

STATE OF ALASKA

INVITATION TO BID (ITB)



ARCTIC PIPE FOR WATER AND SEWER MAIN EXTENSION EMMONAK, ALASKA ITB 27-VSW-EMM-007

7/22/2026

ONE TIME PURCHASE OF ARCTIC PIPE

IMPORTANT NOTICE: If you received this solicitation from the State of Alaska's "Online Public Notice" web site, you must register with the procurement officer listed below if you desire to receive notification of subsequent amendments to the solicitation.

BIDDER'S NOTICE: By signature on this form, the bidder certifies that they comply with the following:

- (1) the bidder has a valid Alaska business license or will obtain one prior to award of any contract resulting from this ITB. If the bidder possesses a valid Alaska business license, the license number must be written below or one the following forms of evidence must be submitted with the bid:
 - a canceled check for the business license fee;
 - a copy of the business license application with a receipt date stamp from the State's business license office;
 - a receipt from the State's business license office for the license fee;
 - a copy of the bidder's valid business license;
 - a sworn notarized affidavit that the bidder has applied and paid for a business license;
- (2) the price(s) submitted was arrived at independently and without collusion, under penalty of perjury, and that the bidder is complying with:
 - the laws of the State of Alaska;
 - the applicable portion of the Federal Civil Rights Act of 1964;
 - the Equal Employment Opportunity Act and the regulations issued thereunder by the state and federal government;
 - the Americans with Disabilities Act of 1990 and the regulations issued thereunder by the state and federal government;
 - the bid will remain open and valid for at least 90 days;
 - all terms and conditions set out in this Invitation to Bid (ITB).

If a bidder does not hold an Alaska Business License (1) at the time designated in the ITB for opening the state will disallow the Alaska Bidder Preference. Bids must also be submitted under the name as appearing on the bidder's current Alaska business license in order to receive the Alaska Bidder Preference. If a bidder fails to comply with (2) of this paragraph, the state may reject the bid, terminate the contract, or consider the contractor in default.

John McDonald Procurement Officer	_____ COMPANY SUBMITTING BID	*DOES YOUR BUSINESS QUALIFY FOR THE MBE / WBE BIDDER'S PREFERENCE? [] YES [] NO
Phone: (907) 269-7602	_____ AUTHORIZED SIGNATURE	
Email: john.mcdonald@alaska.gov	_____ PRINTED NAME	*SEE ITB FOR EXPLANATION OF CRITERIA TO QUALIFY
	_____ DATE	_____ TELEPHONE NUMBER
_____ ALASKA BUSINESS LICENSE NUMBER	_____ FEDERAL TAX ID NUMBER	_____ E-MAIL ADDRESS

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SECTION 1. INTRODUCTION & INSTRUCTIONS

SEC. 1.01 PURPOSE OF THE ITB

The Department of Environmental Conservation, Division of Water, Village Safe Water Program (department), is soliciting bids for the one-time purchase of various sized arctic pipe and associated fittings for a construction project in Emmonak, Alaska.

SEC. 1.02 BUDGET

Payment for the contract is subject to funds already appropriated and identified.

SEC. 1.03 DEADLINE FOR RECEIPT OF BIDS

Bids must be received no later than **2:00PM** Alaska Time on 8/5/2026, at which time they will be publicly opened. Late bids or amendments will be considered non-responsive and will not be opened or accepted for evaluation.

SEC. 1.04 PRIOR EXPERIENCE

No specific minimums have been set for this ITB.

SEC. 1.05 REQUIRED REVIEW

Bidders shall carefully review this ITB for defects and questionable or objectionable material. Comments concerning defects and questionable or objectionable material in the ITB should be made in writing and received by the procurement officer at least ten days before the deadline for receipt of bids. This will allow time for an amendment to be issued if one is required. It will also help prevent the opening of a defective bid, upon which award cannot be made, and the resultant exposure of bidders' prices.

SEC. 1.06 QUESTIONS PRIOR TO DEADLINE FOR RECEIPT OF BIDS

All questions must be in writing and directed to the procurement officer. The interested party must confirm telephone conversations in writing. Two types of questions generally arise. One may be answered by directing the questioner to a specific section of the ITB. These questions may be answered over the telephone. Other questions may be more complex and may require a written amendment to the ITB. The procurement officer will make that decision.

SEC. 1.07 SITE INSPECTION

Section not used.

SEC. 1.08 RETURN INSTRUCTIONS

Bids shall be submitted via email. The entire bid may be emailed to april.akers@alaska.gov and must contain the ITB number in the subject line of the email. The **maximum** size of a single email (including all text and attachments) that can be received by the state is **20mb (megabytes)**. If the email containing the bid exceeds this size, the bid must be sent in multiple emails that are each less than 20 megabytes and each email must comply with the requirements described above.

Please note that email transmission is not instantaneous. Like sending a hard copy bid, if you are emailing your bid, the state recommends sending it enough ahead of time to ensure the email is delivered by the deadline for receipt of bids.

It is the bidder's responsibility to contact the issuing agency at 907-334-2638 to confirm that the entire bid has been received. The state is not responsible for unreadable, corrupt, or missing attachments.

SEC. 1.09 ASSISTANCE TO BIDDERS WITH A DISABILITY

The State of Alaska complies with Title II of the Americans with Disabilities Act of 1990. Individuals with disabilities who may need auxiliary aids, services, and/or special modifications to submit a bid should contact the Procurement Officer no later than ten days prior to the closing of the bid to make any necessary arrangements.

SEC. 1.10 AMENDMENTS TO BIDS

Amendments to or withdrawals of bids will only be allowed if acceptable requests are received prior to the deadline that is set for receipt of bids, in accordance with 2 AAC 12.140. No amendments or withdrawals will be accepted after the deadline unless the delay is due to an error of the contracting agency, in accordance with 2 AAC 12.160.

SEC. 1.11 AMENDMENTS TO THE ITB

If an amendment is issued before the deadline for receipt of bids, the amendment will be posted on the State of Alaska Online Public Notice (OPN) website. The link to the posting of the amendment will be provided to all who were notified of the ITB and to those who have registered with the procurement officer after receiving the ITB from the OPN.

SEC. 1.12 ITB SCHEDULE

The ITB schedule below represents the State of Alaska's best estimate of the schedule that will be followed. If a component of this schedule, such as the deadline for receipt of bids, is delayed, the rest of the schedule may be shifted accordingly. All times are Alaska Standard Time (AST).

ACTIVITY	TIME	DATE
Issue Date / ITB Released	N/A	7/22/2026
Deadline for Receipt of Bids / Bid Due Date	2:00 PM AST	8/5/2026
Bid Evaluations Complete	N/A	8/6/2026

Notice of Intent to Award	N/A	8/6/2026
Contract Issued	N/A	8/16/2026

This ITB does not, by itself, obligate the state. The state's obligation will commence when the contract is approved by the Commissioner of the Department of Environmental Conservation, or the Commissioner's designee. Upon written notice to the contractor, the state may set a different starting date for the contract. The state will not be responsible for any work done by the contractor, even work done in good faith, if it occurs prior to the contract start date set by the state.

SEC. 1.13 PRE-BID Conference/Teleconference

Section not used.

SEC. 1.14 ALTERNATE BIDS

Bidders may only submit one bid for evaluation. In accordance with 2 AAC 12.830 alternate bids (bids that offer something different than what is asked for) will be rejected.

SEC. 1.15 SUPPORTING INFORMATION

Provided a bid meets the requirements for a definite, firm, unqualified, and unconditional offer, the state reserves the right to request supplemental information from the bidder, after the bids have been opened, to ensure that the products or services offered completely meet the ITB requirements. The requirement for such supplemental information will be at the reasonable discretion of the state and may include the requirement that a bidder will provide a sample product(s) so that the state can make a first-hand examination and determination.

A bidder's failure to provide this supplemental information or the product sample(s), within the time set by the state, may cause the state to consider the offer non-responsive and reject the bid.

SEC. 1.16 FIRM, UNQUALIFIED, AND UNCONDITIONAL OFFER

To be responsive a bid must constitute a definite, firm, unqualified and unconditional offer to meet all the material terms of the ITB. Material terms are those that could affect the price, quantity, quality, or delivery. Also included as material terms are those which are clearly identified in the ITB, and which must be complied with at risk of bid rejection for non-responsiveness.

SECTION 2. SCOPE OF WORK AND CONTRACT INFORMATION

SEC. 2.01 SCOPE OF WORK

The contractor shall provide and deliver various sized arctic pipe and associated fittings as described in the attached bid schedule and specifications.

SEC. 2.02 CONTRACT TERM

Bids items must be delivered to the F.O.B. Point no later than 10/15/2026

The length of the contract will be from the date of award for approximately 8/16/2026 until completion.

SEC. 2.03 CONTRACT TYPE

This contract is a firm fixed price contract.

SEC. 2.04 PAYMENT FOR STATE PURCHASES

No payment will be made until the contract is approved by the Commissioner of the Department of Environmental Conservation or the Commissioner's designee. Under no conditions will the state be liable for the payment of any interest charges associated with the cost of the contract. The state is not responsible for and will not pay local, state, or federal taxes. All costs associated with the contract must be stated in U.S. currency.

Payment for agreements under \$500,000 for the undisputed purchase of goods or services provided to a state agency, will be made within 30 days of the receipt of a proper billing or the delivery of the goods or services to the location(s) specified in the agreement, whichever is later. A late payment is subject to 1.5% interest per month on the unpaid balance. Interest will not be paid if there is a dispute or if there is an agreement that establishes a lower interest rate or precludes the charging of interest.

SEC. 2.05 ELECTRONIC PAYMENTS

The State of Alaska prefers vendors receive payment via Electronic Funds Transfer (EFT). Bidders may review information concerning the EFT process and access the [Electronic Payment Agreement Form for Vendors](https://doa.alaska.gov/dof/vendor.html) at the following link: <https://doa.alaska.gov/dof/vendor.html>. Method of payment is not a factor in the State's determination for award.

Any single contract payments of \$1 million or higher must be accepted by the contractor via Electronic Funds Transfer (EFT).

SEC. 2.06 PROMPT PAYMENT FOR STATE PURCHASES

Section not used.

SEC. 2.07 CONTRACT ADMINISTRATION

The administration of this contract is the responsibility of the procurement officer or person appointed by the Department of Environmental Conservation, Division of Administrative Services.

SEC. 2.08 CONTRACT PRICE ADJUSTMENTS

Section not used.

SEC. 2.09 CONTRACT PERFORMANCE LOCATION

The location(s) the work is to be performed, completed, and managed vendors place of business and Emmonak, Alaska.

The state will not provide workspace for the contractor. The contractor must provide its own workspace.

The contractor is responsible for all travel related costs if they need to travel to Emmonak, Alaska. Travel to other locations will not be required.

By signature on their bid, the bidder certifies that all services provided under this contract by the contractor and all subcontractors shall be performed in the United States.

If the bidder cannot certify that all work will be performed in the United States, the bidder must contact the procurement officer in writing to request a waiver at least 10 days prior to the deadline for receipt of bids.

The request must include a detailed description of the portion of work that will be performed outside the United States, where, by whom, and the reason the waiver is necessary.

Failure to comply with these requirements may cause the state to reject the bid as non-responsive or cancel the contract.

SEC. 2.10 THIRD-PARTY FINANCING AGREEMENTS NOT ALLOWED

Because of the additional administrative and accounting time required of the state when third party financing agreements are permitted, they will not be allowed under this contract.

SEC. 2.11 SUBCONTRACTORS

Subcontractors will not be allowed.

SEC. 2.12 JOINT VENTURES

Joint ventures will not be allowed.

SEC. 2.13 RIGHT TO INSPECT PLACE OF BUSINESS

At reasonable times, the state may inspect those areas of the contractor's place of business that are related to the performance of a contract. If the state makes such an inspection, the contractor must provide reasonable assistance.

SEC. 2.14 F.O.B. POINT

The F.O.B. point for all items purchased under this contract is the barge landing in Emmonak, Alaska. Ownership of and title to the ordered items remains with the contractor until the items have been delivered to their final destination and are accepted by the state.

The cost of shipping and delivery to Emmonak is to be included in the unit bid prices. There will be no additional charge for shipping and delivery to or from Emmonak.

SEC. 2.15 INSPECTION & MODIFICATION - REIMBURSEMENT FOR UNACCEPTABLE DELIVERABLES

The contractor is responsible for providing all products or the completion of all work set out in the contract. All products or work is subject to inspection, evaluation, and approval by the state. The state may employ all reasonable means to ensure that the work is progressing and being performed in compliance with the contract. The state may instruct the contractor to make corrections or modifications if needed in order to accomplish the contract's intent. The contractor will not unreasonably withhold such changes.

Substantial failure of the contractor to perform the contract may cause the state to terminate the contract. In this event, the state may require the contractor to reimburse monies paid (based on the identified portion of unacceptable products or work received) and may seek associated damages.

SEC. 2.16 EQUIPMENT INSPECTION

Section not used.

SEC. 2.17 NEW EQUIPMENT

Section not used.

SEC. 2.18 REMANUFACTURED/RECONDITIONED EQUIPMENT

Section not used.

SEC. 2.19 LEMON CLAUSE

Section not used.

SEC. 2.20 DISCONTINUED ITEMS

Section not used.

SEC. 2.21 LIQUIDATED DAMAGES

Section not used.

SEC. 2.22 SHIPPING DAMAGE

The state will not accept or pay for damaged goods. The contractor must file all claims against the carrier(s) for damages incurred to items in transit from the point of origin to the ultimate destination. The state will provide the contractor with written notice when damaged goods are received. The state will deduct the cost of the damaged goods from the invoice prior to payment. The contractor must file all claims against the carrier(s) for reimbursement of the loss.

SEC. 2.23 CONTRACT CHANGES – UNANTICIPATED AMENDMENTS

During the course of this contract, the contractor may be required to perform additional work. That work will be within the general scope of the initial contract. When additional work is required, the state will provide the contractor a written description of the additional work and request the contractor to submit a firm time schedule for accomplishing the additional work and a firm price for the additional work. Cost and pricing data must be provided to justify the cost of such amendments per AS 36.30.400.

The contractor will not commence additional work until the procurement officer has secured required state approvals necessary and issued a written contract amendment.

SEC. 2.24 CONTINUING OBLIGATION OF CONTRACTOR

Notwithstanding the expiration date of a contract resulting from this ITB, the contractor is obligated to fulfill its responsibilities until warranty, guarantee, maintenance, and parts availability requirements have completely expired.

SEC. 2.25 BILLING INSTRUCTIONS

All invoices produced by the contractor must contain the following information at a minimum:

1. Invoice number
2. Date
3. Itemized costs
4. Total cost

Invoices must be billed to the ordering agency's address shown on the individual Purchase Order, Contract Award or Delivery Order. The state will make payment after it receives the goods or services and the invoice. Questions concerning payment must be addressed to the ordering agency.

SEC. 2.26 ESTIMATED QUANTITIES

The quantities referenced in this ITB are firm. The department expects to make this purchase approximately 8/14/2026. The state does not guarantee any minimum or maximum purchase.

SEC. 2.27 WARRANTY

Section not used.

SEC. 2.28 NONDISCLOSURE AND CONFIDENTIALITY

Section not used.

SEC. 2.29 INDEMNIFICATION

The contractor shall indemnify, hold harmless, and defend the contracting agency from and against any claim of, or liability for error, omission or negligent act of the contractor under this agreement. The contractor shall not be required to indemnify the contracting agency for a claim of, or liability for, the independent negligence of the contracting agency. If there is a claim of, or liability for, the joint negligent error or omission of the contractor and the independent negligence of the contracting agency, the indemnification and hold harmless obligation shall be apportioned on a comparative fault basis.

“Contractor” and “contracting agency”, as used within this and the following article, include the employees, agents and other contractors who are directly responsible, respectively, to each. The term “independent negligence” is negligence other than in the contracting agency’s selection, administration, monitoring, or controlling of the contractor and in approving or accepting the contractor’s work.

SEC. 2.30 INSURANCE

Without limiting the contractor's indemnification, it is agreed that the contractor shall purchase at its own expense and maintain in force at all times during the performance of services under this agreement the following policies of insurance. Where specific limits are shown, it is understood that they shall be the minimum acceptable limits. If the contractor's policy contains higher limits, the state shall be entitled to coverage to the extent of such higher limits.

Certificates of Insurance must be furnished to the procurement officer prior to contract approval and must provide for a notice of cancellation, non-renewal, or material change of conditions in accordance with policy provisions. Failure to furnish satisfactory evidence of insurance or lapse of the policy is a material breach of this contract and shall be grounds for termination of the contractor's services. All insurance policies shall comply with and be issued by insurers licensed to transact the business of insurance under AS 21.

Proof of insurance is required for the following:

- Workers' Compensation Insurance: The contractor shall provide and maintain, for all employees engaged in work under this contract, coverage as required by AS 23.30.045, and where applicable, any other

statutory obligations including but not limited to Federal U.S.L. & H. and Jones Act requirements. The policy must waive subrogation against the state.

- Commercial General Liability Insurance: covering all business premises and operations used by the contractor in the performance of services under this agreement with minimum coverage limits of \$300,000 combined single limit per occurrence.
- Commercial Automobile Liability Insurance: covering all vehicles used by the contractor in the performance of services under this agreement with minimum coverage limits of \$300,000 combined single limit per occurrence.

SEC. 2.31 AMERICAN IRON AND STEEL REQUIREMENTS

This procurement is partially / fully funded by the United States Department of Agriculture, Rural Development. The item(s) identified in the bid schedule are subject to American Iron and Steel (AIS) requirements. The contractor shall follow the attached AIS requirements.

SECTION 3. BID FORMAT AND CONTENT

SEC. 3.01 BID FORMS

Bidders shall use the front page of this ITB, the Bid Submission Cover Sheet, and any other forms identified in this ITB for submitting bids. All bids must be signed by an individual authorized to bind the bidder to the provisions of the ITB.

BIDDER'S CERTIFICATION

By signature on the bid, the bidder certifies that they comply with the following:

- a. the laws of the State of Alaska;
- b. the applicable portion of the Federal Civil Rights Act of 1964;
- c. the Equal Employment Opportunity Act and the regulations issued thereunder by the state and federal government;
- d. the Americans with Disabilities Act of 1990 and the regulations issued thereunder by the state and federal government and certifies that programs, services, and activities provided to the general public on behalf of the State under a contract resulting from this solicitation comply with the Americans with Disabilities Act of 1990, 28 CFR, Part 35, Subpart B 35.130;
- e. Clean Air Act;
- f. Clean Water Act;
- g. Contract Work Hours and Safety Standards Act;
- h. Rehabilitation Act of 1973;
- i. Age Discrimination Act of 1976;
- j. Drug Free Workplace Act of 1988;
- k. all terms and conditions set out in this ITB;
- l. the price(s) submitted was arrived at independently arrived and without collusion, under penalty of perjury; and
- m. that the bid will remain open and valid for at least 90 days.

If any bidder fails to comply with [a] through [m] of this paragraph, the state reserves the right to disregard the bid, terminate the contract, or consider the contractor in default.

CONFLICT OF INTEREST

Each bid shall include a statement indicating whether the company or any individuals working on the contract has a possible conflict of interest (e.g., currently employed by the State of Alaska or formerly employed by the State of Alaska within the past two years) and, if so, the nature of that conflict. The procurement officer reserves the right to **consider a bid non-responsive and reject it** or cancel the award if any interest disclosed from any source could either give the appearance of a conflict or cause speculation as to the objectivity of the contract to be performed by the bidder.

SEC. 3.02 BID BOND – PERFORMANCE BOND – SURETY DEPOSIT

Section not used.

SEC. 3.03 PRICES

The bidder shall state prices in the units of issue on this ITB. Prices quoted in bids must be exclusive of federal, state, and local taxes. If the bidder believes that certain taxes are payable by the state, the bidder may list such taxes separately, directly below the bid price for the affected item.

SECTION 4. EVALUATION AND CONTRACTOR SELECTION

SEC. 4.01 EVALUATION OF BIDS

After bid opening, the procurement officer will evaluate the bids for responsiveness and responsibility. Bids deemed non-responsive or non-responsible will be eliminated from further consideration. An evaluation may not be based on discrimination due the race, religion, color, national origin, sex, age, marital status, pregnancy, parenthood, disability, or political affiliation of the bidder.

SEC. 4.02 MBE / WBE PREFERENCE

A Minority Business Enterprise (MBE) or Women's Business Enterprise (WBE) preference of 5% will be applied to the total bid price. To receive the points, the qualified MBE / WBE bidder must provide evidence of certification and the work that they shall perform.

This procurement is funded in part or fully through federal grants or cooperative agreements. It is a national policy to award a fair share of contracts to Minority Firms and Women's Business Enterprises through affirmative action. This solicitation incorporates a five-point preference for all qualified minority firms and women's business enterprises.

In order to be deemed a bona fide MBE / WBE a firm must be an independent business concern which is at least fifty-one percent (51%) owned and controlled by minority group members or women.

SEC. 4.03 MBE / WBE CERTIFICATION

In order to qualify for the Women's Business Enterprises (WBE) or Minority Business Enterprises (MBE), the business must obtain certification from any of the following organizations:

- United States Small Business Administration,
- United States Department of Transportation,
- Indian Tribal Governments,
- State/local Governments,
- Independent private organizations.

To qualify for the federal Environmental Protection Association, Disadvantaged Business Enterprises program, an entity must be certified, and such certification must meet the criteria as stipulated in 40 CFR §33.202 and/or §33.203.

Offerors may provide their MBE/WBE certification number on the proposal form. If a certification number is not available, then the offeror must provide a letter from the certifying agency verifying the offerors certification status.

SEC. 4.04 APPLICATION OF PREFERENCES

Section not used per AS 36.30.890 Federal funds or assistance.

SEC. 4.05 ALASKA BIDDER PREFERENCE

Section not used.

SEC. 4.06 ALASKA VETERAN PREFERENCE

Section not used.

SEC. 4.07 ALASKA MILITARY SKILLS PROGRAM PREFERENCE

Section not used.

SEC. 4.08 USE OF LOCAL FOREST PRODUCTS

Section not used.

SEC. 4.09 LOCAL AGRICULTURAL AND FISHERIES PRODUCT PREFERENCE

Section not used.

SEC. 4.10 ALASKA PRODUCT PREFERENCE

Section not used.

SEC. 4.11 EMPLOYMENT PROGRAM PREFERENCE

Section not used.

SEC. 4.12 ALASKANS WITH DISABILITIES PREFERENCE

Section not used.

SEC. 4.13 PREFERENCE QUALIFICATION LETTER

Section not used.

SEC. 4.14 EXTENSION OF PRICES

In case of error in the extension of prices in the bid, the unit prices will govern; in a lot bid, the lot prices will govern.

SEC. 4.15 METHOD OF AWARD

Award will be made to the lowest responsive and responsible bidder. To be considered responsive, bidders must bid on all items.

SEC. 4.16 CONTRACTOR SELECTION PROCESS

Section not used.

SEC. 4.17 NOTICE OF INTENT TO AWARD

After the responses to this ITB have been opened and evaluated, a tabulation of the bids will be prepared. This tabulation, called a Notice of Intent to Award, serves two purposes. It lists the name of each company or person that offered a bid and the price they bid. It also provides notice of the state's intent to award a contract(s) to the bidder(s) indicated. A copy of the Notice of Intent will be sent to each company or person who responded to the ITB. Bidders identified as the apparent low responsive bidders are instructed not to proceed until a Purchase Order, Contract Award, Lease, or some other form of written notice is given by the procurement officer. A company or person who proceeds prior to receiving a Purchase Order, Contract Award, Lease, or some other form of written notice from the procurement officer does so without a contract and at their own risk.

SECTION 5. GENERAL PROCESS AND LEGAL INFORMATION

SEC. 5.01 INFORMAL DEBRIEFING

When the contract is completed, an informal debriefing may be performed at the discretion of the procurement officer. If performed, the scope of the debriefing will be limited to the products provided or work performed by the contractor.

SEC. 5.02 ALASKA BUSINESS LICENSE AND OTHER REQUIRED LICENSES

Prior to the award of a contract, a bidder must hold a valid Alaska business license. However, to receive the Alaska Bidder Preference and other related preferences, such as the Alaska Veteran Preference and Alaskans with Disabilities Preference, a bidder must hold a valid Alaska business license prior to the deadline for receipt of bids. Bidders should contact the **Department of Commerce, Community and Economic Development, Division of Corporations, Business, and Professional Licensing, PO Box 110806, Juneau, Alaska 99811-0806**, for information on these licenses. Acceptable evidence that the bidder possesses a valid Alaska business license may consist of any one of the following:

- copy of an Alaska business license,
- certification on the bid that the bidder has a valid Alaska business license and has included the license number in the bid,
- a canceled check for the Alaska business license fee,
- a copy of the Alaska business license application with a receipt stamp from the state's occupational licensing office, or
- a sworn and notarized statement that the bidder has applied and paid for the Alaska business license.

You are not required to hold a valid Alaska business license at the time bids are opened if you possess one of the following licenses and are offering services or supplies under that specific line of business:

- fisheries business licenses issued by Alaska Department of Revenue or Alaska Department of Fish and Game,
- liquor licenses issued by Alaska Department of Revenue for alcohol sales only,
- insurance licenses issued by Alaska Department of Commerce, Community and Economic Development, Division of Insurance, or
- Mining licenses issued by Alaska Department of Revenue.

Prior the deadline for receipt of bids, all bidders must hold any other necessary applicable professional licenses required by Alaska Statute.

SEC. 5.03 AUTHORITY

This ITB is written in accordance with AS 36.30 and 2 AAC 12.

SEC. 5.04 COMPLIANCE

In the performance of a contract that results from this ITB, the contractor must comply with all applicable federal, state, and borough regulations, codes, and laws; be liable for all required insurance, licenses, permits and bonds; and pay all applicable federal, state, and borough taxes.

SEC. 5.05 SUITABLE MATERIALS, ETC.

Unless otherwise specified in this ITB, all materials, supplies or equipment offered by a bidder shall be new, unused, and of the latest edition, version, model, or crop and of recent manufacture.

SEC. 5.06 SPECIFICATIONS

Unless otherwise specified in this ITB, product brand names or model numbers specified in this ITB are examples of the type and quality of product required and are not statements of preference. If the specifications describing an item conflict with a brand name or model number describing the item, the specifications govern. Reference to brand name or number does not preclude an offer of a comparable or better product, if full specifications and descriptive literature are provided for the product. Failure to provide such specifications and descriptive literature may be cause for rejection of the offer.

SEC. 5.07 BRAND SPECIFIC

Section not used.

SEC. 5.08 ITEM UPGRADES

The state reserves the right to accept upgrades to models on the basic contract when the upgrades improve the way the equipment operates or improve the accuracy of the equipment. Such upgraded items must be at the same price as the items in the basic contract.

SEC. 5.09 WORKMANSHIP AND MATERIALS

All work must be performed in a thorough and workmanlike manner and in accordance with current industry practices. The contractor will be held responsible for the quality of the service, maintenance, and inspections. Service, maintenance, and inspections that are improperly done will be redone, by the contractor, at the contractor's risk and expense.

SEC. 5.10 CONTRACTOR SITE INSPECTION

The state may conduct on-site visits to evaluate the bidder's capacity to perform the contract. A bidder must agree, at risk of being found non-responsive and having its bid rejected, to provide the state reasonable access to relevant portions of its work sites. Individuals designated by the procurement officer at the state's expense will make site inspection.

SEC. 5.11 ORDER DOCUMENTS

Except as specifically allowed under this ITB, an ordering agency will not sign any vendor contract. The state is not bound by a vendor contract signed by a person who is not specifically authorized to sign for the state under this ITB. Unless otherwise specified in this ITB, the State of Alaska Purchase Order, Contract Award and Delivery Order are the only order documents that may be used to place orders against the contract(s) resulting from this ITB.

SEC. 5.12 HUMAN TRAFFICKING

By signature on their bid, the bidder certifies that the bidder is not established and headquartered or incorporated and headquartered in a country recognized as Tier 3 in the most recent United States Department of State's Trafficking in Persons Report.

The most recent United States Department of State's Trafficking in Persons Report can be found at the following website: <http://www.state.gov/j/tip/>

Failure to comply with this requirement will cause the state to reject the bid as non-responsive or cancel the contract.

SEC. 5.13 RIGHT OF REJECTION

Bidders must comply with all the terms of the ITB, the State Procurement Code (AS 36.30), and all applicable local, state, and federal laws, codes, and regulations. The procurement officer may reject any bid that does not comply with all the material and substantial terms, conditions, and performance requirements of the ITB.

Bidders may not qualify the bid nor restrict the rights of the state. If a bidder does so, the procurement officer may determine the bid to be a non-responsive counteroffer and the bid may be rejected.

Minor informalities that:

- do not affect responsiveness,
- are merely a matter of form or format,
- do not change the relative standing or otherwise prejudice other bidders,
- do not change the meaning or scope of the ITB,
- are trivial, negligible, or immaterial in nature,

- do not reflect a material change in the work, or
- do not constitute a substantial reservation against a requirement or provision,

may be waived by the procurement officer.

The state reserves the right to refrain from making an award if it is determined to be in the state's best interest.

A bid from a debarred or suspended bidder shall be rejected.

SEC. 5.14 STATE NOT RESPONSIBLE FOR PREPARATION COSTS

The state will not pay any cost associated with the preparation, submittal, presentation, or evaluation of any bid.

SEC. 5.15 DISCLOSURE OF BID CONTENTS

This section governs the ownership, return, and disclosure of any offer or other record a bidder submits in response to this invitation to bid. (Herein, any reference to "Record" includes all such records and the offer; any reference to "Law" includes any federal or State of Alaska (State) law, including any court or administrative order or rule.)

1. All Records belong to the State.
2. The State has sole discretion regarding whether to return any Record. In exercising this discretion, the State will comply with all Laws.
3. Unless a notice of intent to award is issued, the State will, to the extent permitted by Law, consider all Records confidential and not subject to the Alaska Public Records Act (APRA).
4. If, and when a notice of intent to award is issued, the State will consider nonconfidential any Record unless, at the time of submission, the bidder undertook the following protective measures:
 - a. marked information confidential;
 - b. for any information marked confidential, identified the authority that makes that specific information confidential; and
 - c. committed, in writing, to explain in detail, including with affidavits and briefs, why each authority applies in any court or administrative proceeding in which any nondisclosure is challenged.
5. If the bidder did not undertake each protective measure, the State will not consider any information in a Record confidential: the State will disclose the entire Record without any redaction in response to an APRA or other request or, if it chooses, in the absence of a request and the State will disclose the entire Record without notifying the bidder.
6. If the bidder undertook each protective measure, the State will withhold the information marked confidential to the following extent:
 - a. the State agrees that the Law protects the information; and

- b. if the nondisclosure is challenged, the bidder fulfills its commitment to explain, including with affidavits and briefs, how each authority applies to the information marked confidential.
7. The State will only notify a bidder of a request for the Record and of a planned release if the bidder undertook each protective measure, but the State disagrees that the marked information is protected. If there is such a disagreement, then before releasing the Record, the State will, to the extent permitted by Law and practicable, notify the bidder that it will disclose the information unless the bidder convinces the State not to or obtains an order prohibiting disclosure.

SEC. 5.16 ASSIGNMENTS

Per 2 AAC 12.480, the contractor may not transfer or assign any portion of the contract without prior written approval from the procurement officer. Bids that are conditioned upon the state's approval of an assignment will be rejected as non-responsive.

SEC. 5.17 FORCE MAJEURE (IMPOSSIBILITY TO PERFORM)

The parties to a contract resulting from this ITB are not liable for the consequences of any failure to perform, or default in performing, any of its obligations under the contract, if that failure or default is caused by any unforeseeable Force Majeure, beyond the control of, and without the fault or negligence of, the respective party.

For the purposes of this ITB, Force Majeure will mean war (whether declared or not); revolution; invasion; insurrection; riot; civil commotion; sabotage; military or usurped power; lightning; explosion; fire; storm; drought; flood; earthquake; epidemic; quarantine; strikes; acts or restraints of governmental authorities affecting the project or directly or indirectly prohibiting or restricting the furnishing or use of materials or labor required; inability to secure materials, machinery, equipment or labor because of priority, allocation or other regulations of any governmental authorities.

SEC. 5.18 DEFAULT

In case of default by the contractor, for any reason whatsoever, the state may procure the goods or services from another source and hold the contractor responsible for any resulting excess cost and may seek other remedies under law or equity.

SEC. 5.19 DISPUTES

If the contractor has a claim arising in connection with the contract that it cannot resolve with the state by mutual agreement, it shall pursue the claim, if at all, in accordance with the provisions of AS 36.30.620 – AS 36.30.632.

SEC. 5.20 SEVERABILITY

If any provision of the contract or agreement is found to be invalid or declared by a court to be illegal or in conflict with any law, the validity of the remaining terms and provisions will not be affected; and the rights and obligations

of the parties will be construed and enforced as if the contract did not contain the particular provision held to be invalid.

SEC. 5.21 CONTRACT CANCELLATION

- 1) The state reserves the right to cancel the contract at its convenience upon **30** calendar days written notice to the contractor. The state is only liable for payment in accordance with the payment provisions of this contract for supplies or services provide before the effective date termination.
- 2) By signature on their bid, the bidder certifies that they will not support or participate in a boycott of the State of Israel. Failure to comply with this requirement may cause the state to reject the bid as non-responsive or cancel the contract.

SEC. 5.22 GOVERNING LAW; FORUM SELECTION

A contract resulting from this ITB is governed by the laws of the State of Alaska. To the extent not otherwise governed by Section 5.15 of this ITB, any claim concerning the contract shall be brought only in the Superior Court of the State of Alaska and not elsewhere.

SEC. 5.23 QUALIFIED BIDDERS

Per 2 AAC 12.875, unless provided for otherwise in the ITB, to qualify as a bidder for award of a contract issued under AS 36.30, the bidder must:

- 1) Add value in the contract by actually performing, controlling, managing, or supervising the services to be provided; or
- 2) Be in the business of selling and have actually sold on a regular basis the supplies that are the subject of the ITB.

If the bidder leases services or supplies or acts as a broker or agency in providing the services or supplies to meet these requirements, the procurement officer may not accept the bidder as a qualified bidder under AS 36.30.

SEC. 5.24 FEDERALLY IMPOSED TARIFFS

Changes in price (increase or decrease) resulting directly from a new or updated federal tariff, excise tax, or duty, imposed after contract award may be adjusted during the contract period or before delivery into the United States via contract amendment.

- **Notification of Changes:** The contractor must promptly notify the procurement officer in writing of any new, increased, or decreased federal excise tax or duty that may result in either an increase or decrease in the contact price and shall take appropriate action as directed by the procurement officer.
- **After-imposed or Increased Taxes and Duties:** Any federal excise tax or duty for goods or services covered by this contract that was exempted or excluded on the contract award date but later imposed on the

contractor during the contract period, as the result of legislative, judicial, or administrative action may result in a price increase provided:

- a) The tax or duty takes effect after the contract award date and isn't otherwise addressed by the contract.
 - b) The contractor warrants, in writing, that no amount of the newly imposed federal excise tax or duty or rate increase was included in the contract price, as a contingency or otherwise.
- **After-relieved or Decreased Taxes and Duties:** The contract price shall be decreased by the amount of any decrease in federal excise tax or duty for goods or services under the contract, except social security or other employment [taxes](#), that the contractor is required to pay or bear, or does not obtain a refund of, through the contractor's fault, negligence, or failure to follow instructions of the procurement officer.
 - **State's Ability to Make Changes:** The state reserves the right to request verification of federal excise tax or duty amounts on goods or services covered by this contract and increase or decrease the contract price accordingly.
 - **Price Change Threshold:** No adjustment shall be made in the contract price under this clause unless the amount of the adjustment exceeds \$250.

SEC. 5.25 BYRD ANTI-LOBBYING AMENDMENT

The contractor certifies, by submitting a bid, to the best of his or her knowledge and belief, that:

No federal appropriated funds have been paid or will be paid, by or on behalf of the contractor, to any person for influencing or attempting to influence an officer or employees of any Federal agency, a Member of Congress, an officer or employee of Congress, or an employee of a Member of Congress in connection with the awarding of any Federal contract, the making of any Federal grant, the making of any Federal loan, the entering into of any cooperative Agreement, and at the extension, continuation, renewal, Amendment, or modification of any Federal contract, grant, loan, or cooperative Agreement.

If any funds other than Federal appropriated funds have been paid or will be paid to any person for influencing or attempting to influence an officer or employee of any Federal agency, a Member of Congress in connection with this Federal contract, grant, loan, or cooperative Agreement, the undersigned shall complete and submit Standard Form LLL, Disclosure of Lobbying Activities, in accordance with its instructions. Any person who fails to file the required disclosure shall be subject to a civil penalty of not less than \$10,000 and not more than \$100,000 for each such failure.

This certification is a material representation of fact upon which reliance was placed when this transaction was made or entered into. Submission of this certification is a prerequisite for making or entering into this transaction imposed by Section 1352, Title 31, U.S. Code.

The contractor also agrees by executing this Agreement that the contractor shall require that the language of this certification be included in all lower tier subcontracts, which exceed \$100,000 and that all such subrecipients shall certify and disclose accordingly.

SEC. 5.26 FEDERAL DEBARMENT, SUSPENSION, INELIGIBILITY AND VOLUNTARY EXCLUSION

The bidder/offeree certifies, by submission of this bid or acceptance of this contract, that neither it nor its principals is presently debarred, suspended, proposed for debarment, declared ineligible, or voluntarily excluded from participation in this transaction by any Federal department or agency. It further agrees by submitting this bid that it will include this clause without modification in all lower tier transactions, solicitations, proposals, contracts, and subcontracts. Where the bidder/offeree/contractor or any lower tier participant is unable to certify to this statement, it shall attach an explanation to this solicitation/bid.

SEC. 5.27 PROHIBITION ON CERTAIN TELECOMMUNICATION AND VIDEO SURVEILLANCE SERVICES OR EQUIPMENT

On projects using federal funds, the Contractor shall comply with the requirements of 2 CFR 200.216, as amended effective August 13, 2020, Federal Register, Vol. 85, No. 157, 49506 - 49582, Prohibition on certain telecommunication and video surveillance services or equipment.

By signature of the bid, proposal, contract or contract amendment the Contractor certifies the Contractor and subcontractors have not entered into a contract nor extended or renewed a contract to procure or obtain equipment, services, or systems that uses covered telecommunications equipment or services as a substantial or essential component of any system, or as critical technology as part of any system produced by:

- a. Huawei Technologies Company or ZTE Corporation (or any subsidiary or affiliate of such entities).
- b. Hera Communications Corporation, Hangzhou Hikvision Digital Technology Company, or Dahua Technology Company (or any subsidiary or affiliate of such entities).
- c. Any entity that the Secretary of Defense, in consultation with the Director of the National Intelligence or the Director of the Federal Bureau of Investigation, reasonably believes to be an entity owned or controlled by, or otherwise connected to, the government of a covered foreign country.

The Contractor shall further certify that it has complied the requirements of 2 CFR 200.216, as amended effective August 13, 2020, Federal Register, Vol. 85, No. 157, 49506- 49582 and that it will continue to do so throughout the term of the Contract.

SEC. 5.28 PROTEST

AS 36.30.560 provides that an interested party may protest the content of the ITB.

An interested party is defined in 2 AAC 12.990(a) (7) as "an actual or prospective bidder or bidder whose economic interest might be affected substantially and directly by the issuance of a contract solicitation, the award of a contract, or the failure to award a contract."

If an interested party wishes to protest the content of a solicitation, the protest must be received, in writing, by the procurement officer at least ten days prior to the deadline for receipt of bids.

AS 36.30.560 also provides that an interested party may protest the award of a contract or the proposed award of a contract.

If a bidder wishes to protest the award of a contract or the proposed award of a contract, the protest must be received, in writing, by the procurement officer within ten days after the date the Notice of Intent to Award the contract is issued.

A protester must have submitted a bid to have sufficient standing to protest the proposed award of a contract. Protests must include the following information:

- the name, address, and telephone number of the protester,
- the signature of the protester or the protester's representative,
- identification of the contracting agency and the solicitation or contract at issue,
- a detailed statement of the legal and factual grounds of the protest including copies of relevant documents, and
- the form of relief requested.

Protests filed by telex or telegram are not acceptable because they do not contain a signature. Fax copies containing a signature are acceptable.

The procurement officer will issue a written response to the protest. The response will set out the procurement officer's decision and contain the basis of the decision within the statutory time limit in AS 36.30.580. A copy of the decision will be furnished to the protester by certified mail, fax or another method that provides evidence of receipt.

All bidders will be notified of any protest. The review of protests, decisions of the procurement officer, appeals, and hearings, will be conducted in accordance with the State Procurement Code (AS 36.30), Article 8 "Legal and Contractual Remedies."

SECTION 6. ATTACHMENTS

SEC. 6.01 ATTACHMENTS

Attachments:

- 1) Bid Schedule
- 2) AIS Requirements
- 3) Federal Debarment
- 4) Certification Regarding Lobbying
- 5) Emmonak Insulated Pipe & Fittings Specifications
- 6) Emmonak Design Drawings

Bid Schedule					
Bidders must complete and submit this form. Do not modify this form or provide additional information, asterisks or other than requested in the form.					
Item	Description	Unit	Quantity	Unit Cost	Total Cost
A	6x12 - 6" SDR-11 Insulated PIPE	Feet	1200	\$	\$
B	6x15 - 6" SDR-11 with 3"x 5" glycol channel	Feet	1780	\$	\$
C	Channel at 6 o'clock 90 degree sweep	Each	2	\$	\$
D	Channel at 6 o'clock 23 degree sweep	Each	2	\$	\$
E	Channel at 6 o'clock 52 degree sweep	Each	2	\$	\$
F	Flushing port	Each	1	\$	\$
G	4' x 2.5" Wharf Hydrant	Each	1	\$	\$
H	4' x 12" Insulated Cap	Each	1	\$	\$
I	Pour foam joint kits - 6" x 15"	Each	111	\$	\$
J	Pour foam joint kits - 6" x 12"	Each	66	\$	\$
K	Pour foam 10 gallon set	Each	17	\$	\$
L	2" HDPE SDR-11 Pipe coil	Each	1800	\$	\$
M	Profile change (6" offset)	Each	4	\$	\$
N	Profile change (8.25" offset)	Each	1	\$	\$
O	Profile change (10.75" offset)	Each	1	\$	\$
P	Profile Change (12" offset)	Each	1	\$	\$
Q	6x12 Insulated Carrier pipe	Each	600	\$	\$
R	4"IPS x 10.75" 2 Piece Pipe Connection Nozzle 6" Long With Pipe Connection Cover Plate (Fastener Holes to be Field Drilled) See Sheet C207 Detail 1 and 4	Each	6	\$	\$
S	"6"IPS x 13" 2 Piece Pipe Connection Nozzle 6" A58Long With Pipe Connection Cover Plate (Fastener Holes to be Field Drilled)	Each	10	\$	\$
T	6"IPS x 16" 2 Piece Pipe Connection Nozzle 6" Long With Pipe Connection Cover Plate (Fastener Holes to be Field Drilled) See Sheet C207 Detail 1 and 4	Each	15	\$	\$
U	6" x 15" Insulated Pour Foam Joint Kit 15.75"ID x 36"wide 16ga 5052 H-32 Aluminum Band, 4ea 1/2" Galvanized Bolts and Nuts and 2ea 60"Long x 4"Wide x 1/4" Armaflex Gasket (Pour foam sold seprerate)	Each	17	\$	\$
V	6" x 12" Insulated Pour Foam Joint Kit 15.75"ID x 36"wide 16ga 5052 H-32 Aluminum Band, 4ea 1/2" Galvanized Bolts and Nuts and 2ea 60"Long x 4"Wide x 1/4" Armaflex Gasket (Pour foam sold seprerate)	Each	12	\$	\$
W	4" x 10" Insulated Pour Foam Joint Kit 10.25"ID x 36"wide 16ga 5052 H-32 Aluminum Band, 4ea 1/2" Galvanized Bolts and Nuts and 2ea 60"Long x 4"Wide x 1/4" Armaflex Gasket (Pour foam sold seprerate)	Each	6	\$	\$
X	A&B 3lb Pour Foam 10 Gallon Set 5 Gallons A side and 5 Gallons B side in 5 gallon buckets	Each	7	\$	\$
Y	6" x 12" Insulated Sweep 90° Elbow 6" HDPE SDR 17 PE 3608/4710 Core w/ HARCO Coupler & 12.75" 16ga 5052-H32 Aluminum Spir-o-lok Jacket Stab + 1-3/4 Cutback	Each	6	\$	\$
Z	13" Arctic Boot Kits 13"ID x 24"Long x 3/16"Thick EPM Rubber Boot w/ Steel Bonnet,4ea 6"IPS x 12.75"OD x 2"Thick Rubber Insulation Donut, 2ea 1/2" SS Clamps and 8ea 3/8" x 3" Galvanized Lag Bolts	Each	6	\$	\$
AA	6" x 12" Insulated Joint Kit 6"IPS x 12.75"OD x 2"Thick Rubber Insulation Donut w/ 24"wide 16ga 5052 H-32 Aluminum Band, 4ea 1/2" Galvanized Plated Bolts and Nuts	Each	42	\$	\$
AB	Shipping F.O.B. Point	Lump sum			\$
AC	Subtotal (A through AB = AC)				\$
AD	5% MBE/WBE Preference, If applicable (AC x 0.05 = AD)				\$
AE	Total Bid Price for Evaluation Purposes Only (AC - AD = AE)				\$

American Iron and Steel General Requirements:

1. The Contractor must comply with Section 746 of Title VII of the Consolidated Appropriations Act of 2017 (Division A - Agriculture, Rural Development, Food and Drug Administration, and Related Agencies Appropriations Act, 2017) and subsequent statutes mandating domestic preference applies an American Iron and Steel requirement to this project. This is referred to “AIS requirements”. The Contractor is responsible for all costs to ensure compliance with AIS requirements. All listed iron and steel products used in this project must be produced in the United States. The term “iron and steel products” means the following products made primarily of iron or steel: lined or unlined pipes and fittings, manhole covers and other municipal castings, hydrants, tanks, flanges, pipe clamps and restraints, valves, structural steel, reinforced precast concrete, and construction materials. The de minimis and minor components waiver {add project specific waivers as applicable} apply to this contract.
 - a) The Contractor shall obtain a Manufacturer’s Certification letter for any item in the submittal subject to AIS requirements and include the Certificate in the submittal. Refer to Manufacturer’s Certification Letter (see Exhibit D) provided in these Contract Documents. The Contractor shall certify prior to material shipment to the F.O.B. Point that all Work and Materials has complied with AIS requirements. Contractor shall provide said Certification to the Department.
 - b) Manufacturer’s Certification letter is documentation provided by the manufacturer, supplier, distributor, vendor, fabricator, etc. to various entities stating that the iron and steel products to be used in the project are produced in the United States in accordance with AIS requirements. Refer to Manufacturer’s Certification Letter provided in these Contract Documents.
 - c) The Contractor shall provide a Manufacturers’ Certification letter of compliance per AIS requirements for all equals or substitutes approved by Addenda for American Iron and Steel products as provided in these Contract Documents.
 - d) The Contractor shall include a Manufacturer’s Certification letter for compliance with AIS requirements in support data, if applicable. Refer to Manufacturer’s Certification Letter provided in these Contract Documents.
 - e) See Exhibit D.
 - f) Materials that are non-compliant with AIS requirements shall be considered defective work.
 - g) By submitting Materials for payment, Contractor is certifying that the submitted Materials are compliant with AIS requirements. Manufacturer’s Certification letter for Materials satisfy this certification. See exhibit D.
 - h) “Certifications” means the following:
 - Manufacturers’ certification is documentation provided by the manufacturer or fabricator to various entities stating that the iron and steel products to be used in the project are produced in the United States in accordance with AIS Requirements. If items are purchased via a supplier, distributor, vendor, etc. vs. from the manufacturer or fabricator directly, then the supplier, distributor,

vendor, etc. will be responsible for obtaining and providing these certification letters to the parties purchasing the products.

- Contractors' certification is documentation submitted upon substantial completion of the project that all iron and steel products installed were produced in the United States.
- i) "Coating" means a covering that is applied to the surface of an object. If a coating is applied to the external surface of a domestic iron or steel component, and the application takes place outside of the United States, said product would be considered a compliant product under the AIS requirements. Any coating processes that are applied to the external surface of iron and steel components that would otherwise be AIS compliant would not disqualify the product from meeting the AIS requirements regardless of where the coating processes occur, provided that final assembly of the product occurs in the United States. This exemption only applies to coatings on the external surface of iron and steel components. It does not apply to coatings or linings on internal surfaces of iron and steel products, such as the lining of lined pipes. All manufacturing processes for lined pipes, including the application of pipe lining, must occur in the United States for the product to be compliant with AIS requirements.
- j) "Construction materials" are those articles, materials, or supplies made primarily of iron and steel, that are permanently incorporated into the project, not including mechanical and/or electrical components, equipment and systems. Some of these products may overlap with what is also considered "structural steel". Note: Mechanical and electrical components, equipment and systems are not considered construction materials. See definition of mechanical and electrical equipment.
- k) "Consulting engineer" is an individual or entity with which the owner has contracted to perform engineering/architectural services for water and waste projects funded by the programs subject to AIS requirements).
- l) "De minimis incidental components" are various miscellaneous low-cost components that are essential for, but incidental to, the construction and are incorporated into the physical structure of the project. Examples of incidental components could include small washers, screws, fasteners (such as "off the shelf" nuts and bolts), miscellaneous wire, corner bead, ancillary tube, signage, trash bins, door hardware etc. Costs for such de minimis incidental components cumulatively may comprise no more than a total of five percent of the total cost of the materials used in and incorporated into a project; the cost of an individual item may not exceed one percent of the total cost of the materials used in and incorporated into a project.
- m) "Iron and steel products" are defined as the following products made primarily of iron or steel: lined or unlined pipes and fittings, manhole covers and other municipal castings, hydrants, tanks, flanges, pipe clamps and restraints, valves, structural steel, reinforced precast concrete, and construction materials. Only items on the above list made primarily of iron or steel, permanently incorporated into the project must be produced in the United States. For example trench boxes, scaffolding or equipment, which are removed from the project site upon completion of the project, are not

required to be made of U.S. Iron or Steel.

- n) “Manufacturers” meaning a supplier, fabricator, distributor, materialman, or vendor is an entity with which the applicant, general contractor or with any subcontractor has contracted to furnish materials or equipment to be incorporated in the project by the applicant, contractor or a subcontractor.
- o) “Manufacturing processes” are processes such as melting, refining, forming, rolling, drawing, finishing, and fabricating. Further, if a domestic iron and steel product is taken out of the United States for any part of the manufacturing process, it becomes foreign source material. However, raw materials such as iron ore, limestone and iron and steel scrap are not covered by the AIS requirement, and the material(s), if any, being applied as a coating are similarly not covered. Non-iron or steel components of an iron and steel product may come from non-US sources. For example, for products such as valves and hydrants, the individual non-iron and steel components do not have to be of domestic origin. Raw materials, such as iron ore, limestone, scrap iron, and scrap steel, can come from non-U.S. sources.
- p) “Mechanical equipment” is typically that which has motorized parts and/or is powered by a motor. “Electrical equipment” is typically any machine powered by electricity and includes components that are part of the electrical distribution system. AIS does apply to mechanical equipment.
- q) “Minor components” are components within an iron and/or steel product otherwise compliant with the American Iron and Steel requirements. This is different from the de minimis definition where de minimis pertains to the entire project and the minor component definition pertains to a single product. This waiver, would allow non-domestically produced miscellaneous minor components comprising up to five percent of the total material cost of an otherwise domestically produced iron and steel product to be used. However, unless a separate waiver for a product has been approved, all other iron and steel components in said product must still meet the AIS requirements. This waiver does not exempt the whole product from the AIS requirements only minor components within said product and the iron or steel components of the product must be produced domestically. Valves and hydrants are also subject to the cost ceiling requirements described here. Examples of minor components could include items such pins and springs in valves/hydrants, bands/straps in couplings, and other low cost items such as small fasteners etc.
- r) “Municipal castings” are cast iron or steel infrastructure products that are melted and cast. They typically provide access, protection, or housing for components incorporated into utility owned drinking water, storm water, wastewater, and solid waste infrastructure.
- s) “National Office” refers to the office responsible for the oversight and administration of the program nationally. The National Office sets policy, develops program regulations, and provides training and technical assistance to help the state offices administer the program. The National Office is located in Washington, D.C.
- t) “Owner” is the Department. See 00700 General Conditions, Article 1 Definitions.

- u) “Primarily iron or steel” is defined as a product made of greater than 50 percent iron or steel, measured by cost. The cost should be based on the material costs. An exception to this definition is reinforced precast concrete (see Definitions). All technical specifications and applicable industry standards (e.g. NIST, NSF, AWWA) must be met. If a product is determined to be less than 50 percent iron and steel, the AIS requirements do not apply.

For example, the cost of a fire hydrant includes:

- (1) The cost of materials used for the iron portion of a fire hydrant (e.g. bonnet, body and shoe); and
- (2) The cost to pour and cast to create those components (e.g. labor and energy).

Not included in the cost are:

- (1) The additional material costs for the non-iron and steel internal workings of the hydrant (e.g. stem, coupling, valve, seals, etc.); and
- (2) The cost to assemble the internal workings into the hydrant body.

- v) “Produced in the United States” means that the production in the United States of the iron or steel products used in the project requires that all manufacturing processes must take place in the United States, with the exception of metallurgical processes involving refinement of steel additives.
- w) “Project” is the total undertaking to be accomplished for the applicant by consulting engineers, general contractors, and others, including the planning, study, design, construction, testing, commissioning, and start-up, and of which the work to be performed under the contract is a part. A project includes all activity that an applicant is undertaking to be financed in whole or part by programs subject to AIS requirements. The intentional splitting of projects into separate and smaller contracts or obligations to avoid AIS requirements is prohibited.
- x) “Reinforced Precast Concrete” may not consist of at least 50 percent iron or steel, but the reinforcing bar and wire must be produced in the United States and meet the same standards as for any other iron or steel product. Additionally, the casting of the concrete product must take place in the United States. The cement and other raw materials used in concrete production are not required to be of domestic origin. If the reinforced concrete is cast at the construction site, the reinforcing bar and wire are considered to be a construction material and must be produced in the United States.
- y) “Steel” means an alloy that includes at least 50 percent iron, between 0.02 and 2 percent carbon, and may include other elements. Metallic elements such as chromium, nickel, molybdenum, manganese, and silicon may be added during the melting of steel for the purpose of enhancing properties such as corrosion resistance, hardness, or strength. The definition of steel covers carbon steel, alloy steel, stainless steel, tool steel, and other specialty steels.

- z) “Structural steel” is rolled flanged shapes, having at least one dimension of their cross-section three inches or greater, which are used in the construction of bridges, buildings, ships, railroad rolling stock, and for numerous other constructional purposes. Such shapes are designated as wide-flange shapes, standard I-beams, channels, angles, tees, and zees. Other shapes include but are not limited to, H-piles, sheet piling, tie plates, cross ties, and those for other special purposes.
- aa) “United States” means each of the several states, the District of Columbia, and each Federally Recognized Indian Tribe.

EXAMPLE OF A MANUFACTURER'S CERTIFICATION LETTER OF COMPLIANCE WITH PROVISIONS OF THE AMERICAN IRON AND STEEL (AIS) REQUIREMENTS OF SECTION 746 OF TITLE VII OF THE CONSOLIDATED APPROPRIATIONS ACT OF 2017 (DIVISION A - AGRICULTURE, RURAL DEVELOPMENT, FOOD AND DRUG ADMINISTRATION, AND RELATED AGENCIES APPROPRIATIONS ACT, 2017) AND SUBSEQUENT STATUTES MANDATING DOMESTIC PREFERENCE

Date:

Company Name:

Company Address:

Subject: AIS Step Certification for Project (X), Owner's Name, and Contract Number

I, (company representative), certify that the (melting, bending, galvanizing, cutting, etc.) processes for (manufacturing or fabricating) the following products and/or material shipped or provided for the subject project is in full compliance with the AIS requirement as mandated by Section 746 of Title VII of the Consolidated Appropriations Act of 2017 (Division A - Agriculture, Rural Development, Food and Drug Administration, and Related Agencies Appropriations Act, 2017) and subsequent statutes mandating domestic preference.

Item, Products and/or Materials, and location of delivery (City, State):

- 1.
- 2.

Such processes for AIS took place at the following location:

(City, State)

This certification is to be submitted upon request to interested parties (e.g. municipalities, consulting engineers, general contractors, etc.)

If any of the above compliance statements change while providing materials to this project, please immediately notify the person(s) who is requesting to use your product(s).

Authorized Company Representative Signature

(Note: *Authorized signature shall be manufacturer's representative not the material distributor or supplier*)

Federal Debarment Certification Form

Certification Regarding Debarment, Suspension, Ineligibility and Voluntary Exclusion Lower Tier Covered Transactions

This certification is required by the regulations implementing Executive Order 12549, Debarment and Suspension, 29 CFR Part 98, Section 98.510, Participant's responsibilities. The regulations were published as Part VII of the May 26, 1988 Federal Register (pages 19160-19211).

(BEFORE COMPLETING CERTIFICATION, READ THE INSTRUCTIONS ON THE FOLLOWING PAGE WHICH ARE AN INTEGRAL PART OF THE CERTIFICATION)

(1) The prospective recipient of Federal assistance funds certifies, by submission of this bid, that neither it nor its principals are presently debarred, suspended, proposed for debarment, declared ineligible, or voluntarily excluded from participation in this transaction by any Federal department or agency.

(2) Where the prospective recipient of Federal assistance funds is unable to certify to any of the Statements in this certification, such prospective participant shall attach an explanation to this Proposal.

Name and Title of Authorized Representative

Signature

Date

Federal Debarment Certification Form Instructions

Instructions for Certification

1. By signing and submitting this Proposal, the prospective recipient of Federal assistance funds is providing the certification as set out below.
2. The certification in this class is a material representation of fact upon which reliance was placed when this transaction was entered into. If it is later determined that the prospective recipient of Federal assistance funds knowingly rendered an erroneous certification, in addition to other remedies available to the Federal Government, the Department of Labor (DOL) may pursue available remedies, including suspension and/or debarment.
3. The prospective recipient of Federal assistance funds shall provide immediate written notice to the person to whom this Proposal is submitted if at any time the prospective recipient of Federal assistance funds learns that its certification was erroneous when submitted or has become erroneous by reason of changed circumstances.
4. The terms "covered transaction," "debarred," "suspended," "ineligible," "lower tier covered transaction," "participant," "person," "primary covered transaction," "principal," "Proposal," and "voluntarily excluded," as used in this clause, have the meanings set out in the Definitions and Coverage sections of rules implementing Executive Order 12549. You may contact the person to which this Proposal is submitted for assistance in obtaining a copy of those regulations.
5. The prospective recipient of Federal assistance funds agrees by submitting this Proposal that, should the proposed covered transaction be entered into, it shall not knowingly enter into any lower tier covered transaction with a person who is debarred, suspended, declared ineligible, or voluntarily excluded from participation in this covered transaction, unless authorized by the DOL.
6. The prospective recipient of Federal assistance funds further agrees by submitting this Proposal that it will include the clause titled "Certification Regarding Debarment, Suspension, Ineligibility and Voluntary Exclusion - Lower Tier Covered Transactions," without modification, in all lower tier covered transactions and in all solicitations for lower tier covered transactions.
7. A participant in a covered transaction may rely upon a certification of a prospective participant in a lower tier covered transaction that it is not debarred, suspended, ineligible, or voluntarily excluded from the covered transaction, unless it knows that the certification is erroneous. A participant may decide the method and frequency by which it determines the eligibility of its principals. Each participant may but is not required to check the List of Parties Excluded from Procurement or Non-procurement Programs.
8. Nothing contained in the foregoing shall be construed to require establishment of a system of records in order to render in good faith the certification required by this clause. The knowledge and information of a participant is not required to exceed that which is normally possessed by a prudent person in the ordinary course of business dealings.
9. Except for transactions authorized under paragraph 5 of these instructions, if a participant in a covered transaction knowingly enters into a lower tier covered transaction with a person who is suspended, debarred, ineligible, or voluntarily excluded from participation in this transaction, in addition to other remedies available to the Federal Government, the DOL may pursue available remedies, including suspension and/or debarment.

CERTIFICATION REGARDING LOBBYING

The undersigned certifies, to the best of his or her knowledge and belief, that:

(1) No Federal appropriated funds have been paid or will be paid, by or on behalf of the undersigned, to any person for influencing or attempting to influence an officer or employee of any agency, a Member of Congress, an officer or employee of Congress, or an employee of a Member of Congress in connection with the awarding of any Federal grant, the making of any Federal loan, the entering into of any cooperative agreement, and the extension, continuation, renewal, amendment or modification of any Federal contract, grant, loan, or cooperative agreement.

(2) If any funds other than Federal appropriated funds have been paid or will be paid to any person for influencing or attempting to influence an officer or employee of any agency, a Member of Congress, an officer or employee of Congress, or an employee of a Member of Congress in connection with this Federal contract, grant, loan, or cooperative agreement, the undersigned shall complete and submit Standard Form-LLL, "Disclosure of Lobbying Activities," in accordance with its instructions.

(3) The undersigned shall require that the language of this certification be included in the award documents of all sub-awards at all tiers (including subcontracts, sub-grants, and contracts under grants, loans, and cooperative agreements) and that all sub-recipients shall certify and disclose accordingly. The contractor and any subcontractors must return this completed certification form to the contract administering office.

This certification is a material representation of fact upon which reliance was placed when this transaction was made or entered into. Submission of this certification is a prerequisite for making or entering into this transaction imposed by section 1352, title 31, United States Code. Any person who fails to file the required certification shall be subject to a civil penalty of not less than \$10,000 and not more than \$100,000 for each such failure.

Organization: _____

Street address: _____

City, State, Zip: _____

CERTIFIED BY: (Type or Print)

TITLE:

(signature)

(date)

FAR 52.203-11**CERTIFICATION AND DISCLOSURE REGARDING PAYMENTS TO INFLUENCE CERTAIN FEDERAL TRANSACTIONS (SEPT 2007)** (a) *Definitions*. As used in this provision—"Lobbying contact" has the meaning provided at [2](#)

[U.S.C. 1602\(8\)](#). The terms "agency," "influencing or attempting to influence," "officer or employee of an agency," "person," "reasonable compensation," and "regularly employed" are defined in the FAR clause of this solicitation entitled "Limitation on Payments to Influence Certain Federal Transactions" ([52.203-12](#)).

(b) *Prohibition*. The prohibition and exceptions contained in the FAR clause of this solicitation entitled "Limitation on Payments to Influence Certain Federal Transactions" ([52.203-12](#)) are hereby incorporated by reference in this provision.

(c) *Certification*. The offeror, by signing its offer, hereby certifies to the best of its knowledge and belief that no Federal appropriated funds have been paid or will be paid to any person for influencing or attempting to influence an officer or employee of any agency, a Member of Congress, an officer or employee of Congress, or an employee of a Member of Congress on its behalf in connection with the awarding of this contract.

(d) *Disclosure*. If any registrants under the Lobbying Disclosure Act of 1995 have made a lobbying contact on behalf of the offeror with respect to this contract, the offeror shall complete and submit, with its offer, OMB Standard Form LLL, Disclosure of Lobbying Activities, to provide the name of the registrants. The offeror need not report regularly employed officers or employees of the offeror to whom payments of reasonable compensation were made.

(e) *Penalty*. Submission of this certification and disclosure is a prerequisite for making or entering into this contract imposed by [31 U.S.C. 1352](#). Any person who makes an expenditure prohibited under this provision or who fails to file or amend the disclosure required to be filed or amended by this provision, shall be subject to a civil penalty of not less than \$10,000, and not more than \$100,000, for each such failure.

CONSENT TO USE OF ELECTRONIC SIGNATURES

BY CHECKING HERE, I AGREE TO THE USE OF ELECTRONIC SIGNATURES AS VALID, LEGALLY BINDING SUBSTITUTES FOR ORIGINAL, HANDWRITTEN SIGNATURES ON THIS DOCUMENT.

Company _____

Name (signature) _____

Name (printed) _____

Title _____ Date of execution _____

DISCLOSURE OF LOBBYING ACTIVITIES

Complete this form to disclose lobbying activities pursuant to 31 U.S.C. 1352

Approved by OMB

0348-0046

(See reverse for public burden disclosure.)

1. Type of Federal Action: ☐ a. contract ☐ b. grant ☐ c. cooperative agreement ☐ d. loan ☐ e. loan guarantee ☐ f. loan insurance		2. Status of Federal Action: ☐ a. bid/offer/application ☐ b. initial award ☐ c. post-award		3. Report Type: ☐ a. initial filing ☐ b. material change For Material Change Only: year _____ quarter _____ date of last report _____	
4. Name and Address of Reporting Entity: ☐ Prime ☐ Subawardee Tier _____, if known: Congressional District, if known:			5. If Reporting Entity in No. 4 is a Subawardee, Enter Name and Address of Prime: Congressional District, if known:		
6. Federal Department/Agency:			7. Federal Program Name/Description: CFDA Number, if applicable: _____		
8. Federal Action Number, if known:			9. Award Amount, if known: \$ _____		
10. a. Name and Address of Lobbying Registrant (if individual, last name, first name, MI):			b. Individuals Performing Services (including address if different from No. 10a) (last name, first name, MI):		
11. Information requested through this form is authorized by title 31 U.S.C. section 1352. This disclosure of lobbying activities is a material representation of fact upon which reliance was placed by the tier above when this transaction was made or entered into. This disclosure is required pursuant to 31 U.S.C. 1352. This information will be available for public inspection. Any person who fails to file the required disclosure shall be subject to a civil penalty of not less than \$10,000 and not more than \$100,000 for each such failure.			Signature: _____ Print Name: _____ Title: _____ Telephone No.: _____ Date: _____		
Federal Use Only:				Authorized for Local Reproduction Standard Form LLL (Rev. 7-97)	

INSTRUCTIONS FOR COMPLETION OF SF-LLL, DISCLOSURE OF LOBBYING ACTIVITIES

This disclosure form shall be completed by the reporting entity, whether subawardee or prime Federal recipient, at the initiation or receipt of a covered Federal action, or a material change to a previous filing, pursuant to title 31 U.S.C. section 1352. The filing of a form is required for each payment or agreement to make payment to any lobbying entity for influencing or attempting to influence an officer or employee of any agency, a Member of Congress, an officer or employee of Congress, or an employee of a Member of Congress in connection with a covered Federal action. Complete all items that apply for both the initial filing and material change report. Refer to the implementing guidance published by the Office of Management and Budget for additional information.

1. Identify the type of covered Federal action for which lobbying activity is and/or has been secured to influence the outcome of a covered Federal action.
2. Identify the status of the covered Federal action.
3. Identify the appropriate classification of this report. If this is a followup report caused by a material change to the information previously reported, enter the year and quarter in which the change occurred. Enter the date of the last previously submitted report by this reporting entity for this covered Federal action.
4. Enter the full name, address, city, State and zip code of the reporting entity. Include Congressional District, if known. Check the appropriate classification of the reporting entity that designates if it is, or expects to be, a prime or subaward recipient. Identify the tier of the subawardee, e.g., the first subawardee of the prime is the 1st tier. Subawards include but are not limited to subcontracts, subgrants and contract awards under grants.
5. If the organization filing the report in item 4 checks "Subawardee," then enter the full name, address, city, State and zip code of the prime Federal recipient. Include Congressional District, if known.
6. Enter the name of the Federal agency making the award or loan commitment. Include at least one organizational level below agency name, if known. For example, Department of Transportation, United States Coast Guard.
7. Enter the Federal program name or description for the covered Federal action (item 1). If known, enter the full Catalog of Federal Domestic Assistance (CFDA) number for grants, cooperative agreements, loans, and loan commitments.
8. Enter the most appropriate Federal identifying number available for the Federal action identified in item 1 (e.g., Request for Proposal (RFP) number; Invitation for Bid (IFB) number; grant announcement number; the contract, grant, or loan award number; the application/proposal control number assigned by the Federal agency). Include prefixes, e.g., "RFP-DE-90-001."
9. For a covered Federal action where there has been an award or loan commitment by the Federal agency, enter the Federal amount of the award/loan commitment for the prime entity identified in item 4 or 5.
10. (a) Enter the full name, address, city, State and zip code of the lobbying registrant under the Lobbying Disclosure Act of 1995 engaged by the reporting entity identified in item 4 to influence the covered Federal action.

(b) Enter the full names of the individual(s) performing services, and include full address if different from 10 (a). Enter Last Name, First Name, and Middle Initial (MI).
11. The certifying official shall sign and date the form, print his/her name, title, and telephone number.

According to the Paperwork Reduction Act, as amended, no persons are required to respond to a collection of information unless it displays a valid OMB Control Number. The valid OMB control number for this information collection is OMB No. 0348-0046. Public reporting burden for this collection of information is estimated to average 10 minutes per response, including time for reviewing instructions, searching existing data sources, gathering and maintaining the data needed, and completing and reviewing the collection of information. Send comments regarding the burden estimate or any other aspect of this collection of information, including suggestions for reducing this burden, to the Office of Management and Budget, Paperwork Reduction Project (0348-0046), Washington, DC 20503.

**SECTION 33 07 00
INSULATED PIPE AND FITTINGS**

PART 1 - GENERAL

1.1 SUMMARY

A. Related Sections:

1. Section 33 11 13: Public Water Utility Distribution Piping.
2. Section 33 31 00: Sanitary Utility Sewerage Piping

- B. Water and Sewer Mains shall be supplied as insulated pipe and fittings with heat trace channels for use in pressure pipe applications. The minimum service temperature range of all individual components and final products shall be -60 to 100°F unless otherwise specified. All pipe and fittings shall be capable of withstanding the cyclic freezing of water under its rated service pressure without breaks, leaks, gross deformities or impaired service characteristics. The core pipe and fittings shall be in accordance with Section 331113 – Public Water Utility Distribution Piping or Section 333100 – Sanitary Utility Sewerage Piping, as appropriate. The core pipe shall be factory insulated with polyurethane insulation and protected with an outer jacket of 16-gauge aluminum pipe.

1.2 REFERENCES

- A. The following specifications are referenced in this document and shall be considered integral to this specification:

1. ASTM C177 Thermal transmission (guarded hot-plate apparatus)
2. ASTM C273 Shear properties of sandwich-core materials
3. ASTM C518 Thermal transmission (heat flow meter apparatus)
4. ASTM D1248 Polyethylene (PE) extrusion materials – wire and cable
5. ASTM D1621 Compressive properties of rigid cellular plastics
6. ASTM D1622 Apparent density of rigid cellular plastics
7. ASTM D2126 Response of rigid cellular plastics to thermal humid aging (thermal dimensional stability)
8. ASTM D2657 Heat Joining Polyolefin Pipe and Fittings
9. ASTM D2837 Obtaining pressure design basis for thermoplastic pipe products

10. ASTM D2842 Water absorption of rigid cellular plastics
 11. ASTM D3350 Specification for Polyethylene Plastic Pipe and Fittings Materials
 12. ASTM E96 Water vapor transmission of rigid cellular plastics
 13. ASTM E398 Water vapor transmission rate of sheet materials (dynamic relative humidity measurement)
 14. ASTM F714 Polyethylene (PE) plastic pipe (SDR-PR) – based on outside diameter
 15. AWWA C901 Polyethylene Pressure Pipe and Tubing, 1/2-inch through 3-inch for Water Service
 16. AWWA C906 Polyethylene Pressure Pipe and Fittings, 4-inch through 63-inch for Water Distribution and Transmission
 17. NSF/ANSI-61 Drinking Water System Components-Health Effects
 18. PPI TR-33 Generic Butt Fusion Joining Procedure for Polyethylene Gas Pipe
- B. Unless otherwise noted herein or on the drawings, all fittings shall be constructed utilizing core pipe of the same material, resin, and dimensions as that used for the core pipe of the straight lengths.

1.2 SUBMITTALS

- A. The Contractor shall furnish to the Engineer for approval one (1) copy of the submittals indicated below. No work shall commence on any item until the required shop drawing submittals have been approved. The submittals shall include:
1. Product Data: Submit manufacturer's standard printed information and literature for all materials to be incorporated in the work.
 2. Shop Drawings: Submit dimensionally correct (scaled) shop drawings for all items to be fabricated prior to beginning fabrication.
 3. Fabrication Procedures: Submit a written description of the methods/procedures to be used in fabricating the pipe and fitting.
 4. Inspections and Testing of Pipe and Fittings:
 - a) Submit proposed hydrostatic testing procedure for review and approval before any testing is undertaken.
 - b) Submit results of foam density tests on daily basis for all specified inspections and testing of pipe and fittings.

5. Quality Assurance program in accordance with 1.3.

6. Laboratory Testing Results:

- a) K-factor testing of insulation.
- b) Core pipe/insulation bond
- c) Density of insulation
- d) Testing frequency shall be a minimum of one set of tests per 400 linear feet of pipe.

1.3 QUALITY ASSURANCE

- A. The manufacturer shall be experienced and regularly engaged in the production of pre-insulated piping systems. The manufacturer shall understand the system design and its intent and shall produce components suitable to accomplish that intent. Any deficiencies in the Drawings or these Specifications which may jeopardize the performance of the system shall be brought to the immediate attention of the Engineer, prior to submittal of product description and information for acceptance, whenever possible.
- B. Engineer shall have open access to the fabrication facility and any sub-tier suppliers to assure conformance with the Specifications and quality of workmanship.
- C. The Contractor shall submit to the Engineer for approval a Quality Assurance program which incorporates as a minimum the following:
 - 1. A description of the method of manufacture.
 - 2. A description of the methodology for the quality assurance program.
- D. The Contractor shall implement the Quality Assurance program to assure compliance with all requirements of this Specification.
- E. A record of all tests which were performed shall be provided to the Engineer as required. (As a minimum, all test reports shall be submitted to the Engineer upon completion of work).
- F. Where a method of testing has not been specified, the Contractor shall submit detailed test procedures for approval by the Engineer.
- G. Any deficiency found in a stick of pipe shall be cause for rejection of the entire stick of pipe. All rejected pipe shall be replaced by the Contractor at no additional cost to the Owner.

- H. All insulated pipe and fittings supplied under this specification shall utilize the same manufacturer of core pipe. Contractor shall identify the core pipe manufacturer with his submittal.

PART 2 - PRODUCTS:

2.1 CORE PIPE:

- A. All core pipe shall be made of high-density polyethylene (HDPE) that conforms to all applicable provisions and requirements of the latest revision of AWWA C901 and AWWA C906 and, by inclusion, all appropriate standards referenced therein.
- B. Core pipe shall be in accordance with Section 331113 – Public Utility Distribution Piping or Section 333100 – Sanitary Utility Sewerage Piping as applicable.

2.2 INSULATION

- A. Insulation between core pipe and outer jacket of all pipe and fittings shall be low-density rigid closed-cell urethane insulation with a nominal thickness as shown on the drawings. It shall be applied and cured in strict accordance with the manufacturer's recommendations and good commercial practices such that the resulting insulation completely fills the annular space between core pipe and outer jacket and is free of defects affecting its intended purpose.
- B. Urethane insulation shall exhibit the following properties and characteristics specified by the referenced ASTM tests below.
- | | | | |
|----|-------------------|---|------------------------------------|
| 1. | ASTM C518 or C177 | Maximum K-factor, as produced | 0.15 btu-in/hr-ft ² -°F |
| 2. | ASTM D1622 | Core Density Range | 2.0 to 4.0 lbs/ft ³ |
| 3. | ASTM D1621 | Minimum Compressive Strength | 35 psi |
| | | (parallel and perpendicular to pipe axis) | |
| 4. | ASTM D2842 | Maximum Water Absorption | 0.05 lb/ft ³ |
| 5. | ASTM D2126 | Dimensional Stability | 1% at -20°F |
| | | (Maximum Linear Change) | 3% at +100°F |
- C. Exposed urethane insulation faces at pipe and fitting ends shall be coated to protect against physical abuse, UV exposure during shipping and storage, and against water intrusion in service. The coating shall be suitable for direct application over urethane insulation with no deleterious effects to the insulation or coating. The coating shall be formulated for long-term service and retained flexibility over extended periods of exposure to sunlight, harsh weather, and saltwater spray. The strength of the adhesive bond of the coating to the insulation shall be greater than the tensile strength of the coating. In the event the coating is nicked or an edge is

rolled up in handling, the coating that has been dislodged shall tear free from the coating still adhering to the insulation rather than pull the balance of the coating off as a sheet.

- D. The coating shall be applied and cured in strict accordance with the manufacturer's recommendations and good commercial practice such that the finished product is free of defects affecting its intended purpose.
- E. The coating material shall exhibit the following properties and characteristics:
 - 1. ASTM E398 or E96 Maximum Water Vapor Permeance 1.0 perm
 - Dry Film Thickness Range: 15 to 63 mils

2.3 METAL OUTER JACKET

- A. Metal outer jackets for pipe and fittings shall be constructed of 16-gauge internal helical lock-seam corrugated aluminum pipe with a nominal diameter as shown on the drawings. Aluminum alloy material shall be 3004-H34 with a 7072 coating on the outside of the jacket or 5052-H32. All helical seams shall be continuous, tightly locked and folded. The outer jacket of all pipe and fittings shall be watertight under a five-foot head of water and the outside of the jacket shall present a relatively smooth, flat overall appearance. Standard corrugated culvert pipe is not acceptable.
- B. The outer jacket corrugations shall be between 3/16-inch and 3/8-inch deep as measured from the flat area between corrugations to the bottom of the corrugation on the outside of the jacket and shall be spaced no more than 2 2/3-inches apart and formed diagonally around the pipe, resulting in not less than 2 nor more than 10 complete corrugations crossing the pipe's circumference at a given cross-section.
- C. The nominal diameter shall be the inside diameter as measured between the innermost portion of the corrugations, with a dimensional tolerance of +1/2".
- D. All joints in the aluminum outer jacket fabricated around fittings shall be welded with a continuous bead, resulting in a finished jacket that is watertight per the requirements of section 2.3A.
- E. The Contractor shall provide company name and production date (month and year) on the outer jacket of each pipe and fitting. Information shall be stamped onto an aluminum plate with 1/8-inch to 1/4-inch high lettering, and the plate shall be riveted onto the jacket with a minimum of 4 aluminum rivets. The plate shall be secured to the jacket within 8" of one end of the jacket.
- F. All surfaces of the outer jacket, including end-cuts and welds, shall be finished such that no jagged edges exist that could cause personal injury.
- G. The interior of the jacket shall be free of oils, grease, or other residue that could interfere with the adhesion of insulation to the outer jacket.

2.4 HEAT TRACE CHANNEL

- A. Heat trace channels shall be fully enclosed, in direct contact with the core pipe for its entire length, and there shall be no intrusion of insulation between the heat trace channel and the core pipe unless otherwise specified.
- B. Heat trace channels for all straight lengths of pipe shall be made of PE or ABS material and shall be half-moon shaped with inside dimensions of 1 1/2-inches to 1 3/4-inches wide by 3/4-inch to 1-inch high and installed as shown on the drawings. The heat trace channel shall extend 2-inches past the insulation face of the pipe, with ends cleanly cut, square, smooth, and free from burrs or other protrusions that could interfere with installing the heat trace in the field, as shown in the drawings.
- C. Heat trace channels installed along angular bends of fittings shall be constructed with 1-1/2-inch diameter flexible, liquid-tight PVC non-metallic conduit. Conduit material shall be nonconductive and non-corrosive, with a smooth interior surface that will maintain the internal diameter in tight radius bends. Conduit material shall be UL listed for outdoor use. A transition fitting shall be installed on all ends of heat trace channel that results in a half-moon channel protruding from the insulation face as specified for straight pipe channel. All transition fittings shall be constructed with smooth interiors, free from burrs or other protrusions that could interfere with installing the heat trace in the field, as shown in the drawings.
- D. Pieces of half-moon heat trace channel to fit within the joint area (jumpers) shall be provided with each piece of pipe and with each fitting. The jumpers must be sized to slip snugly over the outside of the specified straight pipe heat trace channel with an overlap of not less than 1 1/2-inches on each side after a typical field fusion of individual lengths of pipe.

2.5 GLYCOL TRACE CHANNEL

- A. Glycol trace channels shall be fully enclosed and constructed of PE or ABS material with a minimum thickness of 0.10-inch. The channel shall be in direct contact with the core pipe for its entire length and there shall be no intrusion of insulation between the channel and the core pipe unless otherwise specified.
- B. The glycol trace channel shall be oval-shaped and sized 6-5/8 inch by 3-1/4 inch to allow adequate interior space to conveniently pull two each 2-inch SDR-11 HDPE pipes within the channel. Channels used in fittings shall be mitered and fused together to create a channel that follows the curvature of the fitting.

2.6 MANUFACTURING AND DIMENSIONAL TOLERANCES

- A. Allowable offset of the centerline of the outer jacket and core pipe shall be not more than 1/4-inch at the pipe ends. Elsewhere along pipe lengths the centerline offset shall not be greater than 3/8-inch. Allowable offset of the centerline of the glycol trace channel and core pipe shall be not more than 3/8-inches.

- B. The minimum temperature of all components used to manufacture pipe and fittings shall be 50 °F at the start of fabrication. The fabricated pipe shall be placed in a facility maintained at a temperature of 50 °F or greater for a minimum of 12 hours after fabrication.
- C. All elbows shall have a bend radius as specified in the drawings with a tolerance of + 2 degrees without reversion. All elbows must maintain normal outside diameters along their entire length without tolerance as per ASTM-F714.
- D. All branches of fabricated fittings must lie in a single plane with a maximum deviation of + 2 degrees.
- E. The length of core pipe protruding from the insulation on the ends shall be 12 inches + 1/4 -inch. The core pipe ends shall be smooth and oriented perpendicularly to the core pipe longitudinal axis + 1/8-inch.
- F. The outer jacket shall be cut in one pass perpendicular to the length of the jacket + 1 degree. The coupling on bell ends shall be perpendicular to the length of the jacket + 1 degree and flush with the jacket end with a tolerance of -1/8-inch. No part of the coupling shall protrude beyond the end of the jacket as determined by placing a straight-edge across the jacket at any two points. The bell end of the coupling shall be flush with the insulation and outer jacket. Before coating, the plane of the exposed insulation face at bell and spigot ends shall be perpendicular to the centerline axis of the outer jacket + 1/8-inch. The insulation profile of the coated ends shall not exceed a relief deviance of + 1/4-inch across the face.

2.7 FABRICATED FITTINGS

- A. All fusion joints used in fabricated fittings shall be documented by a computer that records pressure and temperature applied at each fused joint. Computer printouts and electronic data for each fitting shall be made available to the owner upon request. The contractor shall ensure that each joint is fused at the temperature and pressure recommended by the pipe manufacturer in order to achieve the maximum pressure rating for that joint.
- B. All fittings for each project shall be labeled with a unique identifier that corresponds with the fusion computer printouts for each fitting.

2.8 INSULATING

- A. All Federal and State regulations applicable to the type of insulation and its use shall be strictly adhered to.
- B. Insulation shall be placed into the pipe by a single injection application. Fittings may be manufactured using one insulation injection for each open end of the fitting. In no case shall the jacket be drilled to perform, monitor, or inspect the injection.
- C. The maximum allowable void size is 0.05 in³ (for reference, a 3/8-inch cube is .05 in³).

- D. Insulation and chemicals shall be prevented from coming in contact with the end or inside of the exposed core pipe.
- E. The heat trace channel shall be secured to the outside of the core pipe, parallel to the pipe axis, prior to insulating. The channel shall protrude 2-inches past the insulation faces at each end of the pipe or fitting, be free of insulation residue and foreign substances, and open to the minimum cross section specified throughout.
- F. The glycol trace channel shall be secured to the outside of the core pipe, parallel to the pipe axis, prior to insulating. The channel shall be flush with the insulation faces at each end of the pipe or fitting, be free of insulation residue and foreign substances, and open to the minimum cross section specified.

2.9 CORE PIPE/INSULATION BOND

- A. Core pipe and fittings shall be bonded to the insulation with a minimum shear bond strength of 15 psi, or in such a manner as to produce insulation-to-insulation separation when a sample is tested in shear.
- B. The core pipe surface preparation will be performed in a manner that does not leave foreign material imbedded in the plastic. Gouges or scratches in the pipe surface that exceed the tolerance specified by the pipe manufacturer for the pipe pressure rating shall be cause for rejection.

2.10 PRODUCTION TESTING AND INSPECTION

- A. Only finished pipe lengths and fittings that meet the requirements of these specifications and drawings shall be used for destructive testing. Should any product fail to meet the visual quality control specifications listed below, that product shall be either re-built to meet the specifications or rejected. Only those products that meet all visual quality control specifications shall be considered final products suitable for receipt by the Owner or for laboratory or other destructive testing.
 - 1. VISUAL QUALITY CONTROL:
 - a. DIMENSIONAL TOLERANCE: Each length of pipe and each fitting will be examined by the Contractor for off-set tolerances, insulation cut-back distances, exposed insulation face alignment and relief profile, and alignment and smoothness of core pipe ends.
 - b. INSULATION INTEGRITY: Completed pipe and fitting ends shall be inspected for voids in excess of 0.05 in³ or discontinuities by the Contractor prior to coating. Any glazing left on the uncoated pipe end from the forms used during the insulating operation shall be removed before coating.
 - 2. LABORATORY TESTING
 - a. The density and K-factor shall be measured on insulation specimens of the appropriate size and under the specified conditions as set forth in the applicable ASTM test. Insulation specimens shall be retrieved by cutting a 12-inch section of

insulated pipe from a production sample. The remaining length shall be trimmed to the dimensional tolerances of this specification to allow Owner use of that pipe section.

- b. Should the Contractor choose to test the "K" factor as outlined in ASTM C518, the testing apparatus shall be calibrated within 24 hours of the test using a calibration standard certified accurate by the National Bureau of Standards (NBS). The "K" factor test sample shall be removed from the insulated pipe, prepared for testing, and left open to the atmosphere at 70°F for a minimum of 24 hours prior to testing.
- c. In addition to the testing identified above, the following tests shall be performed to verify the quality of the finished product:
 - 1) Core pipe/insulation bond:
 - a) Two 6-inch lengths of cured insulated pipe shall be cut from one uncoated insulation face end of completed pipe length. The remaining length shall be trimmed according to the dimensional tolerances of this specification and coated to allow Owner use of that pipe section.
 - b) One specimen shall be tested at +70°F. The other specimen shall be brought to -60°F in 4 hours or less, and remain there for at least 24 hours before testing. Acceptance will be indicated by a minimum shear bond strength of 15 psi and insulation-to-insulation (or insulation-to-insulation pipe surface film) separation or tearing.
 - c) Testing shall be conducted as indicated on the attached drawing labeled "Core pipe/insulation bond test setup."

2.11 PACKING

- A. The core pipe spigot ends of all pipe and fittings shall be capped with PE pipe caps (Caplugs, or approved equal) and the plugs taped to the pipe with black electrical tape (such as 3M #33+) or other approved tape after final inspection and prior to shipment. Duct tape shall not be used to secure the PE pipe caps to the pipe spigot ends.
- B. Pre-insulated pipe shall be packed in bundles with a maximum gross weight of 4,000 pounds per bundle unless otherwise specified by the Owner. The end geometry of each bundle shall be rectangular. Each layer of pipe within the bundle including the bottom layer shall rest upon a minimum of 3 each 4-inch x 4-inch cross cleats banded to that individual layer using 1 1/4-inch steel strapping. All cleats shall feature a 45-degree stop block at least nominal 4-inches high by 4-inches long fastened securely to both ends of the cleats to prevent the pipe from rolling off the cleat when the banding is cut. The outer cross cleats shall be installed between 1 to 2-feet from the insulation face of the pipe ends with the middle cleat centered on the bundle. In addition, 1 1/4-inch steel straps shall securely fasten all the layers together to form a complete bundle. Bundles 5 pipes wide by 5 pipes high are recommended.
- C. All fittings and couplings shall be packaged in crates sheathed with minimum 1/2-inch sheathing not to exceed 4 ft x 4 ft x 8 ft. Minimum nominal 2-inch x 3-inch framing members shall be installed in all corners of the crate and fastened securely to the sheathing. On crates longer than 6-feet, framing members shall be installed along the shorter centerline of all the 4 long panels. The framing members shall be securely fastened to each other and to the sheathing. For crates 4-feet long or less, 2 each 4-inch x 4-inch cleats shall be installed on the bottom edges of the crate to provide for forklift handling. For crates longer than 4-feet, 3

cleats shall be installed, with the middle cleat centered on the crate. These cleats shall be fastened through the bottom sheathing and also banded to the crate with 1 1/4-inch wide steel bands that wrap around the entire crate. The crates shall be designed to stack 3 crates high, provide protection to the contents during rough ocean, air freight transport, and on-site handling without damage.

2.12 FINAL INSPECTION

- A. After completion of the quantity of pipe and fittings contracted for, the Owner may perform a final inspection at the fabrication point. The certified results of all required laboratory tests made during production by the Contractor shall be made available in report form at this time. During the final inspection, the product packing will be inspected to see that all specifications listed in section 3.6 have been met. Should any of the packing fail to meet the specifications, the Contractor shall re-pack the pipe to meet the specifications.

2.13 JOINT INSULATION KIT

- A. Joints between segments of insulated pipe and fittings shall be installed using a two-part field poured polyurethane foam.
 - 1. Two-part foam mixing chemicals shall be shipped to the site in separate containers of 50 gallons or less each.
 - 2. Contractor shall provide two-part form mixing chemicals in sufficient quantity to fill all required joints.
 - 3. Chemicals shall be applied to the joint using a foam dispensing gun which mixes the chemical immediately prior to injection into the joint.
 - 4. Joint kit foam shall only be installed by a qualified individual who has taken part in a training program offered by the foam supplier. Proof of qualification shall be submitted to Engineer prior to foaming of any joints.
 - 5. Foam shall be installed using an aluminum coupling band form to be removed after foam is cured. Minimum two holes are required in the coupling band. One hole for injection and the other to vent air.
 - 6. Pre-formed "half-shells" are unacceptable and shall not be used.
- B. After curing, foam shall be covered by a protective heat shrinkable sleeve specifically designed for pipes made of HDPE, Canusa Superseal or approved equal.
- C. Joint kits shall include foam insulation, heat shrink, and coupling band form complete with bolts, nuts and washers to field fabricate the pipe joint.
- D. Joint kits shall be sized for 24-inch cut back (12 inches for each pipe) and 12-inch jacket overlap (6 inches for each pipe) for a total heat shrink sleeve length of 36 inches.

- E. Manufacture to fit the fitting or the pipe joint.

PART 3 - EXECUTION

3.1 CORE PIPE FUSION

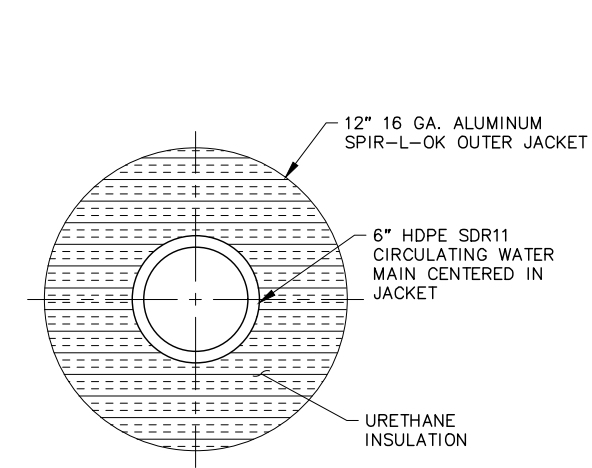
- A. Install core HDPE piping in accordance with Section 331113 – Public Utility Distribution Piping or Section 333100 – Sanitary Utility Sewerage Piping as applicable.

3.2 JOINT INSULATION KITS

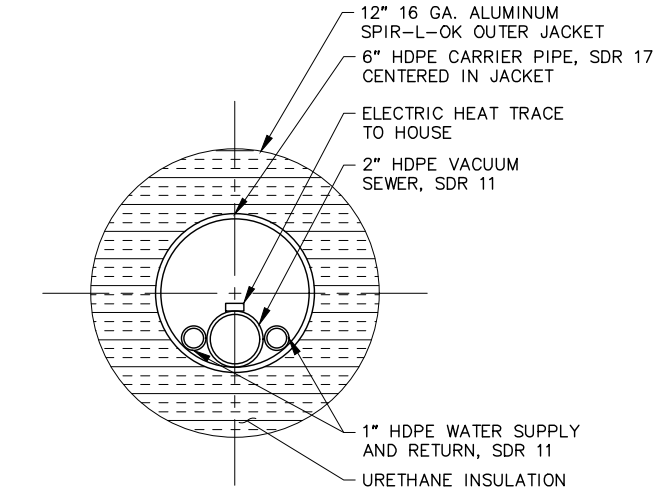
- A. Construct all piping, heat trace channels, glycol heat trace piping and electrical heat trace before installing joint insulation kits.
- B. Joint insulation kits shall only be installed on piping that has passed hydrostatic pressure test as described in Section 331113 – Public Utility Distribution Piping and/or Section 333100 – Sanitary Utility Sewerage Piping.
- C. Apply release agent to inside of removable coupling bands prior to application of foam.
- D. Inject 2-part foam insulation in liquid form through one hole in top of aluminum coupling band.
- E. Remove band and inspect foam insulation at joint for void space.
 - 1. Fill small voids (less than 2-inches in diameter) with spray foam insulation, DOW Great Stuff, or equal.
 - 2. Fill large voids (greater than 2-inches in diameter) by re-installing aluminum joint kit band and injecting additional foam insulation. Cut out cured foam as necessary to apply new foam to void area.
 - 3. Remove aluminum band and re-inspect foam. Repeat above steps if required.
- F. Install heat shrink sleeve over joint kit, Canusa Wrap or equal. Follow Manufacturer's installation instructions.
- G. Install permanent aluminum joint kit band.

END OF SECTION

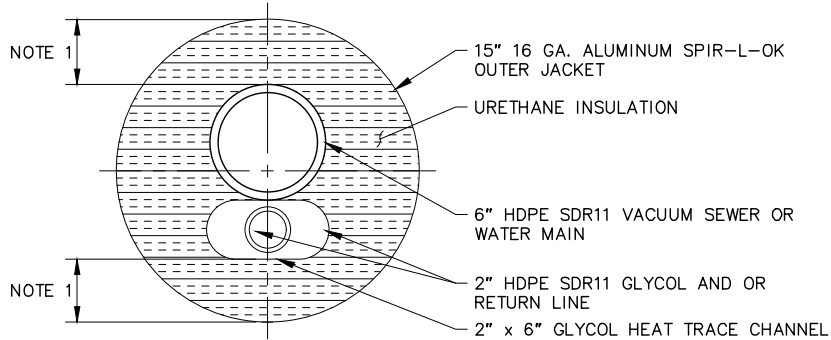
File: \\crweng.com\projects\JobsData\31311.00 Vsw--emmonak W And S Main Extension\00 Cadd 2019\01 Working Set\01 Civil\31311.00 Arctic Pipe And Joint Kits.dwg Plot Date: 6/27/2024 3:46 PM



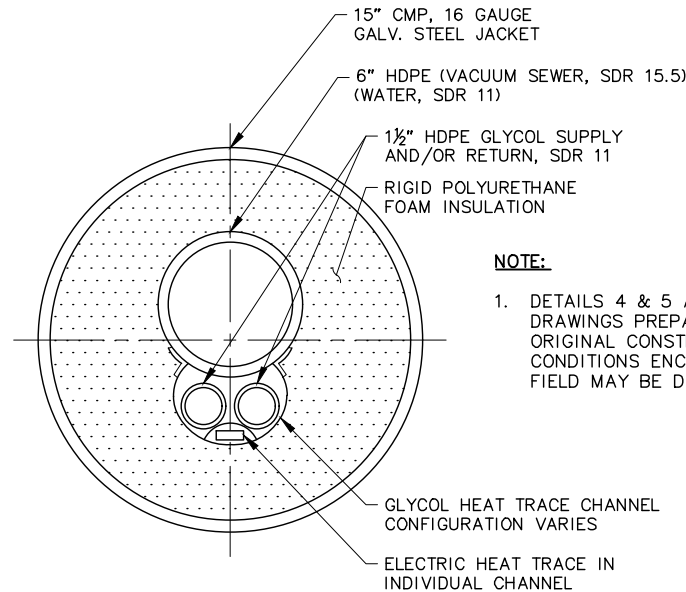
1 **NEW 6x12 WATER MAIN**
NOT TO SCALE



2 **NEW SERVICE LINE**
NOT TO SCALE

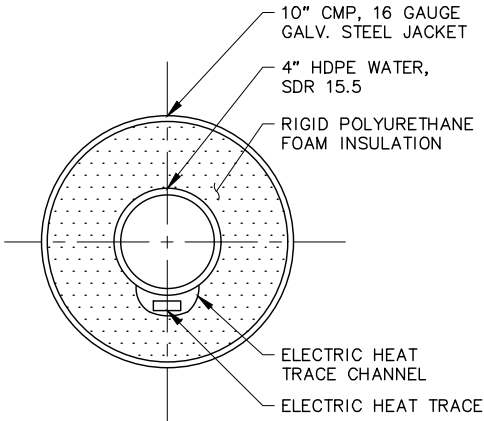


3 **NEW 6x15 VACUUM SEWER MAIN/WATER MAIN W/ GLYCOL**
NOT TO SCALE

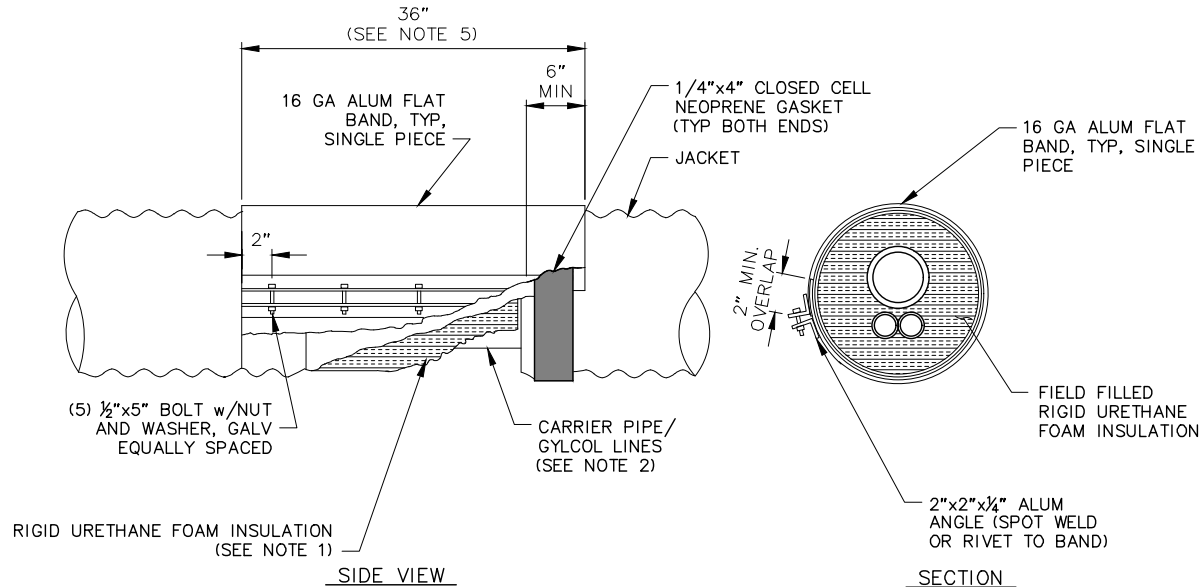


NOTE:
1. DETAILS 4 & 5 ARE BASED ON RECORD DRAWINGS PREPARED AT TIME OF ORIGINAL CONSTRUCTION. ACTUAL CONDITIONS ENCOUNTERED IN THE FIELD MAY BE DIFFERENT THAN SHOWN.

4 **EXISTING 6x15-INCH VACUUM SEWER**
NOT TO SCALE



5 **EXISTING 4x10-INCH WATER**
NOT TO SCALE



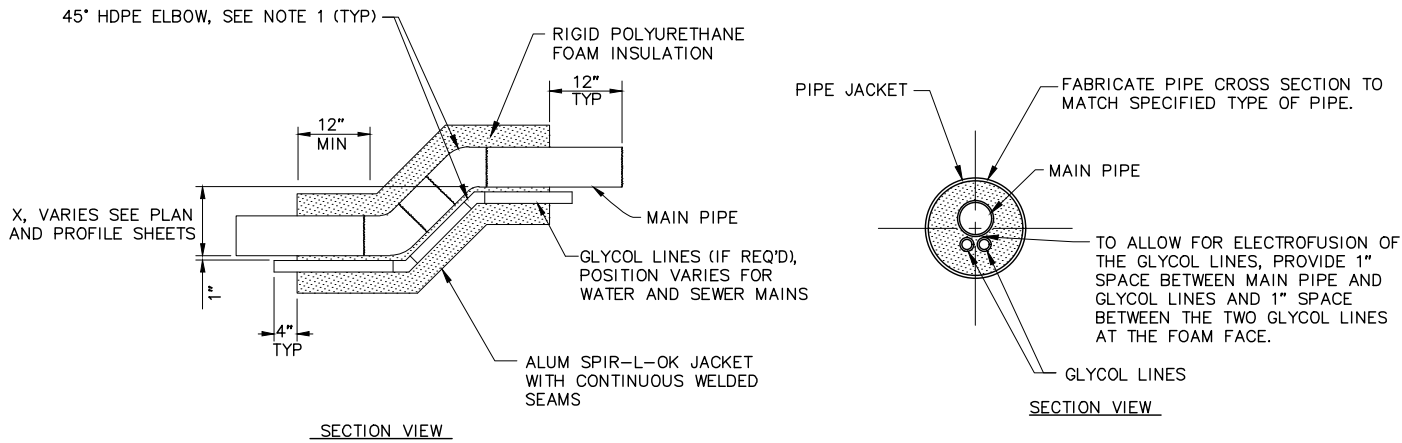
6 **TYPICAL INSULATED JOINT KIT**
NOT TO SCALE

- NOTES:**
1. BAND OR ZIPTIE GLYCOL LINES TO CARRIER PIPE AND SEAL ALL HEAT TRACE CHANNEL OPENINGS IN TWO LOCATIONS PRIOR TO FOAMING.
 2. PROVIDE 24" LENGTH OF HEAT TAPE AND/OR GLYCOL CHANNEL TO MATCH EACH PIPE SECTION.
 3. JOINT KIT INSULATION SHALL BE PROVIDED IN TWO-PART LIQUID FORM SUCH THAT IT CAN BE COMBINED AND POURED IN THE FIELD. POUR-FOAMING SHALL BE PERFORMED IN STRICT ACCORDANCE WITH THE MANUFACTURER'S INSTRUCTIONS IN THE PROPER AMBIENT CONDITIONS BY QUALIFIED, EXPERIENCED PERSONNEL.
 4. INSTALL JOINT KITS WITH ANGLE ROTATED DOWN AND THE BOLT NUTS ON THE UNDERSIDE.
 5. AT LOCATIONS WHERE BOX IS BEING REMOVED OR THE ARCTIC PIPE IS BEING PATCHED, THE JOINT KIT WILL NEED TO BE LONGER.

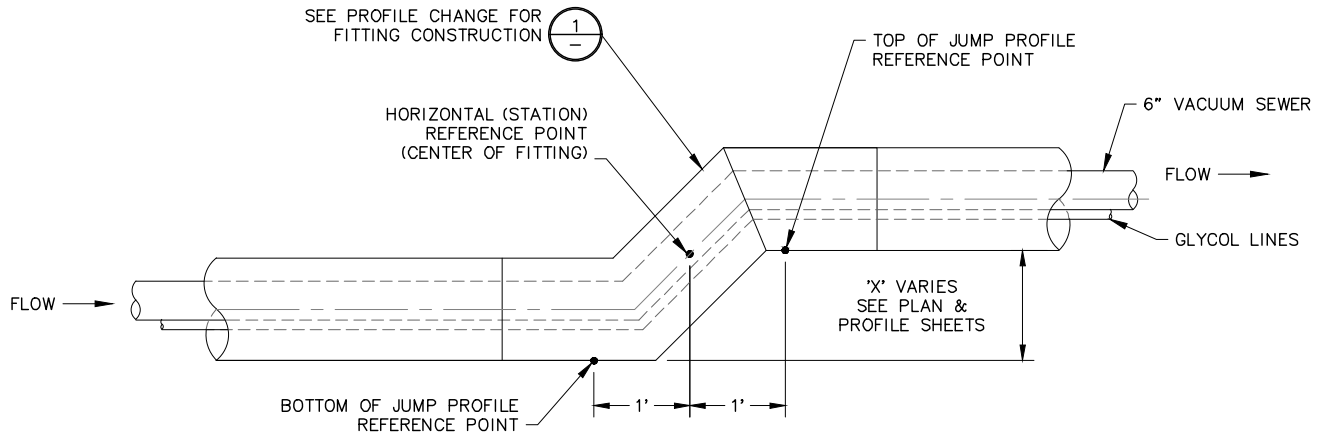
NO.	REVISION	BY	DATE
0	ISSUED FOR CONSTRUCTION	SH	6/21/24

Plot Date: 6/21/24	Designed: -	Drawn: -	Approved: -
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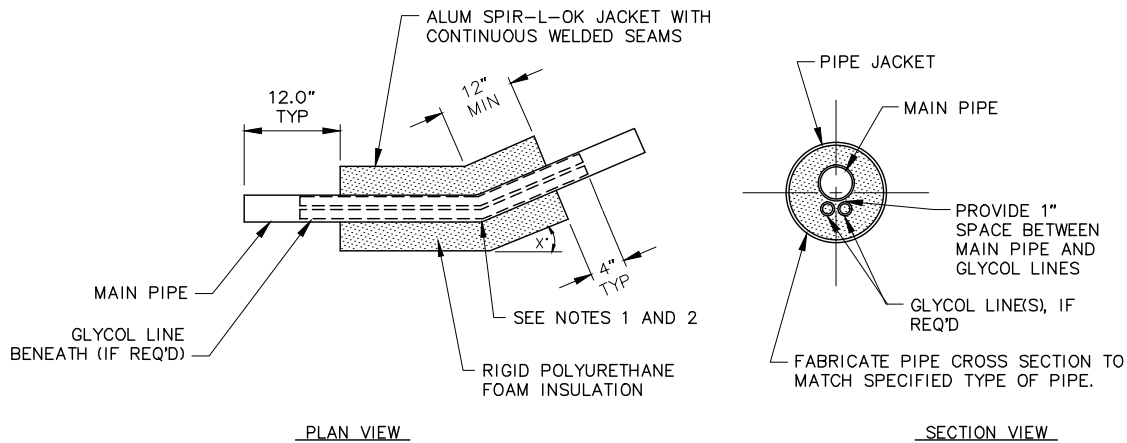
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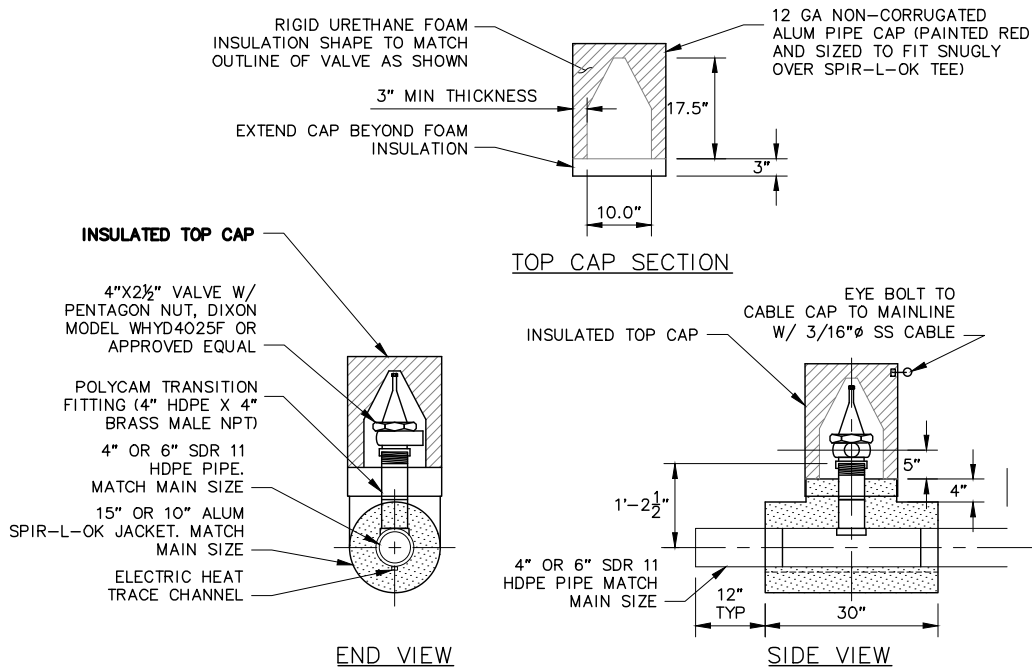
1 PROFILE CHANGE FITTING
NOT TO SCALE



2 SEWER MAIN JUMP
NOT TO SCALE



3 TYPICAL HORIZONTAL PIPE FITTING
NOT TO SCALE



4 WATER MAIN FLUSHING PORT
NOT TO SCALE

SHEET NOTES:

- ALL SERVICE LINE FITTINGS SHALL BE FABRICATED WITH LONG SWEEP ELBOWS, RADII PER TABLE A. STANDARD MOLDED ELBOW FITTINGS ARE ALLOWED FOR SEWER AND WATER MAIN FITTINGS. INTERNAL FUSION BEADS SHALL BE REMOVED FOR ALL SERVICE LINE FITTINGS.
- ALL ARCTIC PIPE FITTINGS GREATER THAN 45 DEGREES SHALL HAVE SWEEP ELBOWS.

TABLE A	
PIPE SIZE	ELBOW RADII
6-INCH	19.9"

NO.	REVISION	BY	DATE
0	ISSUED FOR CONSTRUCTION	SH	6/21/24

Plot Date	6/21/24
Designed	-
Drawn	-
Approved	-