



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. 1 TO PROJECT NO. 44484

**CONSTRUCTION WORK,
REPLACE ROOFS, BUILDINGS 12J, 12A, 18 & 94
WALLKILL CORRECTIONAL FACILITY
PO BOX G, ROUTE 208,
WALLKILL, NEW YORK, 12589**

July 26, 2013

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.

DRAWINGS:

1. Addendum Drawing:
 - a. Drawing No. A-102 is attached to this Addendum and forms part of the Contract Documents.

2. b. GENERAL NOTES: Add Note No. 24 to drawing A-500:

“ 24. CONTRACTOR SHALL NOTE THAT THE ROOF HEIGHTS ABOVE FINISHED GRADE ON 12-A AND 12-J ARE AS FOLLOWS:

 - 12-A-1 : +/- 45.0'
 - 12-A-2 : +/- 15.0'
 - 12-A-3 : +/- 25.0' & 32.0'
 - 12-A-4 : +/- 25.0'
 - 12-J-1 : +/- 32.0' to top of Parapet
 - 12-J-2 : +/- 36.0' to top of Parapet “

3. c. GENERAL NOTES: Add Note No. 11 to drawing A-103:

“ 11. ROOF HEIGHTS ON BLDG. 18 AND BLDG. 94 ARE AS FOLLOWS:
Bldg. 18 : Eave Height - +/- 8'-6”
Bldg. 94 : Eave Height - +/- 8'-6” “

4. d. “ 12. THE EXISTING ROOF SLOPES ON BLDG. 18 AND BLDG. 94 IS 6” ON 12”.

SPECIFICATIONS:

5. SECTION 323113 CHAIN LINK FENCE AND GATES:
 - a. Add to the Project Manual the Section 323113 dated 7/26/2013 attached.

END OF ADDENDUM

James Dirolf, P.E.
Director of Design

SECTION 323113

CHAIN LINK FENCE AND GATES

PART 1 GENERAL

1.01 REFERENCES

- A. Comply with ASTM A 53 for requirements of Schedule 40 piping.
- B. Welding Standards: “Structural Welding Code - Steel, AWS D1.1” or “Structural Welding Code - Sheet Steel, AWS D1.3”, as applicable, by the American Welding Society (AWS Codes).
- C. Materials and Finishes Standard: ANSI/BHMA A156.18-1993, “American National Standard for Materials and Finishes”.

1.02 DEFINITIONS

- A. Height of Fence: Distance measured from the top of concrete footing to the top of fabric.
- B. Company Field Advisor: An employee of the company which markets the security coils under their name and who is certified in writing by the Company to be technically qualified in design and installation of security coils or an employee of an organization certified by the foregoing company to be technically qualified in design and installation of security coils.

1.03 SUBMITTALS

- A. Shop Drawings: Complete detailed drawings for each height and style of fence and gate required. Include separate schedule for each listing all materials required and technical data such as size, weight, and finish, to ensure conformance to specifications.
- B. Product Data: Manufacturer’s catalog cuts, specifications, and installation instructions for each item specified.
- C. Samples:
 - 1. Fence Fabric: Minimum one square foot.
 - 2. Fence and Gate Posts: One foot long each.
 - 3. Miscellaneous Materials and Accessories: One each.
 - 4. If directed, provide samples from materials delivered to the Site for installation.
- D. Re-Evaluation Fee: In accordance with Article 4.7 of the General Conditions, a re-evaluation processing fee will be levied against the Contractor for each re-evaluation of any Submittal Package submission that was returned for failure to comply with the submittal requirements relative to completeness, content or

format. There will be a fee of \$250 levied against the Contractor for each re-evaluation of any Submittal Package submission that was returned for failure to comply with the submittal requirements relative to completeness, content or format.

- E. Quality Control Submittals:
 - 1. Test Reports: Security coils test procedure report.
 - 2. Certificates: Letter required under Quality Assurance Article.

1.04 QUALITY ASSURANCE

- A. Comply with standards of the Chain Link Fence Manufacturer's Institute.
- B. Provide steel fence and related gates as a complete compatible system including necessary erection accessories, fittings, and fastenings.
- C. Posts and rails shall be continuous without splices.
- D. Security Coils Installation Certification: Letter by the Company Field Advisor stating that the fence company is certified in the installation of the security coils and meets the Contract requirements.
- E. Concrete batching plants shall be currently approved as concrete suppliers by the New York State Department of Transportation.

1.05 DELIVERY

- A. Coordinate delivery of anchors and other accessories to be built into other Work, to avoid delay. Furnish instructions and templates as required for accurate location.

1.06 UNIFORMITY OF DETENTION HARDWARE

- A. Provide detention hardware specified in this section from the same manufacturer.
- B. Coordinate with the facility the detention hardware required.

PART 2 PRODUCTS

2.01 COMPANIES

- A. Allied Tube & Conduit Corp., 16100 S. Lathrop Ave., Harvey, IL 60426, (800) 882-5543.
- B. Hearne Steel Company, Inc. P.O. Box 1239 Hearne Texas 77859, www.hearnesteel.com.
- C. Anchor Fence, 6500 Eastern Ave., Baltimore, MD, (410) 633-6500.

- D. Southern Folger Detention Equipment Company, 4634 South Presa St., San Antonio, TX 78223, (210) 533-1231, www.southernfolger.com.
- E. RhinoTube LLC, North American Steelworks, 17 Wood St., West Haven, CT 06516, (800) 466-8600
- F. Tymetal Corporation, Inc., 2549 State Route 40, Greenwich, NY 12834, (518) 692-9930, www.tymetal.com
- G. Wheatland Tube Company, One Council Ave., Wheatland, PA 16161, (724) 342-6851

2.02 MATERIALS

- A. Class B Steel Tubing (Option):
 - 1. SS-40 Fence Pipe by Allied Tube & Conduit Corp.
 - 2. RhinoShield R-40 Tubing by RhinoTube LLC.
 - 3. WT-40 Fence Pipe by Wheatland Tube Company.

2.03 STEEL FRAMEWORK (FOR FENCES 6'-1" - 10'-0" HIGH)

- A. End Posts, Corner Posts and Pull Posts:
 - 1. Pipe: 2.875 inches OD, 5.79 pounds per linear foot (Schedule 40).
 - 2. Class B Steel Tubing: 2.875 inches OD, 4.64 pounds per linear foot.
 - 3. Square Tubing: 2.50 inches OD, 5.70 pounds per linear foot.
- B. Line Posts:
 - 1. Pipe: 2.375 inches OD, 3.65 pounds per linear foot (Schedule 40).
 - 2. Class B Steel Tubing: 2.375 inches OD, 3.11 pounds per linear foot.
- C. Light Posts:
 - 1. Pipe: 4 inches OD, 9.11 pounds per linear foot (Schedule 40).
 - 2. Class B Steel Tubing: 4 inches OD, 6.56 pounds per linear foot.

2.04 STEEL FABRIC

- A. One-piece widths for fence heights up to 12'-0".
- B. Chain link, 2 inch mesh, No. 9 gauge; 3/8 inch mesh, No. 11 gauge.
- C. Selvages: Top edge and bottom edge twisted and barbed.

2.05 SWING GATE POSTS

- A. Single width of gate 6'-0" to 12'-0" wide or over 10'-0" high:
 - 1. Pipe: 4 inches OD, 9.11 pounds per linear foot (Schedule 40).
 - 2. Class B Steel Tubing: 4 inches OD, 6.56 pounds per linear foot.
 - 3. Square Tubing: 3 inches OD, 9.10 pounds per linear foot.

2.06 SWING GATE FRAMES

- A. Up to 6'-0" high, and leaf width 8'-0" or less.
 - 1. Pipe: 1.660 inches OD, 2.27 pounds per linear foot (Schedule 40).
 - 2. Class B Steel Tubing: 1.660 inches OD, 1.84 pounds per linear foot.
 - 3. Square Tubing: 1.50 inches OD, 1.90 pounds per linear foot.
- B. Assemble gate frames by welding or with special steel fittings and rivets for rigid connections. Install mid-height horizontal rails on gates over 10 feet high. When width of gate leaf exceeds 10 feet, install mid-distance vertical bracing of the same size and weight as frame members. When either horizontal or vertical bracing is not required, provide truss rods as cross bracing to prevent sag or twist.

2.07 SWING GATE HARDWARE

- A. Type "B" Gates:
 - 1. Hinges: Pressed Steel Offset 180 degree gate hinge item no. 014005 or appropriate for use by Hearne Steel Company, Inc.
 - 2. Prison Deadlock: 1 - Folger Adam No.86 or Southern Steel No.1080A-2.
 - 3. Cylinder Shields: 2 - Folger Adam No. 2CS or Southern Steel No. 219 x US32D.

2.08 FABRICATION AND MANUFACTURE

- A. Lock Box for Type "B" Gates: Fabricate lock box with channels, plates, angles and flat bars as indicated. Provide removable cover plate held in place with TORX center pin security machine screws. Locate removable cover plate on side of gate opposite threat side. If removable cover plate must be installed on threat side, secure plate with TORX PLUS center pin security machine screws. Galvanize entire assembly.
- B. Thoroughly clean all steel prior to sending it to the galvanizer the entire assembly. Remove oil, grease, and similar contaminants in accordance with SSPC SP-1 "Solvent Cleaning". Remove steel mill stamp, loose mill scale, loose rust, weld slag and spatter, and other detrimental material in accordance with SSPC SP-2 "Hand Tool Cleaning", SSPC SP-3 "Power Tool Cleaning", SSPC SP-6 "Commercial Blast Clean" or SSPC SP-7 "Brush-Off Blast Cleaning".

2.09 KEYING

- A. Key locks as specified and incorporate a keying schedule into the hardware schedule for approval.
 - 1. Key changes shall be different from changes previously used at this Facility, except as noted.
 - 2. Record key changes, to avoid future unintended duplication.
 - 3. Furnish seven keys for each change, except as noted.
 - 4. Furnish extended shank keys when required.
 - 5. Key locks as follows: Coordinate and/or Match the Facilities existing Key Locks.

2.10 MISCELLANEOUS MATERIALS AND ACCESSORIES

- A. Rails and Post Braces:
 - 1. Pipe: 1.660 inches OD, 2.27 pounds per linear foot (Schedule 40).
 - 2. Class B Steel Tubing: 1.660 inches OD, 1.84 pounds per linear foot.
- B. Fittings and Post Tops: Steel, wrought iron, or malleable iron.
 - 1. Fasteners: Tamper-resistant cadmium plated steel screws.
- C. Stretcher Bars: One piece equal to full height of fabric, minimum cross-section 3/16 inch by 3/4 inch.
- D. Metal Bands (for securing stretcher bars): Steel, wrought iron, or malleable iron.
- E. Wire Ties: Conform to American Steel Wire gauges.
 - 1. For tying fabric to line posts, rails and braces: 9 gauge (.1483 inch) steel wire.
 - 2. For tying tension wire to fabric: 11 gauge (.1205 inch) steel hog rings.
 - 3. For tying security coils to fence fabric, barbed wire, or adjacent coils: 16 gauge (.0625 inch) 300 Series stainless steel wire.
 - 4. For splicing overlapped fabric at bottom rail: 11 gauge (.1205 inch) steel hog rings.
- F. Truss Rods: 3/8-inch diameter.
- G. Concrete: Portland Cement concrete having a minimum compressive strength of 4000 psi at 28 days.
- H. Spiral Paper Tubes:
 - 1. Sonotube by Sonoco Products Co., North Second St., Hartsville, SC 29550, (800) 377-2692.
 - 2. Slek/tubes by Jefferson Smurfit Corp., P.O. Box 66820, St. Louis, MO 63166, (314) 746-1100.
- I. Cold Galvanizing Compound: Single component compound giving 93 percent pure zinc in the dried film, and meeting the requirements of DOD-P-21035A (NAVY).
- J. Expansion Anchors: 3/4 inch diameter with a minimum 4-3/4" embedment depth, Stainless Steel KWIK Bolt 3 (KB3) by Hilti, Inc. www.us.hilti.com ; 1-800-879-8000.
- K. Shrink-Resistant Grout (Ferrous): Factory-packaged, non-catalyzed, ferrous aggregate mortar grouting compound selected from the following:
 - 1. Embeco 636 by Master Builders, 23700 Chagrin Blvd., Cleveland, OH 44122, (800) 227-3350.
 - 2. Ferrolith G-NC by Sonneborn, Chemrex, Inc., 57-46 Flushing Ave., Maspeth, NY 11378, (800) 433-9517.
 - 3. Ferro-Grout by L&M Construction Chemicals, 14851 Calhoun Rd., Omaha, NE 68152, (800) 362-3331.

4. Vibra-Foil by A.C. Horn, Inc., Tamm Industries, 7405 Production Dr., Mentor, OH 44060, (800) 862-2667.

2.17 THIRTY INCH DIAMETER SECURITY COILS (OPTION, EITHER A. OR B. BELOW)

- A. One hundred and one coil loops of a single helical coil of spring quality austenitic stainless steel conforming to U.S. Army MERADCOM drawing 13220E0889 and 13220E2744 except that the outside diameter shall be 30 inches (plus or minus 2 inches) with 24 (plus or minus 1) barb clusters per revolution.
 1. Adjacent coil loops shall be alternately spot welded at 5 points of equal spacing about the perimeter. Spot welding shall survive a minimum 200-pound force per weld loaded uniformly about the periphery of the coil, as specified in the barbed tape test procedure.
 2. One jacketed stainless steel wire rope, 7 by 7 strand 3/64 inch by 5/64 inch minimum diameter, per MIL-W-83420, Type II composition B, shall be attached, along the length of the obstacle to each coil loop to preset the maximum barbed tape opening and the 50 foot (plus or minus 2 feet) length.
 3. The wire rope shall be attached with clips as required and the wire rope with clips shall be capable of satisfying the 50-pound pull test Paragraph 4. 5. 2. 1. 1., Specification MIL-B-52775B.

2.18 SOURCE QUALITY CONTROL

- A. Test Procedure - Barbed Tape Security Coils: The company producing the security coils shall have test facilities available which can demonstrate that the security coils meets the following requirements.
 1. Sampling; before delivery to job site: Samples for quality conformance inspections shall be selected in accordance with MIL-STD-105, sampling level S-1, AQL 2.5. A unit of product for sampling shall be one complete unit no less than ten feet in length.
 2. Test Equipment: The test equipment for applying and measuring force shall be capable of measuring a minimum force of 200 pounds and shall be calibrated prior to each test with standards traceable to the National Bureau of Standards.
 3. Test Specimen: The test specimen shall consist of 2 segments of barbed tape, taken from adjacent coil loops, each at least one- foot-long, containing and centered upon a point of attachment. This attachment shall be prepared in the normal course of production.
 4. Test Preparation: A pair of one inch, plus or minus 0.1 inch, cubic back-up blocks shall be centered on each side of the attachment point, in as close as possible contact with the major surfaces of the barbed tape. Barbs adjacent to the attachment point may be removed to simplify the testing process. Each leg of each barbed tape segment shall be bent at a 90-degree angle so that each segment has a major surface in contact with 3 adjoining faces of a back-up cube and so that ends of each segment are parallel to each other and to the axis of the attachment. Each back-up cube shall then be restrained in place by spot welding a straining strap to each leg of a segment so that the strap is in continuous contact with the cube face opposite the point attaching the 2 segments.

5. Test: Two ends of one of the test segments, prepared per above, shall be joined and rigidly attached to a structure so that the retaining structure, with said attachment, will survive a minimum tensile load of 200 pounds without deflection or slippage. The 2 ends of the opposite segment shall be joined and attached to the test apparatus so that said attachment will survive a minimum tensile load of 200 pounds, without any slippage. The test equipment above shall then be used to apply up to a 200-pound minimum force (through the adjacent coil loop segment attachment point) away from the rigid retaining structure. After reaching a minimum 200 pound force, as measured by the test equipment, this force shall be maintained continuously for a least 30 seconds.
6. Test Results: At the completion of the 30-second pull test, the test specimen shall be removed from the attachments to the rigid retaining structure and to the test equipment. The back-up blocks shall be removed from the test specimen and each segment of the barbed tape shall be examined for breaks, cracks, or separation around their mutual attachment point. The test specimen shall have failed this test if any of the above have occurred or a 200-pound minimum pull cannot be applied continuously for 30 seconds.

2.19 FINISHES

- A. Steel Framework:
 1. Pipe: Galvanized in accordance with ASTM A 53, 1.8 ounces zinc per square foot.
 2. Square Tubing: Galvanized in accordance with ASTM A 123, 2.0 ounces zinc per square foot.
 3. Class B Steel Tubing: Exterior; 1.0 ounces zinc per square foot plus chromate conversion coating and clear polyurethane. Interior; zinc rich organic coating.
- B. Fabric; one of the following:
 1. Galvanized Finish: ASTM A 392 class II zinc coated after weaving, with 2.0 ounces per square foot.
- C. Fence and Gate Hardware, Miscellaneous Materials, Accessories:
 1. Wire Ties and Hog Rings: Galvanized Finish, ASTM A 90 1.6 ounces zinc per square foot, or aluminized finish, ASTM A 809 0.40 ounces per square foot.
 2. Hardware and Miscellaneous Items: Galvanized Finish, ASTM A 153 (Table 1).

PART 3 EXECUTION

3.01 PREPARATION

- A. Clear and grub along fence line as required to eliminate growth interfering with alignment. Remove debris from State property.

3.02 INSTALLATION

- A. Space posts equidistant in the fence line with a maximum of 10 feet on center. For fences 16 feet and higher space posts a maximum of 8 feet on center.
- B. Setting Posts in Earth: Drill holes for post footings Set posts in center of hole and fill hole with concrete. Plumb and align posts. Vibrate or tamp concrete for consolidation. Finish concrete in a dome shape above finish grade elevation to shed water. Do not attach fabric to posts until concrete has cured a minimum of 7 days.
- C. Setting Posts in Rock: Drill holes into solid rock one inch wider than post diameter, 18 inches deep for end, pull, corner, and gate posts, and 12 inches deep for line posts. Set posts into holes and fill annular space with shrink-resistant grout.
- D. Brace assembled sections until permanently secured in place to prevent displacement or distortion of the members. Do not utilize metal bracing to support gate post when plumbing or securing posts.
- E. If post tops or extension arms will not be installed prior to impending rain, provide temporary covers over tops of posts to prevent posts from filling with water.
- F. Locate corner posts at corners and at changes in direction. Use pull posts at all abrupt changes in grade and at intervals no greater than 500 feet. On runs over 500 feet, space pull posts evenly between corner or end posts. On long curves, space pull posts so that the strain of the fence will not bend the line posts.
- G. Install top rail continuously through post tops or extension arms, bending to radius for curved runs. Install expansion couplings as recommended by fencing manufacturers.
- H. Install bottom and intermediate rails in one piece between posts and flush with post on fabric side using special offset fittings where necessary.
- I. Brace corner posts, pull posts, end posts, and gate posts to adjacent line posts with horizontal rails.
- J. Diagonally brace corner posts, pull posts, end posts, and gate posts to adjacent line posts with truss rods and truss rod tighteners.
- K. Attach fabric to security side of fence. Maintain a 2-inch clearance above finished grade except when indicated otherwise. Thread stretcher bars through fabric using one bar for each gate and end post and 2 for each corner and pull post. Pull fabric tight so that the maximum deflection of fabric is 2 inches when a 30-pound pull is exerted perpendicular to the center of a panel. Maintain tension by securing stretcher bars to posts with metal bands spaced 15 inches oc. Fasten fabric to steel framework with wire ties spaced 12 inches oc for line posts and 24 inches oc for rails and braces. Bend back wire ends to prevent injury. Tighten stretcher bar bands, wire ties, and other fasteners securely.

- L. Position bolts for securing metal bands and hardware so nuts are located opposite the fabric side of fence. Tighten nuts and cut off excess threads so no more than 1/8 inch is exposed. Peen ends of all bolts below a height of 10 feet to prevent loosening or removal of nuts.
 - 1. Secure post tops and extension arms with tamper-resistant screws.
- M. Install gates plumb and level and adjust for full opening without interference. Install ground-set items in concrete for anchorage, as recommended by fence manufacturer. Adjust hardware for smooth operation and lubricate where necessary.
- N. Concertina Type Security Coils: Install in accordance with the manufacturer's printed instructions and meeting the following minimum requirements:
 - 1. Install security coils with coil loops (apertures) equally spaced 12 inches oc (plus or minus 2 inches).
 - 2. Secure coils to the top of the fence by attaching each coil loop where it intersects the barbed wire and the top of the fabric with twistable stainless steel wire ties.
 - 3. Secure coils to the side of the fence by attaching each coil loop where it intersects the fence fabric, and any adjacent coils, with twistable stainless steel wire ties. Attach adjacent coils to each other where every other loop intersects or at 36 inches oc maximum.
 - 4. Where security coils are placed on the ground, anchor each coil to the ground at 5-foot intervals using anchors formed from galvanized No. 3 reinforcement bars. Each reinforcement bar anchor shall have a 2-inch hook formed at the top and shall be driven a minimum of 30 inches into the ground.
 - 5. Splices: Splice successive units to adjacent coil loops by overlapping end loops a minimum of two barbed clusters to form one continuous obstacle.
 - a. Permanently attach barb roots together with twistable stainless steel wire ties or stainless steel hog rings.
 - b. Cross-tie barb roots with 2 stainless steel twistable wire ties or 2 stainless steel hog rings on both barbs of a 2-barb splice or the center barb of a 3-barb splice, and at all points of the splice where factory clips are installed on adjoining sections of continuous coil.
- O. Wire brush and repair welded and abraded areas of galvanized surfaces with one coat of cold galvanizing compound.
- P. Restore disturbed ground areas to original condition. Topsoil and seed to match adjacent areas.

3.03 ADJUSTING

- A. Adjust operative units and equipment to work freely and easily, ready for use. Field lubricate operating and locking systems in accordance with the manufacturer's maintenance instructions. Adjust equipment when the temperature is approximately 70 degrees F.

END OF SECTION

CONSULTANT

WARNING:

THE ALTERATION OF THIS MATERIAL IN ANY WAY, UNLESS DONE UNDER THE DIRECTION OF A COMPARABLE PROFESSIONAL, I.E. ARCHITECT FOR AN ARCHITECT, ENGINEER FOR AN ENGINEER OR LANDSCAPE ARCHITECT FOR A LANDSCAPE ARCHITECT, IS A VIOLATION OF THE NEW YORK STATE EDUCATION LAW AND/OR REGULATIONS AND IS A CLASS 'A' MISDEMEANOR.



CONTRACT:

CONSTRUCTION

TITLE: REPLACE ROOFS, BUILDINGS 12J, 12A, 18 & 94

LOCATION: WALLKILL CORRECTIONAL FACILITY
PO BOX G ROUTE 208
WALLKILL, N.Y. 12589

CLIENT: DEPARTMENT OF CORRECTIONS

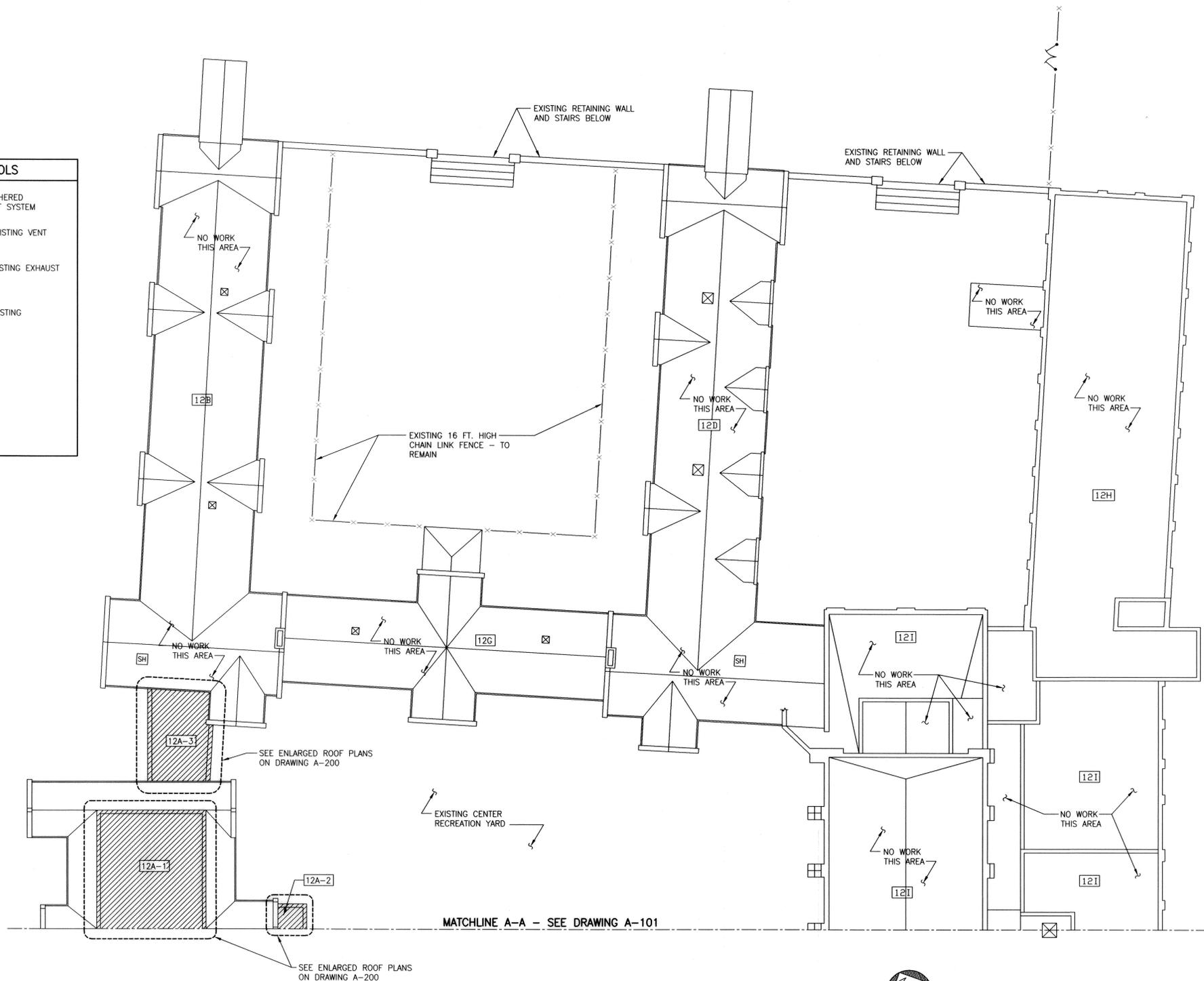
MARK	DATE	DESCRIPTION
	4/05/2013	FINAL SUBMISSION

PROJECT NUMBER:	44484 -C
DESIGNED BY:	BRUCE WOLFORD
DRAWN BY:	BRUCE WOLFORD
FIELD CHECK:	
APPROVED:	

SHEET TITLE:
**BUILDING NO. 12
PARTIAL ROOF PLAN -
NORTH**

DRAWING NUMBER:
A-102

PLAN SYMBOLS	
	LOCATION OF ADHERED 0.90 EPDM ROOF SYSTEM
	LOCATION OF EXISTING VENT PIPES
	LOCATION OF EXISTING EXHAUST FAN
	LOCATION OF EXISTING SMOKE HATCHES



BUILDING NO. 12 - PARTIAL ROOF PLAN - NORTH

SCALE: 1/8"=1'-0"