

**Maxor Mail Order Pharmacy
416 S. Tyler
Amarillo, Texas**



ARCHITECTURAL ADDENDUM #1

DATE: July 12, 2017
FROM: Lavin Associates, Architects
TO: Plan Holders of Record
PROJECT: Maxor Mail Order Pharmacy



This Addendum forms a part of the Contract Documents and modifies the original Bidding Documents dated July 5, 2017. Work not specifically deleted, modified, changed or altered by the Addendum should remain in effect as part of the Contract Documents. Acknowledge receipt of this Addendum in the space provided on the Bid Form. Failure to do so may subject Bidder to disqualification.

IN THE PROJECT MANUAL:

- 1. Revise Table of Contents attached**
- 2. Insert Specifications Sections below:**
 - Section 02821 Cantilever Gates
 - Section 02823 Ornamental Fence
 - Section 05120 Structural Steel
 - Section 05210 Steel Joists
 - Section 05310 Steel Deck

IN THE DRAWINGS:

- 1. Sheet LS.01 Insert sealed sheet attached.**
- 2. Sheet A1.01 Insert revised sheet attached.**
Added details and notes on west parking lot.
- 3. Sheet A1.02 Insert sealed sheet attached.**
Added notes, pedestal detail, and enlarged plans of entrances
- 4. Sheet A2.01 Insert sealed sheet attached.**
- 5. Sheet A2.02 Insert sealed sheet attached.**
- 6. Sheet A2.03 Insert sealed sheet attached.**
- 7. Sheet A2.04 Insert sealed sheet attached.**
- 8. Sheet A3.01 Insert sealed sheet attached.**
- 9. Sheet A3.02 Insert sealed sheet attached.**
- 10. Sheet A8.01 Insert sealed sheet attached.**
- 11. Sheet C2.1 Insert revised sheet attached.**
- 12. Sheet C3.1 Insert revised sheet attached.**
- 13. Sheet C3.2 Insert revised sheet attached.**
- 14. Sheet C3.3 Insert revised sheet attached.**
- 15. Sheet C4.2 insert revised sheet attached.**
- 16. Sheet C8.1 Insert revised sheet attached.**

END OF ADDENDUM NO. 1

New Building For Maxor Mail Order

4TH Avenue & Tyler St.
Amarillo, Texas

Architectural Package

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(Revised 7/11/2017)



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* Issued with Site/Civil Package 6/18/2017

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* Issued with Site/Civil Package 6/18/2017

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* Issued with Site/Civil Package 6/18/2017

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SECTION 02821 - CANTILEVER GATES

PART 1 - GENERAL

1.1 SUMMARY

- A. Section includes aluminum cantilever gates.

1.2 ACTION SUBMITTALS

- A. Product Data: For each type of product indicated
- B. Shop Drawings: Include plans, elevations, sections, details, and attachments to other work.
- C. Samples: For each polymer-coated product and for each color and texture specified, in 6-inch (150-mm) lengths for components and on full-sized units for accessories.

1.3 INFORMATIONAL SUBMITTALS

- A. Product Certificates: For each type of chain-link fence and gate, from manufacturer.
- B. Product Test Reports: For framing strength according to ASTM F 1043.
- C. Sample of special warranty.

1.4 CLOSEOUT SUBMITTALS

- A. Operation and maintenance data.

1.5 WARRANTY

- A. The powder coated surface on all components (pickets, rails, and posts) is warranted for 10 years. Refer to manufacturer for complete details regarding warranty.
- B. The powder coated surface on all components (pales, rails, and posts) is warranted for 15 years. Refer to manufacturer for complete details regarding warranty.
- C. The electrocoated surface on all components (panels and posts) is warranted for 20 years. Refer to manufacturer for complete details regarding warranty.
- D. The powder coated surface on all aluminum framework (pickets, rails and posts) is warranted for a limited lifetime. Refer to manufacturer for complete details regarding warranty.

PART 2 - PRODUCTS

2.1 MANUFACTURER

- A. Acceptable Manufacturer: The “Basis of Design” is Ameristar Fence Products, which is located at: 1555 N. Mingo ; Tulsa, OK 74116; Toll Free Tel: 800-321-8724; Tel: 918-835-0898; Fax: 877-926-3747; Email: [request info \(mktg@ameristarfence.com\)](mailto:request_info@mktg@ameristarfence.com); Web: www.ameristarfence.com

2.2 CANTILEVER GATES

- A. General: Provide “**Ameristar**” **TransPort II** Classic Style gate system.
1. Gate Width: **As indicated.**
 2. Gate Height: **As indicated.**

2.3 MATERIALS:

- A. The materials used for cantilever gate framing (i.e., uprights, diagonal braces and pickets or pales) shall be manufactured from ASTM B221 aluminum (designation 6063-T-6) with a yield strength of 25,000 PSI, a tensile strength of 30,000 PSI and a standard mill finish. The TransPort® Fast-Trak™ rails shall be manufactured from ASTM B221 aluminum (designation 6063-T-6) with minimum yield strength of 25,000 PSI, a tensile strength of 30,000 PSI and a standard mill finish.
- B. Material for diagonal bracing and uprights shall be 2” sq. x ¼” aluminum. The design of the top and bottom enclosed track shall conform to the manufacturers 5” x 2” Fast-Trak system. Material for pickets shall be 1” x 1/8” wall aluminum.
- C. Internal roller truck assembly shall be self-aligning swivel ball-and-socket type running on four bearing wheels. Internal roller truck assembly shall be affixed to the hanger bracket by means of a 5/8” diameter industrial-grade rod end/center bolt, with a minimum static load rating of 10,000 pounds. Attachment of the center bolt to the truck body shall be by means of a swivel joint to ensure equivalent and consistent loading on all bearing wheels and internal track surfaces throughout the travel of the gate.

2.4 FABRICATION

- A. Pickets, enclosed track, uprights and diagonal bracing shall be pre-drilled and labeled for easy assembly. All components shall be precut to specified lengths.
- B. Top and bottom rail extrusions shall be mechanically fastened to vertical uprights and reinforced with diagonal braces, as required by drawing.
- C. The manufactured components shall be subjected to the Ameristar thermal stratification coating process (high-temperature, in-line, multi-stage, and multi-layer) including, as a minimum, a six-stage pretreatment/wash and an electrostatic spray application of a polyester finish. The topcoat shall be a “no-mar” TGIC polyester powder coat finish with a minimum thickness of 2 mils

(0.0508mm). The color shall be (As selected by the Architect from standard color pallette). The stratification-coated framework shall be capable of meeting the performance requirements for each quality characteristic shown below:

1. Adhesion – ASTM D3359 – Method B.
2. Corrosion Resistance – ASTM B117, D714, & D1654.
3. Impact Resistance – ASTM D2794.
4. Weathering Resistance – ASTM D822, D2244, D523 (60° Method)

2.5 Hardware

- A. Latches permitting operation from both sides of gate **with provision for padlocking accessible from both sides of gate.**
- B. Slide Gate Operator: Provide “**Ameristar**” #9150AGS with ½ horsepower motor, 115 V A.C. 60 Hz.
- C. Telephone Intercom: Provide “**Ameristar**” #1802AGS intercom.

PART 3 - EXECUTION

3.1 INSTALLATION

- A. Examine areas and conditions, with Installer present, for compliance with requirements for site clearing, earthwork, pavement work, and other conditions affecting performance of the Work.
 1. Do not begin installation before final grading is completed unless otherwise permitted by Architect.
- B. Proceed with installation only after unsatisfactory conditions have been corrected.
- C. Stake locations of fence lines, gates, and terminal posts. Do not exceed intervals of **500 feet (152.5 m)** or line of sight between stakes. Indicate locations of utilities, lawn sprinkler system, underground structures, benchmarks, and property monuments.
- D. All hardware shall be installed in accordance with the Transport installation instructions. Transport cantilever gates shall be installed so they comply with current ASTM F2200 & UL325 standards.
- E. Post Excavation: Drill or hand-excavate holes for posts to diameters and spacings indicated, in firm, undisturbed soil.
- F. Post Setting: Set posts **in concrete** at indicated spacing into firm, undisturbed soil.
 1. Verify that posts are set plumb, aligned, and at correct height and spacing, and hold in position during setting with concrete or mechanical devices.
 2. Concrete Fill: Place concrete around posts to dimensions indicated and vibrate or tamp for consolidation. Protect aboveground portion of posts from concrete splatter.

- a. Exposed Concrete: Extend **2 inches (50 mm)** above grade; shape and smooth to shed water.
 - b. Concealed Concrete: Top **2 inches (50 mm)** below grade **as indicated on Drawings** to allow covering with surface material.
- G. Install gates according to manufacturer's written instructions, level, plumb, and secure for full opening without interference. Attach pickets as for fencing. Attach hardware using tamper-resistant or concealed means. Install ground-set items in concrete for anchorage. Adjust hardware for smooth operation and lubricate where necessary.
- H. Gate stops shall be installed on each track in a way that conforms to current ASTM F2200 standards
- I. Gates: Adjust gates to operate smoothly, easily, and quietly, free of binding, warp, excessive deflection, distortion, nonalignment, misplacement, disruption, or malfunction, throughout entire operational range. Confirm that latches and locks engage accurately and securely without forcing or binding.

END OF SECTION 02821

SECTION 02823 – ORNAMENTAL FENCES

PART 1 – GENERAL

1.1 SECTION INCLUDES

- A. Commercial steel ornamental fence system - fusion welded.

1.2 RELATED WORK

- A. Section 02300 - Earthwork
- B. Section 03300 - Concrete

1.3 REFERENCES

- ASTM B117 - Practice for Operating Salt-Spray (Fog) Apparatus.
- ASTM B221 - Standard Specification for Aluminum and Aluminum-Alloy Extruded Bars, Rods, Wire, Profiles and Tubes.
- ASTM D523 - Test Method for Specular Gloss.
- ASTM D822 - Practice for Conducting Tests on Paint and Related Coatings and Materials using Filtered Open-Flame Carbon-Arc Light and Water Exposure Apparatus.
- ASTM D1654 - Test Method for Evaluation of Painted or Coated Specimens Subjected to Corrosive Environments.
- ASTM D2244 - Test Method for Calculation of Color Differences from Instrumentally Measured Color Coordinates.
- ASTM D2794 - Test Method for Resistance of Organic Coatings to the Effects of Rapid Deformation (Impact).
- ASTM D3359 - Test Method for Measuring Adhesion by Tape Test.

1.4 SUBMITTAL

- A. The manufacturer's submittal package shall be provided prior to installation.

1.5 PRODUCT HANDLING AND STORAGE

- A. Upon receipt at the job site, all materials shall be checked to ensure that no damage occurred during shipping or handling. Materials shall be stored in such a manner to ensure proper ventilation and drainage, and to protect against damage, weather, vandalism and theft.

1.6 PRODUCT WARRANTY

- A. The powder coated surface on all aluminum framework (pickets, rails and posts) is warranted for a limited lifetime. Refer to manufacturer for complete details regarding warranty.

PART 2 – MATERIALS

2.1 MANUFACTURER

- A. Acceptable Manufacturer: Ameristar Fence Products, which is located at: 1555 N. Mingo ; Tulsa, OK 74116; Toll Free Tel: 800-321-8724; Tel: 918-835-0898; Fax: 877-926-3747; Email: [request info \(mktg@ameristarfence.com\)](mailto:request_info@mktg@ameristarfence.com); Web: www.ameristarfence.com .
- B. The industrial ornamental aluminum fence system shall conform to Ameristar Echelon II, Classic, 2-Rail, style manufactured by Ameristar Fence Products, Inc., in Tulsa, Oklahoma.

2.2 MATERIAL

- A. Aluminum material for fence framework (i.e., tubular pickets, rails and posts) shall conform to the requirements of ASTM B221. The aluminum extrusions for posts and rails shall be Alloy and Temper Designation 6005-T52. The aluminum extrusions for pickets shall be Alloy and Temper Designation 6063-T52.
- B. Material for fence pickets shall be 1” square x 0.062” thick extruded tubing. The cross-sectional shape of the rails shall conform to the manufacturer’s ForeRunner™ design with outside cross-section dimensions of 1.75” square. The top wall and internal web of the rail shall be 0.070” thick; the sidewalls shall be 0.070” thick for superior vertical load strength. Picket holes in the ForeRunner rail shall be spaced 4.715” o.c., except for Invincible style 6’ long, which shall be, spaced 4.98” o.c. Picket retaining rods shall be 0.125” diameter galvanized steel. Fence posts and gate posts shall meet the minimum size requirements determined by the manufacturer.
 - a. PVC grommets shall be supplied to seal all picket-to-rail intersections.
- C. Bracket to rail attachments shall be made using specially designed one-way tamperproof security nuts with carriage bolt. Bracket to post connections shall be made using self-drilling hex-head screws.
- D. Aluminum castings shall be used for all rings, post caps, finials, and miscellaneous adornments.

2.3 FABRICATION

- A. Pickets, rails and posts shall be pre-cut to specified lengths. ForeRunner rails shall be pre-punched to accept pickets.
- B. The rail inner slide shall be fully inserted into the rail outer channel to form the raceway for the internal retaining rod. Grommets shall be inserted into the pre-punched holes in the rails, and pickets shall be inserted through the grommets so that pre-drilled picket holes align with the internal raceway of the two-part ForeRunner rails. (Note: This can best be accomplished by using an alignment template). Retaining rods shall be inserted into each ForeRunner rail so that they pass through the pre-drilled holes in each picket, thus completing the panel assembly.
- C. Completed panels shall be capable of supporting a 300 lb. load (applied at midspan) without permanent deformation. Panels shall be biasable to a 25% change in grade.
- D. Gates shall be fabricated using 1.75” sq. reinforced ForeRunner rail material, 2” sq. x .250” gate ends, and 1” sq. x .125” pickets. All rail and upright intersections shall be joined by welding. All picket and rail intersections shall be joined by welding.

PART 3 - EXECUTION

3.1 PREPARATION

- A. All new installation shall be laid out by the contractor in accordance with the construction plans.

3.2 FENCE INSTALLATION

- A. Fence post shall be spaced according to manufacturer's requirements. For installations that must be raked to follow sloping grades, the post spacing dimension must be measured along the grade. Fence panels shall be attached to the line and end posts with fasteners supplied by the manufacturer. Attachment to corner post shall be made using brackets and fasteners supplied by the manufacturer. Posts shall be set in concrete footers having a minimum depth of 36". The "Earthwork" and "Concrete" sections of this specification shall govern material requirements for the concrete footer. Posts setting by other methods such as plated posts or grouted core-drilled footers are permissible only if shown by engineering analysis to be sufficient in strength for the intended application.

3.3 FENCE INSTALLATION MAINTENANCE

- A. When cutting/drilling rails or posts adhere to the following steps to seal the exposed surfaces;
 - a. Remove all metal shavings from cut area.
 - b. Apply zinc-rich primer to thoroughly cover cut edge and/or drilled hole; let dry.
 - c. Apply 2 coats of custom finish paint matching fence color. Failure to seal exposed surfaces per steps above will negate warranty.
- B. Ameristar spray cans or paint pens shall be used to prime and finish exposed surfaces; it is recommended that paint pens be used to prevent overspray. Use of non-Ameristar parts or components will negate the manufactures' warranty.

3.4 GATE INSTALLATION

- A. Gate posts shall be spaced according to the manufacturer's gate drawings, dependent on standard out-to-out gate leaf dimensions and gate hardware selected. Type and quantity of gate hinges shall be based on the application; weight, height, and number of gate cycles. The manufacturers' gate drawings shall identify the necessary gate hardware required for the application. Gate hardware shall be provided by the manufacture of the gate and shall be installed per manufacturer's recommendations.

3.5 CLEANING

- B. The contractor shall clean the jobsite of excess materials; post-hole excavations shall be scattered uniformly away from posts.

END OF SECTION 02823

SECTION 05120 - STRUCTURAL STEEL

PART 1 - GENERAL

1.1 RELATED DOCUMENTS

- A. Drawings and general provisions of the Contract, including General and Supplementary Conditions and Division 1 Specification Sections, apply to this Section.

1.2 SUMMARY

- A. This Section includes the following:

- 1. Structural steel.
- 2. Architecturally exposed structural steel.
- 3. Grout.

- B. Related Sections include the following:

- 1. Division 1 Section "Quality Requirements" for independent testing agency procedures and administrative requirements.
- 2. Division 3 Section "Cast-in-Place Concrete" for embedded metal assemblies.
- 3. Division 5 Section "Steel Joists".
- 4. Division 5 Section "Metal Fabrications" for steel lintels or shelf angles not attached to structural-steel frame, miscellaneous steel fabrications, and other metal items not defined as structural steel.

1.3 DEFINITIONS

- A. Structural Steel: Elements of structural-steel frame, as classified by AISC's "Code of Standard Practice for Steel Buildings and Bridges," that support design loads.
- B. Architecturally Exposed Structural Steel: Structural steel designated as architecturally exposed structural steel in the Contract Documents.

1.4 PERFORMANCE REQUIREMENTS

- A. Connections: Provide details of simple shear connections required by the Contract Documents to be selected or completed by structural-steel fabricator to withstand ASD-service loads indicated and comply with other information and restrictions indicated.
 - 1. Select and complete connections using schematic details indicated and AISC's "Manual of Steel Construction," Part 10.
 - 2. Substitutions: Proposed substitutions of sections or modification of details, and reasons thereof, shall be submitted with shop drawings for review. Submitted substitutions must be clearly identified and noted as such. Approved substitutions, modifications, and

necessary changes in related portions of work shall be coordinated by fabricator and shall be accomplished at no additional cost to Owner.

- a. Substitutions to the beam to column and beam to beam connections shown on the drawings will be reviewed for acceptability if submitted with calculations prepared by a licensed professional engineer.

1.5 SUBMITTALS

- A. Product Data: For each type of product indicated.
- B. Shop Drawings: Show fabrication of structural-steel components.
 1. Include details of cuts, connections, splices, camber, holes, and other pertinent data.
 2. Include embedment drawings.
 3. Indicate welds by standard AWS symbols, distinguishing between shop and field welds, and show size, length, and type of each weld.
 4. Indicate type, size, and length of bolts, distinguishing between shop and field bolts. Identify pretensioned and slip-critical high-strength bolted connections.
- C. Welding certificates.

1.6 QUALITY ASSURANCE

- A. Installer Qualifications: A qualified installer with not less than 5 years of experience in erection of structural steel.
- B. Fabricator Qualifications: A qualified fabricator who participates in the AISC Quality Certification Program and is designated an AISC-Certified Plant, Category Sbd. An otherwise qualified fabricator is acceptable if satisfactory evidence of qualifications is submitted prior to contract award. For non-certified fabricators, Contractor shall submit a resume describing plant size, equipment, quality control procedures and personnel, and experience on comparable work in the last 3 years.
- C. Welding: Qualify procedures and personnel according to AWS D1.1, "Structural Welding Code--Steel."
- D. Comply with applicable provisions of the following specifications and documents:
 1. AISC's "Code of Standard Practice for Steel Buildings and Bridges."
 2. AISC's "Specification for Structural Steel Buildings."
 3. AISC's "Specification for the Design of Steel Hollow Structural Sections."
 4. RCSC's "Specification for Structural Joints Using ASTM A 325 or A 490 Bolts."
 5. AWS D1.1, "Structural Welding Code."
 6. Industrial Fasteners Institute, "Handbook on Bolt, Nut, and Rivet Standards."
 7. Steel structure painting council:
 - a. Painting manual, vol. 1, Good Painting Practice.
 - b. Painting manual, vol. 2, Systems Specifications.

1.7 DELIVERY, STORAGE, AND HANDLING

- A. Store materials to permit easy access for inspection and identification. Keep steel members off ground and spaced by using pallets, dunnage, or other supports and spacers. Protect steel members and packaged materials from erosion and deterioration.
 - 1. Store fasteners in a protected place. Clean and relubricate bolts and nuts that become dry or rusty before use.
 - 2. Do not store materials on structure in a manner that might cause distortion, damage, or overload to members or supporting structures. Repair or replace damaged materials or structures as directed.

1.8 COORDINATION

- A. Furnish anchorage items to be embedded in or attached to other construction without delaying the Work. Provide setting diagrams, sheet metal templates, instructions, and directions for installation.

PART 2 - PRODUCTS

2.1 STRUCTURAL-STEEL MATERIALS

- A. W-Shapes: ASTM A 992/A 992M.
- B. Channels, Angles: ASTM A 36/A 36M.
- C. Plate and Bar: ASTM A 36/A 36M.
- D. Cold-Formed Hollow Structural Sections: ASTM A 500, Grade B, structural tubing.
- E. Welding Electrodes: Comply with AWS requirements. Use E70 electrodes.

2.2 BOLTS, CONNECTORS, AND ANCHORS

- A. High-Strength Bolts, Nuts, and Washers: ASTM A 325, Type 1, heavy hex steel structural bolts; ASTM A 563 heavy hex carbon-steel nuts; and ASTM F 436 hardened carbon-steel Tension-control (twist-off) bolt assemblies in paragraph below correspond to strength of ASTM A 325 (ASTM A 325M) bolts. If corrosion-resisting (weathering) steel is used, change Type 1 assemblies to Type 3 below and delete "Finish" Subparagraph.
- B. Tension-Control, High-Strength Bolt-Nut-Washer Assemblies: ASTM F 1852, Type 1, round head steel structural bolts with splined ends; ASTM A 563 heavy hex carbon-steel nuts; and ASTM F 436 hardened carbon-steel washers.
- C. Anchor Rods: ASTM F 1554, Grade 36.
 - 1. Configuration: As indicated.
 - 2. Nuts: ASTM A 563hex carbon steel.

3. Plate Washers: ASTM A 36/A 36M carbon steel.
4. Washers: ASTM F 436 hardened carbon steel.

2.3 PRIMER

- A. Primer: Fabricator's standard lead- and chromate-free, nonasphaltic, rust-inhibiting primer, applied to a dry film thickness of 2.0 mils.
- B. Galvanizing Repair Paint: MPI#18, MPI#19, or SSPC-Paint 20 ASTM A 780.

2.4 NON-SHRINK GROUT

- A. Nonmetallic, Shrinkage-Resistant Grout: ASTM C 1107, Grade B, factory-packaged, nonmetallic aggregate grout, noncorrosive, nonstaining, mixed with water to consistency suitable for application and a 30-minute working time. Compressive strength in 28 days shall be 5000 psi minimum, but in no case less than the specified strength of the base concrete.

2.5 FABRICATION

- A. Structural Steel: Fabricate and assemble in shop to greatest extent possible. Fabricate according to AISC's "Code of Standard Practice for Steel Buildings and Bridges" and AISC's "Specification for Structural Steel Buildings."
 1. Mark and match-mark materials for field assembly.
 2. Complete structural-steel assemblies, including welding of units, before starting shop-priming operations.
- B. Architecturally Exposed Structural Steel: Comply with fabrication requirements, including tolerance limits, of AISC's "Code of Standard Practice for Steel Buildings and Bridges" for structural steel identified as architecturally exposed structural steel.
 1. Fabricate with exposed surfaces smooth, square, and free of surface blemishes including pitting, rust, scale, seam marks, roller marks, rolled trade names, and roughness.
 2. Remove blemishes by filling or grinding or by welding and grinding, before cleaning, treating, and shop priming.
- C. Thermal Cutting: Perform thermal cutting by machine to greatest extent possible.
 1. Plane thermally cut edges to be welded to comply with requirements in AWS D1.1.
- D. Bolt Holes: Cut, drill, or punch standard bolt holes perpendicular to metal surfaces.
- E. Finishing: Accurately finish ends of columns and other members transmitting bearing loads.
- F. Steel Wall-Opening Framing: Select true and straight members for fabricating steel wall-opening framing to be attached to structural steel. Straighten as required to provide uniform, square, and true members in completed wall framing.

- G. Holes: Provide holes required for securing other work to structural steel and for passage of other work through steel framing members.
1. Cut, drill, or punch holes perpendicular to steel surfaces. Do not thermally cut bolt holes or enlarge holes by burning.
 2. Base-Plate Holes: Cut, drill, mechanically thermal cut, or punch holes perpendicular to steel surfaces.
 3. Weld threaded nuts to framing and other specialty items indicated to receive other work.

2.6 SHOP CONNECTIONS

- A. High-Strength Bolts: Shop install high-strength bolts according to RCSC's "Specification for Structural Joints Using ASTM A 325 or A 490 Bolts" for type of bolt and type of joint specified.
- B. Weld Connections: Comply with AWS D1.1 for welding procedure specifications, tolerances, appearance, and quality of welds and for methods used in correcting welding work.
1. Verify that weld sizes, fabrication sequence, and equipment used for architecturally exposed structural steel will limit distortions to allowable tolerances. Prevent weld show-through on exposed steel surfaces.
 - a. Grind butt welds flush.
 - b. Grind or fill exposed fillet welds to smooth profile. Dress exposed welds.

2.7 SHOP PRIMING

- A. Shop prime steel surfaces except the following:
1. Surfaces embedded in concrete or mortar. Extend priming of partially embedded members to a depth of 2 inches.
 2. Surfaces to be field welded.
 3. Galvanized surfaces.
- B. Surface Preparation: Clean surfaces to be painted. Remove loose rust and mill scale and spatter, slag, or flux deposits. Prepare surfaces according to the following specifications and standards:
1. Interior framing: SSPC-SP 2, "Hand Tool Cleaning."
 2. Exterior exposed framing (Sun Shade Canopies): SSPC-SP 6/NACE No. 3, "Commercial Blast Cleaning."
- C. Priming: Immediately after surface preparation, apply primer according to manufacturer's written instructions and at rate recommended by SSPC. Use priming methods that result in full coverage of joints, corners, edges, and exposed surfaces.
1. Apply two coats of shop paint to inaccessible surfaces after assembly or erection. Change color of second coat to distinguish it from first.

2.8 GALVANIZING

- A. Hot-Dip Galvanized Finish: Apply zinc coating by the hot-dip process to structural steel according to ASTM A 123/ A 123M.
 - 1. Fill vent holes and grind smooth after galvanizing.
 - 2. Galvanize exposed exterior framing (Sun Shade Canopies)
 - 3. Galvanize lintels and shelf angles attached to structural-steel frame and located in exterior walls.

PART 3 - EXECUTION

3.1 EXAMINATION

- A. Verify elevations of concrete bearing surfaces and locations of anchor rods, bearing plates, and other embedments, with steel erector present, for compliance with requirements.
- B. Proceed with installation only after unsatisfactory conditions have been corrected.

3.2 PREPARATION

- A. Provide temporary shores, guys, braces, and other supports during erection to keep structural steel secure, plumb, and in alignment against temporary construction loads and loads equal in intensity to design loads. Remove temporary supports when permanent structural steel, connections, and bracing are in place, unless otherwise indicated.

3.3 ERECTION

- A. Set structural steel accurately in locations and to elevations indicated and according to AISC's "Code of Standard Practice for Steel Buildings and Bridges" and "Specification for Structural Steel Buildings."
- B. Base Plates: Clean concrete bearing surfaces of bond-reducing materials, and roughen surfaces prior to setting base plates. Clean bottom surface of base plates.
 - 1. Set base plates for structural members on wedges, shims, or setting nuts as required.
 - 2. Weld plate washers to top of base plate.
 - 3. Snug-tighten anchor rods after supported members have been positioned and plumbed. Do not remove wedges or shims but, if protruding, cut off flush with edge of base plate before packing with grout.
 - 4. Promptly pack grout solidly between bearing surfaces and base plates so no voids remain. Neatly finish exposed surfaces; protect grout and allow to cure. Comply with manufacturer's written installation instructions for shrinkage-resistant grouts.
- C. Maintain erection tolerances of structural steel and architecturally exposed structural steel within AISC's "Code of Standard Practice for Steel Buildings and Bridges."

- D. Align and adjust various members forming part of complete frame or structure before permanently fastening. Before assembly, clean bearing surfaces and other surfaces that will be in permanent contact with members. Perform necessary adjustments to compensate for discrepancies in elevations and alignment.
 - 1. Level and plumb individual members of structure.
- E. Splice members only where indicated.
- F. Remove erection bolts on welded, architecturally exposed structural steel; fill holes with plug welds; and grind smooth at exposed surfaces.
- G. Do not use thermal cutting during erection unless approved by Architect. Finish thermally cut sections within smoothness limits in AWS D1.1.
- H. Do not enlarge unfair holes in members by burning or using drift pins. Ream holes that must be enlarged to admit bolts.

3.4 FIELD CONNECTIONS

- A. High-Strength Bolts: Shop install high-strength bolts according to RCSC's "Specification for Structural Joints Using ASTM A 325 or A 490 Bolts" for type of bolt and type of joint specified.
- B. Weld Connections: Comply with AWS D1.1 for welding procedure specifications, tolerances, appearance, and quality of welds and for methods used in correcting welding work.
 - 1. Comply with AISC's "Code of Standard Practice for Steel Buildings and Bridges" and "Specification for Structural Steel Buildings" for bearing, adequacy of temporary connections, alignment, and removal of paint on surfaces adjacent to field welds.
 - 2. Remove backing bars or runoff tabs, back gouge, and grind steel smooth.
 - 3. Verify that weld sizes, fabrication sequence, and equipment used for architecturally exposed structural steel will limit distortions to allowable tolerances. Prevent weld show-through on exposed steel surfaces.
 - a. Grind butt welds flush.
 - b. Grind or fill exposed fillet welds to smooth profile. Dress exposed welds.

3.5 FIELD QUALITY CONTROL

- A. Testing Agency: Owner will engage a qualified independent testing and inspecting agency to inspect field welds and high-strength bolted connections.
- B. Bolted Connections: Shop-bolted connections will be inspected according to RCSC's "Specification for Structural Joints Using ASTM A 325 or A 490 Bolts."
- C. Welded Connections: Field welds will be visually inspected according to AWS D1.1.
 - 1. In addition to visual inspection, field welds will be tested according to AWS D1.1 and the following inspection procedures, at testing agency's option:

- a. Ultrasonic Inspection: ASTM E 164.
 - b. Radiographic Inspection: ASTM E 94.
- D. Correct deficiencies in Work that test reports and inspections indicate does not comply with the Contract Documents.

3.6 REPAIRS AND PROTECTION

- A. Repair damaged galvanized coatings on galvanized items with galvanized repair paint according to ASTM A 780 and manufacturer's written instructions.
- B. Touchup Painting: After installation, promptly clean, prepare, and prime or reprime field connections, rust spots, and abraded surfaces of prime-painted joists and accessories and abutting structural steel.
 - 1. Clean and prepare surfaces by SSPC-SP 2 hand-tool cleaning or SSPC-SP 3 power-tool cleaning.
 - 2. Apply a compatible primer of same type as shop primer used on adjacent surfaces.

END OF SECTION 05120

SECTION 05210 - STEEL JOISTS

PART 1 - GENERAL

1.1 RELATED DOCUMENTS

- A. Drawings and general provisions of the Contract, including General and Supplementary Conditions and Division 1 Specification Sections, apply to this Section.

1.2 SUMMARY

- A. This Section includes the following:
 - 1. K-series steel joists.
 - 2. Long-span steel joists.
 - 3. Joist accessories.

1.3 DEFINITIONS

- A. SJI "Specifications": Steel Joist Institute's "Standard Specifications, Load Tables and Weight Tables for Steel Joists and Joist Girders."
- B. Special Joists: Steel joists or joist girders requiring modification by manufacturer to support nonuniform, unequal, or special loading conditions that invalidate load tables in SJI's "Specifications."

1.4 PERFORMANCE REQUIREMENTS

- A. Structural Performance: Provide special joists and connections capable of withstanding design loads indicated.
- B. Design special joists to withstand design loads with live load deflections no greater than 1/360 of the span.

1.5 SUBMITTALS

- A. Shop Drawings: Show layout, designation, number, type, location, and spacings of joists. Include joining and anchorage details, bracing, bridging, joist accessories; splice and connection locations and details; and attachments to other construction.
 - 1. Comprehensive engineering analysis of special joists signed and sealed by the qualified professional engineer responsible for its preparation. Calculations will be reviewed for loading conditions and deflection criteria only.

- B. Manufacturer Certificates: Signed by manufacturers certifying that joists comply with requirements.

1.6 QUALITY ASSURANCE

- A. Manufacturer Qualifications: A manufacturer certified by SJI to manufacture joists complying with applicable standard specifications and load tables of SJI "Specifications."
 - 1. Manufacturer's responsibilities include providing professional engineering services for designing special joists to comply with performance requirements.
- B. SJI Specifications: Comply with standard specifications in SJI's "Specifications" that are applicable to types of joists indicated.
- C. Welding: Qualify procedures and personnel according to AWS D1.1/D1.1M, "Structural Welding Code - Steel."

1.7 DELIVERY, STORAGE, AND HANDLING

- A. Deliver, store, and handle joists as recommended in SJI's "Specifications."
- B. Protect joists from corrosion, deformation, and other damage during delivery, storage, and handling.

PART 2 - PRODUCTS

2.1 MATERIALS

- A. Steel: Comply with SJI's "Specifications" for web and steel-angle chord members.
- B. High-Strength Bolts, Nuts, and Washers: ASTM A 325, Type 1, heavy hex steel structural bolts; ASTM A 563 heavy hex carbon-steel nuts; and ASTM F 436 hardened carbon-steel washers.
- C. Welding Electrodes: Comply with AWS standards.

2.2 PRIMERS

- A. Primer: SSPC-Paint 15, or manufacturer's standard shop primer complying with performance requirements in SSPC-Paint 15.

2.3 K-SERIES STEEL JOISTS

- A. Manufacture steel joists of type indicated according to "Standard Specifications for Open Web Steel Joists, K-Series" in SJI's "Specifications," with steel-angle top- and bottom-chord members, underslung ends, and parallel top chord.

1. Joist Type: K-series steel joists.
- B. Comply with AWS requirements and procedures for shop welding, appearance, quality of welds, and methods used in correcting welding work.
- C. Provide holes in chord members for connecting and securing other construction to joists.
- D. Top-Chord Extensions: Extend top chords of joists where indicated, complying with SJI's "Specifications."
- E. Extended Ends: Extend bearing ends of joists with SJI's Type R extended ends where indicated, complying with SJI's "Specifications."
- F. Camber joists according to SJI's "Specifications."
- G. Equip bearing ends of joists with manufacturer's standard beveled ends or sloped shoes if joist slope exceeds 1/4 inch per 12 inches.

2.4 LONG-SPAN STEEL JOISTS

- A. Manufacture steel joists according to "Standard Specifications for Longspan Steel Joists, LH-Series and Deep Longspan Steel Joists, DLH-Series" in SJI's "Specifications," with steel-angle top- and bottom-chord members; of joist type and end and top-chord arrangements as indicated.
- B. Comply with AWS requirements and procedures for shop welding, appearance, quality of welds, and methods used in correcting welding work.
- C. Provide holes in chord members for connecting and securing other construction to joists.
- D. Camber long-span steel joists according to SJI's "Specifications."
- E. Equip bearing ends of joists with manufacturer's standard beveled ends or sloped shoes if joist slope exceeds 1/4 inch per 12 inches.

2.5 JOIST ACCESSORIES

- A. Bridging: Provide bridging anchors and number of rows of horizontal or diagonal bridging of material, size, and type required by SJI's "Specifications" for type of joist, chord size, spacing, and span. Furnish additional erection bridging if required for stability.
- B. Supply miscellaneous accessories, including splice plates and bolts required by joist manufacturer to complete joist installation.

2.6 CLEANING AND SHOP PAINTING

- A. Clean and remove loose scale, heavy rust, and other foreign materials from fabricated joists and accessories by hand-tool cleaning, SSPC-SP 2 or power-tool cleaning, SSPC-SP 3.

- B. Apply 1 coat of shop primer to joists and joist accessories to be primed to provide a continuous, dry paint film not less than 1.5 mils thick.

PART 3 - EXECUTION

3.1 EXAMINATION

- A. Examine supporting substrates, and abutting structural framing for compliance with requirements for installation tolerances and other conditions affecting performance.
 - 1. Proceed with installation only after unsatisfactory conditions have been corrected.

3.2 INSTALLATION

- A. Do not install joists until supporting construction is in place and secured.
- B. Install joists and accessories plumb, square, and true to line; securely fasten to supporting construction according to SJI's "Specifications," joist manufacturer's written recommendations, and requirements in this Section.
 - 1. Before installation, splice joists delivered to Project site in more than one piece.
 - 2. Space, adjust, and align joists accurately in location before permanently fastening.
 - 3. Install temporary bracing and erection bridging, connections, and anchors to ensure that joists are stabilized during construction.
 - 4. Delay rigidly connecting bottom-chord extensions to columns or supports until dead loads have been applied.
- C. Field weld joists to supporting steel framework. Coordinate welding sequence and procedure with placement of joists. Comply with AWS requirements and procedures for welding, appearance and quality of welds, and methods used in correcting welding work.
- D. Install and connect bridging concurrently with joist erection, before construction loads are applied. Anchor ends of bridging lines at top and bottom chords if terminating at walls or beams.

3.3 FIELD QUALITY CONTROL

- A. Testing Agency: Owner will engage a qualified independent testing and inspecting agency to inspect field welds and bolted connections and to perform field tests and inspections and prepare test and inspection reports.
- B. Field welds will be visually inspected according to AWS D1.1/D1.1M.
- C. Bolted connections will be visually inspected.
- D. Correct deficiencies in Work that test and inspection reports have indicated are not in compliance with specified requirements.

- E. Additional testing will be performed to determine compliance of corrected Work with specified requirements.

3.4 REPAIRS AND PROTECTION

- A. Touchup Painting: After installation, promptly clean, prepare, and prime or reprime field connections, rust spots, and abraded surfaces of prime-painted joists, abutting structural steel, and accessories.
 - 1. Clean and prepare surfaces by hand-tool cleaning, SSPC-SP 2, or power-tool cleaning, SSPC-SP 3.
 - 2. Apply a compatible primer of same type as shop primer used on adjacent surfaces.
- B. Provide final protection and maintain conditions, in a manner acceptable to manufacturer and Installer, that ensure that joists and accessories are without damage or deterioration at time of Substantial Completion.

END OF SECTION 05210

SECTION 05310 - STEEL DECK

PART 1 - GENERAL

1.1 RELATED DOCUMENTS

- A. Drawings and general provisions of the Contract, including General and Supplementary Conditions and Division 1 Specification Sections, apply to this Section.

1.2 SUMMARY

- A. This Section includes the following:
 - 1. Roof deck.
- B. Related Sections include the following:
 - 1. Division 5 Section "Metal Fabrications" for framing deck openings with miscellaneous steel shapes.

1.3 SUBMITTALS

- A. Shop Drawings: Show layout and types of deck panels, anchorage details, reinforcing channels, pans, cut deck openings, special jointing, accessories, and attachments to other construction.

1.4 QUALITY ASSURANCE

- A. Welding: Qualify procedures and personnel according to AWS D1.3, "Structural Welding Code - Sheet Steel."
- B. AISI Specifications: Comply with calculated structural characteristics of steel deck according to AISI's "North American Specification for the Design of Cold-Formed Steel Structural Members."

1.5 DELIVERY, STORAGE, AND HANDLING

- A. Protect steel deck from corrosion, deformation, and other damage during delivery, storage, and handling.
- B. Stack steel deck on platforms or pallets and slope to provide drainage. Protect with a waterproof covering and ventilate to avoid condensation.

PART 2 - PRODUCTS

2.1 MANUFACTURERS

- A. Manufacturers: Subject to compliance with requirements, provide products by one of the following:
1. Steel Deck:
 - a. ASC Profiles, Inc.
 - b. Canam Steel Corp.;The Canam Manac Group.
 - c. Consolidated Systems, Inc.
 - d. DACS, Inc.
 - e. D-Mac Industries Inc.
 - f. Epic Metals Corporation.
 - g. Marlyn Steel Decks, Inc.
 - h. New Millennium Building Systems, LLC.
 - i. Nucor Corp.; Vulcraft Division.
 - j. Roof Deck, Inc.
 - k. United Steel Deck, Inc.
 - l. Valley Joist; Division of EBSCO Industries, Inc.
 - m. Verco Manufacturing Co.
 - n. Wheeling Corrugating Company; Div. of Wheeling-Pittsburgh Steel Corporation.

2.2 ROOF DECK

- A. Steel Roof Deck: Fabricate panels, without top-flange stiffening grooves, to comply with "SDI Specifications and Commentary for Steel Roof Deck," in SDI Publication No. 30, and with the following:
1. Galvanized Steel Sheet: ASTM A 653/A 653M, Structural Steel (SS), Grade 33, G60 zinc coating.
 2. Deck Profile: As indicated.
 3. Side Laps: Overlapped.

2.3 ACCESSORIES

- A. General: Provide manufacturer's standard accessory materials for deck that comply with requirements indicated.
- B. Welding rods shall conform to American Welding Society "Specification for Iron and Steel Arc-Weld Electrodes." Use welding electrodes recommended by deck manufacturer.
- C. Side-Lap Fasteners: Corrosion-resistant, hexagonal washer head; self-drilling, carbon-steel screws, No. 10 minimum diameter.
- D. Miscellaneous Sheet Metal Deck Accessories: Steel sheet, minimum yield strength of 33,000 psi, not less than 0.0359-inch design uncoated thickness, of same material and finish as deck; of profile indicated or required for application.

- E. Galvanizing Repair Paint: ASTM A 780, SSPC-Paint 20 or DOD-P-21035, with dry film containing a minimum of 94 percent zinc dust by weight.
- F. Repair Paint: Manufacturer's standard rust-inhibitive primer of same color as primer.

PART 3 - EXECUTION

3.1 EXAMINATION

- A. Examine supporting frame and field conditions for compliance with requirements for installation tolerances and other conditions affecting performance.

3.2 INSTALLATION, GENERAL

- A. Install deck panels and accessories according to applicable specifications and commentary in SDI Publication No. 30, manufacturer's written instructions, and requirements in this Section.
- B. Locate deck bundles to prevent overloading of supporting members.
- C. Place deck panels on supporting frame and adjust to final position with ends accurately aligned and bearing on supporting frame before being permanently fastened. Do not stretch or contract side-lap interlocks.
- D. Place deck panels flat and square and fasten to supporting frame without warp or deflection.
- E. Cut and neatly fit deck panels and accessories around openings and other work projecting through or adjacent to deck.
- F. Comply with AWS requirements and procedures for manual shielded metal arc welding, appearance and quality of welds, and methods used for correcting welding work.

3.3 ROOF-DECK INSTALLATION

- A. Size, spacing, and location of welds and side lap connections shall be as indicated on Structural Drawings.
- B. Fasten roof-deck panels to steel supporting members by arc spot (puddle) welds of the surface diameter indicated or arc seam welds with an equal perimeter that is not less than 1-1/2 inches long.
- C. End Bearing: Install deck ends over supporting frame with a minimum end bearing of 1-1/2 inches, with end joints as follows:
 - 1. End Joints: Lapped 2 inches minimum.

3.4 FIELD QUALITY CONTROL

- A. Testing Agency: Owner will engage a qualified independent testing and inspecting agency to perform field tests and inspections and prepare test reports.
- B. Field welds will be subject to inspection.
- C. Testing agency will report inspection results promptly and in writing to Contractor and Architect.
- D. Remove and replace work that does not comply with specified requirements.
- E. Additional inspecting, at Contractor's expense, will be performed to determine compliance of corrected work with specified requirements.

3.5 REPAIRS AND PROTECTION

- A. Galvanizing Repairs: Prepare and repair damaged galvanized coatings on both surfaces of deck with galvanized repair paint according to ASTM A 780 and manufacturer's written instructions.
- B. Provide final protection and maintain conditions to ensure that steel deck is without damage or deterioration at time of Substantial Completion.

END OF SECTION 05310

July, 11th 2017

Via: E-mail

Lavin Associates, Inc.
c/o: Mr. John Jenkins AIA, Design Project Manager
RE: MAXOR MAIL ORDER BID
4th & Tyler St.
Amarillo, TX 79101

Re: Maxor Mail Order Building Roofing Questions

Dear Mr. Jenkins,

Please note the following bid questions regarding Maxor Mail Order Building Project, Amarillo TX.

Ref specification No. 07552 SBS MC

1. 1.5, D. Requires a 15 yr. Manufacturer Warranty with a 90 MPH Wind Rider.
 - a. Basis of design is TAMKO. Upon contact with TAMKO, we were advised that they no longer issue a manufacturer NDL warranty of any kind.
 - b. It is our understanding that Amarillo is not in a 90 MPH Global's published information. A 90 MPH wind rated roofing system is substantially more expensive than a lesser wind ratings.
 - o Is 90 MPH wind rated required or can a lesser wind rating be considered? If so, what wind rating is desired?

2. 3.2, F. Adhered Insulation: This section calls for foam adhering ISO board to steel deck. Although an acceptable method of attachment to steel deck per GAF materials, it does not have any of the specified testing or approvals for uplift or wind speeds as specified in section 07552. Will these requirements be waived for the specified roof areas?

Please note, we are unaware of any other method beyond mechanical fastening that achieves the specified FM & UL requirements. Please advise.

Thank you for your time and I look forward to your response soon.

Sincerely,

Jim Wattenburger
Tecta America Amarillo - CS

Tamko is not the only pre-approved mfr. If they can't or won't meet the spec, go to another.

Stick with the 90MPH

Specifications will be revised to be mechanically attachment everywhere.

July, 12th 2017

Via: E-mail

Lavin Associates, Inc.
c/o: Mr. John Jenkins AIA, Design Project Manager
4th & Tyler St.
Amarillo, TX 79101

Re: Maxor Mail Order Building Roofing Questions

Dear Mr. Jenkins,

Should be A5.02

Please note the following bid questions in regards to the Maxor Mail Order Building, Amarillo TX.

Ref Drawing A4.01, North Elevation, see note “.040” Break metal with reinforced corner angles. These details are shown on drawing A5.02 in Plan Sec 8 & 9. The north elevation shows a down spout”. flat aluminum metal with reinforced corner angles.

Corrugated metal is the corner of the Training Room beyond. Metal is flat aluminum.

1. Drawing A5.05 in elevation Section 5 this same cover is shown and appears to be a corrugated metal.
 - a. Please clarify.
2. In this same section, is there a soffit not shown along the north elevation?

Yes there is a soffit

Ref Drawing A4.01 North Elevation, Section 1 on A5.05. On drawing A5.05 Section 5 shows a 15' overhang with the soffit shown as the insulated 2000 Smooth wall panel.

1. Is this overhang just in the 9' wide door way opening?

5/A5.05 is at the loading docks on the east elevation.

Thank you for your time and I look forward to hearing back from you soon.

Sincerely,


Jim Wattenburger
Tecta America Amarillo - CS