# City of Portsmouth Department of Public Works April 26, 2006 Addendum #2 Bid Proposal #57-06

# New Castle Avenue Project

This Addendum forms part of the original document marked Bid #57-06 New Castle Avenue Roadway from Marcy Street to the Bridge over the Piscataqua River Inlet and Seawall Project

- Clarification of a contractor's question.
- Special Provision section 608.24 & 608.26 are to be added to the original bid document.
- Special Provision section 608.25 is to be added to the original bid document.

Please acknowledge this addendum within your proposal. Failure to do so may subject a vendor to disqualification.

# FAY, SPOFFORD & THORNDIKE, INC.

288 South River Road, Bedford, NH 03110



#### CITY OF PORTSMOUTH, NH

# NEWCASTLE AVENUE ROAWDAY AND SEAWALL RECONSTRUCTION FST PROJECT NO. QN-053

April 25, 2006

#### Contractor Question:

Can the wall face be installed with a batter angle due to precast concrete units design?

#### Answer:

The face of the seawall has been specifically shown and designated as vertically plumb due to wetlands permitting requirements relating to the limits of the wetlands restoration and the roadway design parameters. The mudline at the face of the wall must remain in virtually the same location as shown on the plans.

If the specific unavoidable physical characteristics of the proprietary segmental units for the precast concrete seawall system categorically preclude the installation of the wall face in a vertically plumb alignment, then the contractor shall design the wall face and layout where the precast concrete seawall system will have a battered face and the following restrictions shall apply:

- 1. The point where the downward projection of the outer capslab edge intersects the existing grade below (mudline as if the wall face were vertically plumb) MUST be maintained.
- 2. The wall face batter must extend upward and back towards the roadway centerline from the mudline workpoint to the underside of the capslab. The capslab will have to be cantilevered over the top of the precast concrete seawall system to hold the consistent offset from the roadway centerline as shown on the plans.
- 3. The cantilever must not exceed 12" beyond face the edge of the capslab due to the set-back of the wall face by the battered wall configuration. Wall face batter shall not exceed a 2-inch setback in 1.5 feet of rise in wall face.
- 4. The amount of capslab cantilever will be constantly changing along the length of the wall as the existing grade varies in elevation at the mudline and the capslab elevations follow the roadway profile. The contractor shall be responsible for providing detailed shop drawings depicting the wall units' layout to facilitate a battered wall configuration accordingly to ensure accurate fabrication and field fit-up without continuous adjustments or modifications.
- 5. If a battered wall face configuration is utilized, the contractor shall be responsible for the appropriate design of anchoring the overhung capslab to the precast concrete seawall system and for providing thickened slabs and/or additional reinforcement in cantilevered areas at handicap ramps in the sidewalk / capslab.

#### SPECIAL PROVISION

To Section 608 (NHDOT Standard Specifications) Sidewalks

Item 608.52 – ADA Compliant Handicap Ramp Panels

This special provision provides for the installation of handicap accessible ramp surfaces (Detectable Warning Pavers) to be in compliance with the Americans with Disabilities Act (ADA). This Special Provision provides for Item 608.4 and neither modifies nor amends any other provisions of this section unless specifically noted.

# Description

1.1 This work shall consist of furnishing and installing a detectable warning surface and accessories on sidewalk ramps at locations shown on the plans, as specified herein, or as ordered including any and all required surface preparation. Detectable warnings shall be installed at sidewalk ramps where a sidewalk crosses a vehicular way, excluding unsignalized driveway crossings. The edge nearest the curbline shall be located 150 to 200 mm (6 to 8 in) from the face of curbline. The paver shall be centered on the ramp.

#### Materials

# 2.1 Detectable Warning Device:

- 2.1.1 Material. The detectable warning surface shall consist of Engineered Plastic units or approved equal. The units will be pressed into Portland cement or other Owner approved material. The paver units shall be Armor Tile as manufactured and supplied by Engineered Plastic, Inc., 300 International Dr Suite 100, Williamsville, NY 14221, 1-800-769-4463, www.armor-tile.com
- **2.1.2** Color. The color of the tile used shall be brick red, all would be installed in a concrete ramp as described above (608.26).
- **2.1.3** Paver Dimensions. Nominal paver dimensions shall be 2' deep x 3' wide.
- **2.1.4** Detectable Warning Truncated Dome Geometry:
  - 2.1.4.1 Detectable warnings shall be in full compliance with ADAAG guidelines (Title 49 DFR Transportation, Part 37.9 Standard for Accessible Transportation Facilities, Appendix A, Section 4.29.2- Detectable Warning on Walking Surfaces).
  - 2.1.4.2 Size and spacing for truncated domes shall be as follows: base diameter of nominal 0.9 inch, top diameter of nominal 0.4 inch, height of nominal 0.2 inch, with a center to center spacing of nominal 2.35 inches.
  - **2.1.4.3** The truncated dome pattern shall align properly from paver to paver if more than 1 paver is required.

#### 2.2 Setting Bed Material

**2.2.1** Material. Pavers shall be set into fresh concrete before it sets. See ramp specification above (608.26). Also see manufacturer instructions.

# **Construction Requirements**

- **3.1** The Contractor shall submit manufacturer's installation instructions and descriptive literature for materials specified herein.
- **3.2** Transport, storage, and handling of products shall be in accordance with manufacturer's instructions.
  - **3.2.1** All sealants/adhesives shall be protected from freezing conditions.
- **3.3** The air and surface temperatures during construction shall be in accordance with manufacturer's recommendations.
- 3.4 Concrete foundation shall be installed in accordance with the specifications included within Section 608 to depths indicated in the section shown on the plans.
- 3.5 Install detectable warning pavers in accordance with manufacturer's instructions directly in the setting bed and the allowing the top surface of the paver units to be at or just below the required finish grade.
- 3.6 Care shall be taken to ensure the safety of pedestrians when sidewalks must remain in service during construction.

#### Method of Measurement

**4.1**These are measured by each panel installed under the truncated dome panel item.

# **Basis of Payment**

Pay Item and Unit

608.52 Truncated Dome Pavers (Detectable Warning Pavers Only) Each

#### SPECIAL PROVISION

To Section 608 (NHDOT Standard Specifications) Sidewalks

# Amend Section 608 to read:

#### SECTION 608.24 & 608.26

#### CONCRETE SIDEWALK CONSTRUCTION

Sidewalks outside the Seawall shall conform to Section 608 with the following amendments:

1.01 <u>Scope of Work:</u> The work shall consist of construction of concrete sidewalks as shown on the plans or as directed in the field by the Engineer.

# 1.02 Methods of Construction:

- 1.02a All labor and materials shall conform to the State of New Hampshire Standard Specifications for Road and Bridge Construction, Section 608, 203 and 209 except as amended here.
- 1.02b All concrete shall be Class A, 4000-PSI after 28 days with 5 to 7 percent air entrained. The maximum concrete slump that will be allowed is 5, this may be tested by the engineer at any time. All concrete will have polyfiber reinforcing. Any concrete found not meeting this specification will be removed and repoured by the contractor with no additional expense to the owner. Expansion joints shall be 25' apart. Control joints shall be 5' apart and shall be \(^{1}\)4 of the depth of the sidewalk (Up to 1 1/2" deep).
- 1.02c Minimum thickness shall be 4 inches (for 608.24) and 6 inches (for 608.26) unless approved by the engineer.
- 1.02d The ends of all sidewalks at driveways shall be ramped at a maximum slope of 1:12.
- 1.02e All sidewalks shall have handicap ramps at street intersections or as located by the Engineer, built at a maximum slope of 1:12 and in accordance with the ADA Regulations (see plan details).
- 1.02f Excavation for new sidewalks shall be at a depth of 12 inches below finish grade. In areas not butting curbing or buildings the excavation shall be 6 inches wider on each side than the finished sidewalk width. At all drive crossings, the depth of excavation shall be increased accordingly. All unsuitable material shall be approved by the Engineer and removed and disposed of offsite at the Contractor's own expense. At no time will unsuitable material be left under sidewalk areas.
- 1.02g Handicapped ramps (at street intersections) shall be 6" deep, 4000 psi fiber mix reinforced with 6" x 6" x 10ga welded wire mesh with truncated dome panels (paid for under 608.52).
- 1.02h All exposed edges of sidewalks will be sealed with an approved Silane-Siloxane coating as specified under 534.3.4. Any sidewalks not meeting the test referenced in 534.3.4 will be recoated at no expense to the owner. Contractor will provide cut sheets on product before installation for engineers approval.
- 1.02I All sidewalk areas shall be thoroughly wetted and compacted prior to the pouring of any concrete. All sidewalks will be kept damp using wet burlap tarps or any other approved method for 24 hours after set up. Tarps will be staked down to prevent being blown off by wind gusts. Curing compounds will be considered an approved equal.

- 1.02j All sidewalks will be finished with a soft broom with the finish being transverse to the typical pedestrian path. After brooming, all edges will be finish edged.
- 1.02k Any sidewalks poured that have excessive "popcorning" on top or on the sides as determined by the engineer will not be approved or paid for.
- 1.021 All joints shall be straight, even and perpendicular to the sidewalk.

# 1.03 Methods of Measurement:

This work shall be measured by the square yard of concrete sidewalk successfully & completely installed and approved by the Engineer.

# 1.04 Basis of Payment:

This work shall be paid for at the Contract Unit Price as listed in Item #608.24 & 608.26 in the Bid Specification.

This price shall include all equipment, material and labor incidental hereto.