

Rehabilitation of North Terminal, Nordic Fisheries Inc.

14 Hervey Tichon Avenue, New Bedford, MA

ADDENDUM #2

Issued: 1/20/2023

General

1. None

Contractor Questions

1. Regarding the Granular fill Backfill, May we use 1.5" crushed stone in lieu of granular fill?

A: Use of 1.5" crushed stone should be avoided due to uncertainty relative to ability to efficiently penetrate the material with the vibratory probe during vibro-compaction. However, ¾-inch crushed stone may be used as bulkhead backfill, as long as it can be efficiently vibro-compacted.

Due to difference in anticipated response of the crushed stone to vibro-compaction, the following procedure shall be followed when using crushed stone:

- a) Place crushed stone backfill up to above underside of existing pier bents (approx. El. 5)
- b) Vibro-compact crushed stone backfill executing the number of probe drops determined during the test program. Some settlement of the top of crushed stone is anticipated during vibro-compaction.
- c) Install 12-OZ non-woven filter fabric to cover the top of the vibro-compacted crushed stone backfill.
- d) Place approved granular fill in maximum 12-inch lifts and compact granular backfill using conventional methods (plate compactor, walk-behind roller) to 95% of the maximum dry density up to pavement section subgrade.
- e) If the contractor elects to use crushed stone fill strike Paragraph 5.1 and use Paragraph 5.2 below for measurement and payment. Indicate on the Bid Proposal Form, page 2, under Owner 1. "Including The following addendum:" that Crushed stone fill will be used and Paragraph 5.2 will be used for measurement and payment.

5.2 MEASUREMENTS AND PAYMENT FOR VIBRO-COMPACTION OF CRUSHED STONE BACKFILL

A. The work of VPC COMPACTION OF ¾ -INCH CRUSHED STONE BACKFILL within this section shall be measured and paid for as follows:

ITEM	PAYMENT BASIS
Mobilization/ Demobilization (VPC)	Lump Sum

Test Compaction Program and Test Probes
(one day)

Lump Sum

945 probes,
based upon 315 total grid locations with
3 probes per grid location

Lump Sum

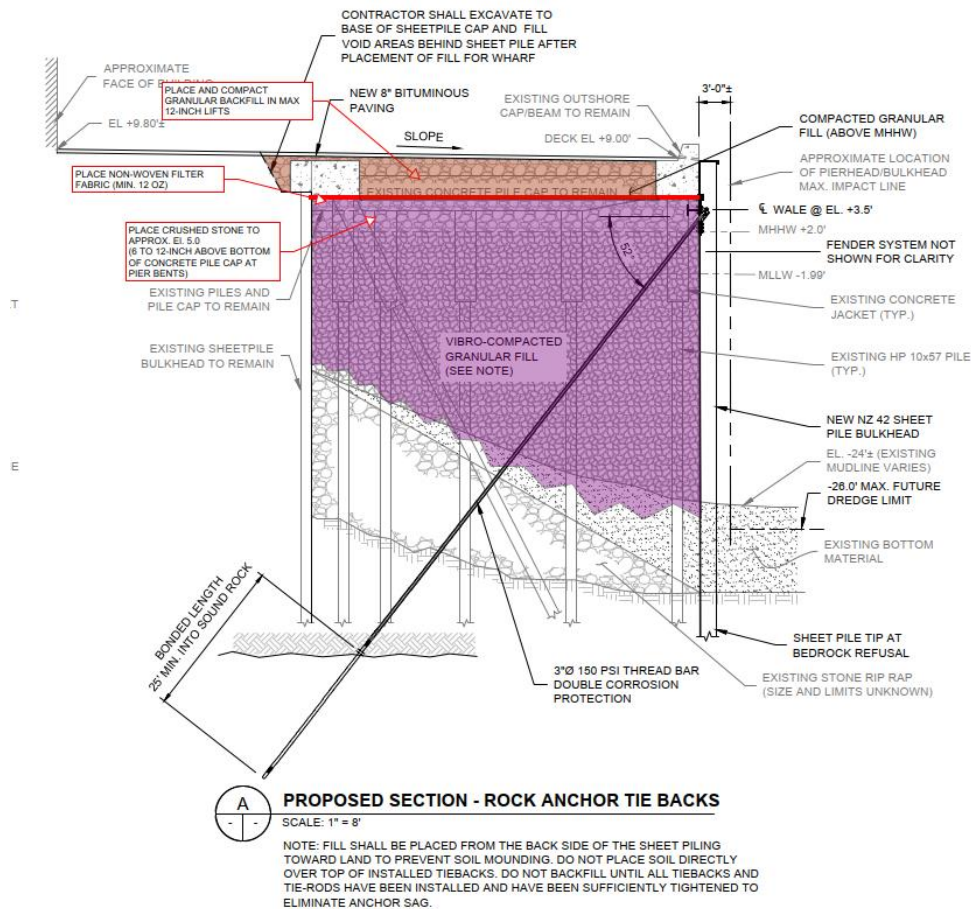
Additional VPC probes beyond 945
(or credit for unused probes
to a minimum of 315 probes – 1 probe
per grid location)

Add/Deduct Unit Price
per probe

B. Payment shall be for work that includes mobilization and demobilization, deep compaction, labor, equipment, and all associated work required to densify the crushed stone backfill to the requirements specified herein and to the limits shown on the Contract Plans.

C. The Owner will pay the Contractor, at the unit price per probe, for any additional probes above 945 probes. The Contractor will credit the Owner, at the unit price per probe, for any unused probes below 945 total probes to a minimum number of 315 probes.

SKETCH:



2. This is a follow up question to Addenda #1 Q&A#13: Please confirm that there is no hazardous waste anticipated to be found from above-water excavations as well.

A: There is no hazardous waste anticipated from above water excavations. Note that the area behind the existing bulkhead has been excavated 4 -feet to 6-feet deep and filled with crushed stone or flowable fill to mitigate sinkholes. The excavation under this project is intended to ensure that there are no new sinkholes and to fill any new sinkholes prior to paving.

3. This is a follow up question to Addenda #1 Q&A#34/35: Specification section 314116 mentions the Contractor owns obstructions to EL. -30. The Addendum states the Contractor owns obstructions to EL. -32. Please clarify.

A: Contractor owns obstructions to EL. -32 NAVD88 datum.

4. Can a size of weld be provided for Anode Connection on Detail 5/C-12? Can the type of weld and size be provided for Wall Closure on Detail 1/S-4?

A: The anodes require a minimum of 2 - 2inch long x .25-inch throat welds at each end of the anode core. The closure plate detail shown on Sheet S-4 is schematic in nature. As noted, the detail is to be designed by contractor based on actual encountered field conditions.

5. Regarding the rock anchor lengths, boring T-37 on sheet C-2 shows rock at about El. -60. Sheet C-7 shows rock at El -46. Please clarify the existing rock elevation at the location of the proposed bonded rock anchor.

A: Information currently available to the Owner has been provided with the bid package. Rock anchors shall be installed a minimum of 25-feet into sound rock regardless of where it is encountered. Total length of rock anchors and its bond zone in rock may vary following performance of the test anchor.

6. Typically, rock anchors are not pressure grouted or post grouted but there is reference to both techniques in the bid documents. Will the grouting means and method be determined by the Contractor to meet the design requirements?

A: Contractor shall be responsible for providing anchors of the specified capacity, meeting the minimum requirements specified. Proposed means and methods for obtaining the specified capacity shall be submitted to the Owner for review. Review of the Contractor's submittal will not alleviate the Contractor of their responsibility to meet the requirements of the specifications.

7. Per the sequence of construction, the existing concrete structure and new bulkhead will not be backfilled during rock anchor installation. Is the intent to conduct the testing program on the anchors, and locking them off at the 90% design load, prior to backfilling the bulkhead? If so, will the new sheets and existing outshore cap beam and pile cap structure be able to resist the 133% design load anchor test, and the 90% design load for lock off?

A: The anchors will be loaded / tensioned to 5 kips prior to backfill placement per note 6 on Drawing/Sheet S-2. Following backfill, the anchors will be proof-tested and locked off at 90% of the design load.

8. Drawing C-8 shows a 7"x12" treated timber block and a 2.5"x12" treated timber block between the 12"x12" timber fender and the existing concrete cap beam. Please confirm the spacing or quantity of these two timber blocks.

A: The 2.5" x 12" timber blocks shall be placed approximately half way between the timber piles, spacing will be approximately 9'-2.25" on center but will vary. On the Typical Plan at south end, change 7" x 12" to 2.5" x 12". At the north and south ends the spacing or size may need to be adjusted based on field conditions.

9. Drawing G-2 note 2 in the Timber section states that "All Timber shall be treated with preservative treatment according to AWP category 4B & 4C for water born preservative to retention of .60 PCF." Specification section 06 13 00 section 2.01 – C states "All timber members shall be treated with chromated copper arsenate (CCA) in accordance with AWP Standards U1 and T1. All timber bracing shall be treated to a retention of .6 PCF of CCA". Please specify which treatment process should be followed.

A: All timber shall be treated with preservative treatment according to AWP Standards U1 and T1 for Use Category 4B & 4C for water born preservative.

10. Detail 2 on sheet S-2 calls out new concrete to be placed within the void between new sheet pile and concrete cap beam from top of new sheet pile to bottom of concrete cap beam. Please see questions below regarding this concrete placement:

A: The concrete is intended to fill the void between the new sheet pile and the existing structure for its full length. The concrete does not need to be formed and can be placed on top of the granular fill. There is no reinforcing steel in this concrete.

11. Should formwork be used on the bottom of this placement, or should this concrete be placed on top of the compacted granular fill? If there is to be formwork used is this formwork to be temporary and stripped after placement, or is it a permanent stay in place form?

A: See # 10 above.

12. Is there any steel reinforcement required to tie into the existing concrete cap beam? If so please provide details including quantity and type of anchoring system.

A: See # 10 above.

13. Is there any steel reinforcement required to tie into the new sheet pile bulkhead? If so please specify the quantity and type of anchoring system.

A: See # 10 above.

14. Is any rebar required in this concrete placement? If so please specify the type, quantity and layout of rebar.

A: See # 10 above.

15. Is this concrete placement typical for the entire length of the new sheet pile bulkhead?

A: See # 10 above.

16. Will there be any discharge from the outfall pipe during construction? If so, please specify the rates of discharge. Is this material being discharged treated?

A: The outfall pipe is active and is a combined sewer overflow (CSO). This outfall discharges rainwater runoff and untreated sewer during heavy rainfall events. Outside of heavy rainfall events there is very little or no discharge.

17. Drawing C-1 shows a sewer and drain line in the outfall area continuing on to the Eastern edge of the wharf. Drawing C-5 shows the existing outfall pipe being terminated on the western side of the wharf. Is the outfall pipe different from the sewer & drain lines? What elevation is the sewer and drain line at?

A: The lines indicating the sewer and drain lines in the area of the outfall on drawing C-1 are not representative of the actual outfall and do not represent actual pipes. The outfall is a single 60-inch diameter pipe that terminates in a chamber/manhole at the existing bulkhead. See the reference drawings for the existing structure. The outfall invert is at approximate elevation -9 feet NAVD88. Work on the existing manhole and outfall pipe are not in this contract.

18. Please provide an epoxy coating specification for the bulkhead corner tie rods

A: Corner tie rods shall be fusion bonded epoxy coated with epoxy coating in accordance with ASTM A775 or ASTM A934 with a minimum thickness of 8 mils, or coal tar epoxy coating in accordance with tie rod manufacturer's recommendations. Coal Tar Epoxy Coating shall be in accordance with material specifications provided in Section 09 97 13 – Shop Applied Coatings for Metal

Alternatively, corner tie rods may be galvanized using the hot-dip process in conformance with ASTM A153. Special cleaning procedures of the steel shall be performed in accordance with ASTM A14 to mitigate problems associated with hydrogen embrittlement of high strength steel bars.

19. Section 01 10 00-9. C. 7. States to Submit evidence of Contractor's continuing insurance coverage (if required by Contract Documents). What is the GC expected to carry for continual insurance and how long?

A: See Section A.3.2.1 of AIA Document A101-2017 Exhibit A which states "See Section 00 00 45 Supplemental Conditions for insurance requirements". Insurance must be in place until the project is fully closed out and completed.

20. please provide an aluminum anode count, or clarify if they are installed on all sheet pile including bulkhead front as well as end return walls and any internal return walls

A: The anodes shall be installed on the full length of the berth and the north and south end returns. Anodes are not required on the phase I/II cutoff wall. In addition provide two anodes on each of the outfall walls (4 total).

21. Will a shop coat primer and Macropoxy top coat be acceptable for new Cast Steel CSB-9 bollard, please confirm that color shall be red

A: Yes, color to be determined by owner based on available color choices by manufacturer.

22. What would be the allowable down time for power to the pedestals at any point in time?

A: See Addendum 1 question #7.

END OF ADDENDUM 2