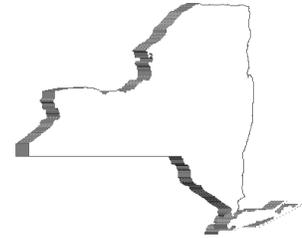




STATE OF NEW YORK
OFFICE OF GENERAL SERVICES
DESIGN AND CONSTRUCTION GROUP
THE GOVERNOR NELSON A. ROCKEFELLER
EMPIRE STATE PLAZA
ALBANY, NY 12242



ADDENDUM NO. 2 TO PROJECT NO. 44956

**CONSTRUCTION WORK, HVAC WORK, PLUMBING WORK, ELECTRIC WORK
REPLACE SUPPLY & RETURN
HOT AND COLD WATER PIPING
BLDGS. 143, 144, 152
GROVELAND CORRECTIONAL FACILITY
7000 SONYEA ROAD, ROUTE 36
SONYEA, NY**

June 6, 2016

NOTE: This Addendum forms a part of the Contract Documents. Insert it in the Project Manual.
Acknowledge receipt of this Addendum in the space provided on the Bid Form.

**C CONTRACT:
SPECIFICATIONS**

1. Delete Section 042000 Unit Masonry in its entirety.
2. Add Section 042200 Concrete Unit Masonry. See attached.
3. Add Section 054000 Cold Formed Metal Framing. See attached.
4. Page 092116-3: add Article 2.06 ACCESSORIES as shown below:

2.06 ACCESSORIES

- A. Flattened Expanded Metal Mesh: ASTM F 1267, Type II, Class 1, grade as selected by fabricator; 13 gage, 1/2 inch carbon sheet steel, diamond style.

END OF ADDENDUM

Margaret F. Larkin
Executive Director
Design and Construction

SECTION 042200

CONCRETE UNIT MASONRY

PART 1 GENERAL

1.01 SUBMITTALS

- A. Product Data: Catalog sheets, specifications, and installation instructions for the following:
 - 1. Portland Cement: Brand and manufacturer's name.
 - 2. Masonry Cement: Brand and manufacturer's name.
 - 3. Lime: Brand and manufacturer's name.
 - 4. Sand(s): Location of pit, name of owner, and previous test data.
 - 5. Masonry wall reinforcement.
- B. Quality Control Submittals:
 - 1. Test Reports: Certified test reports for concrete masonry units showing that materials for delivery to the Project meet the requirements of these Specifications.

1.02 DELIVERY, STORAGE, AND HANDLING

- A. Store masonry units off the ground on platforms that allow air circulation under stacked units.
- B. Cover and protect masonry units against wetting prior to use.
- C. Handle masonry units on pallets or flat bed barrows.

PART 2 PRODUCTS

2.01 CONCRETE MASONRY UNITS

- A. Solid Load-Bearing Units: ASTM C 90.
- B. Aggregate:
 - 1. Lightweight Units: ASTM C 331; dry net weight not more than 105 lb per cu ft.
- C. Special Shapes: Units of shape and size required for lintels, corners, jambs, sash, control joints, headers, bonding, and other special conditions indicated.
- D. Manufacturer: Obtain masonry units from one manufacturer, of uniform texture and color for each kind required. All concrete masonry units must be certified to contain a minimum of 30 percent pre-consumer (post-industrial) recycled content.

2.02 MORTAR

- A. Cement: One of the following complying with the indicated requirements:
 - 1. Portland Cement: ASTM C 150, Type 1, of natural color or white as required to produce the desired color.
 - a. Fly Ash: Comply with ASTM C593.
 - 1) Recycled Content: Minimum 15 percent pre-consumer recycled content at contractor's option.
 - a) Type 1: 81 g, 15 percent.
 - 2. Masonry Cement: ASTM C 91, of natural color or custom color as required to produce the desired color.
 - a. Fly Ash: Comply with ASTM C593.
 - 1.) Recycled Content: Minimum 5 percent post-consumer recycled content, or minimum 20 percent pre-consumer recycled content at contractor's option.
 - a) Type S: 26 g, 5 percent; 102 g, 20 percent.
- B. Hydrated Lime: ASTM C 207, Type S.
- C. Mortar Sand: ASTM C 144, except that for joints less than 1/4 inch thick use sand graded with 100 percent passing the No. 16 sieve.
- D. Water: Clean and free of deleterious amounts of acids, alkalis, and organic materials.
- E. Mortar Mix for Unit Masonry: Comply with ASTM C 270, proportion specifications, except limit materials to those specified.

2.03 ACCESSORIES

- A. Masonry Wall Reinforcement: Joint reinforcement factory fabricated from cold-drawn steel wire, ASTM A 82, truss or ladder design, with 9 gage deformed steel wire longitudinal rods welded to 9 gage steel wire cross ties spaced 16 inches oc; width 1-1/2 to 2 inches less than total wall thickness. Furnish factory-fabricated corner and tee sections for corners and wall intersections.
 - 1. Finish for Bathroom Walls Exposed to Moist Environment: 1.5 oz per sq ft hot dipped galvanized after fabrication, ASTM A 153, Class B-2.

2.04 SOURCE QUALITY CONTROL

- A. Tests: Sample and test concrete masonry units in accordance with ASTM C 140 and ASTM C 426. Have tests performed by a qualified independent testing laboratory.

PART 3 EXECUTION

3.01 PREPARATION

- A. Allow other trades sufficient opportunity to install built-in Work before proceeding with the walls and partitions. Do not cover pipes, conduit, or ductwork in masonry until directed by the Director's Representative.
- B. Clean off supporting surface under first course of masonry just prior to laying the masonry units.
- C. Protection:
 - 1. Protect face materials against staining.
 - 2. Remove misplaced mortar immediately.
 - 3. Protect sills, ledges, off-sets, and similar items from mortar drippings and other damage during construction.
 - 4. Protect newly laid masonry from exposure to precipitation, excessive drying, freezing, soiling, backfill, and other harmful elements.
 - 5. Cover top of walls with non-staining waterproof covering when Work is not in progress. Place with minimum 2-foot overhang of protective covering on each side of wall and securely anchor.

3.02 INSTALLATION

- A. Install concrete masonry units plumb and true to line in level courses accurately spaced.
- B. Lay masonry units in running bond, with vertical joints located at center of units in course below, unless otherwise indicated on the Drawings.
- C. Lay only dry masonry units.
- D. Adjust units to final position while mortar is soft and plastic. Remove units disturbed after mortar has stiffened; clean joints and units of mortar and re-lay in fresh mortar.
- E. Lay out Work to avoid use of less than half-size units. Where cutting of masonry units is necessary, cut with a power saw.
- F. Where fresh masonry joins partially or totally set masonry, clean bond surfaces of set masonry, removing loose mortar and foreign material prior to laying fresh masonry.
- G. If it is necessary to stop off a horizontal run of masonry, rack back one-half unit length in each course. Tothing will not be permitted unless approved in writing by the Director's Representative.

3.03 INSTALLATION TOLERANCES

- A. Variation from the Plumb:
 - 1. In the lines and surfaces of columns, walls, and arises:
 - a. In 10 feet: 1/4 inch.

2. For external corners, control joints, and other conspicuous lines:
 - a. In any story or 20 feet maximum: 1/4 inch.
- B. Variation of the Linear Building Lines from Established Position in Plan and Related Portion of Columns, Walls, and Partitions:
 1. In any bay or 20 feet maximum: 1/2 inch.

3.04 MORTAR BEDS

- A. Solid Units: Lay with full mortar coverage on horizontal and vertical joint surfaces.

3.05 JOINTS

- A. Horizontal and Vertical Face Joints:
 1. Nominal Thickness: 3/8 inch, unless otherwise indicated.
 2. Construct uniform joints.
 3. Cut joints flush and tool slightly concave on both sides of walls and partitions.
- B. Remove mortar protruding into cells or cavities to be reinforced or filled.

3.06 HORIZONTAL JOINT REINFORCEMENT

- A. Reinforce horizontal joints of concrete unit masonry with continuous masonry wall reinforcement at the following locations:
 1. Interior load-bearing walls.
 2. Straight runs of interior non-load-bearing partitions and walls that exceed 20 feet in length or exceed 12 feet in height, including partitions and walls having door and window openings.
 3. Joint immediately above and below openings in walls and partitions for a length 4 feet longer than opening.
 4. Other locations as indicated on the drawings.
- B. Install masonry wall reinforcement in horizontal joints as follows:
 1. Space reinforcement every 16 inches vertically.
 2. Straighten kinks or bends in the wires caused by handling, without injury to the material, before placing in masonry.
 3. Place longitudinal wires over face shell mortar beds.
 4. Embed entire length of longitudinal wires fully in mortar.
 5. Provide minimum mortar cover of 5/8 inch on exterior side of exterior walls and 1/2 inch at other locations.
 6. Lap ends of adjoining strips of reinforcement 6 inches or more.
 7. Install factory fabricated corner and tee sections at corners and wall intersections respectively.
 8. Cut reinforcement one inch short of each side of control and expansion joints.
 9. Install additional lengths of reinforcement in first unreinforced joint above and below openings, centered on opening.

3.07 BONDING WITH MASONRY

- A. Bonding of Abutting or Intersecting Walls and Partitions:
 - 1. External Corners: Where partitions and walls form external corners, bond together by alternate lapping of each course of corner unit.

3.08 BUILT-IN WORK

- A. Avoid cutting and patching.
- B. Build-in bolts, anchors, nailing blocks, inserts, frames, vents, flashings, conduit and other items as masonry Work progresses.
- C. Fit masonry units closely around built-in Work. Fill voids around built-in items with mortar for anchorage. Solidly fill space between masonry and metal frames with mortar.

3.09 POINTING AND CLEANING

- A. Cut off mortar projections remaining from tooling joints.
- B. Dry brush masonry Work after mortar has set, at end of each day's Work and after final pointing.
- C. At completion of masonry Work, fill holes in joints (except weep holes) and tool.
- D. Remove and replace CMU that are loose, chipped, broken, stained, or otherwise damaged, or if units do not match adjacent units. Install new units to match adjoining units in fresh mortar, point joints to eliminate any evidence of block replacement.
- E. Cut out and repoint defective joints.
- F. Leave Work and surrounding surfaces clean and free of mortar spots and droppings.

3.10 CONCRETE MASONRY UNIT SCHEDULE

- A. Unless shown otherwise on the Drawings, use the various kinds of concrete masonry units specified at the locations indicated below:
 - 1. Solid Load-Bearing Units (Lightweight):
 - a. Use for walls supporting wall-hung plumbing fixtures.

END OF SECTION

SECTION 054000

COLD-FORMED METAL FRAMING

PART 1 GENERAL

1.01 RELATED WORK SPECIFIED ELSEWHERE

- A. Non-load Bearing, Light Gage Steel Framing: Section 092116.

1.02 REFERENCES

- A. Except as shown or specified otherwise, the Work of this Section shall meet the requirements of the following:
 - 1. General Standard: "Specification for the Design of Cold-Formed Steel Structural Members" by the American Iron and Steel Institute (AISI Specification).
 - 2. Welding: "Structural Welding Code - Sheet Steel, AWS D1.3" by the American Welding Society (AWS Code).
- B. Organizations:
 - 1. AISI: American Iron and Steel Institute, 1140 Connecticut Ave., NW, Suite 705, Washington, D.C. 20036, (202) 452-7100, www.steel.org.
 - 2. AWS: American Welding Society, 550 N.W. LeJeune Rd., Miami, FL 33126, (800) 443-9353, www.aws.org.
 - 3. ASTM: ASTM International, 100 Barr Harbor Dr., PO Box C700, West Conshohocken, PA, 19428-2959, (610) 832-9500, www.astm.org.
 - 4. SSPC: The Society for Protective Coatings, 40 24th Street, 6th Floor, Pittsburgh PA 15222-4656, (877) 281-7772, www.sspc.org.

1.03 SYSTEM DESCRIPTION

- A. Type of Metal Framing: Load carrying, formed steel framing.
 - 1. Framing with joists and accessories.

1.04 SUBMITTALS

- A. Shop Drawings: Erection and fabrication drawings for all load carrying metal framing and accessories. Show plans and elevations at not less than 1/4 inch to 1'-0" scale, and details at not less than 1-1/2 inch to 1'-0" scale.
 - 1. Include the following in an early submission:
 - a. Erection drawings indicating sizes and locations of all metal framing members.
 - b. Anchor bolt plan showing anchor bolts, if any, to be placed in cast-in-place concrete Work.
 - c. Show plans and elevations at not less than 1/4 inch to 1'-0" scale, and details at not less than 1-1/2 inch to 1'-0" scale.

2. Do not submit fabrication drawings, other than for anchor bolts, until after approval of the erection drawings.
 3. When shop drawings are marked “Approved as Noted”, promptly resubmit copies of corrected shop drawings for formal approval and record.
- B. Product Data: Manufacturer’s printed specifications and installation instructions for each type of metal framing and accessory, including data required to show compliance with the Drawings and Specifications.
- C. Quality Control Submittals:
1. Certificates: Affidavit required under Quality Assurance Article.

1.05 QUALITY ASSURANCE

- A. Certification: Affidavit certifying that sheet steel complies with specified quality, grade, and zinc-coating.

1.06 DELIVERY, STORAGE, AND HANDLING

- A. Deliver metal framing to the Site in manufacturer’s unopened containers or bundles, identified with brand, type, and gage.
- B. Protect metal framing from damage and rusting. Store off the ground in dry, ventilated space.
- C. Store and handle metal framing in a manner that will not cause distortion.

PART 2 PRODUCTS

2.01 MATERIALS

- A. Framing (including Tracks, Joists, and Perimeter Channel):
1. Members of 12, 14, and 16 Gage Steel: Galvanized, structural quality sheet steel; ASTM A653, Grade D (minimum yield 50 ksi).
 2. Members of 18 and 20 Gage Steel: Galvanized, structural quality sheet steel; ASTM A653, Grade A (minimum yield 33 ksi).
- B. Accessories and Fasteners:
1. Bracing, Bridging, Strapping, Reinforcement, Stiffeners, Plates, Gussets, Clip Angles, and Hangers: Unless otherwise indicated, metal framing manufacturer’s standard products formed from ASTM A653 galvanized, structural quality sheet steel. Thickness and grade shall be determined by application requirements, with a minimum thickness of 20 gage and a minimum yield of 33 ksi.
 2. Power-Actuated Fasteners: Low velocity, powder activated, threaded studs complying with ASTM E 1190 and zinc coated in accordance with ASTM B633, Type III, Classification 5.

- a. Minimum Stud Size: 1/4-20 thread, 0.145 inch dia shank, with 1/4-20 nut and 5/8 inch outside dia washer.
 - b. Stud Material: ASTM A510 1060 or 1065 steel.
 - c. Minimum Core Hardness: 51-56 Rockwell C.
 - d. Minimum Tensile Strength: 285,000 psi.
 - e. Minimum Shear Strength: 182,000 psi.
3. Self-Drilling Fasteners: Cadmium plated, No. 12-14 x 3/4 inch, hex washer head, self-drilling, self-tapping fastener with pilot point.
- C. Galvanizing: Hot-dip process complying with ASTM A653, Coating Designation G 60.
- D. Galvanizing Repair Paint: High-zinc-dust-content paint complying with SSPC-Paint 20 and compatible with paints specified to be used over it.

2.02 FABRICATION

- A. Fabricate metal framing in accordance with “Approved” or “Approved as Noted” fabrication drawings only.
 - 1. When fabrication drawings are “Approved as Noted”, progress fabrication in strict accordance with the marks and notes thereon.
- B. Repairing Galvanizing: Clean shop welded and abraded surfaces, and repair them with a 2 mil (dry) minimum thick coating of galvanizing repair paint. Comply with paint manufacturer’s application instructions.

PART 3 EXECUTION

3.01 EXAMINATION

- A. Verification of Conditions: Examine surfaces to receive metal framing for defects that will adversely affect the execution and quality of the Work. Do not proceed until unsatisfactory conditions are corrected.

3.02 SURFACE PREPARATION

- A. Clean surfaces that support the Work of this Section.

3.03 INSTALLATION

- A. Install metal framing and accessories in accordance with approved shop drawings, and with the metal framing manufacturer’s printed installation instructions.
- B. Provide temporary bracing to ensure stability of the structure during construction.
- C. Repairing Galvanizing: Clean field welded and abraded surfaces, and repair them with a 2 mil (dry) minimum thick coating of galvanizing repair paint. Comply with paint manufacturer’s application instructions.

- D. Installation of Joists:
1. Install joists of size and gage shown. Space joists 16 inches maximum oc, unless otherwise shown.
 2. Locate joists directly over bearing studs, or provide a load distribution member at the top track.
 3. Unless otherwise shown, install joists with a minimum bearing of 1-1/2 inches at end supports and 3-1/2 inches at intermediate supports.
 4. Install the following as shown, or if not shown, provide the metal framing manufacturer's recommended details:
 - a. Framing connectors.
 - b. Web stiffeners at bearing and concentrated load points.
 - c. Reinforcement at intermediate supports.
 5. Install bridging at joist ends and at intermediate supports, unless joists are otherwise restrained from rotation.
 6. Install additional framing around floor openings wider than the joist spacing.
 7. Unless otherwise shown, install transverse bridging at midspan for joist spans up to 15 feet, and in equally spaced rows not exceeding 8 feet oc for joist spans exceeding 15 feet. For each row, install solid bridging in the first two and last two joist spaces, and at single intermediate spaces not exceeding 10 feet oc, plus continuous 2 inch by 16 gage strapping on the bottom of the joists. The solid bridging shall be of the same depth as the joists and 16 gage minimum thickness. Fasten the solid bridging sections to the joists with 16 gage clip angles with a length one inch less than the joist depth, and with one row of self-drilling fasteners spaced 3 inches on center in each clip angle leg. Fasten the continuous strapping to the solid bridging with 4 self-drilling fasteners, and to the joist bottom flanges with one self-drilling fastener. Do not fasten the strapping by welding.
 8. Provide temporary lateral support for the joist top flanges between the solid bridging locations until the deck material has been installed.
 9. Install diagonal bracing as shown.

END OF SECTION