

Bid Questions and Responses

Q1) I see that you have HDPE as your waterline material. Is there an item to bid on Ductile Iron Pipe on this project?

Q1 Response:

HDPE is the basis of design for this project.

All underground routing has been designed for use with DR 11 HDPE.

Other piping materials shall not be substituted.

Q2) Are the soils and ground water on this project site free of hydrocarbons?

Q2 Response:

No, not all areas of the project are free of hydrocarbons.

Q3) Under section 331100, "Water Distribution", 3.1.2.1.b. Jointing: the Jointing is specified to comply with ASTM D2657 which is an old specification. The new specification for the jointing of HDPE is ASTM F2620-12. Please confirm that the latter is the specification to follow for jointing of HDPE.

Q3 Response:

Use the new ASTM number (ASTM F2620-12)

Q4) In the section 331100, "Water Distribution", the specifications for piping materials under 2.1.1.1 refers to PE plastic piping and heat-fusion fittings, but then also refers to mechanical joints under 2.1.1.1a. Does this mean that the contractor is allowed to mix and match between HDPE heat fusion fittings and mechanical joint fittings? If this is true, can the contractor use HDPE MJ Adapters or Stainless Steel Stiffeners with pvc megalugs?

Q4 Response:

HDPE fusion and mechanical joints shall be allowed at transitions and at hydrants connections.

Please note the contractor shall be responsible for restraining the pipe. If restraining is not possible, the contractor shall provide thrust blocks. If heat fusion joints are used, restraint lengths are not required however if electro fusion joints are used restraint lengths shall be required.

Q5) What is the working pressure of the 12" HDPE water main being installed and what will be the test pressure?

Q5 Response:

Domestic Water service shall utilize a design pressure of 80 psig.

Testing will be based on 1.5 times the design pressure (80 psig x 1.5 = 120 psig)

Q6) Specification Section 33 05 23.98 - DIRECTIONAL DRILLING and Section 33 11 00 - WATER DISTRIBUTION called for HDPE DR 11 per AWWA C906. Can Fusible PVC™ pipe be used as an equal to HDPE pipe for water main application? Please find the technical comparisons in Pages 2-5 showing equivalent inside diameter and pressure rating

Q6 Response:

See Q1 response regarding alternate materials

Q7) Fusible PVC™ pipe system utilizes standard waterworks fittings for reconnection – eliminating the use of expensive transition fittings or fused-on fittings required by HDPE pipe system. Connection details are included in Pages 11-12. We also included our project profiles and brochure for your information.

Q7 Response:

See Q1 response regarding alternate materials

Q8) Sta. 0+57.64, Existing 24" valve #1200 – is this to be removed?

Q8 Response:

The existing Valve #1200 shall be removed and area restored to match existing conditions as practical. A temporary valve installation is indicated to replicate the function of Valve 1200 for construction sequencing.

Q9) If there are utilities not shown on the prints and the utility is hit by directional bore / open cut, will NASA be responsible for the unforeseen condition?

Q9 Response:

Utilities not marked in the field as part of the digging/excavation permit process or not shown on the drawings will be considered under the *Differing Site Conditions* clause of the contract and therefore will be the responsibility of NASA.

Contractor shall use white marking paint for marking of excavation areas during the course of the project prior to the excavation permit request.

Q10) Is the HDPE pipe to be IPS size or DIPS size?

Q10 Response:

Use Ductile Iron Pipe Size (DIPS) for 4" through 24" pipe and pipe 3" and smaller shall be IPS.

Q11) Must HDPE MJ adapters be used for all mechanical joint connections, i.e., valves, hydrants, etc?

Q11 Response:

Yes.

Q12) Can electrofusion couplings be used?

Q12 Response:

Electrofusion couplings are permissible if heat fusion cannot be completed.

Q13) Sheet 1 of 51, 41-45 of 51 reference 330199 for sliplining requirements – should this be referencing 220583.63?

Q13 Response:

Yes the primary spec is 22 05 83.63 and the secondary spec is 33 01 99.

Q14) What pressure is the 24" CIPP to be rated to?

Q14 Response:

The CIPP shall be rated the same as the DR11 HDPE piping.

Q15) What is the working pressure of the 24" Steel Water Main?

Q15 Response:

See response to Question 5.

Q16) Is the 24" Steel Water Main cement mortar lined?

Q16 Response:

No.

Q17) What kind of fittings can be used on the existing 24" steel main to put back spools, fittings, valves, etc. – flanged type?

Q17 Response:

A solid sleeve must be completed on the existing 24" line.

The contractor shall use MJ's and/or other jointing methods (back spools, flanges, fittings, etc.) as per applicable codes and standards to complete the work.

Q18) Is there a service connection profile for Building 101?

Q18 Response:

See attached profile for Building 101 service connection. (Attachment 1)

Q19) What type of pipe is to be used when penetrating into buildings?

Q19 Response:

Contractor shall use cement lined ductile iron pipe to mating point on drawings

Q20) What is the required test pressure for the 24" CIPP liner?

Question 20 Response:

Same as the waterline - 120 psig.

Q21) The detail for hydrants on plan sheet C501 shows a D.I. short bodied swivel tee for the hydrant. Can HDPE tees with MJ adapters be used in lieu of D.I.?

Question 21 Response:

Yes.

Q22) Per spec section 330523.98 3.1.1 "the contractor shall be completely liable and financially responsible for any damage or disturbance to existing utilities as a part of this work". Will the contractor be compensated for cost associated with unknown and unmarked existing utilities?

Q22 Response:

If any unknown utilities are encountered that conflict with the installation of the new waterline, these conflicts will be treated as a differing site condition and be compensated.

All utilities that are known are shown on the drawings and/or will be marked as part of the Digging and Excavation Permit process as outlined on GI 001 sheet 3 of 4 and within the statement of work.

Cross-reference with Question 9.

Q23) Will NASA would provide an area for the directional boring fluids to dry out?

Q23 Response:

Contractor will need to provide their own provisions to capture, control and handle boring fluids as indicated in Specification 33 05 23.98

The contractor shall be responsible to manage all the fluids. At no time shall the contractor hamper traffic or center operations in an area that is not approved to be closed. At the end of each phase of drilling the contractor will have to remove all foreign debris for complete restoration. At no time may any of the fluid impact any of the NASA utilities or waterways, if the fluid enters or hampers any of the utilities or waterways they shall be repaired to the government's satisfaction at no additional cost to the government including any penalties incurred.

Q24) Can lines that are shown as directional drill be open cut and vice versa?

Q24 Response:

Yes, see GI 001 Sheet 3 of 4 under the section Water Main Installation for further details.

Q25) Are we to keep depths to a minimum or can the waterline be ran deeper to avoid weaving through utilities?

Q25 Response:

The water line plans as depicted are engineered to depths to avoid conflict with existing underground utilities. The contractor shall use what is drawn as the basis of bid, it will be up to the contractor to verify utility depth, location, and avoid existing utilities while maintaining the minimum cover requirements. See GI 001 sheet 3 of 4 for additional requirements. This sheet has all the specific general notes for installation requirements and bid assumptions.

Q26) Detail EXCV-A-2c on sheet C501-1 shows natural sand bedding 6" under the pipe but does not specify what material is then filled to 6" over the pipe. What is the fill from the bedding limit to 6" over the pipe?

Q26 Response:

The pipe shall filled with natural sand (ODOT 703.06) to 6" over the top of the pipe.

Modification to Specification 33 11 00 Water Distribution

3.1.2.3 Thrust Blocks and Restraints

The Contractor shall provide restraint lengths on all mechanical, push-on, or coupler joints regardless of the material.

Submit calculations for government approval on restraint length for each instance.

The Contractor shall provide thrust blocks if restraint lengths cannot be used in accordance with AWWA C150 and details shown on the drawings. All dead ends(caps), tees, bends and hydrants are required to have thrust blocks or restraints. All thrust blocks and restraints must be inspected by the Authority Having Jurisdiction (AHJ) or Government Designee prior to being covered.

Modification to Bid Schedule - Unit Pricing

Unit Price 1

Provide a price per S.F. to undercut 12" of commercial/industrial fill soil and place non woven fabric and 12" of #1 and #2 limestone. This unit price will be used for undercutting of pavement or bridging of trench areas.

Unit Price 2

Provide a price per S.F. to undercut 12" of solid waste soil and place non woven fabric and 12" of #1 and #2 limestone. This unit price will be used for undercutting of pavement or bridging of trench areas.

Unit Price 3

Provide a price per S.F. to install Tensar Tri Ax geogrid TX 190L or equal. This unit price will be used for undercutting of pavement and bridging of trench areas.

Unit Price 4

Provide a price per S.Y. for installation of the pavement section A-1 as shown on C501 sheet 1 of 3 in commercial/industrial fill soil.

Unit Price 5

Provide a price per S.Y. for installation of the pavement section A-1 as shown on C501 sheet 1 of 3 in solid waste soil.

Unit Price 6

Provide a price per S.Y. for installation of the pavement section A-2 as shown on C501 sheet 1 of 3 in commercial/industrial fill soil.

Unit Price 7

Provide a price per S.Y. for installation of the pavement section A-2 as shown on C501 sheet 1 of 3 in solid waste soil.

Unit Price 8

Provide a price per S.Y. for 2" Milling of asphalt and 2" restoration with ODOT 448 Type 1 surface course. Contractor shall provide Star Grid G+PF or approved equal on the milled surface prior to the ODOT 448 application. ODOT 407 Tack coat shall be applied on all surfaces at rate of 0.3 gal/yd. Price shall be all inclusive to include removal of grindings from Lewis field in accordance with GRC Waste Management procedures.

Assumptions:

- The contractor shall assume the undercutting will be completed during pavement or waterline installation services while mobilized.
- The contractor shall also assume the pavement work (Unit Prices 3-7) will be completed while mobilized on site for base bid or option 1 work.

bldg101-sc-n PROFILE

