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**GEORGETOWN READINESS CENTER  
EXTERIOR ENVELOPE & INTERIOR UPGRADES  
FIRE ALARM / SPRINKLER SYSTEM ADDITION  
GEORGETOWN, DELAWARE  
STATE PROJECT NO: MJ7601000046  
OCTOBER 27, 2016**

**ADDENDUM NO. 2**

The following items shall become a part of the contract documents. Contractor must acknowledge receipt of this addendum on the Bid Form. Failure to do so may subject the Bidder to disqualification.

- Item No. 1      See attached specification section 09 30 13 - Ceramic Tile, for flooring.
- Item No. 2      There are no liquidated damages on this project.
- Item No. 3      Refer to drawing EXT1: The existing waterline at the sprinkler tie-in is 8 inches.
- Item No. 4      The hardware sets have been added to the door schedule, see attached Drawing A3.1.
- Item No. 5      Refer to Detail K1/A3.2 for countertop specifications. The basis of design is Meganite or an approved equal. The sinks shall be an integral bowl as specified on the plumbing schedule.
- Item No. 6      Refer to Detail D8/A3.1 for requirements to patch removed slab.
- Item No. 7      Refer to attached Sheet P3.0 for the new floor drain tie-in direction at the fire pump room.
- Item No. 8      Refer to attached Drawings M3.1 for the following revisions:
- Drawings notes 1 and 4 have been revised.
  - Drawing note 7 has been added to the plan.
  - Duct detector locations have been revised.
- Item No. 9      A dual relay power pack “RC2” has been added to the legend, see attached Drawing E1.0.
- Item No. 10     MDP2 and MDP panel schedules have been revised, see attached Drawing E1.2.
- Item No. 11     The exhaust fan tag in the fire pump room has been revised to EF-3, see attached Drawing E3.1.

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Georgetown Readiness Center, Exterior Envelope & Interior Upgrades

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- Item No. 12      The lighting controls and the exhaust fan tags in the latrines have been revised, see attached Drawing E4.0.
  
- Item No. 13      The contractor is responsible for all associated work with installing the roof curb for RTU-1. This work includes, but is not limited to, cutting the existing roof and deck, installing necessary blocking and flashing the curb into the existing roof for a weathertight connection.
  
- Item No. 14      The size of the new server room has been revised, see attached Drawing A1.1.
  
- Item No. 15      As noted at the pre-bid meeting, one original bid and two copies are required.
  
- Item No. 16      The floor in the boiler room shall be cut and patched to accommodate the new floor drain in the fire pump room. See attached drawing A1.1 and P3-0.
  
- Item No. 17      The curtain leading into the shower area in the men's latrine has been removed.

END OF ADDENDUM

**SECTION 09 30 13****CERAMIC TILING****PART 1 - GENERAL****1.1 SUMMARY**

- A. Section Includes:
1. Floor tile.
  2. Stone thresholds.
  3. Waterproof membrane.

**1.2 ACTION SUBMITTALS**

- A. Product Data: For each type of product.
- B. Samples:
1. Each type and composition of tile and for each color and finish required.
  2. Assembled samples mounted on a rigid panel, with grouted joints, for each type and composition of tile and for each color and finish required.
  3. Stone thresholds.

**1.3 QUALITY ASSURANCE**

- A. Mockups: Build mockups to verify selections made under Sample submittals and to demonstrate aesthetic effects and set quality standards for materials and execution.
1. Build mockup of floor tile installation.
  2. Subject to compliance with requirements, approved mockups may become part of the completed Work if undisturbed at time of Substantial Completion.

**PART 2 - PRODUCTS****2.1 PRODUCTS, GENERAL**

- A. ANSI Ceramic Tile Standard: Provide Standard-grade tile that complies with ANSI A137.1 for types, compositions, and other characteristics indicated.
- B. ANSI Standards for Tile Installation Materials: Provide materials complying with ANSI A108.02, ANSI standards referenced in other Part 2 articles, ANSI standards referenced by TCNA installation methods specified in tile installation schedules, and other requirements specified.

## 2.2 TILE PRODUCTS

### A. Ceramic Tile: Glazed floor tile.

1. Manufacturers or approved equal:
  - a. American Olean
  - b. Daltile (Basis of Design)
2. Face Size: 12 x 12 inches.
3. Thickness: 5/16".
4. Dynamic Coefficient of Friction: Not less than 0.42.
5. Glaze: Mat, clear.
6. Basis of Design: Series - Heathland
7. Tile Color and Pattern: As selected by Owner from manufacturer's full range.
8. Grout Color: As selected by Owner from manufacturer's full range.
9. Trim Units: Coordinated with sizes and coursing of adjoining flat tile where applicable and matching characteristics of adjoining flat tile. Provide shapes as follows, selected from manufacturer's standard shapes:
  - a. Base Cove: Cove, module size same width as adjoining flat tile.

## 2.3 THRESHOLDS

### A. General: Fabricate to sizes and profiles indicated or required to provide transition between adjacent floor finishes.

1. Bevel edges at 1:2 slope, with lower edge of bevel aligned with or up to 1/16 inch (1.5 mm) above adjacent floor surface. Finish bevel to match top surface of threshold. Limit height of threshold to 1/2 inch (12.7 mm) or less above adjacent floor surface.

### B. Marble Thresholds: ASTM C 503/C 503M, with a minimum abrasion resistance of 10 according to ASTM C 1353 or ASTM C 241/C 241M and with honed finish.

1. Description: Uniform, fine- to medium-grained white stone with gray veining.

## 2.4 WATERPROOF MEMBRANE

### A. General: Manufacturer's standard product that complies with ANSI A118.10 and is recommended by the manufacturer for the application indicated. Include reinforcement and accessories recommended by manufacturer.

## 2.5 CRACK ISOLATION MEMBRANE

### A. General: Manufacturer's standard product that complies with ANSI A118.12 for high performance and is recommended by the manufacturer for the application indicated. Include reinforcement and accessories recommended by manufacturer.

## 2.6 SETTING MATERIALS

- A. Portland Cement Mortar: ASTM C150, Type 1, gray or white.

## 2.7 GROUT MATERIALS

- A. Sand-Portland Cement Grout: ANSI A108.10, consisting of white or gray cement and white or colored aggregate as required to produce color indicated.

## 2.8 MISCELLANEOUS MATERIALS

- A. Trowelable Underlayments and Patching Compounds: Latex-modified, portland cement-based formulation provided or approved by manufacturer of tile-setting materials for installations indicated.
- B. Grout Sealer: Manufacturer's standard product for sealing grout joints and that does not change color or appearance of grout.
  - 1. Manufacturer or approved equal:
    - a. Bonsal American
    - b. Custom Building Products
    - c. Jamo Inc.
    - d. Southern Grouts & Mortars
    - e. Summitville Tiles, Inc.
  - 2. Grout sealers shall comply with requirements of FloorScore certification.
  - 3. Grout sealers shall comply with the testing and product requirements of the California Department of Public Health's (formerly, the California Department of Health Services') "Standard Method for the Testing and Evaluation of Volatile Organic Chemical Emissions from Indoor Sources Using Small-Scale Environmental Chambers."

## PART 3 - EXECUTION

### 3.1 EXAMINATION

- A. Examine substrates, areas, and conditions where tile will be installed, with Installer present, for compliance with requirements for installation tolerances and other conditions affecting performance of the Work.
  - 1. Verify that substrates for setting tile are firm; dry; clean; free of coatings that are incompatible with tile-setting materials, including curing compounds and other substances that contain soap, wax, oil, or silicone; and comply with flatness tolerances required by ANSI A108.01 for installations indicated.
  - 2. Verify that concrete substrates for tile floors installed with adhesives, bonded mortar bed or thinset mortar comply with surface finish requirements in ANSI A108.01 for installations indicated.
- B. Proceed with installation only after unsatisfactory conditions have been corrected.

### 3.2 PREPARATION

- A. Fill cracks, holes, and depressions in concrete substrates for tile floors installed with thinset mortar with trowelable leveling and patching compound specifically recommended by tile-setting material manufacturer.
- B. Where indicated, prepare substrates to receive waterproofing by applying a reinforced mortar bed that complies with ANSI A108.1A and is sloped 1/4 inch per foot (1:50) toward drains.
- C. Blending: For tile exhibiting color variations, verify that tile has been factory blended and packaged so tile units taken from one package show same range of colors as those taken from other packages and match approved Samples. If not factory blended, either return to manufacturer or blend tiles at Project site before installing.
- D. Protect surrounding work from damage.

### 3.3 CERAMIC TILE INSTALLATION

- A. Comply with TCNA's "Handbook for Ceramic, Glass, and Stone Tile Installation" for TCNA installation methods specified in tile installation schedules. Comply with parts of the ANSI A108 series "Specifications for Installation of Ceramic Tile" that are referenced in TCNA installation methods, specified in tile installation schedules, and apply to types of setting and grouting materials used.
- B. Extend tile work into recesses and under or behind equipment and fixtures to form complete covering without interruptions unless otherwise indicated. Terminate work neatly at obstructions, edges, and corners without disrupting pattern or joint alignments.
- C. Accurately form intersections and returns. Perform cutting and drilling of tile without marring visible surfaces. Carefully grind cut edges of tile abutting trim, finish, or built-in items for straight aligned joints. Fit tile closely to electrical outlets, piping, fixtures, and other penetrations so plates, collars, or covers overlap tile.
- D. Provide manufacturer's standard trim shapes where necessary to eliminate exposed tile edges.
- E. Where accent tile differs in thickness from field tile, vary setting bed thickness so that tiles are flush.
- F. Jointing Pattern: Lay tile in grid pattern unless otherwise indicated. Lay out tile work and center tile fields in both directions in each space or on each wall area. Lay out tile work to minimize the use of pieces that are less than half of a tile. Provide uniform joint widths unless otherwise indicated.
- G. Joint Widths: Unless otherwise indicated, install tile with the following joint widths:
  - 1. Ceramic Tile: 3/16" minimum.
- H. Expansion Joints: Provide expansion joints and other sealant-filled joints, including control, contraction, and isolation joints, in locations verified in the field. Form joints during installation of setting materials, mortar beds, and tile. Do not saw-cut joints after installing tiles.

1. Where joints occur in concrete substrates, locate joints in tile surfaces directly above them.
- I. Stone Thresholds: Install stone thresholds in same type of setting bed as adjacent floor unless otherwise indicated.
    1. At locations where mortar bed (thickset) would otherwise be exposed above adjacent floor finishes, set thresholds in latex-portland cement mortar (thinset).
    2. Do not extend waterproofing under thresholds set in dry-set portland cement mortar. Fill joints between such thresholds and adjoining tile set with elastomeric sealant.
  - J. Grout Sealer: Apply grout sealer to cementitious grout joints in tile floors according to grout-sealer manufacturer's written instructions. As soon as grout sealer has penetrated grout joints, remove excess sealer and sealer from tile faces by wiping with soft cloth.
  - K. Install waterproofing to comply with ANSI A108.13 and manufacturer's written instructions to produce waterproof membrane of uniform thickness that is bonded securely to substrate.
- 3.4 PROTECTION OF FINISHED WORK
- A. Do not permit traffic over finished floor surface for 72 hours after installation.
  - B. Cover floor with kraft paper to protect from other trades.
  - C. Where floor will be exposed for prolonged periods, cover with plywood or similar type walkways.

END OF SECTION

**DRAWINGS REDACTED**