

MEMORANDUM

TO: Carlos Esguerra, Water Planning and Management, Connecticut DEEP

FROM: Douglas Brisee, PE, Project Manager
Kurt Mailman, PE, Vice President

DATE: March 19, 2021

RE: Response to Comments – Project Plans and Specifications
Old Lyme – Shared Sewer Infrastructure Design

Per your memo dated March 12, 2021, below are the response to your comments as a result of your review of the project plans and specifications for the Shared Sewer Infrastructure Design in Old Lyme, Connecticut.

Comments from Project Manual (Specifications)

1. Have the Associations reviewed and commented on the contract documents?

Response:

Yes, the Associations have reviewed and commented on the draft Contract Documents.

2. The contract documents don't include any provisions related to Covid-19. While vaccination is expected to be widely available later this year, it is recommended to include precautionary measures following CDC's/CT DPH's guidance.

Response:

Specification Section 01140 - Work Restrictions has been updated to include Covid-19 provisions.

3. Bid Advertisement page (1st page). Bid bond paragraph. Please correct "ten percent" versus (5%) inconsistency.

Response:

The Bid Advertisement has been updated to indicate 5%.

4. Bid Advertisement (2nd page): Executive order 3 and 17 is repeated on two different paragraphs on same page.

Response:

The duplicate reference to Executive Orders 3 and 17 in the Bid Advertisement has been removed.

5. Bid advertisement (1st page/last paragraph): correct word "potion" vs "Portion"

Carlos Esguerra, Water Planning and Management, Connecticut DEEP
Response To Comments - Project Plans and Specifications
Old Lyme - Shared Sewer Infrastructure Design
March 19, 2021
Page 2 of 18

Response:

Bid Advertisement has been updated to correct the word from "potion" to "portion".

6. Instruction to Bidders – 1.01: Add definition for “Owner” and “Engineer”

Response:

Instructions to Bidders, Article 1.01 has been updated to include the definition for “Owner” and “Engineer”.

7. Instruction to Bidders - Section 4.01-A: Regarding easements and ROW's. Have all easements needed for construction been secured? Does this include permanent and temporary easements?
Please include in the plans a map clearly delineating the extent and location of easements relevant to this project.

Response:

Yes, all easements and right-of-ways have been secured. Drawing VE-401 has been added to the Contract Drawings depicting all easements and right-of-ways for the project.

8. Instruction to Bidders – Section 4.04-A. Require that contractor's safety program adheres/complies with OSHA (29 CFR 1910).

Response:

Instructions to Bidders, Article 4.04-A has been updated to include language that the Contractor's safety program shall adhere and comply with OSHA (29 CFR 1910).

9. Instruction to Bidders – pre-bid conference: This paragraph says that bidders are “encouraged” to attend meeting, but the bid advertisement states that is mandatory. Please address this inconsistency.

Response:

The Bid Advertisement and the Instructions to Bidders have been updated to be consistent with a non-mandatory pre bid conference.

10. Instruction to Bidders – Articles 12 and 23: Subcontractors retained for any work under the main contract must have a current valid certification with CTDAS if the services to be rendered or materials to be supplied exceed \$500,000.00.

Response:

Instructions to Bidders, Article 12 and 23 has been updated to include the following language: “Subcontractors retained for any work under the main contract must have a current valid certification with CTDAS if the services to be rendered or materials to be supplied exceed \$500,000.00”

Carlos Esguerra, Water Planning and Management, Connecticut DEEP
Response To Comments - Project Plans and Specifications
Old Lyme - Shared Sewer Infrastructure Design
March 19, 2021
Page 3 of 18

11. Instruction to Bidders - Article 19-01: Change “responsible” to “successful” bidder to be consistent with definitions used in the contract. Please be consistent with the use of defined terminology throughout the contract document.

Response:

Instructions to Bidders, Article 19-01 has been updated to reflect “successful” bidder.

12. Instructions to Bidders Article 19-08: update paragraph as follows: ...Owner will consider the funding available, and will award the contract, **following receipt of written authorization from DEEP**, to the **successful** bidder.

Response:

Instructions to Bidders, Article 19-08 paragraph has been updated as recommended.

13. Instructions. to Bidders Article 23: There are three subgroups described under the General Building Construction category in DAS website, what group in your professional judgment applies to this project? Please update specifications accordingly.

Response:

Instructions to Bidders, Article 23 has been updated to specify General Building Construction Group C due to the pump station having “large amounts of integrated scientific or complex mechanical/ electrical equipment in order for them to function”.

14. Payment items – (item 01500.01) – Suggest relabeling this item as field office or construction office.

Response:

Payment Item 01500.01 has been updated to Field Office.

15. Payment Item (01555.03 #2) – Change last word to “Flaggers”

Response:

Payment Item 01555.03 has been updated to reflect “Flaggers”.

16. Payment Item (02321.03) - Delete item # 1.d which is repeated.

Response:

Payment Item 02321.03 item 1d has been deleted.

Carlos Esguerra, Water Planning and Management, Connecticut DEEP
Response To Comments - Project Plans and Specifications
Old Lyme - Shared Sewer Infrastructure Design
March 19, 2021
Page 4 of 18

17. Payment Item (02529.01) – Well testing seems to only apply as it relates to rock excavation or blasting, however as discussed with CT DPH (and mentioned in the attached letter to DPH), is it being considered for establishing a pre and post water quality baseline condition? Whose responsibility will it be to get permission from property owners to collect water samples? Will Owner in coordination with the Town of Old Lyme facilitate this coordination?

Response:

Payment Item 02529.01 – Well Testing only relates to the rock excavation and blasting. Fuss & O'Neill will consult with Association leadership on approach to develop pre-and post-water quality baseline condition.

18. Payment items (02545-01 and 02545-02): Please explain where these two items are expected to be used as it applies to the sanitary sewer project.

Response:

The proposed gravity sewer trunk line along the shore traverses two commercial properties at 85 Swan Avenue and 86 Hartford Avenue. These payment items are provided in the event that the existing septic is disturbed as part of the construction.

19. Payment Item (11316.02 #2): Add word “treatment”.

Response:

The word “treatment” has been added to Payment Item 11316.02.

20. Payment Item A.2 (Helical piles): this alternate item references payments of 02321.03 and 02321.04. Do you anticipate that use of these piles could be used to support any or all structures at the pump station site?

Response:

Helical piles are being proposed as a Bid Alternate in the event that it's determined that it is more cost effective to provide helical piles as opposed to removing all of the unsuitable material. The helical piles are proposed to support the infrastructure in the roadway, not the pump station site. As shown in the details, it is likely that manholes will also be supported on piles.

21. Page EJCDC C-510 “Notice of Award”: Please remove references to Town of Newtown project, including project #.

Response:

Notice of Award has been updated accordingly.

Carlos Esguerra, Water Planning and Management, Connecticut DEEP
Response To Comments - Project Plans and Specifications
Old Lyme - Shared Sewer Infrastructure Design
March 19, 2021
Page 5 of 18

22. Supplementary Condition .1.01.A.49: In addition to “Abnormal Weather Conditions”, add Flood Plain definition pursuant to FEMA.

Response:

Supplementary Conditions section 1.01-A has been updated to include the FEMA definition for Flood Plain.

23. SC 4.01.A In regard to the contract time commencing to run no later than 60 days after the bid opening. Should bid opening be substituted by award of contract? Otherwise how do you reconcile this requirement with the 120-day bid open requirement?

Response:

Supplementary Conditions section 4.01-A has been updated to 120 days.

24. Supplementary Conditions: Add section 5.07 (Environmental and public health considerations): Two items need to be clearly delineated in this new section: 1) Project portions that will take place within FEMA flood plain (AE and VE zones), and 2) construction work near drinking water resources (Private wells). With these two important considerations in mind, please provide descriptions and expectations of adequate protection measures and BMP's to be implemented within these areas such as but not limited to: Storage and use of hazardous substances, refueling operations, temporary and permanent staging and storage of materials, inspection of construction equipment, spill prevention measures, preparation and coordination with Owner and Engineer in anticipation of severe weather, etc. Contract needs to be clear in that these measures must be strictly adhered to and implemented through final project completion.

Response:

Section 5.07 has been added to the Supplementary Conditions as recommended.

25. SC 7.06.A: Add: Contractor shall not allocate more than 50% of the contract price to a single subcontractor.

Response:

Section 7.06.A has been added to the Supplementary Conditions as recommended.

26. Supplementary Conditions: Add a section 7.15 to include key contact information (e.g., LLHD, Owner, Contractor, etc).

Response:

Section 7.15 has been added to the Supplementary Conditions as recommended.

Carlos Esguerra, Water Planning and Management, Connecticut DEEP
Response To Comments - Project Plans and Specifications
Old Lyme - Shared Sewer Infrastructure Design
March 19, 2021
Page 6 of 18

27. Regarding item SC.10.03.A(C): The RPR shall not.(8) “Authorize Owner to occupy the project in whole or in part “Please explain what is the intent/reason for this clause?”

Response:

This reference has been removed.

28. Section 00820 (Project Regulatory Requirements): Please add a copy of General Permit issued by LWRD on August 24, 2020. Please make sure contractor and Owner follow conditions included in this approval.

Response:

A copy of the General Permit issued by LWRD has been added to Specification Section 00820 – Project Regulatory Requirements.

29. Section 00820. Please include copy of permit or minutes of Town’s zoning or ZBA approval for pump station and odor control station.

Response:

Town of Old Lyme zoning approval for pump station and odor control station has been added to Specification Section 00820 – Project Regulatory Requirements.

30. Is the CTDEEP construction stormwater general permit applicable to this project? A copy of the most recent version of this GP can be found via this link: https://portal.ct.gov/-/media/DEEP/Permits_and_Licenses/Water_Discharge_General_Permits/stormconstgp1.pdf

Response:

The disturbance area for the Shared Infrastructure Project is less than the 5 acre threshold. The CTDEEP Construction Stormwater General Permit that was procured for each individual association includes the components of the Shared Infrastructure project where work is proposed within the association limits.

31. Section 01140-3 (1.10): Please reword as follows: This contract will not be awarded until CT DEEP Flood Management Certificate is granted. You may want to consider removing this statement from this section of the contract while keeping it only in the bid advertisement to make potential bidders aware of this issue. The project will not be authorized for award until the FMC is issued.

Response:

Specification Section 01140-3 statement has been removed and the Bid Advertisement has been updated accordingly.

Carlos Esguerra, Water Planning and Management, Connecticut DEEP
Response To Comments - Project Plans and Specifications
Old Lyme - Shared Sewer Infrastructure Design
March 19, 2021
Page 7 of 18

32. 01310-2. In regard to the Erosion and Sedimentation plan and Dewatering plan: What standard or reference document is the contractor expected to follow to develop the plan? Should the 2002 Connecticut Guidelines for Soil Erosion and Sediment Control document be a reference?

Response:

Specification Section 01310-2 has been updated to reference the 2002 Connecticut Guidelines for Soil Erosion and Sediment Control document.

33. 01500-5 (3.3.E.1): Dispose of rainwater (add: groundwater) ... and after “in a lawful manner”...add: “it will not cause adverse impacts to the environment”.

Response:

Specification Section 01500-5 section 3.3 E.1 has been updated accordingly.

34. 01572-1 (1.2): Add the following: Sedimentation and erosion control measures shall be inspected frequently to ensure full functionality.

Response:

Specification Section 01572-1 section 1.2 has been updated accordingly.

35. 01572-8 (2.12): Given the limitations in the project area, is it feasible/reasonable to expect contractor to set up a “frac” tank and ancillary equipment at the pump station site?

Response:

We do not believe it is feasible/ reasonable to expect contractor to set up a frac tank and ancillary equipment at the pump station site given the site constraints. The Contractor is responsible for siting the proposed location for the frac tank and submitting to the Engineer for review and approval.

36. 01572-6 (3.1): Please reconcile this section with section 5.07 discussed in # 25 above.

Response:

This has been completed.

37. 02466 (Helical Piles and support system): This specification has been written around the CHANCE Civil proprietary construction system. Please be aware that pursuant to RCSA Section 22a-482-4(h)(12)(B) no specifications shall be written so as to “sole source” a product or equipment without the explicit written approval of CTDEEP. Given the specific subsurface conditions at the project site, do you recommend the use of this proprietary system if determined cost competitive?. Are there any other original product manufacturers that offer a similar product that meets the project needs?

Carlos Esguerra, Water Planning and Management, Connecticut DEEP
Response To Comments - Project Plans and Specifications
Old Lyme - Shared Sewer Infrastructure Design
March 19, 2021
Page 8 of 18

DEEP may consider authorizing this product for sole source use if such a justification/rationale is provided by Engineer and deemed satisfactory by DEEP. Here is the excerpt from the regulation (RCSA Section 22a-482-4(h)(12)): “(B) Sole Source Restriction. A specification shall not require the use of structures, materials, equipment, or processes which are known to be available only from a **sole source, unless the Commissioner determines, in advance, that the municipality’s engineer has adequately justified, in writing, that the proposed use meets the particular project’s minimum needs** or the Commissioner determines that use of a single source is necessary to promote innovation”

Response:

The Specification was updated to be more generic to encourage competition.

38. 02466 (Helical Piles)- While other specifications are written so that Engineer approves the use of certain particular products, this specification has been written to state that certain aspects related to the use of this product are to be reviewed and accepted by Owner. Will F&O provide the Owner with the professional expertise to review any information submitted pursuant to this section of the specifications?

Response:

The reference to the Owner was removed as requested.

39. 02466(Helical piles) - (Subsection 4.6): Why are the shaft coupling bolts and nuts not epoxy coated? Are these required to be hot-dipped galvanized? Or what other method will protect these against corrosion?

Response:

According to a manufacturer, galvanized is the typical industry standard. Methods that use various other coatings typically do not to serve to protect piles as well because quite often the coating is rubbed off during the installation process.

An acceptable construction alternative would be the installation of a grout encasement around the pile to isolate the galvanized coating from coming into contact with the surrounding area. This scenario has been incorporated into the project. The encasement will increase the strength of the installation, increase the lateral stability and provide added corrosion protection to the pile.

Carlos Esguerra, Water Planning and Management, Connecticut DEEP
Response To Comments - Project Plans and Specifications
Old Lyme - Shared Sewer Infrastructure Design
March 19, 2021
Page 9 of 18

40. 02530: where is LPS piping proposed to be used?

Response:

Information for Low Pressure Sewer Piping is provided in the Contract Documents in the event that a property served by the gravity sewer trunk line along the shore requires the use of a grinder pump to connect to the system.

41. 02530: Please verify that C900 PVC pipe end seals and transitional couplings are specified in this section.

Response:

Yes, C900 PVC pipe end seals and transitional couplings are specified in this section.

42. 02530: Manholes and other sewer and concrete structures (e.g., wet well and pump chamber) are expected to be constructed with a water proofing additive to ensure water tightness. Is this additive expected to protect concrete against chloride-induced corrosion? If not, what other protective measures should be implemented or have been implemented to protect against high chloride levels expected in project areas near the shoreline?

Response:

Yes, the manhole additive is expected to protect concrete against chloride-induced corrosion.

43. 02530 (3.5): This section states that for “wells that pump less than 10 GPM, the well protection zone is the area within a radius of 75 feet from the well”. Are there any wells that pump more than 10 GPM within the project area? If so, please update the protection buffer zone and protective measures as necessary.

Response:

There are no known wells that pump more than 10 GPM in the project area.

44. 02545: Where is this leaching facility in the project area? Is it being directly impacted by the proposed sewer project?

Response:

The proposed gravity sewer trunk line along the shore traverses two commercial properties at 85 Swan Avenue and 86 Hartford Avenue. Leaching facility repair is included in the Contract Documents in the event that the existing septic is disturbed as part of the construction.

45. 08700 (2.10A): Please list one more manufacturer. If not performance-based or sole-source approved by DEEP, specifications shall include at least two manufacturers or brand names plus

Carlos Esguerra, Water Planning and Management, Connecticut DEEP
Response To Comments - Project Plans and Specifications
Old Lyme - Shared Sewer Infrastructure Design
March 19, 2021
Page 10 of 18

the words “or equal.” Please review all applicable sections of the specifications to ensure adherence to this requirement.

Response:

The Specification for the key control is for the Knox Box, which is a town-wide key cabinet for use by the Fire Department. There are no other manufacturers allowed, as the Fire Department needs to be able to access building keys in a standardized box for all buildings in their jurisdiction.

46. Specification 11316 (1.6): It is noted that this section of the specification has been written to establish minimum performance and design requirements but delegating the ultimate configuration of the pump station (as a single unified system) to the contractor and equipment vendor/supplier. Specifications for pumps, motors and VFDs are in most cases developed by municipalities employing the “two or equal” clause. The use of this clause allows contracts to establish and delineate minimum expected quality, configuration, performance and maintenance standards of the equipment.

With this in mind:

- a. The specification uses performance-based language. However, it specifically requires the use of a particular proprietary impeller (Hard Iron TM) which appears to be supplied by only one original equipment manufacturer (OEM). It then goes on to say that if this product is not selected, the contractor shall provide three additional impellers and wear rings to owner. This effectively precludes or significantly restricts the contractor’s ability to provide or propose other equipment.

We draw your attention to RCSA Section 22a-482-4(h)(12)(B) to ensure compliance with this section of the regulations. Considering the number of pump manufacturers and vendors available, it is highly unlikely that DEEP will approve the proprietary language used in this specification. Accordingly, please redraft this specification to list a minimum of two manufactures plus the words or equal or to keep the specification as currently written but without any proprietary language.

- b. What involvement will F&O expect to have in the review of any substantive equipment and configuration submittals prepared by the contractor and equipment vendor to ensure that technical, design, and operational standards of the proposed pump station as an integrated system are deemed acceptable for use in this project?
- c. Has the Engineer discussed this section of the specification with the project Owner? Are they agreeable to the Section 1.6 language?

Carlos Esguerra, Water Planning and Management, Connecticut DEEP
Response To Comments - Project Plans and Specifications
Old Lyme - Shared Sewer Infrastructure Design
March 19, 2021
Page 11 of 18

Response:

F&O will be involved in the construction administration phase and review/process submittals provided by the General Contractor. F&O will discuss Section 1.6 with the Owner to confirm they are in agreement.

47. 11316-5 (1.8 Warranty). Please consider requiring the 12-month warranty to start after final project completion instead of after substantial completion.

Response:

The specification has been updated accordingly.

48. 11316-5 (1.9 extra materials): Where are the spare parts expected to be properly stored and secured during and after construction completion?

Response:

The Associations have a tacit agreement with the Town of East Lyme to use them as Contract Operators. It's likely the spare parts will be stored at an area accessible to their Contract Operators, not at the pump station site.

49. 11316-6 (1.10.B): This language is not acceptable to DEEP. While the distance may ensure that an emergency call is responded to in a timely manner, why is there a minimum square footage requirement of the facility? Is there more than one vendor that could meet this language?

Response:

We are seeking to sole source the submersible pumps for the pump station due to sensitive hydraulic conditions and efficiencies for O&M. A separate Sole Source Request letter will be submitted to DEEP providing justification for review and approval.

50. 11316-6 (1.12 Experience): Please resolve the minimum experience discrepancy in this section of the specifications (i.e., minimum of five 50-hp or larger submersible solids handling pump units...) compared with the second paragraph in Section 1.5 (i.e., no less than 10 pump stations...)

Response:

The requirement in Section 1.5 is for the precast concrete pump station manufacturer, while the requirement in Section 1.12 is for the pump manufacturer.

51. 11316. Please explain what measures have been specified to ensure the proper operation of the station during the winter months and expected low flow conditions.

Carlos Esguerra, Water Planning and Management, Connecticut DEEP
Response To Comments - Project Plans and Specifications
Old Lyme - Shared Sewer Infrastructure Design
March 19, 2021
Page 12 of 18

Response:

The pumps will incur less cycles during the low flow conditions. As a result of this, odor control measures have been provided at the pump station in the form of air piping to the wet well and vent pipe to a dry scrubber unit, augmented by the bioxide chemical feed addition along Route 156 and vortex manhole at the discharge manhole into East Lyme.

52. 11316-26 (Alarm systems): Will the Reduced Voltage Soft Starters (RVSS) be connected to the alarm system?

Response:

Yes, the Reduced Voltage Soft Starters are connected to the alarm system.

53. 11316. Will there be an alarm for when the station loses commercial power and or if there is a problem with back up emergency power or transfer switch?

Response:

Yes, there will be an alarm for when the station loses line power or if there is a problem with the backup emergency power system. Alarms will be sent to contract operators and Cost Sharing Agreement members and their assigns.

54. 11355 (Odor control): We again call your attention to the fact that this specification was developed around an Evoqua Water Technologies odor control system (which is a proprietary system). This is effectively a sole source specification. However, depending on the availability of other OEMs, you need to submit a written justification for DEEP's review and approval requesting a sole source approval. You need to discuss the availability of other OEMs that provide similar Nitrate salt feed systems, if any, and whether they meet the project requirements and needs; and why you recommend the use of this product over any other.

Response:

We are seeking to sole source the odor control system. A separate Sole Source Request letter will be submitted to DEEP providing justification for review and approval.

55. 11355 (Odor control) The specification in section G provides an alternate product called, "Nitrogen Salt Odor Control System", however a preliminary internet search of these words did not yield any results. Is this the company's name or product name?

Response:

We are seeking to sole source the odor control system. A separate Sole Source Request letter will be submitted to DEEP providing justification for review and approval.

Carlos Esguerra, Water Planning and Management, Connecticut DEEP
Response To Comments - Project Plans and Specifications
Old Lyme - Shared Sewer Infrastructure Design
March 19, 2021
Page 13 of 18

56. 13122 (Generator building): See preceding comments. Sole sourcing the HVAC mini-split unit will not be authorized by DEEP. Please remove any references to proprietary products. Use the “two or equal” clause or draft the specification to define expected performance without listing proprietary product information.

Response:

This specification has been revised to eliminate the sole source references.

57. In regard to special or extended warranties. DEEP -CWF will only cover the costs of the initial standard “default” warranty for a product which is typically one year after project completion. Any special warranties included in the specifications that ask the contractor or equipment supplier to provide extended service contracts must be identified as a separate CWF ineligible bid item to be paid for by the Associations.

Response:

All warranties will be manufacturer’s standard warranty.

Comments on Drawings:

58. GC-401: Please move the “within 75” notation for 23 Hartung place to the last column. Whose responsibility will it be to abandon this well? If uncertain, then the sewer line needs to be constructed following the enhanced protective measures coordinated with CTDPH.

Response:

Drawing GC-401 has been updated accordingly.

59. CS-401: regarding use of the enhanced well protection measures near private wells, what construction measures should be put in place by the contractor to abide by the protective measures near private wells? Will the limits of protection buffer zones be field verified by a surveyor? Please update plan notes as necessary.

Response:

A note has been added indicating that well protection areas shall be field verified by the Engineer and General Contractor.

60. CB-402: Please include note informing contractor of proximity of Sheffield Brook culvert pipes in the immediate vicinity of SMH# 97.

Response:

A note has been added to drawing CB-402.

Carlos Esguerra, Water Planning and Management, Connecticut DEEP
Response To Comments - Project Plans and Specifications
Old Lyme - Shared Sewer Infrastructure Design
March 19, 2021
Page 14 of 18

61. CB-402: Regarding note # 5 “When the overburden reaches 7 ft. the organic material below the area does not require excavation”. Does this mean that when overburden reaches 7 ft. below the bottom of sanitary sewer infrastructure? Please clarify note.

Response:

That is correct. This note has been clarified.

62. CB-403: The elevation view in this plan shows the diameter of the casing pipe as 36”. Is this correct? Same comment applies to CB-404.

Response:

Yes, this is correct. An oversized casing pipe is specified to provide the Contractor with ample space to complete the work.

63. CU-401 and other cross section view plans: Cross section views as it applies to protective measures (casing pipe, transition coupling or end caps) within and outside of any 25-ft. well protection areas need to be shown on these plans.

Response:

The profiles have been updated to indicate the sections where double walled force main pipe is required for the 25-foot well encroachments.

64. CU-401: Minimum 18” clearance under water main should also apply to service laterals.

Response:

The note on drawing CU-401 has been updated accordingly.

65. CS-401: is a thrust block or mechanical restraint joint notation missing from the fused pipe bend immediately to the south of Sta. 101+00?

Response:

A callout for a mechanical restraint has been added to the Contract Drawings.

66. CS-403: Please clarify the extent of the intended use of fusible C-900 PVC. The plans (including this one) appear to indicate that fusible pipe will be used outside of well protection zones. Is this correct? Does DOT have any preference or requirements related to fused versus bell and spigot pipe within their right of way?

Carlos Esguerra, Water Planning and Management, Connecticut DEEP
Response To Comments - Project Plans and Specifications
Old Lyme - Shared Sewer Infrastructure Design
March 19, 2021
Page 15 of 18

Response:

The plans have been updated to reflect the following:

- *Bell and spigot force main outside the well protection area*
- *Fusible force main in between 25-foot and 75-foot well protection area*
- *Fusible force main in fusible carrier pipe in 25-foot well protection area*

67. CS-403: This plan is missing the footprint of the odor control station and product feedline. Either include footprint or notation to see CS-501.

Response:

Drawing CU-403 has been updated accordingly.

68. CS-404: Suggest including in the shared contract the installation of those gravity pipe sections located within DOT's right-of-way that would allow OLSBA to connect the section of this community that is located north of Rte. 156 with the rest of the collection system located south of Rte.156. This can be done via a separate bid item included in this contract so that the costs associated with the installation of these pipes can be covered by OLSBA. This would facilitate all of the Route 156 work under the same contract.

Response:

The Cost Sharing Agreement, which defines the Shared Infrastructure Project, doesn't include the gravity segments internal to OLSBA, therefore we cannot include these components in the Shared Infrastructure Project.

We concur in that from a constructability standpoint, your suggestion makes sense. This will be revisited once a Contractor has been procured for the Shared Infrastructure Project and coordinated with the schedule for internal infrastructure construction.

69. CS-404: Please explain the reason for the pipe curvature between stations 145+00 and 147+00.

Response:

For the work along Route 156, DOT has requested that manhole covers be placed outside the tire tracks of vehicles. In the referenced area, there is an existing telecommunication conduit conflict to the north, therefore we need to divert the force main to the south to get the proposed manhole cover out of the tire tracks.

70. CU-407: Will contractor be able to meet minimum required separation of 12-inches between sewer DIP and top of RCPs? Cross section seems to indicate that this may not be possible (Between stations 176+00 to 181+40).

Carlos Esguerra, Water Planning and Management, Connecticut DEEP
Response To Comments - Project Plans and Specifications
Old Lyme - Shared Sewer Infrastructure Design
March 19, 2021
Page 16 of 18

Response:

Yes, we believe the Contractor will be able to meet the required separation distance. As indicated on the drawings, we have specified pre-insulated ductile iron force main pipe in this area because we expect minimal cover over the force main pipe.

71. CS-412: DEEP has been informed via email on March 3, 2021 of the reason the force main pipe has been designed with a bypass fitting at station 237+35 and at station 244+63. Please confirm for the record (incl. information supplied by DOT) confirming that these bypass valves have been added to the project per DOT's request to facilitate the 4-Mile River bridge replacement work and not for any other purpose.

Response:

That is correct. The bypass fitting at Station 237+35 is being provided to facilitate the construction for the future 4-Mile River Bridge Replacement.

72. CD-413 (Vortex System): How susceptible is this system to clogging due to non- dispersible materials? Is the Town of East Lyme aware and supportive of the use of this device within its collection system? Who will be in charge of maintaining this device and how much maintenance will it require?

Response:

The Vortex Force is reportedly not susceptible to clogging because it is on a force main and the velocities should be such that the unit does not clog. The contract operators of the Shared Infrastructure system will be responsible for Operation and Maintenance of the shared collection system including the vortex system.

73. CS-401: it is stated in the specifications that propane tank must be able to run the generator at full capacity for 24 hours of operation at 100% rated power output. This is not consistent with TR-16 which requires fuel supply to run generator for at least 48 hours under full load.

Response:

The 2016 TR-16 Revisions state the following for backup power:

“An emergency power generator or alternative secondary backup or emergency power source should have enough fuel to run under full load or peak flow for at least 48 hours or under normal operating conditions for at least 96 hours, whichever requires the greater amount of fuel to supply power to critical equipment in the event of a power outage at the wastewater treatment facility pump stations, and facilities in the system responsible for conveying flow to the plant.”

Carlos Esguerra, Water Planning and Management, Connecticut DEEP
Response To Comments - Project Plans and Specifications
Old Lyme - Shared Sewer Infrastructure Design
March 19, 2021
Page 17 of 18

The tank size per the TR-16 criteria above requires a max tank fuel volume of 547 gallons, therefore the proposed 1,000 gallon tank is sufficient in size. The specification has been updated accordingly.

74. CU-417: Contractor is expected to install flow meter in OLSBA (near SMH-99). However this is assuming that the sewer system in OLSBA will be ready by the time this flow meter is ready to be installed. Would it be preferable to transfer the installation of this meter to the OLSBA contract?

Response:

The Contract Documents have been updated to reflect that the Contractor completing the improvements internal to OLSBA is responsible for installing the flow meter manhole structure, however the Shared Infrastructure Contractor is responsible for installing the flow meter sensor, flume, power supply, and controls.

75. DT-401: Can each pump independently handle peak design flows?

Response:

Yes, each pump can independently handle the peak design flows.

76. DT-401: The wet well will be equipped with a compressed air injection system to help remove grit and debris from bottom of wet well, is it also the intent to use this system to address odors in the wet well? What other odor control measures (at the pump station site) have been put in place? Is there a need to equip wet well with a hazardous gas detector?

Response:

Yes, the compressed air injection system is provided to address odors in the wet well. We are also providing vent piping extending from the wet well to a dry scrubber unit at the pump station. We do not believe there is a need to equip the wet well with a hazardous gas detector. O&M staff should have portable four gas meters when visiting the pump station.

77. Please fill out and submit the attached checklist for the pump station confirming the design criteria.

Response:

A copy of the CT DEEP Pump Station Checklist for the Old Lyme Shared Infrastructure Project was submitted to DEEP on March 3, 2020. We will forward another copy of the checklist.

78. SU-401 and 402: What is the status of the AMTRAK permit?, is there an estimate indicating when this permit might be issued?

Carlos Esguerra, Water Planning and Management, Connecticut DEEP
Response To Comments - Project Plans and Specifications
Old Lyme - Shared Sewer Infrastructure Design
March 19, 2021
Page 18 of 18

Response:

The AMTRAK permit is still pending. F&O continues to follow up with AMTRAK. Last update indicated that they are continuing to look into this project and we should have more information soon.