



CITY OF NEWBURYPORT
MAYOR'S OFFICE
60 PLEASANT STREET
NEWBURYPORT, MA 01950
TWATKINS@CITYOFNEWBURYPORT.COM
978-465-4463

Request for Proposals No. 24-04

Bartlet Mall Frog Pond Restoration Project

Addendum #1

All bidders shall acknowledge receipt of this Addendum #1 within their Proposal.

1. Please note the following changes to specified dates in the bid documents:
 - a. The bid closing deadline has been extended to **11:00 AM on August 29, 2023**.
 - b. The required project completion date has been extended to **July 26, 2024**.
2. Revisions to Section 01 2000 – Measurement and Payment (updated section in Attachment 1)
 - a. Paragraph 1.12 Item 7, 1.f
This paragraph has been DELETED and REPLACED with the following:
Furnish, design, and install building structure with finishes as specified, including coordination with for approval by Engineer, and City of Newburyport's Parks Division
3. Revisions to Section 33 1201 – Delegated Design for Pump Building (updated section in Attachment 1)
 - a. Paragraph 1.3 B.1.a.4
This paragraph has been DELETED.
 - b. Paragraph 2.1 B.1.d
This paragraph has been DELETED.
 - c. Paragraph 2.1 G
This paragraph has been modified to ADD the following after the end:
Noise from within the Pump House cannot exceed 45 decibels (dB) outside the Pump House.
 - d. Paragraph 3.4 B
This paragraph has been DELETED and REPLACED with the following:
Provide physical mockup of brick pattern, string pattern, slate, and door veneers.
4. The estimated quantities in the Schedule of Values (Appendix A of the bid documents) have been revised for the following:
 - a. Item 11a (Placement of Imported Armor Stone, tons)
 - b. Item 11b (Placement of Imported Benthic Sediment, tons)
 - c. Item 15b (Flexible Pavement Installation at Eppa Way Entrance, square feet)
 - d. Item 17f (Flexible Pavement Installation) has been deleted as it was repetitive of Items 14b and 15b.

Please use the updated version in Attachment 2 as a superseding Schedule of Values.

5. DELETE Drawing C-400 and REPLACE with the attached revised Drawing C-400.

RESPONSES TO QUESTIONS FROM PROSPECTIVE CONTRACTORS

1. Specifications for Div 2 Site Work says that “Full” Dewatering cannot be done from November 15th until March 1. If the pond is dewatered before November 15th can it be left dewatered during those winter months?
A: Yes.
2. Please provide a detail of construction for the bid alternate for the granite seat height blocks.
A: Please reference Specification Section 04 3010 – Granite Seat-Height Blocks and Detail 2 on Drawing C-202.
3. Is a concrete foundation required for the granite seat height blocks?
A: No.
4. Is a 2 foot or 4 ft thick bedding of crushed stone required for the granite seat height blocks?
A: See Detail 2 on Drawing C-202 for Foundation Stone dimension details.
5. Will mortar be required between the granite seat height blocks?
A: No.
6. Is the intent to remove the solids/sludge at the bottom of the pond prior to placing the liner and any other materials?
A: No. The intent is for all sediment to remain and be rough graded in the pond footprint as shown on Drawing C-104. The liner system will be installed over the rough graded sediments per Specification Section 35 4310 – Liner Installation.
7. If the solids/sludge at the bottom of the pond is to be removed who is responsible for the disposal fees?
A: Sediments will be reused and regraded within the pond basin per the Contract Documents.
8. Why is it required to install the well before any other work is done? It is very difficult at this time to get well drillers to schedule a well installation.
A: Well drilling and testing is critical to understanding and evaluating the availability of water to replenish the pond. There is no guarantee in bedrock drilling and every precaution has been taken to identify the places to have the highest probability of water through a Fracture Trace Analysis (FTA) performed by a hydrogeologist. Ideally, well drilling is done prior to any construction before the site becomes thoroughly disturbed by rigging equipment. Drilling later leaves much to chance to leave until the end. Early drilling allows for the ability to drill deeper (on a unit cost basis) or to pivot to the alternate well location identified on the Drawings or evaluate another yet to be determined program or drilling site. A non-potable water supply is critical to pond restoration and should be confirmed viable at the outset of construction to allow for additional drilling depth and locations on a unit price basis. The later the well is drilled, the bigger the risk of completing the project on time and on budget. If a later well drilling date is preferred due to sourcing and scheduling, please allow in bid pricing for the possibility of remobilizing rig equipment on site to “Prop. Well B” along Pond Street, noted as “Alternate Deep Bedrock Well Site Location” as shown on C-106. The maximum project budget is fixed and contingency money cannot be exhausted before the final bedrock well is drilled. However, while this is as a critical part of the overall infrastructure, other work may proceed while the advancement of the bedrock well is performed. Alternative schedules will be considered to facilitate the start of work as soon as possible. Moreover, discharge from the bedrock well drilling operation and its pump test is anticipated to be discharge into the pond before the pond is dewatered as part of the NPDES permit.
9. Please provide a specification for the materials in the “Hibernacula Area’s”
A: Please see Detail 4 on Drawing C-201 and the description of Benthic Sediment in Specification Section 31 0000 – Earthwork.
10. Is a temporary fence around the entire construction site a requirement?
A: Yes, as shown on Drawing C-103.
11. Is silt fence and or silt sock required for this project? If so how many lineal feet are required?

A: Required erosion controls are detailed on Drawings C-103 and C-200 and consist of coir logs and silt sacks. Details for these products are in Specification Section 01 5000 – Site Preparation. Please note, a second perimeter of coir logs shall be installed around the pond after the liner materials have been installed, as per note 2 on Drawing C-103.

12. Please provide a specification for the crushed stone on the project.

A: Crushed stone details are in Specification Section 31 0000 – Earthwork.

13. The bid form does not mirror the schedule of values. Please confirm the quantities shown on the schedule of values are the basis of the bid and quantities will be adjusted up or down based on the quantities shown on the schedule of values.

A: Correct. Specification Section 00 0300 – Form of General Bid should include the total Base Bid and the cost of Alternatives 1a, 1b, and 2. An updated Schedule of Values has been provided in this addendum to address the quantities.

14. Please provide a copy of the Pre-Bid Attendee list with contact information.

A: See Attachment 4.

15. Can you please provide clarification on the insurance requirements for this project. General conditions 6.03 state E. Umbrella and F. Contractor's Pollution are required but no limits are provided supplementary conditions. Also, the General Conditions require a builder's risk for full contract amount including flood but the Supplementary conditions takes away the flood requirement.

A: The City of Newburyport will require a minimum \$1 million limit for both the Umbrella and Pollution Liability policies. There will be no requirement for either a Builder's Risk Policy or Flood Insurance Policy as outlined in either the General Conditions and/or Supplementary Conditions.

16. Where does the power for the bedrock well come from?

A: From the pump building distribution panel and controlled through the pump station. See Drawing C-106. Electrical is delegated design; refer to Section 26 0500 – Delegated Design for Electrical.

17. Where does the power for the pump station come from?

A: From High Street as shown on the utility plans. See Drawing C-106. Electrical is delegated design; refer to Section 26 0500 – Delegated Design for Electrical.

18. Has a work order for the power been ordered with Eversource?

A: No, this is delegated design and procurement for all electrical by contractor. Refer to Section 26 0500 – Delegated Design for Electrical.

19. Please provide a duct bank detail for the electrical duct banks.

A: See Detail 6 on Drawing C-203.

20. Does the interior concrete block need to be painted?

A: No.

21. Does the ceiling of the pump station need to be insulated and sheet rocked?

A: No, the ceiling of the pump building does not need to be sheet rocked. It is the Contractor's means and methods to determine if the ceiling of the pump building should be insulated or not. Refer to Section 33 1201 – Delegated Design for Pump Building for temperature, air change, insulation, moisture prevention, sound, etc. requirements for the pump building.

22. Drawing C-302 shows the process piping to be flanged piping. Please confirm this pipe can be glued Sch 40 PVC piping with flanged connections at the process equipment.

A: The sand filter used for the basis of design includes flanged connections that are installed at the factory. If flanged adapters are needed to make connections between the sand filter selected by the Contractor and the proposed HDPE pipes, that is the Contractor's means and methods to do so.

23. Please confirm that if once the pond is dewatered and if the sediment is too liquid to be able to support the installation of the geo-grid and the liner using wooden mats that it will be considered "unforeseen conditions" and the contract will be renegotiated to compensate for the additional costs.

A: This question is highly speculative and is contradictory to the findings of the various investigations. Based on this, the City declines to answer this question at this time.

24. Please provide the contact information for the vendor who is the basis of design for the pumps, sand filters and nanobubbler system.

A: Refer to Section 33 1200 – Pump System for recommended manufacturers. It is the Contractor’s means and methods to select equipment that will meet the design intent and fit within the pump building.

25. Please confirm that we will be able to work in the “25ft no work zone” shown on the drawing.

A: Confirmed. Please refer to the Variance provided by the Conservation Commission at the end of the Order of Conditions in Appendix D of the bid documents.

26. Please explain the quantities in the Appendix A “Schedule of Values” and how they may affect the lump sum bid on the bid form and that those quantities will not be used for upward or downward mobility in the contract amount.

A: Please refer to the response to Question No. 13.

27. After contacting liner manufacturers, it is recommended to use a 40 mil HDPE liner in lieu of the 20 mil liner specified. Please clarify.

A: The specification requires a minimum 20 mil HDPE or LDPE liner. If the Contractor would like to propose a 40 mil HDPE liner as a value engineering alternative, it will be considered.

28. Given site conditions, would a pre sprayed polyurea panel pond liner be considered as an alternative in lieu of the HDPE/LDPE system specified in Section 35 4310. These systems are high tensile strength with very good elongation and can contour to the finished site grade. They are widely used as a liner for these conditions and services.

A: Alternate products will be considered in accordance with the Specifications, however for the purpose of providing your proposal, please assume HDPE or LDPE will be installed.

29. What is the construction estimate for the project?

A: The construction estimates are as follows:

Base Bid- \$2.27M

Alt 1A- \$156K

Alt 1B- \$40/ton

Alt 2- \$640/lf

30. Can you confirm the schedule of values does not match the intended scope of work and is not required as part of the bid form?

A: The revised Schedule of Values does match the intended scope of work and is required as part of the bid form. Please see response to Question No. 13.

31. Does the pond need to be dewatered to some depth below the proposed liner until the piping, liner, and soils on top of it are completed?

A: Section 02 1400 – Dewatering requires that the pond be dewatered for installation of the liner system, including dewatering of surface runoff and bedrock well water during development and testing. It is the responsibility of the Contractor to select the appropriate dewatering depth for liner system installation.

32. Would the City consider an allowance for the pump building design and construction portion of the work as the design is not complete?

A: Item 7 in the Schedule of Values that would act as the allowance for design and construction of the pump building. The design parameters and constraints for the pump building can be found in Section 33 1201 – Delegated Design for Pump Building.

33. Can you confirm what if any permits and fees will be needed for the pump building design and construction? Is there board or committee review or just a building and sub trade permits and would those fees be waived?

A: It is the Contractor’s responsibility to confirm all necessary permits and/or fees for the pump building design and construction. It is anticipated that a Building Permit, an Electrical Service Permit, and a Plumbing Permit are required. It is anticipated that City permit fees will be waived

for this project. Refer to Section 33 1201 – Delegated Design for Pump Building for the review approvals needed for the building.

34. Can you confirm what kind of access will be needed for the fountain contractors work? Such as is a road to the fountain required that can handle a crane? Does the access need to come from a certain direction or location?

A: The contractor for the fountain project is responsible for their own access, as needed. The fountain removal contractor is also responsible for any damage caused to this project as part of their removal and replacement efforts. The Contractor for the pond project is only responsible for coordinating access with the fountain project contractor.

35. Is any testing, permitting, or special handling required for soil and sediment relocation onsite?

A: Please refer to Specification Section 01 3500 – Health and Safety, specifically 1.5.B for special handling requirements for sediment. The sediments do contain levels of urban contaminants and the selected Contractor should take the appropriate precautions as outlined in Section 01 3500. Per Specification Section 31 0000 – Earthwork, sediments must be reused within the pond basin. No other testing, permitting, or special handling requirements are required for onsite grading or reuse of soil and sediment. Please review Section 31 0000 – Earthwork for onsite soil and imported material compaction requirements.

36. Is the contractor responsible for all NPDES permitting, reporting, testing, and monitoring for earthwork and dewatering to include a remedial general permit dewatering plan and permit on a lump sum basis?

A: Details on responsibilities for the NPDES DRGP are included in Section 01 1400 – Dewatering. Unless specifically identified as Engineer responsibility, permits are the responsibility of the Contractor to identify the need of and apply for. Costs for procurement of necessary permits shall be included in the Schedule of Values/Bid Form. Costs for City-issued permits will not be necessary for this project, as it is a City-funded project.

37. Please confirm the final condition at the access drive from Auburn Street. Is the brick sidewalk and granite curbing being removed and replaced with just flexipave? Does this access need to be handicap accessible? Is the existing crosswalk need to be adjusted or a ramp added? Are the existing granite stairs to be removed to be salvaged for the City or just disposed of?

A: Brick sidewalk and granite curbing (both at the street) will remain. Any adjustments to the crosswalk will be done by DPS. The new flexible pavement area will begin after the brick sidewalk and will replace the existing gravel walkway and granite stairs. We have received a variance by the Architectural Accessibility Board that states this flexible pavement walkway does not need to be ADA accessible, but should match the design grades. The granite stairs will be removed by others (the contractor building the NW corner slope will remove them).

38. Is there temporary power onsite available for the project use? There appears to be an electrical service on the pole at the grass field on Pond Street?

A: The referenced pole can be used for temporary power for project use, and the cost of electricity will be absorbed by the City. Permitting, coordination, and gaining access to the electricity are the responsibility of the Contractor.

39. Is the grass field along the Pond Street side of the site that is within the limit of work fencing able to be used for stockpile of materials and equipment staging?

A: Please refer to Drawing C-103. Stockpiling, staging, refueling of equipment, etc. must remain outside of the 100-foot Buffer Zone. The grass field along Pond Street is allowable for these activities as long as they remain outside of the 100-foot Buffer Zone.

40. If police details are required for the work will they be paid for by the city?

A: The Contractor will not be responsible for any police detail fees as this is a City project, however they will be responsible for coordination with the Police Department.

41. The 20 mil pond liner calls for crushed stone to be laid directly on top of it but the specifications say no equipment is allowed on the liner. Is the intent that the liner and soils are to be installed in sections to allow machine reach over the liner to install layers of soils?

A: It is the Contractor's responsibility to determine the means and methods to install the liner components without damaging them.

Please note, that Armor Stone (Section 35 4310 – Liner Installation) is to be placed on the HDPE/LDPE, not Crushed Stone (Section 31 0000 – Earthwork). Armor Stone contains a mixed gradation including 25-50% sand and rounded to sub-rounded gravel.

42. It appears based on the soils information that the existing pond bottom is extremely soft and probably can not support the type of machinery necessary to install the planned liner and soils on top of the liner. If stone or gravel material had to be added to the sediment at the bottom of the pond to allow for construction access would that be acceptable and how would that be paid for?

A: The selected contractor is encouraged to provide any Value Engineering solutions as part of their bid.

Attachment 1 – Replacement Specification Sections

SECTION 01 2000 MEASUREMENT AND PAYMENT

PART 1 GENERAL

1.1 RELATED DOCUMENTS

- A. This Section of the Specifications is only a portion of the Contract Documents. All of the Contract Documents, including Division 00 – Procurement and Contracting Requirements, Division 01 – General Requirements, Appendices, and Drawings apply to this Section of the Specifications.

1.2 SUMMARY

- A. The items listed in the Schedule of Values constitute all pay items for completion of the Work.

1.3 VALUE-ADDED PROPOSALS

- A. All Contractors submitting Bids for the Project must complete a Base Bid for the Work as currently constituted in this section (inclusive of providing prices for all alternative items).
- B. The Contractor may choose to include value-added proposal(s) as part of their Bid.
 - 1. If a value-added proposal is submitted, identify the potential benefits to Owner in terms of cost, schedule, and constructability as appropriate.
 - 2. List Base Bid Items affected/substituted by the value-added proposal.
 - 3. Clearly identify the item(s) in the Base Bid that would be affected if the value-added proposal is accepted by the Owner.

1.4 PAYMENT TERMS

- A. Payment on invoices will not be made unless the proper supporting documentation has been submitted and approved by the Owner and Engineer.
- B. Payment for the applicable pay items within an invoice period must include full compensation for all labor, products, tools, equipment, fuel, transportation, services, incidentals, erection, application, installation, overhead, profit, and sales and use taxes.
- C. Payment will not be made for any of the following:
 - 1. Products wasted or disposed of in a manner that is inconsistent with the Contract Documents or as determined by the Owner and Engineer.
 - 2. Products determined to be unacceptable by the Owner or Engineer before or after placement.
 - 3. Products not unloaded or successfully delivered from the transporting vehicle.
 - 4. Products placed beyond the lines and levels of the required Work as shown in the Contract Drawings without approval from the Owner and Engineer.

5. Loading, hauling, and disposing of rejected materials.
 6. Handling, transporting, or restocking of products that remain on-hand after completion of the Work.
 7. Additional work undertaken to expedite the Contractor's operations.
 8. Repair or replacement of property located within or adjacent to the work area where damage is directly or indirectly attributable to the Contractor.
- D. Each invoice will cover all Work performed during the respective invoice period.
- E. Payments for lump sum items will be made based on the percent completion of the pay item or as per the milestones listed with the specific pay item upon approval by the Owner and Engineer. The Owner and Engineer's judgments of lump sum items' percent completion will be made in reference to the Contractor-submitted Schedule of Values (which has been reviewed and accepted by the Owner and Engineer).

1.5 SUBMITTALS

- A. Submit a Schedule of Values to the Owner and Engineer for review and acceptance as detailed in the Specifications.
- B. Submit monthly invoices in accordance with the terms of the Agreement and Specifications.

1.6 QUANTITY ESTIMATES AND UNIT PRICES

- A. The estimated quantities shown on the Schedule of Values are not guaranteed and are solely for the comparison of Bids when determining an initial contract price. The Owner reserves the right to increase or decrease any pay item quantity or to eliminate any pay item. The elimination or quantity adjustment of any pay item shall not invalidate the Agreement.
- B. Verify the estimated quantities for unit prices prior to commencing the Work. If the actual Work requires more or fewer units than the estimated units indicated on the Schedule of Values, provide the required number of units at the contracted unit price per the Agreement. The Contractor may not exceed estimated quantities without prior written approval from the Owner and Engineer.
- C. For all unit price work, the contract price will include an amount equal to the sum of the unit price for each pay item multiplied by the estimated quantity of each item as indicated on the Schedule of Values.
 1. For work that is bid at a nonrepresentational bid price to complete the work associated with that item (e.g., the bid price is \$0.01) and the item is later removed from the contract or significantly revised in its quantity, the Owner reserves the right to negotiate a representative bid price for crediting purposes. In the event that negotiations are unproductive, the Owner reserves the right to use MassDOT average bid prices for said items.

1.7 MEASUREMENT OF QUANTITIES

- A. Measurement by Weight:
 - 1. Weigh scales must be certified in accordance with applicable laws and regulations for the state in which the scales are located. Certification must be within one year prior to the date of use.
 - 2. The term “ton” will mean the short ton, consisting of 2,000 pounds.
 - 3. For shipments to off-Site disposal facilities, trucks will be weighed at the receiving facility for the purpose of measuring the quantity of Work for payment.

- B. Measurement by Volume:
 - 1. Volume quantities will be measured as the in-place “neat” volume of the Work performed.
 - 2. The Project Surveyor, will compute volumes of measured Work using survey data and a computer aided design software package on behalf of the Contractor.

- C. Measurement by Area:
 - 1. Area-based measurements for payment are to be performed by the Project Surveyor unless an alternate basis for measurement is approved in advance by the Engineer.

- D. Linear Measurement:
 - 1. Measure distance by linear dimension at the item centerline or mean chord and verified by the Engineer. Measurements for payment are to be performed by the Project Surveyor, unless an alternate basis for measurement is approved in advance by the Engineer.

- E. Measurement by Time:
 - 1. Measure time by the actual time, and record in the Contractor Daily Report. Recorded time should be rounded to the nearest time unit specified by the applicable pay item and verified by the Engineer.

1.8 ASSESSMENT OF NON-CONFORMING WORK

- A. Replace Work, or portions of the Work, that do not conform to the requirements of the Specifications and Contract Drawings as assessed by the Engineer.

- B. If, in the Owner and Engineer’s opinion, removing and replacing the nonconforming Work is impractical, the Owner and Engineer will select one of the following remedies:
 - 1. The unit price may be adjusted at the discretion of the Owner and Engineer (i.e., a credit given to the Owner).
 - 2. The nonconforming Work shall be partially repaired per instructions from the Owner and Engineer, and the unit price may be adjusted at the discretion of the Owner and Engineer (i.e., a credit given to the Owner).

- C. The Owner and Engineer’s authority to assess nonconforming Work and to identify payment adjustments therefrom is final.

1.9 ELIMINATED ITEMS

- A. If any items contained in the Contract Drawings or Specifications are found unnecessary for the proper completion of the Work, the Owner and Engineer may eliminate such items from the Work upon written order to the Contractor. Such action will in no way invalidate the Agreement.
- B. The elimination of any pay item(s) will have no effect on the price of any other pay item(s).
- C. The Contractor will be paid for all Work performed and all authorized costs incurred, including the mobilization and return of materials, prior to the elimination of any items.

1.10 WORK NOT PAID FOR SEPARATELY

- A. **Earth Excavation.** Payment for earth excavation to the depths indicated on the Contract Drawings or authorized by the Engineer for the construction of all structures (foundations, dry wells, , wet well, etc.), underground utility conduits, underground utility pipe lines and appurtenances including disposal of the excavated materials in fills, backfills, embankments, designated stockpiles, or as spoil, as approved by the Engineer, is included in the prices for the various Items of Work in the Schedule of Prices and no separate payment will be made therefor.
 - 1. **Pumping, Draining and Bailing related to Earth Excavation.** Payment for all necessary pumping, draining, bailing etc., including the use of underdrains or well points, is included in the prices for the various Items in the Schedule of Prices and no separate payment will be made therefor.
 - 2. **Filling, Backfilling, Embankment and Disposal of Surplus Materials related to Earth Excavation.** Payment for filling, backfilling for all structures (foundations, dry wells, bedrock well(s), wet well, etc.), underground utilities, conduits, pipe lines and appurtenances including construction of embankments, trench bedding materials (sand, crushed stone, controlled density fill, ordinary borrow, etc.) and their compaction, and disposal of surplus imported material is included in the prices for the various Items of Work in the Schedule of Prices and no separate payment will be made therefor.
 - a. **Gradation Testing and Compaction Testing related to Earth Excavation.** Payment for required testing to ensure that the backfilled materials and specified compaction has been achieved is included in the prices bid for the various Items in the Schedule of Prices and no separate payment will be made therefor. Payment may be withheld until test results are provided to the Owner and the Engineer.
 - 3. **Sheeting, Shoring and Bracing related to Earth Excavation.** Payment for all necessary sheeting, shoring, trench boxes and bracing, etc. including the removal and abandonment in place (only to the extent permitted by the Engineer) is included in the prices for the various Items in the Schedule of Prices and no separate payment will be made therefor.
 - 4. **Rock Excavation related to Earth Excavation.** Payment for furnishing all materials, labor, tools and equipment and for performing all work to extract the rock (ledge rock and/or boulders) not exceeding one cubic yard in volume in

place, as measured before removal from excavation, that would have been removed if the excavation had been made everywhere to a depth of 6-inches below the underside of the pipe/conduit/structure, and to a width of 12- inches greater on each side than the outside dimensions of said pipe/conduit/structure is included in the prices for the various Items of Work in the Schedule of Prices and no separate payment will be made therefor.

a. Full compensation for furnishing all materials, labor, tools and construction equipment and for performing all work required for placing and compacting crushed stone used replace excavated rock in pipe trenches to 6-inches below and to 12-inches above the pipe is included in the prices for the various Items of Work in the Schedule of Prices and no separate payment will be made therefor.

B. **Work Time Premiums.** Payment for work to be performed on Saturdays as indicated in the Contract Documents is included in the various Items of work in the Schedule of Prices and no separate payment will be made. Contractor is responsible for adhering to all State and Federal wage regulations for premium time.

1.11 MEASUREMENT AND PAYMENT OF BID ITEMS

- A. The Schedule of Values lists all the pay items for the Work.
- B. Quantities and measurements supplied or placed as part of the Work, in accordance with the Specifications and Contract Drawings and verified by the Owner and Engineer, will determine payment for all unit price work.
- C. The Owner and Engineer reserves the right to reject the Contractor's measurement of Work. If any measurement of Work is rejected, the Owner and Engineer will have the Work remeasured at the Contractor's expense by a second independent surveyor that is mutually agreeable to both the Owner and Engineer and the Contractor.

1.12 BASE BID PAY ITEMS

Item 1 Pre-Mobilization Submittals

1. Work required to complete Pre-Mobilization Submittals includes, but is not limited to:
 - a. Collaboration with the Owner and Engineer on adjusting the Contract Documents to reflect any Contractor-proposed and Engineer-accepted value engineering proposals.
 - b. Preparation, submission, and coordination with Owner and Engineer for all required pre-mobilization submittals, as detailed in the Contract Documents.
 - c. Participation in weekly virtual coordination meetings with the Owner and Engineer until mobilization occurs and regular construction meetings begin.
2. Pre-Mobilization Submittals will be measured for payment as one unit, complete as specified.

3. Payment for Pre-Mobilization Submittals will be made on a percentage-completion-of-lump-sum basis and will constitute full compensation for all labor, supervision, materials, equipment, incidentals, and all other costs necessary to complete the Pre-Mobilization Submittals work.

Item 2 Mobilization – General

1. Work required to complete Mobilization includes but is not limited to:
 - a. Movement of personnel, equipment, and materials to the Site if such movement is not included in any other Bid Item.
 - b. Bonds required by the Contract.
2. Mobilization will be measured for payment as one unit, complete as specified.
3. Payment for Mobilization will be made on a percentage-completion-of-lump-sum basis and will constitute full compensation for all labor, supervision, materials, equipment, incidentals, and all other costs necessary to complete the Mobilization work.

Item 3 Demobilization

1. Work required to complete Demobilization includes, but is not limited to:
 - a. Final removal of personnel, equipment, and materials from the Site if such movement is not included in any other Bid Item.
 - b. Dismantling removal of all constituent components from the Site.
 - c. Removal of all temporary fencing and staging areas.
 - d. Completion of any final punch list items generated by the Engineer and Owner.
 - e. Preparation, submittal, and revision of all closeout submittals as detailed in the Contract Documents, if required.
 - f. Performing a final cleaning and restoration of all laydown areas used during the performance of the Work, and leaving all the used laydown areas in a neat and orderly condition as assessed by the Engineer.
2. The Demobilization pay item is for the singular and final removal of personnel, equipment, and materials from the Site. This pay item is not intended to be used for any interim, temporary, or partial removal of personnel, equipment, and materials from the Site prior to the completion of the Work.
3. Demobilization will be measured for payment as one unit, complete as specified.
4. Payment for Demobilization will be made on a percentage-completion-of-lump-sum basis and will constitute full compensation for all labor, supervision, materials, equipment, incidentals, and all other costs necessary to complete the Demobilization work.

Item 4 Site Preparation

1. Work required to complete Site Preparation includes but is not limited to:
 - a. Preparing and submitting to the Engineer a Utility Location Plan as detailed in the Specifications.
 - b. Performing any clearing, grubbing, or ground improvement (e.g., placement of gravel and/or geotextile) required to prepare all the laydown areas selected for use by the Contractor to accommodate their selected means and methods.

- c. Installation of signage, safety barricades, security fencing, security gates, and any other perimeter controls at all laydown areas.
 - d. Installation of sediment and erosion controls and of anti-tracking pads at all laydown areas as required by the Contract Documents.
 - e. Installation of tree protection fencing as required by the Contract Documents.
 - f. Modification (e.g., road widening, adding turnouts, etc.) of any existing haul and/or access roads to accommodate the Contractor's selected means and methods.
 - 1) No trees may be pruned or removed to accommodate these modifications.
 - g. Mobilization and initial setup of all construction office trailers.
 - h. Initial connection and setup of all temporary utilities and services required to complete the Work, including coordination with utility providers.
 - i. Removal and demolition of existing pavement and stairways as shown on the Contract Drawings.
- 2. The Site Preparation pay item work is to include the preparation of all laydown areas selected for use by the Contractor to complete the Work as detailed above.
 - 3. Site Preparation will be measured for payment as one unit, complete as specified.
 - 4. Payment for Site Preparation will be made on a percentage-completion-of-lump-sum basis and will constitute full compensation for all labor, supervision, materials, equipment, incidentals, and all other costs necessary to complete the Site Preparation work.

Item 5 Bedrock Well Installation

- 1. Work required to complete Bedrock Installation includes but is not limited to:
 - a. Procurement of necessary permits
 - b. Furnish and install as shown and/or specified within the Contract Documents:
 - 1) Drilling in Overburden (Unit Price Basis)
 - 2) Drilling in Bedrock (Unit Price Basis)
 - 3) Bedrock Well Casing in Overburden (Unit Price Basis)
 - 4) Bedrock Well Casing in bedrock (Unit Price Basis)
 - 5) Grout sealing annular space around well casing for aquifer and well protection.
 - 6) Pitless Adapter Unit and integral spool piece
 - 7) Sanitary Well Seal
 - 8) Curb Stop and Waste Valve for Winterization
 - 9) Bedrock well pipe, tracer tape, and fittings from Bedrock Well to Pump Building and Pump System
 - 10) Conduit, and wire, tracer tape from Bedrock Well to Pump Building and Pump System
 - 11) Well Tile Manhole and Cover
 - 12) Submersible Pump and Motor, Drop Pipe, Check Valve, and Submersible Power Wiring (including wire spacer)
 - 13) Loam and Seed patches for utility connections/installations
 - c. Develop and fracture opening for bedrock well.

- d. Test well production utilizing temporary test pumps.
 - 1) Step-Drawdown Test
 - 2) Yield Test
 - 3) Recovery Test
2. Bedrock Well Installation will be measured for payment per linear foot of drilling depths in overburden and bedrock, and well casing installed as specified based on final as measured in field.
3. Payment for Bedrock Well Installation will be made on a percentage-completion-of-lump-sum basis and will constitute full compensation for all labor, supervision, materials, equipment, incidentals, and all other costs necessary to complete the Bedrock Well Installation work.

Item 6 Pump System Procurement

1. Work required to complete Pump System Procurement includes but is not limited to:
 - a. Procurement of necessary permits
 - b. Furnish and install as shown and/or specified within the Contract Documents:
 - 1) Sand Filter System
 - 2) Main Submersible Pumps
 - 3) Nanobubble Generator
 - 4) Liquid Injection System
 - 5) Liquid Level Sensor
 - 6) Wet Well and waterproofing of pipe penetrations.
 - 7) Domestic water service (within building footprint), Reduced Pressure Zone Backflow Preventer Assembly, Maintenance Hose Bibb and Isolation Valves.
 - 8) Intake Pipe and Mesh Screen
 - 9) Pipe Penetration System through Liner System for each pipe penetration within this Bid Item into the Pond.
 - 10) Pre-Packaged Pump Station, including but not limited to:
 - a) Programmable logic controller (PLC), Variable Frequency Drive (VFD) controls for pumps, Pump Starters, integral pipes and fittings/appurtenances, Liquid Level Controls, and pressure sensors.
 - b) Factory Testing
2. Pump System Procurement will be measured for payment as one unit, complete as specified.
3. Payment for Pump Procurement will be made on a percentage-completion-of-lump-sum basis and will constitute full compensation for all labor, supervision, materials, equipment, incidentals, and all other costs necessary to complete the Pump System Procurement work.

Item 7 Pump Building Procurement

1. Work required to complete Pump Building Procurement includes but is not limited to:
 - a. Procurement of necessary permits

- b. Delegated Design of the Pump Building by a Structural Engineer and/or an Architect registered in the Commonwealth of Massachusetts.
 - c. Delegated Design of the Pump Building Foundation by a Structural Engineer registered in the Commonwealth of Massachusetts
 - d. Delegated Design of the Pump Building's Electrical System by an Electrical Engineer registered in the Commonwealth of Massachusetts.
 - e. Mock up/Rendering of Pump Building
 - f. Furnish, design, and install building structure with finishes as specified, including coordination with for approval by Engineer, and City of Newburyport's Parks Division.
 - g. Furnish and install as shown and/or specified within the Contract Documents:
 - 1) Foundation and frost wall
 - 2) Interior Electrical Service (within building footprint), conduit, wire, junction boxes, and distribution panel
 - 3) Electrical grounding system
 - 4) Interior Lighting
 - 5) Exterior Lighting
 - 6) HVAC system
 - 7) Building waterproofing system
 - 8) Cellular Communications (antenna and router)
2. Pump System Procurement will be measured for payment as one unit, complete as specified.
3. Payment for Pump System Procurement will be made on a percentage-completion-of-lump-sum basis and will constitute full compensation for all labor, supervision, materials, equipment, incidentals, and all other costs necessary to complete the Pump System Procurement work.

Item 8 Pond Dewatering, Water Treatment System, & Coordination of Fountain Removal

- 1. Work required to complete the Pond Dewatering, Water Treatment System, & Coordination of Fountain Removal includes but is not limited to:
 - a. Designing a pond dewatering water treatment system in accordance with the Specifications.
 - b. Constructing a temporary settling basin at a location agreed to by the Owner and the Engineer in accordance with the Specifications.
- 2. Furnishing a pond dewatering water treatment system design that has been signed and sealed by an engineer licensed to practice in the State of Massachusetts to the Engineer for review and acceptance.
 - a. Movement of personnel, equipment, and materials to the Site as required for setup of the pond dewatering water treatment system.
 - b. Installation, setup, and initial testing of the pond dewatering water treatment system.
 - c. Coordination with Owner and Engineer for appropriate pond dewatering discharge location(s).
 - d. Operation and maintenance for the pond dewatering water treatment system including:

- 1) Any testing required to meet NPDES DRGP discharge requirements.
- 2) Preparing and providing data to support development of Discharge Monitoring Reports (DMRs) by the Engineer.
- e. Removal of the pond dewatering water treatment system, inclusive of all constituent components of the system and residuals, from the Site at the conclusion of the Work.
3. Pond Dewatering Water Treatment System Design, Installation, & Removal will be measured for payment as one unit, complete as specified.
4. Payment for Pond Dewatering Water Treatment System Design, Installation, & Removal will be made on a percentage-completion-of-lump-sum basis and will constitute full compensation for all labor, supervision, materials, equipment, start up, Submittals, incidentals, and all other costs necessary to complete Pond Dewatering Water Treatment System Design, Installation, & Removal work.
5. As part of this effort the Contractor will coordinate with the Engineer to facilitate removal of the existing fountain once the Pond is dewatered at no additional cost to the Owner. Removal of the fountain will be performed by others engaged by the Owner. Work required to facilitated removal of the fountain includes but is not limited to:
 - a. Dewatering the pond to provide access to the fountain removal contract engaged separately by the Owner.
 - b. Allow access for others to inspect the fountain and associated appurtenances.
 - c. Notify the Owner at least 72 hours prior to completion of dewatering.
 - d. If necessary, provide access to the fountain to facilitate removal including but not limited to providing a timber mat access road to the base of the fountain.
 - e. Allow 7 days from completion of dewatering for removal of the fountain at no additional cost to the Owner.
 - 1) Work in other portions of the Site may continue so long as the work doesn't impede removal of the fountain.

Item 9 Street and Site Utilities

1. Work required to complete the Street and Site Utilities includes but is not limited to:
 - a. Procurement of necessary permits
 - b. Coordination with and adherence to requirements of Utility Service Provider for Utility Connections
 - c. Furnish and install as shown and/or specified within the Contract Documents:
 - 1) Domestic Water Connection
 - 2) Domestic water pipe and tracer tape from Street to Pump Building
 - 3) Electrical Service Connection
 - 4) Electrical Conduit, and wire, tracer tape from Street to Pump Building
 - 5) Temporary pavement patch for utility connections/installations
 - 6) Permanent pavement patch for utility connections/installations
 - 7) Loam and Seed patches for utility connections/installations

2. Street and Site Utilities will be measured for payment as one unit, complete as specified.
3. Payment for Street and Site Utilities will be made on a percentage-completion-of-lump-sum basis and will constitute full compensation for all labor, supervision, materials, equipment, start up, Submittals, incidentals, and all other costs necessary to complete Street and Site Utilities work.

Item 10 Pond Rough Grading and Liner Installation

1. Work required to complete the Pond Rough Grading and Liner Installation includes but is not limited to:
 - a. Re-grading the existing sediment in the pond basin to the lines and rough grades shown on the Contract Drawings.
 - 1) Excess sediment will be reused within the pond.
 - b. Disposing of interfering rock and debris offsite as necessary to meet rough grades as shown on the Contract Drawings.
 - c. Installing the methane venting system shown on the Contract Drawings in accordance with the Specifications.
 - d. Installing the geogrid and HDPE/LDPE liner showing on the Contract Drawings in accordance with the Specifications.
2. Pond Rough Grading and Liner Installation will be measured as follows:
 - a. Pond rough grading and installing of the methane venting system, geogrid, and HDPE/LDPE Liner will be measured for payment as one unit, complete as specified.
3. Payment for this item will be made on a percentage-completion-of-lump-sum basis and will constitute full compensation for all labor, supervision, materials, equipment, start up, Submittals, incidentals, and all other costs necessary to complete the work.

Item 11 Placement of Imported Armor Stone & Imported Benthic Sediment

1. Work required to complete the placement of Imported Armor Stone and Imported Benthic Sediment includes but is not limited to:
 - a. Furnishing Imported Armor Stone and Imported Benthic Sediment from an Engineer-accepted source that meets the requirements of the Specifications.
 - b. Placement of Imported Armor Stone and Benthic Sediment to the lines and grades as directed by the Engineer.
2. Placement of Imported Armor Stone will be measured as follows:
 - a. Placement of Imported Armor Stone will be measured for payment by the weight (ton) of material furnished as documented by certified weigh scale. Payment for this item will constitute full compensation for all labor, supervision, materials, equipment, incidentals, and all other costs necessary to complete placement of Imported Armor Stone work.
3. Placement of Imported Benthic Sediment will be measured as follows:
 - a. Placement of Imported Benthic Sediment will be measured for payment by the weight (ton) of material furnished as documented by certified weigh scale. Payment for this item will constitute full compensation for all labor, supervision, materials, equipment, incidentals, and all other

costs necessary to complete placement of Imported Benthic Sediment work.

Item 12 Water Quality Pipe Installation

1. Work required to complete the Water Quality Pipe Installation includes but is not limited to:
 - a. Furnish and install as shown and/or specified within the Contract Documents:
 - 1) Pump System Return Pipes and Fittings
 - 2) Fountain Supply Pipe
 - 3) Nanobubble System Pipes (within Pump Building and Pond)
 - 4) Pipe Penetration System through Liner System for each pipe penetration within this Bid Item into the Pond.
 - 5) Loam and Seed patches for utility connections/installations
2. Water Quality Pipe Installation will be measured for payment as one unit, complete as specified.
3. Payment for Water Quality Pipe Installation will be made on a percentage-completion-of-lump-sum basis and will constitute full compensation for all labor, supervision, materials, equipment, start up, Submittals, incidentals, and all other costs necessary to complete Water Quality Pipe Installation work.

Item 13 Dry Well and Drainage Swale Installation

1. Work required to complete the Dry Well and Drainage Swale Installation includes but is not limited to:
 - a. Furnish and install as shown and/or specified within the Contract Documents:
 - 1) Dry wells, including manholes and covers
 - 2) Drainage Pipe and fittings
 - 3) Roof leader connection
 - 4) Geotextile Fabric
 - 5) Regrading/Micro-grading for and placement of Drainage Swales
 - 6) Loam and Seed patches for utility connections/installations and structure installations
2. Dry Well and Drainage Swale Installation will be measured for payment as one unit, complete as specified.
3. Payment for Dry Well and Drainage Swale Installation will be made on a percentage-completion-of-lump-sum basis and will constitute full compensation for all labor, supervision, materials, equipment, start up, Submittals, incidentals, and all other costs necessary to complete Dry Well and Drainage Swale Installation work.

Item 14 Auburn Street Entrance Grading and Flexible Pavement Installation

1. Work required to complete the grading for the Auburn Street entrance way and installation of Flexible Pavement includes but is not limited to:
 - a. Re-grading the Auburn Street entrance way to the lines and rough grades shown on the Contract Drawings.
 - 1) Excess soil from this effort shall be reused on site.

- b. Furnishing and installing Flexible Pavement from an Engineer-accepted source that meets the requirements of Specifications.
- 2. Grading for the Auburn Street entrance way will be measured as follows:
 - a. Grading will be measured for payment as one unit, complete as specified. Payment for this item will be made on a percentage-completion-of-lump-sum basis and will constitute full compensation for all labor, supervision, materials, equipment, start up, Submittals, incidentals, and all other costs necessary to complete the work.
- 3. Installation of Flexible Pavement will be measured as follows:
 - a. Installation of Flexible Pavement will be measured for payment by the square foot of material furnished as documented by Project Surveyor. Payment for this item will constitute full compensation for all labor, supervision, materials, equipment, incidentals, and all other costs necessary to complete placement of Flexible Pavement work.

Item 15 Eppa Way Entrance Grading and Flexible Pavement Installation

- 1. Work required to complete the grading for the Eppa Way entrance way and installation of Flexible Pavement includes but is not limited to:
 - a. Re-grading the Eppa Way entrance way to the lines and rough grades shown on the Contract Drawings.
 - 1) Excess soil from this effort shall be reused on site.
 - b. Furnishing and installing Flexible Pavement from an Engineer-accepted source that meets the requirements of Specifications.
- 2. Grading for the Eppa Way entrance way will be measured as follows:
 - a. Grading will be measured for payment as one unit, complete as specified. Payment for this item will be made on a percentage-completion-of-lump-sum basis and will constitute full compensation for all labor, supervision, materials, equipment, start up, Submittals, incidentals, and all other costs necessary to complete the work.
- 3. Installation of Flexible Pavement will be measured as follows:
 - a. Installation of Flexible Pavement will be measured for payment by the square foot of material furnished as documented by Project Surveyor. Payment for this item will constitute full compensation for all labor, supervision, materials, equipment, incidentals, and all other costs necessary to complete placement of Flexible Pavement work.

Item 16 Pond Refilling

- 1. Work required to complete the Pond Refilling includes but is not limited to:
 - a. Flushing out all pipe and wet wells with domestic water prior to pond refilling.
 - b. Procuring water for Pond Refilling to be any or all of the following methods as specified below:
 - 1) Bedrock Well Water
 - 2) Domestic Water as approved by the Owner
 - 3) Non-Chlorinated Filtered Trucked Water
- 2. Pond Refilling will be measured for payment as one unit, complete as specified.
- 3. Payment for Pond Refilling will be made on a percentage-completion-of-lump-sum basis and will constitute full compensation for all labor, supervision,

materials, equipment, start up, Submittals, incidentals, and all other costs necessary to complete Pond Refilling work.

Item 17 Restoration

1. Work required to complete Restoration includes but is not limited to:
 - a. Planting the vegetated bank in accordance with Contract Drawings. Furnishing plantings from an Engineer-accepted source that meets the requirements of the Specifications.
 - b. Importing material, as necessary, for perimeter grading to the lines and grades shown on the Contract Drawings. Furnish materials from an Engineer-accepted source that meets the requirements of the Specifications.
 - c. Importing material for the crushed granite path and grading to the lines and grades shown on the Contract Drawings. Furnishing crushed granite from a Engineer-accepted source that meets the requirements of Specifications.
 - d. Importing and placing loam and seed to restore grass areas damaged or disturbed during construction from an Engineer-approved source that meets the requirements of the Specifications.
2. Planting of the Vegetated Bank will be measured as follows:
 - a. Planting will be measured for per plug of plantings furnished. Payment for this item will constitute full compensation for all labor, supervision, materials, equipment, incidentals, and all other costs necessary to complete planting work.
3. Placement of material, as necessary, for perimeter grading will be measured as follows:
 - a. Placement of material for perimeter grading will be measured for payment by the weight (ton) of material furnished as documented by certified weigh scale. Payment for this item will constitute full compensation for all labor, supervision, materials, equipment, incidentals, and all other costs necessary to complete placement of material for perimeter grading work.
4. Placement of material, as necessary, for crushed granite path will be measured as follows:
 - a. Placement of material for crushed granite path will be measured for payment by the cubic yard of material furnished as documented by Project Surveyor. Payment for this item will constitute full compensation for all labor, supervision, materials, equipment, incidentals, and all other costs necessary to complete placement of material for crushed granite path work.
5. Placement of loam and seed will be measured as follows:
 - a. Placement of loam and seed will be made as one unit, complete as specified. Payment for this item will be made on a percentage-completion-of-lump-sum basis and will constitute full compensation for all labor, supervision, materials, equipment, start up, Submittals, incidentals, and all other costs necessary to complete the work.

Item 18 Modular Dock

1. Work required to complete the Modular Dock includes but is not limited to:
 - a. Provide Mockup/Rendering for Modular Dock for and coordination with Engineer and City of Newburyport's Parks Division review and approval.
 - b. Furnish and install as shown and/or specified within the Contract Documents: Modular Dock.
2. Modular Dock will be measured for payment as one unit, complete as specified.
3. Payment for Modular Dock will be made on a percentage-completion-of-lump-sum basis and will constitute full compensation for all labor, supervision, materials, equipment, start up, Submittals, incidentals, and all other costs necessary to complete Modular Dock work.

Item 19 Municipal Training

1. Work required to complete the Municipal Training includes but is not limited to:
 - a. Pre-packaged Pump System maintenance and operation
 - b. Modular Dock installation and disassembly.
2. Municipal Training will be measured for payment as one unit, complete as specified.
3. Payment for Municipal Training will be made on a percentage-completion-of-lump-sum basis and will constitute full compensation for all labor, supervision, materials, equipment, start up, Submittals, incidentals, and all other costs necessary to complete Municipal Training work.

Add Alternate 1 Foundation Stone for Granite Seat-Height Blocks

1. Work required to complete the installation of the Foundation Stone for the Granite Seat-Height Block includes but is not limited to:
 - a. Excavation to the lines and grades shown on the Contract Drawings.
 - 1) Excess soil from this effort shall be reused on site.
 - b. Furnishing and installing a geotextile fabric from an Engineer-accepted source that meets the requirements of Specifications to act as a separation layer between the native soil and imported crushed stone.
 - c. Furnishing and installing imported crushed stoned from an Engineer-accepted source that meets the requirements of Specifications.
2. Excavation, installing the geotextile separation layer, and reuse of material will be measured as follows:
 - a. Excavation, installing the geotextile separation layer, and reuse of material on site will be made as one unit, complete as specified. Payment for this item will be made on a percentage-completion-of-lump-sum basis and will constitute full compensation for all labor, supervision, materials, equipment, start up, Submittals, incidentals, and all other costs necessary to complete the work.
3. Placement of crushed stone will be measured as follows:
 - a. Placement of material for crushed sstone will be measured for payment by the weight (ton) of material furnished as documented by certified weigh scale. Payment for this item will constitute full compensation for all labor, supervision, materials, equipment, incidentals, and all other

costs necessary to complete placement of material for crushed stone path work.

Add Alternate 2 Granite Seat-Height Blocks Installation and Materials

1. Work required to complete the Granite Seat-Height Blocks includes but is not limited to:
 - a. Provide Mockup/Rendering for Granite Seat-Height Blocks for and coordination with Engineer and City of Newburyport's Parks Division review and approval.
 - b. Furnishing Granite Seat-Height Blocks from an Owner-accepted source that meets the requirements of Specifications.
 - c. Installing the Granite Seat-Height Blocks at the locations shown on the Contract Drawings.
2. Furnishing and installing of Granite Seat-Height Blocks will be measured as follows:
 - a. Furnishing and installing the Granite Seat-Height Blocks will be measured per linear foot of Granite Seat-Height Block installed as specified. Payment for this item will constitute full compensation for all labor, supervision, materials, equipment, incidentals, and all other costs necessary to complete furnishing and installing the Granite Seat-Height Block work.

PART 2 PRODUCTS

(Not Applicable)

PART 3 EXECUTION

(Not Applicable)

END OF SECTION

**SECTION 32 1201
DELEGATED DESIGN FOR PUMP BUILDING**

PART 1 GENERAL

1.1 RELATED DOCUMENTS

- A. This section of the Specification is only a portion of the Contract Documents. All of the Contract Documents, including Division 00 – Bidding and Contract Requirements, Division 01 – General Requirements, Appendices, and Drawings apply to this Section of the Specifications.
- B. This section is part of the Base Bid. Price accordingly as per Section 01 20 00 - Measurement and Payment Unit Price Worksheet.

1.2 QUALIFICATIONS

- A. Attest to minimum five (5) years with work and products specified, including:
 - 1. Architectural Accessory Buildings
 - 2. Concrete and Masonry
 - 3. Concrete Pads with Frost Wall Footings
 - 4. Slate Roofing
 - 5. Heating, Ventilation, and Air Conditioning (HVAC) System of Accessory Buildings
- B. Provide at least three (3) references attesting to work experience for qualifications verification.

1.3 SUMMARY

- A. Work of this Section consists of providing labor, tools, equipment, and materials for installation of the building for the Pump Systems shown on Drawings.
- B. Work items specifically included are:
 - 1. Delegated Design of the Pump Building by a Structural Engineer and/or an Architect registered in the Commonwealth of Massachusetts.
 - a. Building design is subject to review and approval by:
 - 1) Owner,
 - 2) Engineer,
 - 3) City of Newburyport's Parks Division, and
 - 2. Delegated Design of the Pump Station Building's Electrical Distribution Panel by an Electrical Engineer registered in the Commonwealth of Massachusetts (see Section 26 05 00).
 - 3. Mock-ups/Rendering of Pump Building
 - a. Furnish and install physical mock-ups suitable to illustrate finish colors, materials, and methods of construction. Maintain mock-ups as standard

of colors, patterns, materials, performance and workmanship for entire project

1.4 CONDITIONS

- A. Review relevant Construction Documents before submitting bid including section referenced Drawings and Specifications.
- B. Review existing conditions on site before submitting bid such as:
 - 1. Site Access for Equipment and Transport
 - 2. Topography and Grade Changes
 - 3. Nearby Structures
 - 4. Utilities (Existing and Proposed)
- C. Review Construction Documents for precedent images for Pump Building as desired by Owner.
- D. Pump Building Work as part of this Section is to be contracted as Delegated Design, requiring the recipient of the awarded Contract to:
 - 1. Provide all design work required to convey overall design intent.
 - 2. Assume responsibility for all design and construction related to Pump Building Work.
 - 3. Structural and HVAC Shop Drawings and Products that are submitted to Owner and Engineer under this Section as part of Record Documents shall be marked “Reviewed for Information Only”. Owner and Engineer do not assume any responsibility for Structural and HVAC Work as part of Contract.
 - 4. Submit architectural and aesthetic elements of Pump Building for Approval by Owner and Engineer.
 - 5. Provide all permits required to obtain electrical service and signoff from jurisdictional building inspectors.
- E. Installation work shall be performed efficiently, timely, and completely to full design intent of Construction Documents.
- F. Guarantee
 - 1. Guarantee entire Pump Building parts and labor for one (1) year from official written date of acceptance by Engineer.
 - 2. Provide written warranty showing date of completion and period of warranty after approved substantial completion.
 - 3. Correct system malfunctions occurring during guarantee period due to defective materials, poor workmanship, or improper adjustment at no additional expense to Owner.
 - 4. Obtain standard written manufacturer warranty of all products and materials provided where such warranties are offered in published product data. Include these warranties in Operation & Maintenance Manual. These warranties shall be in addition to other binding warranties or guarantees.

1.5 APPLICABLE STANDARDS AND CODES

- A. Comply with applicable requirements and accepted practice as established in recognized standards and codes published by following bodies (capitalized abbreviations used through Specifications):
 - 1. American Society for Testing and Materials (ASTM)
 - 2. Occupational Safety and Health Administration (OSHA)
 - 3. City of Newburyport Building Code
 - 4. Massachusetts State Building Code
- B. Comply with applicable laws, standards, and regulations of local governing authority. All local laws more stringent than those referenced above shall take precedent.

1.6 SUBMITTALS

- A. Product submittals for this section, but not limited to:
 - 1. Pump Building
 - a. Physical Mock-up of Materials and Rendering drawings of Complete Building
 - b. Building specifications sheet
 - 1) Provide large scale shop drawings for fabrication, installation, and erection of all parts of each mock-up. Provide plans, elevations, and details of anchorage, connections, and accessory items.
 - 2) Design Modifications: Make design modifications to work only as required to meet performance requirements and to coordinate the work. Indicate proposed design modifications on shop drawings. Maintain original design concept without altering profiles and alignments indicated.
 - c. Dimensioned Shop Drawings
 - d. Method of transport from Manufacturer and off-loading at Site
- B. Schedule
 - 1. Request pre-construction meeting with Owner and Engineer to discuss project, design intent, coordination, submittals required, delivery, mockup/rendering, and construction schedule.
 - 2. Submit schedule of products to be furnished herein, indicating supplier, size, and type.
 - 3. Mock-up/Renderings shall be completed for Engineer's examination at least 45 days prior to scheduled start of construction or fabrication, as applicable for each type of work, unless otherwise specified.
 - 4. Validate types and varieties of products specified are available for purchase in quantities accepted by Engineer.
 - 5. Prior to submitting schedule, confirm current site conditions are as shown in Construction Drawings.
 - 6. Contact Owner and Engineer to arrange for progress site visits to observation installation.

7. At installation completion, contact Engineer to arrange for punchlist to observe installation and performance.
8. One-year guarantee does not commence until punchlist items have been addressed.

1.7 DELIVERY, STORAGE, AND HANDLING

- A. Do not deliver materials to site, until specified submittals have been submitted to Engineer for approval.
- B. Coordinate for temporary storage and staging areas.
- C. Protect materials from damage from construction traffic, weather, corrosion, other trades, theft, and vandalism while stored on-site.
- D. Store and handle materials in compliance with supplier instructions and recommendations.
- E. Minimize on-site storage.
- F. Remove material overages at installation completion site.

PART 2 PRODUCTS

2.1 PUMP STATION BUILDING

- A. Size:
 1. Exterior dimensions: 14 feet wide x 14 feet long x 12 feet tall at roof ridge.
 - a. 8-inch thick CMU walls, with 5-inch brick/grout veneer assumed
 - b. Structure height shall be no higher than the roadway elevation of Auburn Street at building peak.
- B. Construction:
 1. Wood, Precast Concrete, with Concrete Masonry Unit (CMU) Shell
 - a. Historic/Reclaimed/Distressed Brick Veneer
 - b. Dentil Mouldings/Cornice at the Base of Roof
 - c. White Stone String Coursing
 - 1) Top string: at the door head, level with top of doorway
 - 2) Bottom foundation: from subgrade to floor level
 - d. Slate Pyramidal Roof (Reclaimed or natural stone)
 - 1) Gabled roof with support trusses
- C. Features:
 1. Cellular Communications Antenna
 2. Soffits for air exchange exhaust within building)
 3. No Gutters
 4. No Windows

5. Methane vent wind-driven turbine exhaust fan installed 12 inches above top of roof (refer to Section 35 4310 – Liner Installation for additional information and requirements).
 6. Access:
 - a. Lockable Aluminum Safety Double Doors facing Pond with Wood Veneer
 7. Thermal and block insulation
 8. Non-slip floor material on concrete pad sloped towards the Wet Well
- D. Electrical:
1. Interior Maintenance Lighting
 2. Exterior Sconce Lighting (to be confirmed by Owner)
- E. HVAC
1. Ambient interior temperature to not exceed 80°F
 2. Recommended 15 air changes per hour (ACH) minimum
 3. Black Aluminum Louvers on structure base
- F. Waterproofing and Building Wrap
- G. Insulation (Thermal and Sound). Noise from within the Pump House cannot exceed 45 decibels (dB) outside the Pump House.
- H. Cellular Communications
1. Antenna
 2. Router (assessable within Pump Shed Building)

2.2 ELECTRICAL CONNECTION

- A. Delegated Design of the Pump Station Building Electrical Distribution Panel.
1. Provide new electrical service from street. Approximate point of connection location is noted on Construction Drawings.
 2. Anticipated Power requirements are as follows, but not limited to:
 - a. Distribution Panel: 200 Amp (Final Voltage, Amperage, and Phase to be confirmed).

PART 3 EXECUTION

3.1 GENERAL

- A. Provide experienced superintendents and assistants on-site during product delivery, installation, testing, and adjustments.
- B. Lay out materials as indicated on Drawings making minor adjustments for variations for field conditions. Review major changes with Engineer before continuing installation.

3.2 PROJECT COORDINATION

- A. Provide written notifications (electronic is acceptable) to Engineer prior to work commencement, weekly for progress report, for proposed changes to Drawings, and upon installation completion.
- B. Submit in writing Requests for Information (RFI) for questions of design intent, proposed design changes, field notifications, and product substitution after installation commences to Engineer.
- C. Coordination:
 - 1. Exercise care when excavating, trenching and working near existing and/or proposed utilities.
 - 2. Exercise care when excavating, trenching and working near existing trees to remain.

3.3 SITE PROTECTION

- A. Protect landscaping, paving, structures, walls, footings, and site construction from damage caused during work. Report damage to work of another trade immediately.
- B. Replace or repair damage with same product or material to satisfaction of Engineer at no additional cost per Guarantee.

3.4 MOCK-UP

- A. Provide and demonstrate mockup of two or three Pump Station Building renderings for review with Engineer prior to commencing with full installation.
- B. Provide physical mockup of brick pattern, string pattern, slate, and door veneers.

3.5 INSTALLATION

- A. Verify specified compaction and strength of foundation prior to installation of building.
- B. Set Pump Building on prepared foundation (see Section 03 30 00 for foundation requirements) at locations and elevations as shown on Drawings.

3.6 RECORD DRAWINGS

- A. Refer to Section 01 7839 for additional requirements.
- B. Record (As-Built) Drawings
 - 1. Maintain and update Record Drawings with red-line markings as project progresses, including locations of:
 - a. Structural Plans
 - b. Dimensioned Drawings
- C. Record Documents

1. Record Documents shall be on-site at all times. Maintain record of the following as the project progresses:
 - a. Building Permits
 - b. Materials Installed
 - c. Field Communications and Requests for Information (RFI)

3.7 SITE CLEANUP

- A. Remove unused materials and equipment from project site safely and efficiently.
- B. Dispose of unused materials legally including construction debris and trash.

END OF SECTION

Attachment 2 – Replacement Schedule of Values

**Bartlet Mall Frog Pond Restoration Project
Schedule of Values**

Notes: Bidder to populate all blue shaded cells only
Provide an initial Project Schedule with the Schedule of Values.

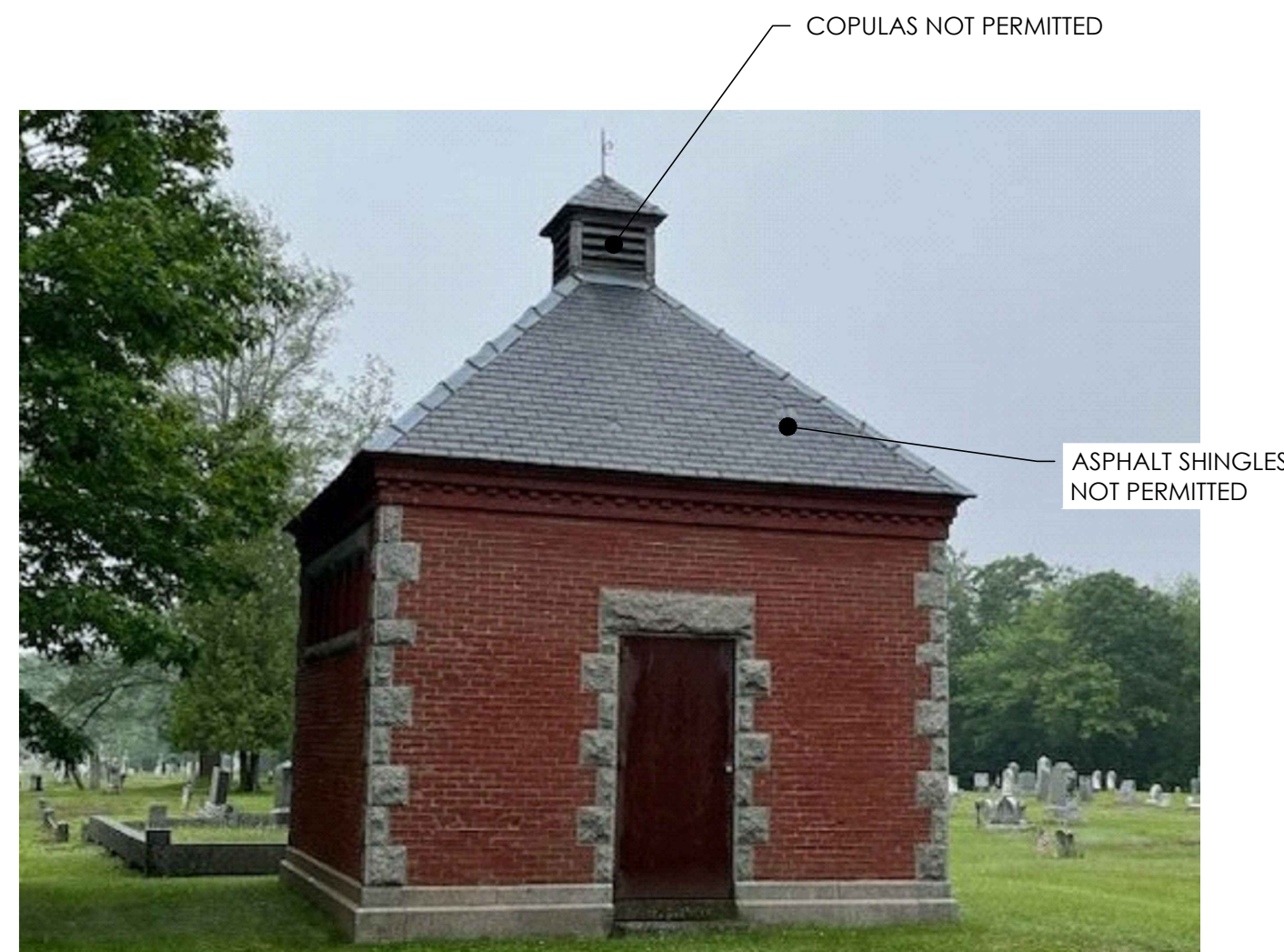
Bid Item #	Description	Approximate Quantity Unit of Measurement	Unit of Measurement	Unit or Lump Sum Price Dollars & Cents
1	Pre-Mobilization Submittals	1	Lump Sum	
2	Mobilization - General	1	Lump Sum	
3	Demobilization	1	Lump Sum	
4	Site Preparation	1	Lump Sum	
5	Bedrock Well Installation	--	--	
5a	10-Inch Drilling in Overburden for 8-Inch Bedrock Well Casing	50	Linear Foot	
5b	10-Inch Drilling in Bedrock for 8-Inch Bedrock Well Casing	20	Linear Foot	
5c	8-Inch Steel Well Casing for Bedrock Well	70	Linear Foot	
5d	2-Inch Annular Grout Seal around Well Casing for Aquifer and Well Protection	70	Linear Foot	
5e	10-Inch Bedrock Drilling (below casing) for Bedrock Well	530	Linear Foot	
5f	Development and Fracture Opening for Bedrock Well	1	Lump Sum	
5g	Well Testing and Recording with Temporary Test Pumps (Step-Drawdown, Yield, Recovery)	56.5	Hours	
5h	Fitness Adapter Unit (2-Inch Outlet)	1	Lump Sum	
5i	Sanitary Well Seal	1	Lump Sum	
5j	Curb Stop and Waste Valve for Winterization	1	Lump Sum	
5k	Well Tile Manhole	1	Lump Sum	
5l	Submersible Pump, Drop Pipe, and Wiring to Curb Stop and Waste Valve	1	Lump Sum	
5m	2-Inch HDPE Discharge Pipe to Pump House (Connect to Wet Well)	800	Linear Foot	
6	Pump System Procurement	1	Lump Sum	
7	Pump Building Procurement	1	Lump Sum	
8	Pond Dewatering, Water Treatment, and Coordination of Fountain Removal	1	Lump Sum	
9	Street and Site Utilities to Pump Building and Electrical Conduit and Wiring to Bedrock Well	1	Lump Sum	
10	Pond Rough Grading and Limer Installation	1	Lump Sum	
11	Placement of Imported Armor Stone and Imported Benthic Sediment	--	--	
11a	Placement of Imported Armor Stone	1,900	Ton	
11b	Placement of Imported Benthic Sediment	2,300	Ton	
12	Pond Water Quality Pipe Installation (Pump System Return, Nanobubble, and Fountain Pipe)	1	Lump Sum	
13	Dry Well and Drainage Swale Installation	1	Lump Sum	
14	Auburn Street Entrance Grading and Flexible Pavement Installation	--	--	
14a	Auburn Street Entrance Grading	1	Lump Sum	
14b	Flexible Pavement Installation at Auburn Street Entrance	4,100	Square Foot	
15	Eppa Way Entrance Grading and Flexible Pavement Installation	--	--	
15a	Eppa Way Entrance Grading	1	Lump Sum	
15b	Flexible Pavement Installation at Eppa Way Entrance	1,400	Square Foot	
16	Pond Refilling	1	Lump Sum	
17	Restoration	--	--	
17a	Planting of the Vegetated Bank	--	--	
17a.1	Blue Flag Iris	239	Each Plug	
17a.2	Marsh Marigold	243	Each Plug	
17a.3	Pickeralweed	68	Each Plug	
17a.4	Water Plantain	68	Each Plug	
17a.5	Monkeyflower	67	Each Plug	
17a.6	Arrow Arum	69	Each Plug	
17a.7	Pointed Brood Sedge	10	Each Plug	
17a.8	Birds Foot Trefoil	10	Each Plug	
17a.9	Fragrant False Indigo	69	Each Plug	
17a.10	Path Rush	36	Each Plug	
17a.11	Sensitive Fern	93	Each Plug	
17a.12	Ivory Sedge	60	Each Plug	
17a.13	Coreopsis	60	Each Plug	
17a.14	Red Fescue Seed	1,600	Square Foot	
17b	Upland Regrading	1	Lump Sum	
17c	Import and Placement of Ordinary Borrow	500	Ton	
17d	Import and Placement of Crushed Stone	160	Ton	
17e	Import and Placement of Crushed Granite	40	Cubic Yards	
17f	Import and Placement of Loam and Seed	1	Lump Sum	
18	Modular Dock	1	Lump Sum	
19	Municipal Training	1	Lump Sum	
TOTAL:				\$ -

Alternative Bid Item #	Description	Assumed Quantity Unit of Measurement	Unit of Measurement	Unit or Lump Sum Price Dollars & Cents
Alt 1	Foundation Stone for Granite Seat-Height Blocks	--	--	--
Alt 1a	Excavation and grading, and furnishing and installing Geotextile	1	Lump Sum	
Alt 1b	Placement of Imported Foundation Stone	200	Ton	
Alt 2	Granite Seat-Height Blocks Installation and Materials	1,300	Linear Foot	
TOTAL:				\$ -

Attachment 3 – Revised Drawing C-400

PRECEDENT IMAGES

NOTE:
1. REFER TO SECTION 33 1201 - PUMP SYSTEM BUILDING FOR BUILDING REQUIREMENTS AND FEATURES.



ROCKPORT, ME



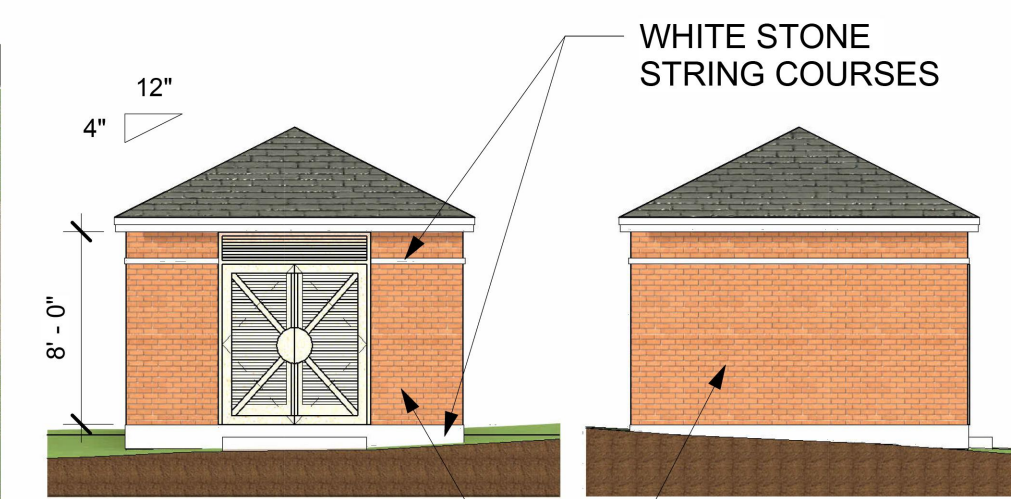
ACADIA NATIONAL PARK



OPTION C

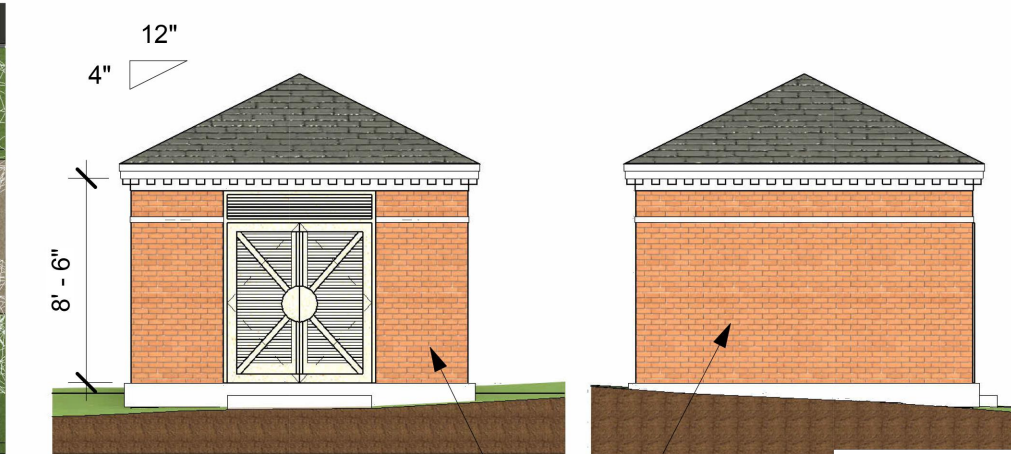


OPTION D



2 Door Elevation NOT TO SCALE
3 Typical Wall Elevation NOT TO SCALE
EXTERIOR CLADDING TO BE MASONRY

20" WIDE STONE EDGE
PUMPHOUSE
DOCK

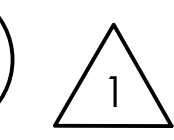


2 Door Elevation NOT TO SCALE
3 Typical Wall Elevation NOT TO SCALE
EXTERIOR CLADDING TO BE MASONRY

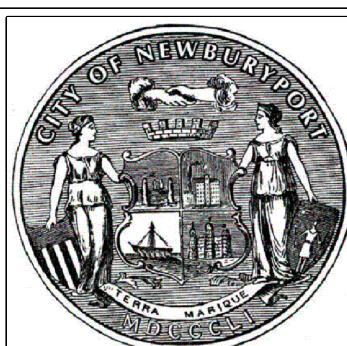
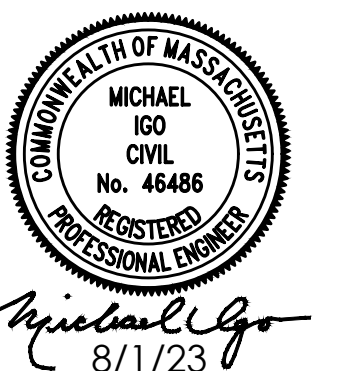
20" WIDE STONE EDGE
PUMPHOUSE
DOCK



CONCEPT RENDERINGS PROVIDED BY LOCAL ARCHITECT AND CITIZENS DONATED TO CITY
(BASIS OF DELEGATED DESIGN FOR PUMP BUILDING)



BID SET - NOT FOR CONSTRUCTION



CITY OF NEWBURYPORT
60 PLEASANT STREET
NEWBURYPORT, MA 01950

Rev No	Date	Drawn	Chkd	Description
REV 1	8/22/23	AEH	MI	ADDENDUM NO. 1
REV 0	8/1/23	AEH	MI	BID SET
Revisions				

Designed By:
A. Hammond
Checked By:
M. Igo
Date:
8-1-2023

SCALE: NONE

BARTLET MALL FROG POND
RESTORATION PROJECT
PUMP SYSTEM EXTERIOR
DELEGATED DESIGN

Sheet No.
C-400

Attachment 4 – Bid Walk Sign-In Sheet

City of Newburyport - Dept. Of Public Services
 IFB No. 24-04 Bartlet Mall Frog Pond Project
 August 16, 2023 @ 1:00 PM
 Pre-Bid/Site Visit Sign-In Sheet

NAME	COMPANY	EMAIL	PHONE NUMBER
Phil Kane	Lakeside Deck + Fence	LakesideDeckandFence@gmail	603 508 7420
BEN FORDE	WASSER	bforde@wassercontractors	617.366.6277
M. J CASSIDY	CASSIDY BROS.	MCASSIDY@CASSIDYBROS.COM	978-948-7303
Glenn Cairns	George Cairns & Sons	glenncairns@gecainc.com	603-421-1888
Aaron Gautreau	Charter	agautreau@charter.us	857-262-6183
Ralph Dumke	Waterline Indus	info@water-lineind.com	6034747477
Bill Peach	T Ford	bill@tford.com	978-995-5787
Daniel Harvey	SumCo Eco-Contracting	estimating@sumcoeco.com	978826 3757
Peter Consoli	Newburyport	CONSOLISTON@COMCAST.NET	978 465-7770