of the tank with a Ram-Nek flexible gasket as manufactured by K.T. Snyder Company or equal and grouted to the top of the tank. During and after construction the Contractor shall avoid driving over the tank.

D. Chamber Drainfield: Chamber drainfields shall be constructed in accordance with the detail drawings. Trenches for installation of the chamber sections shall be excavated to the elevation indicated by the Owner or Owner's Representative and shall be maintained at a level grade throughout the entire length. Chamber sections shall be checked with a construction level upon placement to preclude high or low sections. All smeared or compacted surfaces of the bottom or side walls shall be raked to a depth of 3 inches and loose material removed before the infiltration

chambers are placed in the trench.

Distribution piping to and between chamber trenches shall be connected in accordance with the chamber manufacturer's recommendations. End caps shall be installed at the end of each drainfield lateral as recommended by the chamber manufacturer. Each row of leaching chambers shall contain a splash plate on the native soil within the leaching chamber where the effluent pipe enters the chamber to prevent erosion. This splash plate may be a splash plate made by the manufacturer of the leaching chamber, a concrete block, or a patio block, as approved by the project engineer. Backfill material shall be hand selected to be free of organic and other potentially clogging material and hand placed to a point 3 inches above the highest chamber perforation. The remaining backfill material may be mechanically placed. Trench backfill material shall be mounded 6 inches above the natural ground surface to allow for settlement.

E. In-Drain Modules: In-Drain modules shall be constructed in accordance with the detail drawings for each site. Trenches for installation of the modules shall be excavated to the elevation indicated by the Owner or Owner's Representative and shall be maintained at a level grade throughout the entire length. In-Drain modules shall be checked with a construction level upon placement to preclude high or low sections. All smeared or compacted surfaces of the trenches or bed shall be raked to expose the natural texture of the soil. All loose material shall be removed from the trench before the sand is placed.

The bottom of the trench shall be covered with a 6-inch minimum depth lift of sand. The lift shall be leveled (but not compacted) by hand to within 1-inch throughout the entire length of the trench. The In-Drains shall then be placed end to end on the sand. The 4-inch perforated pipe shall be centered over the In-Drains with the perforations facing downwards in the 5 and 7 o'clock positions and shall be secured to the In-Drain Module with one clamp (supplied by manufacturer) per In-Drain unit. The cover fabric shall then be placed over the rows of In-Drains. Drape the fabric straight down over the pipe. The fabric shall be secured with hand shoveled sand. Place sand a minimum of 6-inches at the sides of the trench up to the top of the In-Drain units.

The trench shall then be backfilled with clean, porous material devoid of any rocks larger than 3 inches and not compacted. The top shall then be mounded with an 8 to 12-inch crown and shall not be compacted. No mechanical or vehicular traffic shall be used to compact the trench. Backhoes shall not be allowed on trenches during or after the backfilling operation.

For installations greater than 18 inches deep, the contractor shall install a layer of pea gravel over the top of the geotextile that covers the perforated pipe on top of the In-Drain Modules. The pea gravel layer shall be installed to the depth needed such that the clean backfill material layer doesn't exceed 18 inches. In no circumstances shall the In-Drain Modules be buried deeper than 4 feet. When pea gravel is installed, the contractor shall also install air vents at the end of each row of In-Drain Modules. The air vents shall consist of 4" solid PVC pipe with a gooseneck screened vent a minimum of 18 inches above grade.

F. Filter Fabric: Filter fabric shall be installed in accordance with chamber/In-Drain module manufacturer's recommendations.

G. Cleanouts: A double service line cleanout shall be provided on the sewer service line between house and septic tank and at every change of sewer service line direction or as directed in the plans and detail drawings. All required fittings shall be in conformance with the provisions of TP-1203.

G. Observation Pipe: Observation pipes shall be installed at the locations indicated on the drawings. The pipe shall be installed through the knockout ports as shown on the detail drawings. The observation pipe shall extend between 12 inches and 24 inches above ground surface. A PVC cap shall be placed on the top of the observation pipe without glue. Exposed PVC pipe shall be coated with 2 coats of paint. Paint shall be equal to Krylon Fusion brand spray paint for plastic. Paint color shall be white. The observation pipes shall be constructed in the manner indicated in the detail drawings. The observation pipes must be stabilized as shown on the details drawings so that they don't pull out when removing the cap.

I. Geosynthetic Aggregate: Geosynthetic Aggregate shall be constructed in accordance with the detail drawings for each site. Trenches for installation shall be excavated to the elevation indicated by the Owner or Owner's Representative and shall be maintained at a level grade throughout the entire length. Installation shall be checked with a construction level upon placement to preclude high or low sections. All smeared or compacted surfaces of the trenches or bed shall be raked to expose the natural texture of the soil.

Prior to placement, the contractor shall remove the plastic shipping wrap from the geosynthetic aggregate. The contractor shall place the geosynthetic aggregate with the geotextile fabric portion facing upwards to prevent the movement of soil into the geosynthetic aggregate. When multiple geosynthetic aggregate cylinders are stacked vertically, the upper geosynthetic aggregate cylinder shall be installed with the geotextile fabric portion facing upwards and each lower geosynthetic aggregate cylinder shall be installed with the geotextile fabric portion facing the side of the trench receiving the backfill.

The geosynthetic aggregate shall be connected to each other using the 4 inch diameter perforated pipe internal couplings provided by the manufacturer. The installation shall be in accordance with manufacturer's recommendations.

J. Inspection: The Contractor shall provide the Owner or Owner's Representative with a minimum of 24 hours notice on the need for inspection prior to final backfill of the septic tank and drainfield installation. The sewer service lines, septic tank and drainfield shall remain uncovered until inspected and approved by the Owner or his/her representative. Backfill prior to such approval will be cause for rejection of the construction for payment until disputed sections are uncovered for inspection purposes. All such re-excavation shall be at the sole expense of the Contractor.

TP-1205 SEPTIC TANK ABANDONMENT

Where shown on the drawings and on the bid schedule, the contractor shall abandon existing septic tank(s) by pumping the tank, knocking a hole in the bottom of the tank to prevent accumulation of water, crush the top of the tank, and backfill with native fill material. The septic tank shall be pumped by a licensed septic tank pumping company and the septage shall be hauled to an approved septage disposal site.

TP-1206 AS-BUILT DRAWINGS:

As-built drawings shall be furnished for individual sewage disposal systems and shall include two swing ties from permanent structures or facilities to each of the following:

A. Inspection holes on the septic tank
B. All cleanouts, bends and elbows
C. Location of the drainfield header
D. Intersections with other utilities

TP-1207 WATER AND SEWER CROSSINGS:

Where sewer service lines must cross water service lines or mains, and the sewer line is not a minimum of 18 inches below the water service line or main, special protection is required. In these instances, the sewer service line or main shall be reconstructed of ductile iron pipe of the same size as the original sewer service line or main for a distance of 10 feet on either side of the water/sewer crossing point. All existing sewer grades shall be maintained.

TP-1208 MEASUREMENT AND PAYMENT:

A. Sewer Service Lines: PVC sewer service line pipe shall be measured in linear feet along the centerline of the pipe, including fittings. Payment for sewer service lines shall be at the contract unit price shown in the Bid Schedule. This price being full compensation for furnishing all labor, equipment, materials, and incidentals required for a complete installation; including, excavation, bedding, stabilization material, connections to the septic tank, cleanouts and drainfield, fittings trench backfilling, as-builts, and final clean-up.

B. Cleanouts: Payment for sewer service cleanouts shall be at the contract unit price shown on the Bid Schedule, and shall be full compensation for furnishing all labor, equipment, materials, and incidentals required for complete installation; including, excavation, connections to the sewer service line, house plumbing, as-builts, and final clean-up.

C. Septic Tanks: Payment for septic tanks shall be at the contract unit price shown on the Bid Schedule, and shall be full compensation for furnishing all labor, equipment, materials, and incidentals required for complete installation; including excavation, effluent filter, as-builts, and final clean-up.

D. Septic Tank Manhole Risers: Payment for septic tank manhole risers shall be at the unit price shown on the Bid Schedule, and based on actual feet installed including one septic tank riser cover. Payment shall be full compensation for all materials, labor, and equipment required for a complete installation. **No separate payment for the cover shall be made.**

E. Distribution Boxes: Payment for distribution boxes shall be at the contract unit price shown on the Bid Schedule, and shall be full compensation for furnishing all labor, equipment, materials, and incidentals required for complete installation; including, excavation, connections to the sewer service line and drainfield piping, as-builts, and final clean-up.

F. Chamber Drainfields: Payment for chamber drainfields shall be made on a linear foot basis measured to the nearest foot and includes costs for the installation of manufactured chambers, splash pads, end pieces, filter fabric (if required), observation pipes and all required piping and fittings. Compensation shall include all labor, equipment, materials, and incidentals required for complete installation; including excavation, backfilling, as-builts, and final clean-up.

H. In-Drain Module Drainfields: Payment for In-Drain module drainfields shall be made on a linear foot basis measured to nearest foot and includes costs for the installation of the manufactured In-Drain Modules, sand, filter fabric, perforated pipe, clamps to secure perforated pipe to In-Drain units, observation pipes, and all required piping and fittings. Payment shall be full compensation for all plant, labor and material required for a complete installation; including excavation, backfilling, as-builts, and final clean-up.

I. Geosynthetic Aggregate: Payment for geosynthetic aggregate drainfields shall be made on a linear foot basis measured to nearest foot and includes costs for the installation of the cylinders, observation pipes, and all required piping and fittings. Payment shall be full compensation for all plant, labor and material required for a complete installation; including excavation, backfilling, as-builts, and final clean-up.

J. Water and Sewer Crossings - Sewer service lines: All costs associated with completion of water and sewer crossings shall be merged with other bid items and will not be considered a separate item for payment. No additional payment will be made for installation of ductile iron sewer pipe associated with water and sewer crossings.

K. Pump and Fill Cess Pool: Payment for pumping and filling the existing cess pool shall be at the contract unit price per job and shall include costs for getting to and from the job site, the cost of the pump truck, labor, and filling the pit with approved fill.

L. Septic Tank Abandonment: Payment for abandonment of the existing septic tank shall be at the contract unit price per job and shall be full compensation for pumping and crushing the existing concrete tank, backfilling the void left by the tank, and compacting the soil to prevent subsidence and to bring it to the same level as the

surrounding grade. If the existing septic tank is any material other than concrete, the Contractor shall be paid at the contract unit price per job to pump and remove the existing septic tank. The Contractor shall be responsible for all costs associated with the removal, including, but not limited to transporting and disposing of the septic tank at a State licensed and approved waste disposal site located off the particular reservation where the work is to be performed. The payment shall also be full compensation for backfilling the void with soil from the designated area, and compaction to prevent subsidence and to bring it to the same level as the surrounding grade.

M. Distribution Box Risers: Payment for the distribution box risers shall be at the contract unit price shown on the Bid Schedule, measured in vertical feet based on the actual quantity of risers installed, and shall be full compensation for furnishing all labor, equipment, materials, and incidentals required for complete installation; including the risers, cover, connection to the distribution box, excavation, as-builts, and final clean-up. Payment shall be compensation for all materials and labor required to furnish and install the risers. **No separate payment for the cover shall be made.**

TP-1209 SUBMITTALS: All materials listed below will require that a submittal be provided to the owner for approval prior to the start of any construction requiring those materials.

A. Sewer Service Line Pipe and Fittings
B. Perforated Pipe
C. Septic Tanks
D. Effluent Filter
E. Septic Tank Manhole Riser
F. Distribution Box and Risers
G. Drainfield Chambers/In-Drain modules/Perforated Pipe Encased in Netted Syrofoam Aggretate
H. Filter Fabric (If required)
I. Sieve Analysis of Sand for In-Drain modules

TECHNICAL PROVISIONS

SECTION 13 - INDIVIDUAL PRESSURE DOSED SEWAGE DISPOSAL SYSTEM

TP-1301 SCOPE:

The work covered by this section includes the furnishing of all plant, labor, tools, equipment, materials, and performing all operations in connection with the installation and construction of an individual waste disposal system composed of a septic tank, lift station with pump and controls, mound type disposal field, and all connecting piping and incidental construction operations necessary to place the sewage disposal system in a fully operational condition.

TP-1302 GENERAL:

The individual sewage disposal systems and related facilities shall be constructed at the locations and of the sizes shown on the drawings. Field changes in location and orientation may be directed by the Owner or his/her representative at the time of construction. The lift station and force main shall be constructed at the locations indicated in the Statement of Work and drawings. Excavation, trenching, and backfilling shall be in accordance with Section 01 of the Technical Provisions, unless specifically altered under other requirements of this specification section.

TP-1303 MATERIALS:

A. Pipe and Fittings: The solid pipe and fittings utilized from the house stubout to the inlet of the septic tank shall be 4-inch diameter PVC pipe, conforming to ASTM 3034, SDR 35, unless otherwise noted on the drawings or bid schedule.

B. Cleanouts: Sewer service line cleanouts will be installed at the locations indicated in the plans. The cleanout shall be constructed of SDR-35 PVC with a cast iron ferrule equal to a Tyler 2-11. The cleanouts shall be installed with a brass hex socket plug equal to Tyler A Low Square Head cleanout plug. A clear silicon lubricant shall be applied to the cleanout plug to allow for easier removal. The cleanouts shall be constructed in the manner indicated in the detail drawings.

C. Septic Tank: Septic tanks shall be dual compartment with a minimum of 1000 gallon liquid capacity as measured below the invert of the outlet. The actual size of the septic tank shall be as shown on the drawings and in the bid schedule. The tanks, as shown in the detail drawings, shall be constructed of precast, reinforced concrete of sufficient strength to withstand hauling and handling stresses and shall meet all regulations of the State Health Department for the state in which it is installed. Septic tanks shall be water-tight and shall have a 28 day compressive strength of at least 3,000 psi. All concrete used for septic tanks shall be batched with a chemical resistant admixture for protection against hydrogen sulfide gas. The admixture shall be equal to Moxie 1800 Super-Admix as manufactured by Moxie

International.

If noted in the Statement of Work or site plans, some sites may require installation of a special low profile septic tank. These tanks shall comply with all provisions for a standard tank but shall require a bury depth of no greater than 48 inches.

D. Pump Tank: Pump tanks shall be a minimum of 500 gallon liquid capacity unless otherwise noted in the bid schedule or on the drawings. The actual size of the pump tank shall be as shown on the drawings and in the bid schedule. The tanks, as shown in the detail drawings, shall be constructed of precast, reinforced concrete of sufficient strength to withstand hauling and handling stresses and shall meet all regulations of the New Mexico State Health Department or Colorado State Health Department. Pump tanks shall be water-tight and shall have a 28 day compressive strength of at least 3,000 psi. All concrete used for pump tanks shall be batched with a chemical resistant admixture for protection against hydrogen sulfide gas. The admixture shall be equal to Moxie 1800 Super-Admix as manufactured by Moxie International.

If noted in the Statement of Work or site plans, some sites may require installation of a special low profile pump tank. These tanks shall comply with all provisions for a standard tank but shall require a bury depth of no greater than 48 inches.

E. Combination Septic/Pump Tank: Combination septic/pump tanks shall be a minimum of 1500 gallon liquid capacity unless otherwise noted in the bid schedule or on the drawings. The actual size of the combination septic/pump tank shall be as shown on the drawings and in the bid schedule. The solids chamber shall comprise approximately 70% of the total tank volume as shown in the detail drawings. A sanitary tee shall be installed at the inlet to the septic tank. In addition, a sanitary tee shall be cast into the baffle between the septic tank chamber of the tank and the pump chamber portion of the tank to allow the effluent to be conveyed to the pump chamber as shown on the drawings. This sanitary tee shall be equipped with an effluent filter.

20 inches minimum diameter access openings shall be provided as shown on the detail drawings. The tanks, as shown in the detail drawings, shall be constructed of precast, reinforced concrete of sufficient strength to withstand hauling and handling stresses and shall meet all regulations of the State Health Department for the state in which it is installed. Tanks shall be water-tight and shall have a 28 day compressive strength of at least 3,000 psi. All concrete used for combination septic/pump tanks shall be batched with a chemical resistant admixture for protection against hydrogen sulfide gas. The admixture shall be equal to Moxie 1800 Super-Admix as manufactured by Moxie International.

If noted in the Statement of Work or site plans, some sites may require installation of a special low profile septic/pump tank. These tanks shall comply with all provisions for a standard tank but shall require a bury depth of no greater than 48 inches.

F. Effluent Filter: Effluent filters shall have a minimum diameter of 4 inch and a maximum filtration size of 1/16 inch. The filters shall be designed for a maximum daily flow of 800 gallons per day. The effluent filters shall be equal to a Zabel Filter Model A1800.

G. Septic/Pump Tank Manhole Risers: Manhole risers, a minimum of 24 inches in diameter, must be provided to provide access to the effluent filter and the inlet of the septic tank for pumping purposes. Risers shall be corrugated HDPE with a Polylok 24" HDPE heavy cover, part # 3008-HD, with stainless steel locking screws or equal.

H. Effluent Pump and Controls: The effluent pump shall be a 1/2 H.P., 115/230 volt, single phase submersible pump equal to a Peabody Barnes Model EH522, Meyers Model WHRE5 or Goulds Model 3885. The pump shall have a 2-inch discharge outlet with a capacity of 50 GPM against a total dynamic head of 20 feet. The pump motor shall have built-in thermal overload protection with automatic reset.

The power supply shall be 120/240 volt, single phase, 3 wire service from a properly sized 1/2 pole breaker off the lighting panel in the residence. The entire system shall be installed in accordance with state and local codes. All wire shall be sized in accordance with the latest issue of the National Electric Code.

The pump supplier shall furnish a control system compatible with the pump furnished under this contract. Pump control equipment shall be housed in a weatherproof enclosure equal to a NEMA Type 4X enclosure, and mounted in a location specified by the Owner or Owner's Representative.

A separate dead front enclosure section shall house a load switching motor contactor with door mounted, heavy duty hand-off-auto switch and a service disconnect mechanism.

Two direct acting mercury float switches shall be furnished for mounting in the effluent chamber. These floats shall serve to detect ON-OFF control levels for the pump. Terminal blocks shall be provided for connection of ON-OFF level control floats.

An alarm system, on a circuit separate from the pump, shall be provided and installed in the residence in a location to be selected by the Owner or Owner's Representative and/or homeowner. This alarm system shall consist of a direct acting mercury float switch for mounting in the effluent chamber, red alarm light, horn, push-to-test alarm button, and a horn silence switch. The alarm system shall be a Tank Alert® 1 or approved equal.

Upon the occurrence of an alarm condition, the high alarm sensor will close its circuit, thus energizing the red alarm light and sounding the horn or buzzer. Upon noticing the visual or audible alarm, a person may slide the silencing switch from the "normal" to the "silence" position and thus silence the audible alarm. The red alarm light shall remain energized as

long as the silencing switch is in the "silence" position. The high alarm sensor shall continue to show as alarm condition until the operating condition has returned to normal and the silencing switch has been returned to its "normal" position.

The control panel meeting the above criteria shall be equal to a Rhombus Technology panel, Model Number 1120W111H1E10E11C, Goulds CentriPro S10020 SES Simplex control panel, or approved equal.

I. Electrical Cable: Electrical cable shall be Type UF for direct burial; 12/2 wire with ground to provide power to the effluent pump and 14/2 wire to provide power to the float switches. The underground cable shall be sized to limit voltage drop from power source to pump motor to two (2) percent.

J. Effluent Discharge Line: The outlet discharge pipe shall be Schedule 80 PVC pipe from the pump to outside the pump tank. Once outside the tank the force main may be Schedule 40 PVC pipe. The discharge line must have a union installed inside the tank.

K. Check Valve: The check valve installed above the pump shall be PVC equal to the utility swing check valve manufactured by Spears. The check valve shall be the same size as the effluent discharge line.

L. Mound Materials:

Clean sand: If indicated on the drawings, a minimum of 12 inches of clean sand shall be placed upon the plowed soil, below the perforated pipe distribution media. A sieve analysis of the mound sand shall be required from the Contractor as a submittal item. The following sieves shall be used for the analysis: No. 10, No. 20, No. 40, No. 60, No. 100, and No. 200. The sand shall meet the following requirements:

Sieve Number	Percent Finer by Weight
8 (2.36 mm)	Greater than 80%
16 (1.18 mm)	50 – 82%
30 (0.6 mm)	25 - 62%
50 (0.3 mm)	10 - 33%
100 (0.15 mm)	6 - 16%
200 (0.075 mm)	Less than 5%

Written approval from the Owner or Owner's Representative shall be obtained prior to the delivery of the sand. The Owner or Owner's Representative reserves the right to conduct a field test of the mound sand and to reject aforesaid sand should it fail to meet the criteria listed above. If the sand does fail, the Contractor will remove all of the sand and clean the affected area of any remnants at no cost or penalty to the Owner, or affiliates.

Fill Material: Fill material may be subsoil if it is not heavy clay or glacial till, with stones and boulders. Sandy loam soil is the preferred fill material. All fill material to be used shall be approved by the Owner or his/her representative.

M. Perforated Pipe Distribution Media: The construction drawings and bid schedule will specify one of the following three media types to house the perforated pipe in the mound system:

1. Drainfield Gravel: The drainfield gravel shall be clean and may vary in size from 1/2 inch to 2 inches, with not more than 5% fines below the 1/2 inch size. Gravel to be used must meet the approval of the Owner or his/her representative.

2. Manufactured Chambers: Drainfield chamber sections shall be constructed of high strength polyethylene plastic. Chambers shall be high capacity chambers equal to INFILTRATOR Quick4 Plus High Capacity Chambers (34" wide x 53" long x 14" high), ADS Arc 36 HC Chambers (34.5" wide x 63" long x 16" high), or approved equal. A minimum loading rating of AASHTO H-10 shall be required for wheel load protection.

3. In-Drain Modules: In-Drain modules shall be constructed of recycled plastic fins inner woven with bio-Matt and securely banded together into rigid modules, Eljen Type B or approved equal. Each module shall have the approximate dimensions of 36 inches wide by 48 inches long by 7 inches tall/deep.

4. Geosynthetic Aggregate: Geosynthetic aggregate shall be constructed of EZ flow manufactured 12 inch diameter bundles as manufactured by INFILTRATOR, or approved equal. The internal perforated pipe and coupling shall meet ASTM F405 and shall be 4 inches in diameter. The internal perforated pipe shall be surrounded with Styrofoam packing material that is encased within durable high strength netting material.

N. Manifold Pipe: The manifold pipe connecting the effluent discharge line, from the point of entry into the drainfield gravel, to the perforated pipe shall be Schedule 40 PVC pipe of the diameter indicated in the bid schedule as "Manifold Pipe".

O. Perforated Pipe: The perforated pipe shall be Schedule 40 PVC pipe. The pipe shall be field perforated. The pipe diameter shall be as indicated in the bid schedule as "Perforated Pipe".

P. Observation Pipe: Observation pipes shall be constructed of solid 4-inch Schedule 40 PVC pipe and installed at the locations indicated on the drawings.

TP-1304 INSTALLATION:

A. Sewer Service Line: All lines leading from the building stubout to the septic/pump tank shall be 4-inch solid, PVC pipe, laid at a minimum slope of 2%. The sewer service line shall be sealed with a rubber gasket or masonry grouted at connection points to the inlet and discharge openings of the septic/pump tank. Grout shall conform to Section 02 of the Technical Provisions.

Plastic pipes with scratches, gouges, or grooves deeper that 10 percent of the wall thickness shall be rejected. Pipe joints and fitting installation shall be in accordance with manufacturer recommendations. All pipes shall be approved by the Owner or Owner's Representative prior to backfilling.

B. Septic Tank and Pump Tank or Combination Septic/Pump Tank: The tank(s) shall be installed at the location shown in the plans and detail drawings. Excavation shall be the minimum required to provide placement of the tank(s). Prior to setting the tank(s), all rocks and other foreign material which might damage the tank(s) upon placement shall be removed from the hole. The contractor shall set the tank(s) on a 6-inch thick minimum bed of sand or gravel to facilitate leveling the tank(s). Prior to backfilling, the tank(s) elevation shall be checked at all corners to assure that placement is level. Final backfill material shall be mounded 6 inches above the natural ground surface to allow for settlement. An effluent filter shall be installed on the septic tank outlet to prevent grease and solids carryover into the drainfield.

The Contractor shall install an approved covered riser which will provide access to the tank(s) not more than 6 inches above nor less than 1 inch above finished grade. The riser system the Contractor proposes to use shall be submitted with the tank drawings and specifications for approval by the Owner or Owner's Representative.

At a minimum, access risers shall be provided for the inlet and outlet of the septic tank and the access to the pump. All tank risers shall be connected to the top of the tank with a Ram-Nek flexible gasket as manufactured by K.T. Snyder Company or equal and grouted to the top of the tank. A 3/8 inch minimum diameter rope shall be attached to the tank access covers and shall extend to within 6 inches of grade. The rope shall be secured to the inside tank riser to facilitate the removal of the access cover inside the riser. During and after construction the Contractor shall avoid driving over the tank(s).

C. Electrical Controls and Cable: The power supply shall be 120/240 volt, single phase, 3 wire service from a properly sized 1/2 pole breaker off the lighting panel in the residence. The entire system shall be installed in accordance with state and local codes. All wire shall be

sized in accordance with the latest issue of the National Electric Code. All of the buried electrical cable (1 pump wire and 3 float switch wires) shall be placed in one trench. All exposed wiring shall be enclosed in approved conduit.

D. Effluent Discharge Line: The outlet discharge pipe shall pass through the tank such that the pump can be removed through the access opening by only disconnecting the union. Once beyond the tank the Contractor may adapt the force main to Schedule 40 PVC. The pipe diameter shall be as specified on the design plans and as listed on the bid schedule. The pipe shall slope up continuously to the mound and a ¼" diameter weep hole shall be made in the force main inside the pump chamber directly above the check valve (unless the check valve is equipped with a weep hole) to facilitate draining the force main back into the pump chamber to prevent freezing unless otherwise directed by the Owner or Owner's Representative. Excavation and backfilling procedures shall be in accordance with Section 1.0 of the Technical Provisions. The effluent pipe shall be trenched up to the mound area and slope up into the mound within the fill from the upslope side or end of mound as shown in detail drawings.

E. Mound Construction: The Contractor shall remove excessive vegetation from the mound area by clearing and mowing. Surface preparation shall be accomplished by plowing, with a moldboard or chisel type plow, parallel to the slope (if the site is sloped). Preparation of the mound area by scratching the surface topsoil with the teeth of a backhoe may be allowed with approval of the Owner or Owner's Representative. The plowing depth shall be a minimum of 7 or 8 inches below original grade and the soil must be dry and crumbly. No plowing shall be done when the moisture content of the soil, at a depth of 7 to 8 inches, is such that rolling a sample between the hands forms a roll. Approval for surface soil preparation shall be obtained from the Owner or Owner's Representative. Once plowing is completed, no vehicular traffic or material stockpiles will be allowed on the mound basal area and/or the designated down-slope area. Application of the mound basal sand must be completed immediately after surface plowing has been accomplished.

A minimum of 12 inches of clean sand shall be placed upon the plowed soil, below the drainfield gravel. The sand shall be placed by dumping along the upslope side and/or ends of the plowed area. Under no circumstances shall the dump truck wheels be allowed on the plowed area. The Contractor shall use a crawler tractor with a blade to spread the sand over the plowed area, keeping at least 6 inches of sand under the tracks at all times to minimize compaction.

A layer of fill material shall be placed above the perforated pipe distribution media as shown in the detail drawing. This fill material layer shall be a minimum of 12 inches deep at the center of the mound and a minimum of 6 inches deep at the sides.

The entire mound shall be covered with a minimum of 6 inches of topsoil. Seeding of the

topsoil shall be with 60% bluegrass, 30% creeping red fescue and 10% rye. Application and coverage shall be as recommended by the seed supplier.

The mound shall be mulched, as approved by the Owner or Owner's Representative, to assure proper seed germination and eliminate erosion of the mound area. The Contractor shall be responsible for re-seeding or repairing erosion damage on the mound as necessary until a complete vegetation cover is achieved.

F. Perforated Pipe Distribution Media

1. Drainfield Gravel: A 9 inch gravel layer shall be placed with a crawler tractor as shown in detail drawing. The perforated pipe shall be installed within the drainfield gravel such that there is approximately 6 inches of gravel below the pipe and 3 inches above the pipe. The perforations shall face downwards at the 6 o'clock position. The drainfield gravel shall be clean and may vary in size from 1/2 inch to 2 inches, with not more than 5% fines below the 1/2 inch size. The top of the gravel shall be covered with synthetic material TYPAR Style 3151 or equal.

2. Manufactured Chambers: The manufactured chambers shall be installed level on top of the sand bed as shown in the detail drawings. The perforated pipe shall be attached to the top of the chambers using stainless steel straps with a minimum of 4 feet on center spacing. The perforations shall face upwards at the 12 o'clock position.

3. In Drain Modules: The In-Drain modules shall be installed level on top of the sand bed as shown in the detail drawings. The perforated pipe shall be centered over the In-Drains with the perforations facing downwards in the 6 o'clock position and shall be secured to the In-Drain Module with one clamp (supplied by manufacturer) per In-Drain unit. The cover fabric shall then be placed over the rows of In-Drains. Drape the fabric straight down over the pipe. The fabric shall be secured with hand shoveled sand.

4. Geosynthetic Aggregate: Geosynthetic Aggregate shall be constructed in accordance with the detail drawings for each site. Trenches for installation shall be excavated to the elevation indicated by the Owner or Owner's Representative and shall be maintained at a level grade throughout the entire length. Installation shall be checked with a construction level upon placement to preclude high or low sections. All smeared or compacted surfaces of the trenches or bed shall be raked to expose the natural texture of the soil.

   Prior to placement, the contractor shall remove the plastic shipping wrap from the geosynthetic aggregate. The contractor shall place the geosynthetic aggregate with the geotextile fabric portion facing upwards to prevent the movement of soil into the geosynthetic aggregate. When multiple geosynthetic aggregate cylinders are stacked

vertically, the upper geosynthetic aggregate cylinder shall be installed with the geotextile fabric portion facing upwards and each lower geosynthetic aggregate cylinder shall be installed with the geotextile fabric portion facing the side of the trench receiving the backfill.

The geosynthetic aggregate shall be connected to each other using the 4 inch diameter perforated pipe internal couplings provided by the manufacturer. The installation shall be in accordance with manufacturer's recommendations.

G. Manifold Pipe: The manifold pipe connecting the effluent discharge line, from the point of entry into the drainfield gravel, to the perforated pipe shall be installed as per the drawings.

H. Perforated Pipe: The perforated pipe shall be field perforated and installed per the drawings.

I. Observation Pipe: Each mound shall have 3 observation pipes located at 1/6, 1/2, and 5/6 of the absorption length as shown in the detail drawing. The pipes must extend from the interface between the sand and the perforated pipe distribution media to 12-24 inches above grade and be securely anchored. A PVC cap shall be placed on the top of the observation pipe without glue. Exposed PVC pipe shall be coated with 2 coats of paint. Paint shall be equal to Krylon Fusion brand spray paint for plastic. Paint color shall be white. The observation pipes shall be constructed in the manner indicated in the detail drawings. The observation pipes must be stabilized as shown on the details drawings so that they don't pull out when removing the cap.

J. Inspection: The Contractor shall provide the Owner or Owner's Representative with a minimum of 24 hours notice on the need for inspection prior to final backfill or the septic/pump tank and pressurized mound installation. The sewer service lines, septic/pump tank, and mound shall remain uncovered until inspected and approved by the Owner or Owner's Representative. Backfill prior to such approval will be cause for rejection of the construction for payment until disputed sections are uncovered for inspection purposes. All such re-excavation shall be at the sole expense of the Contractor.

TP-1305 SEPTIC TANK ABANDONMENT

Where shown on the drawings and on the bid schedule, the contractor shall abandon existing septic tank(s) by pumping the tank, knocking a hole in the bottom of the tank to prevent accumulation of water, crush the top of the tank, and backfill with native fill material. The septic tank shall be pumped by a licensed septic tank pumping company and the septage shall be hauled to an approved septage disposal site.

TP-1306 AS-BUILT DRAWINGS:

As-built drawings shall be furnished for individual sewage disposal systems and shall include two

swing ties from permanent structures or facilities to each of the following:

A. Inspection holes on the septic/pump tank
B. All cleanouts, bends and elbows
C. Location of the mound
D. Intersections with other utilities

TP-1307 WATER AND SEWER CROSSINGS:

Where sewer service lines must cross water service lines or mains, and the sewer line is not a minimum of 18-inches below the water service line or main, special protection is required. In these instances, the sewer service line or main shall be reconstructed of ductile iron pipe of the same size as the original sewer service line or main for a distance of 10 feet on either side of the water/sewer crossing point. All existing sewer grades shall be maintained.

TP-1308 MEASUREMENT AND PAYMENT:

All measurements and payments will be based on completed and accepted work performed in strict accordance with the drawings and specifications and the respective prices and payment shall constitute full compensation for all work complete, including incidentals. No separate payment will be made for testing, excavation, trenching and backfilling or for other items of work covered under this section of the specifications and all such costs pertinent to these items shall be included in the applicable unit prices.

A. Sewer Service Line: PVC sewer service line shall be measured in linear feet along the centerline of the pipe, including fittings. Payment for sewer service lines shall be at the contract unit price shown in the Bid Schedule. This price being full compensation for furnishing all labor, equipment, materials, and incidentals required for a complete installation; including excavation, bedding, stabilization material, connections to the septic/pump tank, cleanouts, fittings, trench backfilling, as-builts, and final clean-up

B. Cleanouts: Payment for the two way cleanouts shall be at the contract unit price shown in the Bid Schedule, and shall be full compensation for furnishing all labor, equipment, materials, and incidentals required for complete installation; including, excavation, connections to the sewer service line, house plumbing, as-builts, and final clean-up.

C. Septic Tank: Payment for the septic tank shall be at the contract unit price shown on the Bid Schedule, and shall be full compensation for furnishing all labor, equipment, materials, and incidentals required for complete installation; including excavation, as-builts, and final clean-up. Payment shall be compensation for all materials and labor required to furnish and install the septic tank including the effluent filter.

D. Pump Tank: Payment for the pump tank shall be at the contract unit price shown on the Bid Schedule, and shall be full compensation for furnishing all labor, equipment, materials, and incidentals required for complete installation; including excavation, as-builts, and final clean-up. Payment shall be compensation for all materials and labor required to furnish and install the pump tank.

E. Combination Septic/Pump Tank: Payment for the combination septic/pump tank shall be at the contract unit price shown on the Bid Schedule, and shall be full compensation for furnishing all labor, equipment, materials, and incidentals required for complete installation; including excavation, as-builts, and final clean-up. Payment shall be compensation for all materials and labor required to furnish and install the combination septic/pump tank.

F. Septic/Pump Tank Manhole Risers: Payment for septic/pump tank manhole risers shall be at the unit price shown on the Bid Schedule, and based on actual feet (measured vertically) installed including one septic/pump tank cover for each riser. Payment shall be full compensation for all materials, labor, and equipment required for a complete installation. No separate payment for the cover shall be made.

G. Effluent Pump with Controls: Each effluent pump shall be counted and paid for at its respective unit price in the Bid Schedule. Payment shall be full compensation for all materials and labor required to furnish and install the pump including the float switches, controls, above ground electrical wiring, piping, and union inside the lift station container (pump tank).

H. Electrical Cable: Buried electrical cable shall be paid on the basis of feet installed at the unit price in the Bid Schedule. Payment shall be full compensation for all labor, equipment, excavation, and materials including electrical cable, conduit and adapters necessary to install the electrical cables.

I. Effluent Discharge Pipe: The solid PVC pipe shall be measured in lineal feet along the center line of the pipe, and payment shall be at the unit price in the Bid Schedule. Payment shall be full compensation for all excavation, back-filling, compaction, and all materials including fittings to install the solid pipe.

J. Mound Material (clean sand, fill and topsoil): The clean sand, fill and topsoil shall be paid for at the lump sum as specified in the Bid Schedule. Payment shall be full compensation for all excavation, labor, and equipment required to place the mound material.

K. Manifold Pipe: The manifold pipe shall be measured in lineal feet along the center line of the pipe, and payment shall be at the unit price on the Bid Schedule. Payment shall be full compensation for all pipe, fittings, excavation, labor, and backfilling required to place the pipe.

L. Perforated Pipe Distribution Media:

1. Drainfield Gravel: The drainfield gravel for the mound shall be paid for at the lump sum or per cubic yard price as specified in the Bid Schedule. Payment shall be full compensation for all plant, labor and material to place the gravel.

2. Manufactured Chambers: Payment for chamber shall be made on a linear foot basis measured to the nearest foot and includes costs for the installation of manufactured chambers, stainless steel straps, end pieces, filter fabric (if required), and all required piping and fittings. Compensation shall include all labor, equipment, materials, and incidentals required for complete installation; including excavation, backfilling, as-builts, and final clean-up.

3. In-Drain Modules: Payment for In-Drain modules shall be made on a linear foot basis measured to nearest foot and includes costs for the installation of the manufactured In-Drain Modules, filter fabric, clamps to secure perforated pipe to In-Drain units, and all required piping and fittings. Payment shall be full compensation for all plant, labor and material required for a complete installation; including excavation, backfilling, as-builts, and final clean-up.

4. Geosynthetic Aggregate: Payment for geosynthetic aggregate shall be made on a linear foot basis measured to nearest foot and includes costs for the installation of the cylinders, observation pipes, and all required piping and fittings. Payment shall be full compensation for all plant, labor and material required for a complete installation; including excavation, backfilling, as-builts, and final clean-up.

M. Perforated Pipe: The perforated pipe shall be measured in lineal feet along the center line of the pipe. Payment shall be made at the unit price on the Bid Schedule and shall be full compensation for all excavation, labor, back-fill, gravel, fittings and perforated pipe and synthetic material.

N. Mound Incidentals: All other incidental items not specifically covered in the other pay items shall be paid for on a lump sum basis per mound installation. These items include plowing of the original topsoil, removing excessive vegetation, seeding, protective cover for seeding, and the observation pipes. Payment shall be full compensation for all plant, labor, and material to complete all incidental items as specified.

O. Septic Tank Abandonment: Payment for abandonment of the existing septic tank shall be at the contract unit price per job and shall be full compensation for pumping and crushing the existing concrete tank, backfilling the void left by the tank, and compacting the soil to prevent subsidence and to bring it to the same level as the surrounding grade. If the existing septic tank is any material other than concrete, the Contractor shall be paid at the contract

unit price per job to pump and remove the existing septic tank. The Contractor shall be responsible for all costs associated with the removal, including, but not limited to transporting and disposing of the septic tank at a State licensed and approved waste disposal site located off the particular reservation where the work is to be performed. The payment shall also be full compensation for backfilling the void with soil from the designated area, and compaction to prevent subsidence and to bring it to the same level as the surrounding grade.

TP-1309 SUBMITTALS:

All materials listed below will require that a submittal be provided to the Owner or Owner's Representative for approval prior to the start of any construction requiring those materials.

A. Solid Sewer Pipe
B. Cleanouts
C. Septic/Pump Tank
D. Effluent Pump, Controls, and Electrical Wiring
E. Effluent and Manifold Pipe
F. Pipe to be Field Perforated
G. Source of Mound Material, Perforated Pipe Distribution Media, and Sieve Analysis (for sand and gravel, if specified)
H. Synthetic Material to Cover Perforated Pipe Distribution Media

TECHNICAL PROVISIONS

SECTION 16 – SINGLE RESIDENCE LIFT STATION

TP-1601 SCOPE:

The work covered by this section includes the furnishing of all plant, labor, tools, equipment, materials, and performing all operations in connection with the installation and construction of an individual waste disposal system composed of a combination septic/pump tank with pump and controls, force main, and all connecting piping and incidental construction operations necessary to place the sewage disposal system in a fully operational condition.

TP-1602 GENERAL:

The individual sewage disposal systems and related facilities shall be constructed at the locations and of the sizes shown on the drawings. The Owner or Owner's Representative may direct field changes in location and orientation at the time of construction. The lift station and force main shall be constructed at the locations indicated in the drawings. Excavation, trenching, and backfilling shall be in accordance with Section 01 of the Technical Provisions, unless specifically altered under other requirements of this specification section.

TP-1603 MATERIALS:

A. Pipe and Fittings: The solid pipe and fittings utilized from the house stubout to the inlet of the septic/pump tank shall be 4-inch diameter PVC pipe, conforming to ASTM 3034, SDR 35.

B. Cleanouts: Sewer service line cleanouts will be installed at the locations indicated in the plans. The cleanout shall be constructed of SDR-35 PVC with a cast iron ferrule equal to a Tyler 2-11. The cleanouts shall be installed with a brass hex socket plug equal to Tyler A Low Square Head cleanout plug. A clear silicon lubricant shall be applied to the cleanout plug to allow for easier removal. The cleanouts shall be constructed in the manner indicated in the detail drawings.

C. Combination Septic/Pump Tank: Combination septic/pump tanks shall be a minimum of 1500-gallon liquid capacity unless otherwise noted in the bid schedule or on the drawings. The actual size of the combination septic/pump tank shall be as shown on the drawings and in the bid schedule. The solids chamber shall comprise approximately 70% of the total tank volume as shown in the detail drawings. A sanitary tee shall be installed at the inlet to the septic tank. In addition, a sanitary tee shall be cast into the baffle between the septic tank chamber of the tank and the pump chamber portion of the tank to allow the effluent to be conveyed to the pump chamber as shown on the drawings. This sanitary tee shall be equipped with an effluent filter.

20 inch minimum diameter access openings shall be provided as shown on the detail drawings. The tanks, as shown in the detail drawings, shall be constructed of precast, reinforced concrete of sufficient strength to withstand hauling and handling stresses and shall meet all regulations of the State Health Department for the state in which it is installed. Tanks shall be water-tight and shall have a 28-day compressive strength of at least 3,000 psi. All concrete used for combination septic/pump tanks shall be batched with a chemical resistant admixture for protection against hydrogen sulfide gas. The admixture shall be equal to Moxie 1800 Super-Admix as manufactured by Moxie International.

If noted in the Statement of Work or site plans, some sites may require installation of a special low profile septic/pump tank. These tanks shall comply with all provisions for a standard tank but shall require a bury depth of no greater than 48 inches.

D. Septic/Pump Tank Manhole Risers: Manhole risers, a minimum of 24 inches in diameter, must be provided to provide access to the effluent filter and the inlet of the septic tank for pumping purposes. Risers shall be corrugated HDPE with a Polylok 24" HDPE heavy cover, part # 3008-HD, with stainless steel locking screws or equal.

E. Effluent Pump and Controls: The effluent pump shall be a 1/2 H.P., 115/230 volt, single phase submersible pump equal to a Peabody Barnes Model EH522, Meyers Model ME50S-11 (for 115V), Meyers Model ME50S-21 (for 230V) or Goulds Model 3885. The pump shall have a 2-inch discharge outlet with a capacity of 50 GPM against a total dynamic head of 20 feet. The pump motor shall have built-in thermal overload protection with automatic reset.

The power supply shall be 120/240 volt, single phase, 3 wire service from a properly sized 1/2 pole breaker off the lighting panel in the residence. The entire system shall be installed in accordance with state and local codes. All wire shall be sized in accordance with the latest issue of the National Electric Code.

The pump supplier shall furnish a control system compatible with the pump furnished under this contract. Pump control equipment shall be housed in a weatherproof enclosure equal to a NEMA Type 4X enclosure, and mounted in a location specified by the Owner or Owner's Representative.

A separate dead front enclosure section shall house a load switching motor contractor with door mounted, heavy duty HAND-OFF-AUTO switch and a service disconnect mechanism.

Two direct acting mercury float switches shall be furnished for mounting in the effluent chamber. These floats shall serve to detect ON-OFF control levels for the pump. Terminal blocks shall be provided for connection of ON-OFF level control floats.

An alarm system, on a circuit separate from the pump, shall be provided and installed in

the residence in a location to be selected by the Owner or Owner's Representative and/or homeowner. This alarm system shall consist of a direct acting mercury float switch for mounting in the effluent chamber, red alarm light, horn, push-to-test alarm button, and a horn silence switch. The alarm system shall be a Tank Alert® 1 or approved equal.

Upon the occurrence of an alarm condition, the high alarm sensor will close its circuit, thus energizing the red alarm light and sounding the horn or buzzer. Upon noticing the visual or audible alarm, a person may slide the silencing switch from the "normal" to the "silence" position and thus silence the audible alarm. The red alarm light shall remain energized as long as the silencing switch is in the "silence" position. The high alarm sensor shall continue to show as alarm condition until the operating condition has returned to normal and the silencing switch has been returned to its "normal" position.

The control panel meeting the above criteria shall be equal to a Rhombus Technology panel, Model Number 1120W111H1E10E11C, Goulds CentriPro S10020 SES Simplex control panel, or approved equal.

F. Electrical Cable: Electrical cable shall be Type UF for direct burial; 12/2 wire with ground to provide power to the effluent pump and 14/2 wire to provide power to thefloat switches. The underground cable shall be sized to limit voltage drop frompower source to pump motor to two (2) percent.

G. Effluent Discharge Line: The outlet discharge pipe shall be Schedule 80 PVC pipe from the pump to outside the pump tank. Once outside the tank the force main may be Schedule 40 PVC pipe. The discharge line must have a union installed inside the tank.

H. Service Saddle: Effluent discharge line saddle shall be casted from ductile iron meeting ASTM A536 and of a design that will prevent collapsing of the PVC sewer main. The gasket shall be EPDM or NBR rubber in accordance with ASTM D2000. The saddle shall be sized to fit the outside diameter (O.D.) of SDR 35 sewer mains. Saddles shall be dual stainless bands and bolts equal to Ford FCD202 or Romac 202S.

I. Check Valve: The check valve installed above the pump shall be PVC and equal to the utility swing check valve manufactured by Spears. The check valve shall be the same size as the effluent discharge line.

J. Ball Valve: The ball valve installed on the effluent discharge line inside the residential valve pitshall be a solvent weld PVC ball valve. Solvent weld PVC gate valves shall also be allowed. The ball valve shall be the same size as the effluent discharge line.

K. Effluent Filter: Effluent filters shall have a minimum diameter of 4 inch and a maximum filtration size of 1/16 inch. The filters shall be designed for a maximum daily flow of 800 gallons per day. The effluent filters shall be equal to a Zabel Filter Model A1800

TP-1604 INSTALLATION:

A. Sewer Service Line: All lines leading from the building stubout to the septic/pump tank shall be 4-inch solid, PVC pipe, laid at a minimum slope of 2%. The sewer service line shall be sealed with a rubber gasket or masonry grouted at connection points to the inlet and discharge openings of the septic/pump tank. Grout shall conform to Section 02 of the Technical Provisions.

Plastic pipes with scratches, gouges, or grooves deeper that 10 percent of the wall thickness shall be rejected. Pipe joints and fitting installation shall be in accordance with manufacturer recommendations. All pipes shall be approved by the Owner or Owner's Representative prior to backfilling.

B. Combination Septic/Pump Tank: The combination septic/pump tank shall be installed at the location shown in the plans and detail drawings. Excavation shall be the minimum required to provide placement of the tank. Prior to setting the tank, all rocks and other foreign material which might damage the tank upon placement shall be removed from the hole. The contractor shall set the tank on a 6-inch thick minimum bed of sand or gravel to facilitate leveling the tank. Prior to backfilling, the tank elevation shall be checked at all corners to assure that placement is level. Final backfill material shall be mounded 6 inches above the natural ground surface to allow for settlement. An effluent filter shall be installed on the septic tank outlet to prevent grease and solids carryover into the drainfield.

The Contractor shall install an approved covered riser which will provide access to the tank not more than 6 inches above nor less than 1 inch above finished grade. The riser system the Contractor proposes to use shall be submitted with the tank drawings and specifications for approval by the Owner or Owner's Representative.

At a minimum, access risers shall be provided for the inlet and outlet of the septic tank and the access to the pump. All tank risers shall be connected to the top of the tank with a Ram-Nek flexible gasket as manufactured by K.T. Snyder Company or equal and grouted to the top of the tank. A ¼ inch minimum diameter rope shall be attached to the tank access covers and shall extend to within 6 inches of grade. The rope shall be secured to the inside tank riser to facilitate the removal of the access cover inside the riser. During and after construction the Contractor shall avoid driving over the tank.

C. Electrical Controls and Cable: The power supply shall be 120/240 volt, single phase, 3 wire service from a properly sized 1/2 pole breaker off the lighting panel in the residence. The entire system shall be installed in accordance with state and local codes. All wire shall be sized in accordance with the latest issue of the National Electric Code. All of the buried electrical cable (1 pump wire and 3 float switch wires) shall be placed in one trench. All exposed wiring shall be enclosed in approved conduit.

D. Effluent Discharge Line: The outlet discharge pipe shall pass through the tank such that the pump can be removed through the access opening by only disconnecting the union. Once beyond the tank the contractor may adapt the force main to Schedule 40 PVC. The pipe diameter shall be as specified on the design plans and as listed on the bid schedule. A check valve shall be installed on the effluent discharge line above the pump inside the tank. A ¼" weep hole shall be drilled in the effluent discharge line just above the check valve such that the effluent discharge line drains back into the tank after a pumping cycle to prevent freezing. The pipe shall slope up continuously to the sewer main unless otherwise directed by the Owner or Owner's Representative. Excavation and backfilling procedures shall be in accordance with Section 01 of the Technical Provisions.

TP-1605 SEPTIC TANK ABANDONMENT

Where shown on the drawings and on the bid schedule, the contractor shall abandon existing septic tank(s) by pumping the tank, knocking a hole in the bottom of the tank to prevent accumulation of water, crush the top of the tank, and backfill with native fill material. The septic tank shall be pumped by a licensed septic tank pumping company and the septage shall be hauled to an approved septage disposal site.

TP-1606 AS-BUILT DRAWINGS:

As-built drawings shall be furnished for individual sewage disposal systems and shall include two swing ties from permanent structures or facilities to each of the following:

A. Inspection holes on the septic tank
B. All cleanouts
C. All bends and elbows
D. Location of the sewer main tap
E. Intersections with other utilities

TP-1607 MEASUREMENT AND PAYMENT:

All measurements and payments will be based on completed and accepted work performed in strict accordance with the drawings and specifications and the respective prices and payment shall constitute full compensation for all work complete, including incidentals. No separate payment will be made for testing, excavation, trenching and backfilling or for other items of work covered under this section of the specifications and all such costs pertinent to these items shall be included in the applicable unit prices.

A. Sewer Service Line: The solid pipe shall be measured in lineal feet along the centerline of the pipe, and payment shall be at the unit price bid. Payment shall be full compensation for all excavation, backfill and compaction, and all materials including cast iron pipe, PVC pipe and all fittings to install the solid pipe.

B. Cleanouts: Payment for the two-way cleanouts shall be at the unit price as stated in the bid schedule. Payment shall be full compensation for adapter, labor and other materials needed to provide a complete installation.

C. Combination Septic/Pump Tank: The combination septic/pump tank shall be counted and paid for at the unit price bid. Payment shall be compensation for all materials and labor required to furnish and install the combination septic/pump tank.

D. Septic/Pump Tank Manhole Risers: Payment for septic/pump tank manhole risers shall be at the unit price shown on the Bid Schedule, and based on actual feet (measured vertically) installed including one septic/pump tank cover for each riser. Payment shall be full compensation for all materials, labor, and equipment required for a complete installation. No separate payment for the cover shall be made.

E. Effluent Pump with Controls: Each effluent pump shall be counted and paid for at its respective unit price bid. Payment shall be full compensation for all materials and labor required to furnish and install the pump including the float switches, controls, above ground electrical wiring and the piping, check valve, gate valve, and union inside the lift station container.

F. Electrical Cable: Buried electrical cable shall be paid on the basis of feet installed at the unit price in the bid schedule. Payment shall be full compensation for all labor, equipment, excavation, and materials including electrical cable, conduit and adapters necessary to install the electrical cables.

G. Effluent Discharge Pipe: The solid PVC pipe shall be measured in lineal feet along the center line of the pipe, and payment shall be at the unit price bid. Payment shall be full compensation for all excavation, back-filling, and compaction and all materials including fittings to install the solid pipe including the connection to the existing community sewer system.

H. Septic Tank Abandonment: Payment for abandonment of the existing septic tank shall be at the contract unit price per job and shall be full compensation for pumping and crushing the existing concrete tank, backfilling the void left by the tank, and compacting the soil to prevent subsidence and to bring it to the same level as the surrounding grade. If the existing septic tank is any material other than concrete, the Contractor shall be paid at the contract unit price per job to pump and remove the existing septic tank. The Contractor shall be responsible for all costs associated with the removal, including, but not limited to transporting and disposing of the septic tank at a State licensed and approved waste disposal site located off the particular reservation where the work is to be performed. The payment shall also be full compensation for backfilling the void with soil from the designated area, and compaction to prevent subsidence and to bring it to the same level as the surrounding grade.

I. Residential Valve Pit for Force Main: Payment for the residential valve pit shall be at the contract unit price shown on the Bid Schedule, and shall be full compensation for furnishing all labor, equipment, materials, and incidentals required for complete installation; including excavation and final clean-up. Payment shall be compensation for all materials and labor required to furnish and install the residential valve pit.

TP-1608 SUBMITTALS:

All materials listed below will require that a submittal be provided to the owner for approval prior to the start of any construction requiring those materials.

A. Solid Sewer Pipe
B. Cleanouts
C. Septic/Pump Tank
D. Effluent Pump, Controls, and Electrical Wiring
E. Effluent Pipe

Pueblo de San Ildefonso
Pueblo Land Access Permit Application

- Application must be received by the Pueblo de San Ildefonso Realty Office, a minimum of two (2) weeks prior to the requested date of access.
- Submit application to Realty Office Daniel Baca at realtyasst@sanipueblo.org. or by fax at (505) 455-4163.

SECTION 1: CONTACT INFORMATION

Submitted by:	Date:
Phone:	Email:

SECTION 2: PERSONNEL INFORMATION (Individual Information Requesting Access)

Name:				
Title:				
Organization:				
Address:				
Phone:				

SECTION 3: VEHICLE INFORMATION

	Vehicle 1	Vehicle 2	Vehicle 3
Color, Make and Model:			
License plate number(s):			

SECTION 4: ACCESS INFORMATION

Date(s) for access:
Start time:
End time:
Purpose of visit:
Description of the Scope of Work to be performed on Pueblo lands:
Data to be Collected (include photographs, videos, audio tapes):
How This Data will be Used:
Where is access needed? (attach map, be specific):
Number of tribal or other escort/monitor(s) needed:

SECTION 5: ACKNOWLEDGEMENT FORM (Each Individual Listed On Section 2 Must Sign)

The Pueblo has the right as a government to protect its Pueblo from conduct and activities that threatens or directly affects the Tribes political integrity, economic security, health and welfare.

I understand and agree that the provisions of the Archeological Resources Protection Act ("ARPA") apply to all Applicants in the conduct of their activities on the Pueblo. In order to protect the Pueblo's cultural resources, any unlawful damage, destruction, disturbance or defacement of any archeological resource located on the Pueblo will be considered a violation of ARPA. Any violation of the ARPA, 16 U.S.C. § 1470, may result in my prosecution by the United States Department of Justice, and may result in fines up to $20,000, and up to 2 years in prison.

I further understand that violation of the ARPA, applicable Pueblo written law, or terms of any permit issued by the Pueblo shall be considered a trespass which may result in my immediate exclusion from the Pueblo.

In addition by singing below I hereby acknowledge that any Registered Sex Offenders will be identified and the Pueblo de San Ildefonso Sex Offender Registration Code will be adhered to.

Pursuant to the Pueblo de San Ildefonso Sex Offender Registration Code, sex offenders who are contractors or employees of contractors doing business within the Pueblo de San Ildefonso lands on jobs or projects that exceed five (5) days must notify the Pueblo's Tribal Courts of their presence with Pueblo de San Ildefonso lands. The Pueblo reserves the right to require full registration for those sex offenders who are contractors and/or their employees and will be present within Pueblo de San Ildefonso lands for more than fifteen (15) days. Examples include, but are not limited to, employees of the construction contractor, their subcontractors and other service providers. The five (5) and fifteen (15) days referenced herein do not have to be consecutive days.

Name:				
Title:				
Organization:				
Signature:				
Date				

Pueblo Natural Resources Department to complete information below	
Approved by:	Date:
Pueblo or private landowner contact:	
Name of escort/monitor(s):	
Notes:	

SECTION 2: PERSONNEL INFORMATION (Continuation Sheet)

Name:				
Title:				
Organization:				
Address:				
Phone:				

Name:				
Title:				
Organization:				
Address:				
Phone:				

Name:				
Title:				
Organization:				
Address:				
Phone:				

Name:				
Title:				
Organization:				
Address:				
Phone:				

SECTION 3: VEHICLE INFORMATION (Continuation Sheet)

	Vehicle 4	Vehicle 5	Vehicle 6
Color, Make and Model:			
License plate number(s):			

	Vehicle 7	Vehicle 8	Vehicle 9
Color, Make and Model:			
License plate number(s):			

	Vehicle 10	Vehicle 11	Vehicle 12
Color, Make and Model:			
License plate number(s):			

SECTION 5: ACKNOWLEDGEMENT FORM (Continuation Sheet)

Name:				
Title:				
Organization:				
Signature:				
Date				

Name:				
Title:				
Organization:				
Signature:				
Date				

Name:				
Title:				
Organization:				
Signature:				
Date				

Name:				
Title:				
Organization:				
Signature:				
Date				

Pueblo de San Ildefonso

Department of Tribal Services - Office of Taxation

BUSINESS REGISTRATION APPLICATION

☐ Check here if this application is to update information only

FILING YOUR BUSINESS REGISTRATION APPLICATION

Pursuant to Section 1.11 of the Pueblo de San Ildefonso Tax Act, before engaging in any transaction or activity that is subject to the Pueblo's tax, the person or business must register with the Pueblo's Tax Office.

The Business Registration Application must be fully completed. Be sure the information is complete, legible and accurate. Incomplete applications will not be processed. Additional information may be requested in order to process an application.

FEES

There is a non-refundable registration fee collected which pays to set up and maintain your registration. The annual fee for a Business Registration is $50.00. This must be paid at the time your application is returned to the Department of Tribal Services. Checks may be made out to "Pueblo de San Ildefonso." There is no fee for filing an updated registration application.

Late Fees: Businesses that do not pay the registration fee by the date business has commenced or annually on or before the anniversary date will be charged a late fee of $30.00.

QUESTIONS

Please contact John Gonzales in the Pueblo de San Ildefonso Department of Tribal Services - Office of Taxation with any business registration questions or concerns at (505) 455-4160.

Pueblo de San Ildefonso
Office of Taxation

BUSINESS REGISTRATION APPLICATION

BUSINESS INFORMATION

Business Name:_____
DBA:_____
Business Structure (Corporation,Partnership, etc):_____
Business Phone:_____ Business Fax:_____
Business Address:_____ City:_____State:_____Zip:_____
Business State CRS#:_____ Business Federal ID#: _____
Describe Type of Business, Products or Services Provided: _____
_____

OWNER INFORMATION

Owner 1 Name:_____ Email:_____
Phone:_____ Fax:_____
Mailing address (if different from above): _____

Owner 2 Name:_____ Email:_____
Phone:_____ Fax:_____
Mailing address (if different from above): _____

CONTACT INFORMATION (Other than Owner)

Name:_____ Email:_____
Phone:_____ Fax:_____
Address:_____ City:_____State:_____Zip:_____

PROJECT INFORMATION (If applicable)

Project Name:_____ Project Manager:_____
Project Manager Email:_____ Project Manager Phone:_____
Project Location:_____
Start date of Project: (mm/dd/yy)_____ End date of Project: (mm/dd/yy)_____

I hereby certify that the above information is true and correct to the best of my knowledge. The Business Registrant, while doing business on Pueblo de San Ildefonso lands, agrees to abide by the applicable Federal laws and the Tribal Laws of the Pueblo de San Ildefonso, including all applicable gross receipts taxes on taxable transactions occurring on the Pueblo de San Ildefonso lands and the Business Registration and Business License Policy.

_____ _____
Signature Print Name

_____
Date

FOR OFFICIAL USE ONLY: Business Registration Application Rec'd _____
Application Fee Rec'd ___Y ___N Amount Rec'd : _____ Check No._____
Business Registration for Period of _____/_____/_____ through _____/_____/_____
Permit or License Number: _____-_____ Employee Initials _____
Year/Month - Registration No.

Exhibit C

San Ildefonso Pueblo Responsibilities of Individuals Conducting Business on Tribal Lands

(To be provided by San Ildefonso Pueblo)

"General Decision Number: NM20250034 01/03/2025

Superseded General Decision Number: NM20240034

State: New Mexico

Construction Type: Highway

County: Santa Fe County in New Mexico.

HIGHWAY CONSTRUCTION PROJECTS (excluding tunnels, building structures in rest area projects & railroad construction; bascule, suspension & spandrel arch bridges designed for commercial navigation, bridges involving marine construction; and other major bridges).

Note: Contracts subject to the Davis-Bacon Act are generally required to pay at least the applicable minimum wage rate required under Executive Order 14026 or Executive Order 13658. Please note that these Executive Orders apply to covered contracts entered into by the federal government that are subject to the Davis-Bacon Act itself, but do not apply to contracts subject only to the Davis-Bacon Related Acts, including those set forth at 29 CFR 5.1(a)(1).

If the contract is entered into on or after January 30, 2022, or the contract is renewed or extended (e.g., an option is exercised) on or after January 30, 2022:	. Executive Order 14026 generally applies to the contract. . The contractor must pay all covered workers at least $17.75 per hour (or the applicable wage rate listed on this wage determination, if it is higher) for all hours spent performing on the contract in 2025.
If the contract was awarded on or between January 1, 2015 and January 29, 2022, and the contract is not renewed or extended on or after January 30, 2022:	. Executive Order 13658 generally applies to the contract. . The contractor must pay all covered workers at least $13.30 per hour (or the applicable wage rate listed on this wage determination, if it is higher) for all hours spent performing on that contract in 2025.

The applicable Executive Order minimum wage rate will be adjusted annually. If this contract is covered by one of the Executive Orders and a classification considered necessary for performance of work on the contract does not appear on this wage determination, the contractor must still submit a conformance request.

Additional information on contractor requirements and worker protections under the Executive Orders is available at http://www.dol.gov/whd/govcontracts.

Modification Number | Publication Date
0 | 01/03/2025

ELEC0611-003 07/01/2014

	Rates	Fringes
ELECTRICIAN (Boom Operator)	$ 29.79	12.74

SUNM2011-002 08/25/2011

	Rates	Fringes
CARPENTER (Includes Form Work)	$ 13.88 **	0.44
CEMENT MASON/CONCRETE FINISHER	$ 14.60 **	0.26
ELECTRICIAN (Includes Traffic Signalization and Installation)	$ 25.06	8.56
HIGHWAY/PARKING LOT STRIPING: Includes Highway Line/Parking Lot Line Striping and Line Striping Truck Driver	$ 14.75 **	0.35
IRONWORKER, REINFORCING	$ 22.44	5.85
LABORER		
Common or General	$ 11.21 **	0.35
Flagger/Cone Setter	$ 13.55 **	0.35
Mason Tender-Cement/Concrete	$ 10.25 **	0.35
Pipelayer	$ 17.13 **	5.04
POWER EQUIPMENT OPERATOR:		
Backhoe/Excavator/Trackhoe	$ 17.20 **	0.26
Bobcat/Skid Loader	$ 12.00 **	0.26
Broom/Sweeper	$ 16.67 **	1.57
Grader/Blade	$ 17.64 **	1.51
Loader (Front End)	$ 16.43 **	0.26
Mechanic	$ 23.24	1.51
Oiler	$ 22.08	8.72
Piledriver	$ 15.73 **	0.26
Roller (Asphalt and Dirt)	$ 16.27 **	1.51
Trencher	$ 15.22 **	0.26
TRUCK DRIVER		
Dump Truck	$ 15.04 **	0.26
Flatbed Truck	$ 13.51 **	0.26
Pickup Truck	$ 12.95 **	0.26
Water Truck	$ 12.96 **	0.26

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

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** Workers in this classification may be entitled to a higher minimum wage under Executive Order 14026 ($17.75) or 13658 ($13.30). Please see the Note at the top of the wage determination for more information. Please also note that the minimum wage requirements of Executive Order 14026 are not currently being enforced as to any contract or subcontract to

which the states of Texas, Louisiana, or Mississippi, including their agencies, are a party.

Note: Executive Order (EO) 13706, Establishing Paid Sick Leave for Federal Contractors applies to all contracts subject to the Davis-Bacon Act for which the contract is awarded (and any solicitation was issued) on or after January 1, 2017. If this contract is covered by the EO, the contractor must provide employees with 1 hour of paid sick leave for every 30 hours they work, up to 56 hours of paid sick leave each year. Employees must be permitted to use paid sick leave for their own illness, injury or other health-related needs, including preventive care; to assist a family member (or person who is like family to the employee) who is ill, injured, or has other health-related needs, including preventive care; or for reasons resulting from, or to assist a family member (or person who is like family to the employee) who is a victim of, domestic violence, sexual assault, or stalking. Additional information on contractor requirements and worker protections under the EO is available at https://www.dol.gov/agencies/whd/government-contracts.

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

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

Union Rate Identifiers

A four-letter identifier beginning with characters other than ""SU"", ""UAVG"", ?SA?, or ?SC? denotes that a union rate was prevailing for that classification in the survey. Example: PLUM0198-005 07/01/2024. PLUM is an identifier of the union whose collectively bargained rate prevailed in the survey for this classification, which in this example would be Plumbers. 0198 indicates the local union number or district council number where applicable, i.e., Plumbers Local 0198. The next number, 005 in the example, is an internal number used in processing the wage determination. The date, 07/01/2024 in the example, is the effective date of the most current negotiated rate.

Union prevailing wage rates are updated to reflect all changes over time that are reported to WHD in the rates in the collective bargaining agreement (CBA) governing the classification.

Union Average Rate Identifiers

The UAVG identifier indicates that no single rate prevailed for those classifications, but that 100% of the data reported for the classifications reflected union rates. EXAMPLE: UAVG-OH-0010 01/01/2024. UAVG indicates that the rate is a

weighted union average rate. OH indicates the State of Ohio. The next number, 0010 in the example, is an internal number used in producing the wage determination. The date, 01/01/2024 in the example, indicates the date the wage determination was updated to reflect the most current union average rate.

A UAVG rate will be updated once a year, usually in January, to reflect a weighted average of the current rates in the collective bargaining agreements on which the rate is based.

Survey Rate Identifiers

The ""SU"" identifier indicates that either a single non-union rate prevailed (as defined in 29 CFR 1.2) for this classification in the survey or that the rate was derived by computing a weighted average rate based on all the rates reported in the survey for that classification. As a weighted average rate includes all rates reported in the survey, it may include both union and non-union rates. Example: SUFL2022-007 6/27/2024. SU indicates the rate is a single non-union prevailing rate or a weighted average of survey data for that classification. FL indicates the State of Florida. 2022 is the year of the survey on which these classifications and rates are based. The next number, 007 in the example, is an internal number used in producing the wage determination. The date, 6/27/2024 in the example, indicates the survey completion date for the classifications and rates under that identifier.

?SU? wage rates typically remain in effect until a new survey is conducted. However, the Wage and Hour Division (WHD) has the discretion to update such rates under 29 CFR 1.6(c)(1).

State Adopted Rate Identifiers

The ""SA"" identifier indicates that the classifications and prevailing wage rates set by a state (or local) government were adopted under 29 C.F.R 1.3(g)-(h). Example: SAME2023-007 01/03/2024. SA reflects that the rates are state adopted. ME refers to the State of Maine. 2023 is the year during which the state completed the survey on which the listed classifications and rates are based. The next number, 007 in the example, is an internal number used in producing the wage determination. The date, 01/03/2024 in the example, reflects the date on which the classifications and rates under the ?SA? identifier took effect under state law in the state from which the rates were adopted.

WAGE DETERMINATION APPEALS PROCESS

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

a) a survey underlying a wage determination
b) an existing published wage determination
c) an initial WHD letter setting forth a position on a wage determination matter
d) an initial conformance (additional classification and rate) determination

On survey related matters, initial contact, including requests for summaries of surveys, should be directed to the WHD Branch of Wage Surveys. Requests can be submitted via email to davisbaconinfo@dol.gov or by mail to:

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

Regarding any other wage determination matter such as conformance decisions, requests for initial decisions should be directed to the WHD Branch of Construction Wage Determinations. Requests can be submitted via email to BCWD-Office@dol.gov or by mail to:

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

2) If an initial decision has been issued, then any interested party (those affected by the action) that disagrees with the decision can request review and reconsideration from the Wage and Hour Administrator (See 29 CFR Part 1.8 and 29 CFR Part 7). Requests for review and reconsideration can be submitted via email to dba.reconsideration@dol.gov or by mail to:

Wage and Hour Administrator
U.S. Department of Labor
200 Constitution Avenue, N.W.
Washington, DC 20210

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

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

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

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END OF GENERAL DECISION"