

**ADDENDUM NO. 1
IRONDALE PUBLIC LIBRARY**

BIDS RECEIVED:

TIME: 2:00pm

DATE: February 15, 2024

City Hall

CITY OF IRONDALE

THIS ADDENDUM IS DIRECTED TO ALL PRIME BIDDERS, AND ALL OTHERS TO WHOM DRAWINGS AND SPECIFICATIONS HAVE BEEN ISSUED.

THIS ADDENDUM FORMS A PART OF THE CONTRACT DOCUMENTS. THE FOLLOWING CONDITIONS TAKE PRECEDENCE OVER ANY CONFLICTING CONDITIONS IN THE DRAWINGS AND SPECIFICATIONS. THE DRAWINGS AND SPECIFICATIONS ARE HEREBY AMENDED IN THE FOLLOWING PARTICULARS.

GENERAL **N/A**

DRAWINGS **N/A**

SPECIFICATIONS

1. Section 07 41 13 – Metal Roof Panels
 - a. Remove Section from Specification
2. Section 07 54 19 – Polyvinyl-Chloride Roofing
 - a. Para. 1.9-D. – Remove Paragraph
 - b. Para. 2.1 Manufacturers
 - i. Add “Carlisle Sureflex 60mil PVC” as approved manufacturer/product
3. Section 07 61 13 Standing Seam Metal Roofing
 - a. Add attached Section 07 61 13 to specification and Index.

REQUEST FOR INFORMATION/CLARIFICATIONS

1. What is the construction start date?
Response: As soon as possible after the City Council approves the recommended Bid.
2. Are exterior openings to be 2-1/4" x 5" 2250 LR Curtainwall?
Response: Yes
3. Provide frame elevation for door# 100B
Response: Matches frame at Door 100 (Storefront Type 'J')
4. 5" vertical mullions not available for P, Q,R- Can get 4-1/2" wide by stacking two verticals together like upper horizontals in P & Q.
Response: This is acceptable.
5. Please confirm location of roller shades. Assuming they are Keynote 1 on A4.12. Please confirm if these are only locations.
Response: See attached sketch of Keynotes that should be used on sheet A4.12 & A4.13.

END OF ADDENDUM NO. 1

Attachment 1: List of Prequalified Bidders

Attachment 2: Sketch SK-1-001

Attachment 3: Specification 07 61 13 Standing Seam Metal Roofing

Attachment 4: Sheet LS.1



**PREQUALIFIED GENERAL CONTRACTORS
IRONDALE PUBLIC LIBRARY
January 26,2024**

Stewart/Perry

4855 Overton Road
Birmingham, AL 35210
205-414-6217

Blalock Building Co.

7309 Gadsden Hwy
Trussville, AL 35173
205-661-3040

Taylor+Miree Construction, Inc.

11 Dexter Avenue
Birmingham, AL 35213
205-879-7770

Cooper Construction

5004 5th Avenue South
Birmingham, AL 35212
205-871-0304

Argo Building Company

4501 7th Avenue- Wylam
Birmingham, AL 35224
205-786-0336

Kyser Construction

214 Hargrove Road East
Tuscaloosa, AL 35401
205-366-3530

Amason & Associates, Inc.

P.O. Box 1729
Tuscaloosa, AL 35403
205-345-9626

Shelby General Contractors

3120 4th Avenue South
Birmingham, AL 35233
205-515-0953

Dominguez Design-Build

314 N Spring Str., Suite B
Pensacola, FL 32501
850-480-5064

Greer Building Contractors

110 Thomas Drive
Gadsden, AL 35904
205-547-7935

Duncan & Dearmon

164 Chandalar Place Drive
Pelham, AL 35124
205-358-8777

Chase Building Group

1 Wiggins Street
Rainbow City, AL 35906
205-870-1175

A.G. Gaston

1820 3rd Avenue North-Suite 400
Birmingham, AL 35203
205-328-0376

INTERIOR FINISH PLAN KEY NOTES

#

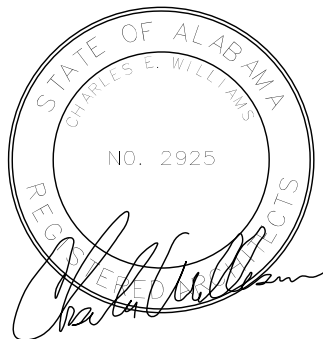
1	PROVIDE NEW DOUBLE SYSTEM ROLLER SHADES (RS-1); SEE SCHEDULE FOR SPECIFICATION
2	PROVIDE TS-1 AT FLOORING TRANSITION
3	PROVIDE CT-3 FULL HEIGHT BEHIND EWC
4	PROVIDE TS-2 AT FLOORING TRANSITION
5	PROVIDE TS-3 AT FLOORING TRANSITION

KEYNOTES TO BE ADDED TO SHEETS A4.12 AND A4.13



Charles Williams & Associates, Inc
ARCHITECTS

3601 8TH AVE. SOUTH
BIRMINGHAM, ALABAMA 35222
PH: 205-250-0700
FAX: 205-250-0515



DATE:

26 January, 2024

PROJECT NUMBER:

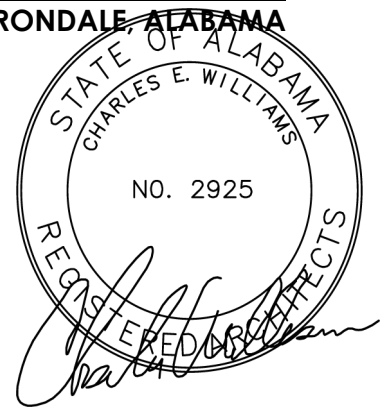
2022-08

PROJECT NAME:

Irondale Public Library

REFERENCE SHEET NO:

A4.12 & A4.13

**SECTION 07 61 13****STANDING SEAM METAL ROOFING****PART 1 - GENERAL****1.1 SUMMARY**

- A. Section Includes: Pre-formed, prefinished metal roofing system complete with clips, perimeter and penetration flashings, high temperature underlayment, and closures.
- B. Related Sections:
 - 1. Section 06 10 00 - Rough Carpentry: Miscellaneous blocking and nailers for standing seam metal roofing.
 - 2. Section 07 62 00 - Sheet Metal Flashing and Trim: Fascia, gutters, flashings and other sheet metal work not part of metal roof panel assemblies.
 - 3. Section 07 92 00 - Joint Sealants: Field-applied sealants not specified in this Section.

1.2 PREINSTALLATION MEETINGS

- A. Preinstallation Conference: Conduct conference at Project site.
 - 1. Meet with Owner, Architect, metal panel Installer, metal panel manufacturer's representative, structural-support Installer, and installers whose work interfaces with or affects metal panels, including installers of roof accessories and roof-mounted equipment.
 - 2. Review and finalize construction schedule and verify availability of materials, Installer's personnel, equipment, and facilities needed to make progress and avoid delays.
 - 3. Review methods and procedures related to metal panel installation, including manufacturer's written instructions.
 - 4. Examine support conditions for compliance with requirements, including alignment between and attachment to structural members.
 - 5. Review structural loading limitations of deck during and after roofing.
 - 6. Review flashings, special details, drainage, penetrations, equipment curbs, and condition of other construction that affect metal panels.
 - 7. Review governing regulations and requirements for insurance, certificates, and tests and inspections if applicable.
 - 8. Review temporary protection requirements for metal panel systems during and after installation.
 - 9. Review procedures for repair of metal panels damaged after installation.
 - 10. Document proceedings, including corrective measures and actions required, and furnish copy of record to each participant.

1.3 ACTION SUBMITTALS

- A. Product Data: For each type of product.
 - 1. Include construction details, material descriptions, dimensions of individual components and profiles, and finishes for each type of panel and accessory.
- B. Shop Drawings:
 - 1. Include fabrication and installation layouts of metal panels; details of edge conditions, joints, panel profiles, corners, anchorages, attachment system, trim, flashings, closures, curbs and accessories; and special details.
 - 2. Accessories: Include details of the flashing, trim, and anchorage systems, at a scale of not less than 3" = 1'-0".
- C. Calculations:
 - 1. Include calculations with registered engineer seal, verifying roof panel and attachment method resist wind pressures imposed on it pursuant to applicable building codes.
- D. Samples for Initial Selection: For each type of metal panel indicated with factory-applied color finishes.
 - 1. Include similar Samples of trim and accessories involving color selection.
- E. Samples for Verification: For each type of exposed finish required, prepared on Samples of size indicated below.
 - 1. Metal Panels: 12 inches long by actual panel width. Include clips, fasteners, closures, and other metal panel accessories.

1.4 INFORMATIONAL SUBMITTALS

- A. Qualification Data: For Installer and Manufacturer.
- B. Product Test Reports: For each product, for tests performed by a qualified testing agency.
- C. Field quality-control reports.
- D. Sample Warranties: For special warranties.

1.5 CLOSEOUT SUBMITTALS

- A. Maintenance Data: For metal panels to include in maintenance manuals.

1.6 QUALITY ASSURANCE

- A. Installer Qualifications: An entity that employs installers and supervisors who are trained and approved by manufacturer.

- B. Manufacturer Qualifications: Company specializing in Architectural Sheet Metal Products.
- C. Mockups: Build mockups to verify selections made under Sample submittals and to demonstrate aesthetic effects and set quality standards for fabrication and installation.
 - 1. Build mockup of typical roof area and eave, including fascia, as shown on Drawings; approximately 48 inches square by full thickness, including attachments, underlayment, and accessories.
 - 2. Approval of mockups does not constitute approval of deviations from the Contract Documents contained in mockups unless Architect specifically approves such deviations in writing.
 - 3. Approved mockups may become part of the completed Work if undisturbed at time of Substantial Completion.

1.7 DELIVERY, STORAGE, AND HANDLING

- A. Deliver components, metal panels, and other manufactured items so as not to be damaged or deformed. Package metal panels for protection during transportation and handling.
- B. Unload, store, and erect metal panels in a manner to prevent bending, warping, twisting, and surface damage.
- C. Stack metal panels horizontally on platforms or pallets, covered with suitable weathertight and ventilated covering. Store metal panels to ensure dryness, with positive slope for drainage of water. Do not store metal panels in contact with other materials that might cause staining, denting, or other surface damage.
- D. Remove strippable protective covering on metal panels as panels are being installed. Do not leave the film on installed panels.

1.8 FIELD CONDITIONS

- A. Weather Limitations: Proceed with installation only when existing and forecasted weather conditions permit assembly of metal panels to be performed according to manufacturers' written instructions and warranty requirements.

1.9 COORDINATION

- A. Coordinate sizes and locations of roof curbs, equipment supports, and roof penetrations with actual equipment provided.
- B. Coordinate metal panel installation with rain drainage work, flashing, trim, construction of soffits, and other adjoining work to provide a leakproof, secure, and noncorrosive installation.

1.10 WARRANTY

- A. Special Warranty on Panel Finishes: Manufacturer's standard form in which manufacturer agrees to repair finish or replace metal panels that show evidence of deterioration of factory-applied finishes within specified warranty period.
 - 1. Exposed Panel Finish: Deterioration includes, but is not limited to, the following:
 - a. Color fading more than 5 Hunter units when tested according to ASTM D 2244.
 - b. Chalking in excess of a No.8 rating when tested according to ASTM D 4214.
 - c. Cracking, chipping, peeling, or failure of paint to adhere to bare metal.
 - 2. Finish Warranty Period: 20 years from date of Substantial Completion.
- A. Special Installer Warranty: Furnish a written warranty signed by the Panel Applicator for a two (2) year period from the date of Substantial Completion of the building guaranteeing materials and workmanship for watertightness of the roofing system, flashings, penetrations, and against all leaks.

PART 2 - PRODUCTS**2.1 PERFORMANCE REQUIREMENTS**

- A. Structural Performance: Provide metal panel systems capable of withstanding the effects of the following loads, based on testing according to ASTM E 1592 or UL580:
 - 1. Wind Loads: As indicated on Drawings.
 - 2. Other Design Loads: As indicated on Drawings.
 - 3. Deflection Limits: For wind loads, no greater than 1/180 of the span.
- B. Air Infiltration: Air leakage of not more than 0.2 cfm/sq. ft. when tested according to ASTM E 1680 and ASTM E 283 at the following test-pressure difference:
 - 1. Test-Pressure Difference: 6.24 lbf/sq. ft.
- C. Water Penetration under Static Pressure: No water penetration when tested according to ASTM E 1646 and ASTM E 331 at the following test-pressure difference:
 - 1. Test-Pressure Difference: 15 lbf/sq. ft.
- D. Wind-Uplift Resistance: Provide metal roof panel assemblies that comply with UL 580 for wind-uplift-resistance class indicated.
 - 1. Uplift Rating: UL 90.

- E. Thermal Movements: Allow for thermal movements from ambient and surface temperature changes by preventing buckling, opening of joints, overstressing of components, failure of joint sealants, failure of connections, and other detrimental effects. Base calculations on surface temperatures of materials due to both solar heat gain and nighttime-sky heat loss.
 - 1. Temperature Change (Range): 120 deg F, ambient; 180 deg F, material surfaces.

2.2 MANUFACTURERS

- A. Basis-of-Design Product/Manufacturer: Pre-formed, prefinished metal roofing system is based on **“CEE-LOCK Standing Seam Panel”** as manufactured by **BERRIDGE MANUFACTURING COMPANY**, 1720 Maury Street, Houston, Texas 77026, Phone: (800) 231-8127, www.berridge.com
 - 1. Substitutions: Subject to full compliance with the performance requirements of this specification, listed manufacturer's systems may be considered by one of the following:
 - a. Centria Architectural Systems; www.centria.com
 - b. Imetco Architectural Systems; www.imetco.com
 - c. Pac-Clad; <https://www.pac-clad.com>

2.3 STANDING-SEAM METAL ROOF PANELS

- A. General: Provide factory-formed metal roof panels designed to be installed by lapping and interconnecting raised side edges of adjacent panels with joint type indicated and mechanically attaching panels to supports using concealed clips in side laps. Include clips, cleats, pressure plates, and accessories required for weathertight installation.
 - 1. Steel Panel Systems: Unless more stringent requirements are indicated, comply with ASTM E 1514.
 - 2. Aluminum Panel Systems: Unless more stringent requirements are indicated, comply with ASTM E 1637.
- B. Vertical-Rib, Snap-Joint, Standing-Seam Metal Roof Panels: Formed with vertical ribs at panel edges and panel striations between ribs; designed for sequential installation by mechanically attaching panels to supports using concealed clips located under one side of panels, engaging opposite edge of adjacent panels, and snapping panels together.
 - 1. Metallic-Coated Steel Sheet: Aluminum-zinc alloy-coated steel sheet complying with ASTM A 792/A 792M, Class AZ50 coating designation; structural quality. Prepainted by the coil-coating process to comply with ASTM A 755/A 755M.
 - a. Nominal Thickness: 24 gauge.
 - b. Exterior Finish: Two-coat fluoropolymer.
 - 1) Painted materials shall have a removable plastic film to protect the paint during roll forming, shipping and handling. Strippable (protective) film must be removed prior to panel installation.

- c. Color: As selected by Architect from manufacturer's full range.
- 2. Clips: **Cee-Clip with Vinyl Weatherseal**. Insert to accommodate thermal movement.
 - a. Material: 24 gauge aluminum-zinc alloy-coated steel sheet.
- 3. Panel Coverage: 11.5 inches.
- 4. Panel Height: 1.5 inches.

2.4 UNDERLAYMENT MATERIALS

- A. Self-Adhering, High-Temperature Underlayment: Provide self-adhering, cold-applied, sheet underlayment, a minimum of 40 mils thick, consisting of slip-resistant, polyethylene-film top surface laminated to a layer of butyl or SBS-modified asphalt adhesive, with release-paper backing. Provide primer when recommended by underlayment manufacturer.
 - 1. Thermal Stability: Stable after testing at 240 deg F; ASTM D 1970.
 - 2. Low-Temperature Flexibility: Passes after testing at minus 20 deg F; ASTM D 1970.
 - 3. Manufacturers: Subject to compliance with requirements, provide products by one of the following:
 - a. **Grace Ultra**
 - b. **Mid-States Asphalt Quick Stick HT Pro**
 - c. **Polyglass Polystick MTS**
 - d. **Soprema Lastobond Shield HT**
 - e. **Tamko TW Underlayment or TW Metal & Tile Underlayment**

2.5 MISCELLANEOUS MATERIALS

- A. Miscellaneous Metal Subframing and Furring: ASTM C 645; cold-formed, metallic-coated steel sheet, ASTM A 653/A 653M, G90 hot-dip galvanized coating designation or ASTM A 792/A 792M, Class AZ50 coating designation unless otherwise indicated. Provide manufacturer's standard sections as required for support and alignment of metal panel system.
- B. Panel Accessories: Provide components required for a complete, weathertight panel system including trim, copings, fasciae, mullions, sills, corner units, clips, flashings, sealants, gaskets, fillers, closure strips, and similar items. Match material and finish of metal panels unless otherwise indicated.
 - 1. Closures: Provide closures at eaves and ridges, fabricated of same metal as metal panels.
 - 2. Backing Plates: Provide metal backing plates at panel end splices, fabricated from material recommended by manufacturer.
 - 3. Closure Strips: Closed-cell, expanded, cellular, rubber or crosslinked, polyolefin-foam or closed-cell laminated polyethylene; minimum 1-inch-thick, flexible closure strips; cut or premolded to match metal panel profile. Provide closure strips where indicated or necessary to ensure weathertight construction.

- C. Flashing and Trim: Provide flashing and trim formed from same material as metal panels as required to seal against weather and to provide finished appearance. Locations include, but are not limited to, eaves, rakes, corners, bases, framed openings, ridges, fasciae, and fillers. Finish flashing and trim with same finish system as adjacent metal panels.
- D. Gutters: Formed from same material as roof panels, complete with end pieces, outlet tubes, and other special pieces as required. Fabricate in minimum 96-inch-long sections, of size and metal thickness according to SMACNA's "Architectural Sheet Metal Manual." Furnish gutter supports spaced a maximum of 36 inches o.c., fabricated from same metal as gutters. Provide wire ball strainers of compatible metal at outlets. Finish gutters to match metal roof panels.
- E. Downspouts: Formed from same material as roof panels. Fabricate in 10-foot-long sections, complete with formed elbows and offsets, of size and metal thickness according to SMACNA's "Architectural Sheet Metal Manual." Finish downspouts to match gutters.
- F. Roof Curbs: Fabricated from same material as roof panels, 0.048-inch nominal thickness; with bottom of skirt profiled to match roof panel profiles and with welded top box and integral full-length cricket. Fabricate curb subframing of 0.060-inch-nominal thickness, angle-, C-, or Z-shaped steel sheet. Fabricate curb and subframing to withstand indicated loads of size and height indicated. Finish roof curbs to match metal roof panels.
 - 1. Insulate roof curb with 1-inch-thick, rigid insulation.
- G. Panel Fasteners: Zinc-coated steel, corrosion resisting steel, zinc cast head, or nylon capped steel, type and size as approved for the applicable loading requirements. Exposed fasteners, where approved by Architect, shall be gasketed or have gasketed washers on the exterior side of the covering to waterproof the penetration.
- H. Panel Sealants: Provide sealant type recommended by manufacturer that are compatible with panel materials, are nonstaining, and do not damage panel finish.
 - 1. Sealant Tape: Pressure-sensitive, 100 percent solids, gray polyisobutylene compound sealant tape with release-paper backing. Provide permanently elastic, nonsag, nontoxic, nonstaining tape 1/2 inch wide and 1/8 inch thick.
 - 2. Joint Sealant: ASTM C 920; elastomeric polyurethane or silicone sealant; of type, grade, class, and use classifications required to seal joints in metal panels and remain weathertight; and as recommended in writing by metal panel manufacturer.
 - 3. Butyl-Rubber-Based, Solvent-Release Sealant: ASTM C 1311.

2.6 FABRICATION

- A. General: Fabricate and finish metal panels and accessories at the factory, by manufacturer's standard procedures and processes, as necessary to fulfill indicated performance requirements demonstrated by laboratory testing. Comply with indicated profiles and with dimensional and structural requirements.
- B. On-Site Fabrication: Subject to compliance with requirements of this Section, metal panels may be fabricated on-site using factory set, non-adjustable portable roll-forming equipment if panels are of same profile and warranted by manufacturer to be equal to factory-formed panels. Fabricate according to equipment manufacturer's written instructions and to comply with details shown.
- C. Provide panel profile, including major ribs and intermediate stiffening ribs, if any, for full length of panel.
- D. Sheet Metal Flashing and Trim: Fabricate flashing and trim to comply with manufacturer's recommendations and recommendations in SMACNA's "Architectural Sheet Metal Manual" that apply to design, dimensions, metal, and other characteristics of item indicated.
 - 1. Form exposed sheet metal accessories that are without excessive oil canning, buckling, and tool marks and that are true to line and levels indicated, with exposed edges folded back to form hems.
 - 2. Sealed Joints: Form nonexpansion, but movable, joints in metal to accommodate sealant and to comply with SMACNA standards.
 - 3. Fabricate cleats and attachment devices from same material as accessory being anchored or from compatible, noncorrosive metal recommended in writing by metal panel manufacturer.
 - a. Size: As recommended by SMACNA's "Architectural Sheet Metal Manual" or metal panel manufacturer for application, but not less than thickness of metal being secured.

2.7 FINISHES

- A. Protect mechanical and painted finishes on exposed surfaces from damage by applying a strippable, temporary protective covering before shipping.
- B. Appearance of Finished Work: Variations in appearance of abutting or adjacent pieces are acceptable if they are within one-half of the range of approved Samples. Noticeable variations in same piece are unacceptable. Variations in appearance of other components are acceptable if they are within the range of approved Samples and are assembled or installed to minimize contrast.
- C. Steel Panels and Accessories:
 - 1. Two-Coat Fluoropolymer: AAMA 621. Fluoropolymer finish containing not less than 70 percent PVDF resin by weight in color coat applied by panel manufacturer on a continuous coil coating line, with a top side dry film

thickness of 0.75 ± 0.05 mil over 0.2 ± 0.05 mil primer coat, to provide a total dry film thickness of 0.95 ± 0.10 mil (0.024 mm). Prepare, pretreat, and apply coating to exposed metal surfaces to comply with coating and resin manufacturers' written instructions.

2. Concealed Finish: Apply pretreatment and manufacturer's standard white or light-colored acrylic or polyester backer finish consisting of prime coat and wash coat with a minimum total dry film thickness of 0.35 mil.

PART 3 - EXECUTION

3.1 EXAMINATION

- A. Examine substrates, areas, and conditions, with Installer present, for compliance with requirements for installation tolerances, metal panel supports, and other conditions affecting performance of the Work.
 1. Examine solid roof sheathing to verify that sheathing joints are supported by framing or blocking and that installation is within flatness tolerances required by metal roof panel manufacturer.
 - a. Verify that air- or water-resistive barriers have been installed over sheathing or backing substrate to prevent air infiltration or water penetration.
- B. Examine roughing-in for components and systems penetrating metal panels to verify actual locations of penetrations relative to seam locations of metal panels before installation.
- C. Proceed with installation only after unsatisfactory conditions have been corrected.

3.2 PREPARATION

- A. Miscellaneous Supports: Install subframing, furring, and other miscellaneous panel support members and anchorages according to ASTM C 754 and metal panel manufacturer's written recommendations.

3.3 UNDERLAYMENT INSTALLATION

- A. Self-Adhering Sheet Underlayment: Apply primer if required by manufacturer. Comply with temperature restrictions of underlayment manufacturer for installation. Apply at locations indicated below, wrinkle free, in shingle fashion to shed water, and with end laps of not less than 6 inches staggered 24 inches between courses. Overlap side edges not less than 36 inches. Extend underlayment into gutter trough. Roll laps with roller. Cover underlayment within 14 days.
 1. Apply over the entire roof surface.

- B. Flashings: Install flashings to cover underlayment to comply with requirements specified in "Section 07 62 00 - Sheet Metal Flashing and Trim."

3.4 METAL PANEL INSTALLATION

- A. General: Install metal panels according to manufacturer's written instructions in orientation, sizes, and locations indicated. Install panels perpendicular to supports unless otherwise indicated. Anchor metal panels and other components of the Work securely in place, with provisions for thermal and structural movement.
 - 1. Shim or otherwise plumb substrates receiving metal panels.
 - 2. Flash and seal metal panels at perimeter of all openings. Fasten with self-tapping screws. Do not begin installation until air- or water-resistive barriers and flashings that will be concealed by metal panels are installed.
 - 3. Install screw fasteners in predrilled holes.
 - 4. Locate and space fastenings in uniform vertical and horizontal alignment.
 - 5. Install flashing and trim as metal panel work proceeds.
 - 6. Locate panel splices over, but not attached to, structural supports. Stagger panel splices and end laps to avoid a four-panel lap splice condition.
 - 7. Align bottoms of metal panels and fasten with blind rivets, bolts, or self-tapping screws. Fasten flashings and trim around openings and similar elements with self-tapping screws.
 - 8. Provide weathertight escutcheons for pipe- and conduit-penetrating panels.
- B. Fasteners:
 - 1. Steel Panels: Use stainless-steel fasteners for surfaces exposed to the exterior; use galvanized-steel fasteners for surfaces exposed to the interior.
- C. Anchor Clips: Anchor metal roof panels and other components of the Work securely in place, using manufacturer's approved fasteners according to manufacturers' written instructions.
- D. Metal Protection: Where dissimilar metals contact each other or corrosive substrates, protect against galvanic action as recommended in writing by metal panel manufacturer.
- E. Metal Panel Protection: Do not permit storage of materials or roof traffic on installed roof panels. Provide cushioned walkboards as necessary to avoid damage to completed work. Protect roofing until completion of project.
- F. Standing-Seam Metal Roof Panel Installation: Fasten metal roof panels to supports with concealed clips at each standing-seam joint at location, spacing, and with fasteners recommended in writing by manufacturer.
 - 1. Install clips to supports with self-tapping fasteners.

2. Install pressure plates (if required) at locations indicated in manufacturer's written installation instructions.
 3. Snap Joint: Nest standing seams and fasten together by interlocking and completely engaging factory-applied vinyl weatherseal.
- G. Accessory Installation: Install accessories with positive anchorage to building and weathertight mounting, and provide for thermal expansion. Coordinate installation with flashings and other components.
1. Install components required for a complete metal panel system including trim, copings, corners, seam covers, flashings, sealants, gaskets, fillers, closure strips, and similar items. Provide types indicated by metal roof panel manufacturers; or, if not indicated, types recommended by metal roof panel manufacturer.
- H. Flashing and Trim: Comply with performance requirements, manufacturer's written installation instructions, and SMACNA's "Architectural Sheet Metal Manual." Provide concealed fasteners where possible, and set units true to line and level as indicated. Install work with laps, joints, and seams that will be permanently watertight and weather resistant.
1. Install exposed flashing and trim that is without buckling and tool marks, and that is true to line and levels indicated, with exposed edges folded back to form hems. Install sheet metal flashing and trim to fit substrates and achieve waterproof and weather-resistant performance.
 2. Expansion Provisions: Provide for thermal expansion of exposed flashing and trim. Space movement joints at a maximum of 10 feet with no joints allowed within 24 inches of corner or intersection. Where lapped expansion provisions cannot be used or would not be sufficiently weather resistant and waterproof, form expansion joints of intermeshing hooked flanges, not less than 1 inch deep, filled with mastic sealant (concealed within joints).
- I. Gutters: Join sections with riveted and soldered or lapped and sealed joints. Attach gutters to eave with gutter hangers spaced not more than 36 inches o.c. using manufacturer's standard fasteners. Provide end closures and seal watertight with sealant. Provide for thermal expansion.
- J. Downspouts: Join sections with telescoping joints. Provide fasteners designed to hold downspouts securely 1 inch away from walls; locate fasteners at top and bottom and at approximately 60 inches o.c. in between.
1. Provide elbows at base of downspouts to direct water away from building.
- K. Roof Curbs: Install flashing around bases where they meet metal roof panels.
- L. Pipe Flashing: Form flashing around pipe penetration and metal roof panels. Fasten and seal to metal roof panels as recommended by manufacturer.

3.5 ERECTION TOLERANCES

- A. Installation Tolerances: Shim and align substrate or framing within installed tolerance of 1/4 inch in 20 feet on slope and location lines as indicated and within 1/8-inch offset of adjoining faces and of alignment of matching profiles.

3.6 FIELD QUALITY CONTROL

- A. Manufacturer's Field Service: Engage a factory-authorized service representative to test and inspect metal roof panel installation, including accessories. Report results in writing.
- B. Remove and replace applications of metal roof panels where tests and inspections indicate that they do not comply with specified requirements.
- C. Additional tests and inspections, at Contractor's expense, are performed to determine compliance of replaced or additional work with specified requirements.
- D. Prepare test and inspection reports.

3.7 CLEANING AND PROTECTION

- A. Remove temporary protective coverings and strippable films, if any, as metal panels are installed, unless otherwise indicated in manufacturer's written installation instructions. On completion of metal panel installation, clean finished surfaces as recommended by metal panel manufacturer. Maintain in a clean condition during construction.
- B. Replace metal panels that have been damaged or have deteriorated beyond successful repair by finish touchup or similar minor repair procedures.
- C. Remove all scrap and construction debris from the site.

END OF SECTION

BUILDING CODE SUMMARY

NOTE: REFERENCES NOTED ARE BASED ON THE INTERNATIONAL BUILDING CODE UNLESS NOTED OTHERWISE.

- APPLICABLE CODES:
A. BUILDING COMPRISING THIS PROJECT HAS BEEN DESIGNED ACCORDING TO THE FOLLOWING ADOPTED REGULATIONS BY THE CITY OF IRONDALE, STATE AND FEDERAL REGULATIONS:

2021	INTERNATIONAL BUILDING CODE
2021	INTERNATIONAL MECHANICAL CODE
2021	INTERNATIONAL PLUMBING CODE
2021	INTERNATIONAL FUEL GAS CODE
2021	INTERNATIONAL FIRE CODE
2010	ADA STANDARDS FOR ACCESSIBILITY DESIGN
2023	NATIONAL ELECTRIC CODE
2024	NFPA 101 - LIFE SAFETY CODE

- PROJECT DESCRIPTION:
A. THIS PROJECT CONSISTS OF A NEW LIBRARY BUILDING FOR THE CITY OF IRONDALE. THE BUILDING IS ONE-STORY OF STEEL FRAMED CONSTRUCTION WITH METAL STUD FRAMING AND METAL ROOF FRAMING. EXTERIOR MATERIALS INCLUDE METAL SIDING, STONE AND BRICK VENER.

BUILDING TYPE	BUILDING DESCRIPTION	OCCUPANCY (IBC 302)	CONSTRUCTION TYPE (IBC TABLE 504.3, 504.4)	SPRINKLERED
1	LIBRARY	A-3 ASSEMBLY	II-B 75 max height - 35'-0" actual	YES, NFPA 13

AREA	BUILDING	AREA ALLOWED (TABLE 506.2)	AREA PROVIDED*
1	LIBRARY	38,000 SF	16,345 SF

*AREA PROVIDED IS BASED ON 502.1 AND IS THE FOOTPRINT AS FORMED BY THE INSIDE FACE OF THE EXTERIOR WALLS

- FIRE RESISTANCE REQUIREMENTS:
A. FIRE RESISTANCE RATINGS PER IBC TABLE 601:
1. FIRE SEPARATION REQUIREMENTS AS FOLLOWS:

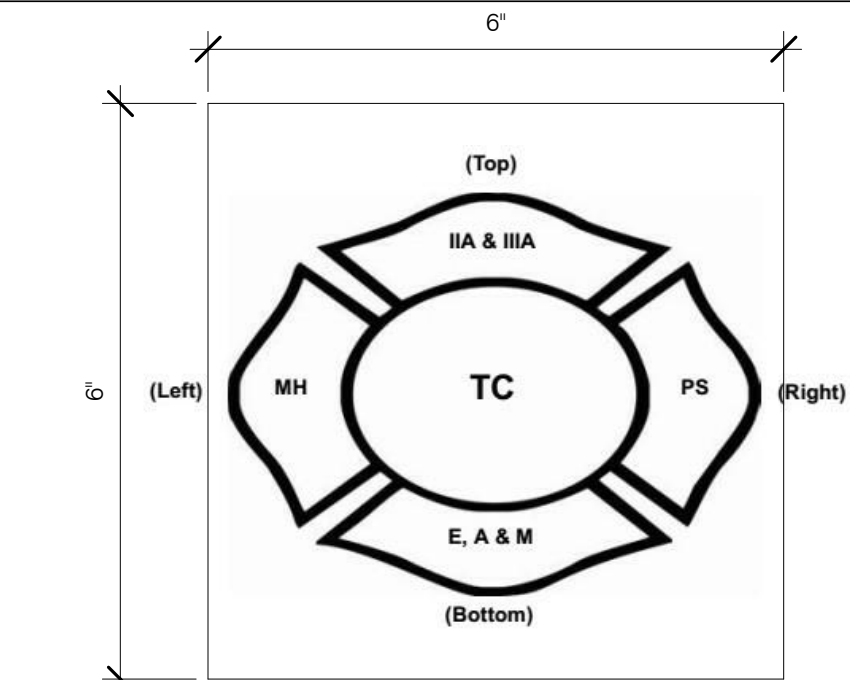
STRUCTURAL ELEMENT	RATING (IN HOURS)
STRUCTURAL FRAME, COLUMNS, GIRDERS	
TRUSSES	0 TABLE 601
EXTERIOR BEARING WALLS	0 TABLE 601
INTERIOR BEARING WALLS	0 TABLE 601
EXTERIOR NON BEARING PARTITIONS	0 TABLE 705.5 - WITH FIRE SEPARATION \geq 30', CONSTRUCTION TYPE II-B, GROUP A-3
INTERIOR NON BEARING PARTITIONS	0 TABLE 601
FLOOR CONSTRUCTION INCLUDING SUPPORTING BEAMS/JOISTS	0 TABLE 601
ROOF CONSTRUCTION INCLUDING SUPPORTING BEAMS/JOISTS	0 TABLE 601
UNPROTECTED EXTERIOR WALL OPENINGS	NR TABLE 602
VERTICAL FLAME BARRIERS	NR PAR 705.8.5, NOT REQUIRED FOR 1-STORY BUILDINGS
FIRE WALLS	NA
FIRE BARRIERS (at area separation)	NA
FIRE RESISTANCE (at ext. bearing walls)	NA
FIRE RESISTANCE (at shafts)	NA
DRAFTSTOPPING CONCEALED SPACES	NA
SMOKE BARRIERS	NA
HORIZONTAL ASSEMBLIES	NA
PENETRATIONS	NR SECTION 714 RATING OF NOT LESS THAN THE REQD FIRE-RESISTANCE RATING OF THE WALL PENETRATED TABLE 716.1(2)
OPENING PROTECTIVES	NR
FIREBLOCKING	- AS REQUIRED FOR CEILINGS AND ROOFS
- CORRIDOR RATING REQUIREMENTS - TABLE 1020.2, RATING NOT REQUIRED IN BUILDINGS WITH SPRINKLER SYSTEM THAT IS IN ACCORDANCE WITH SECTION 903.3.1.1

- EGRESS REQUIREMENTS:
A. OCCUPANT LOAD (IBC TABLE 1004.5):
OCCUPANCY - AREA 1

AREA PER OCCUPANT	AREA (SF)	OCCUPANT LOAD
BUSINESS	150 gross	3,242
STORAGE/MECH	300 gross	821
LIBRARY- READING	50 net	556
LIBRARY- STACKS	100 gross	4,002
ASSEMBLY- Unconcentrated	15 net	2,483
ASSEMBLY- Concentrated	7 net	560
STORE - RETAIL	60 gross	262

TOTAL OCCUPANT LOAD 325.46 PERSONS
- EGRESS CALCULATIONS:
BUILDING TYPE MAX TRAVEL DIST. ALLOWED (1017.2) MAX DIST PROVIDED 152'-9" DEAD END CORR MAX (1020.5, Exc. 2) 20 FT (Not limited per exception) DEAD END CORR PROVIDED 28 FT
A-3 250 FT

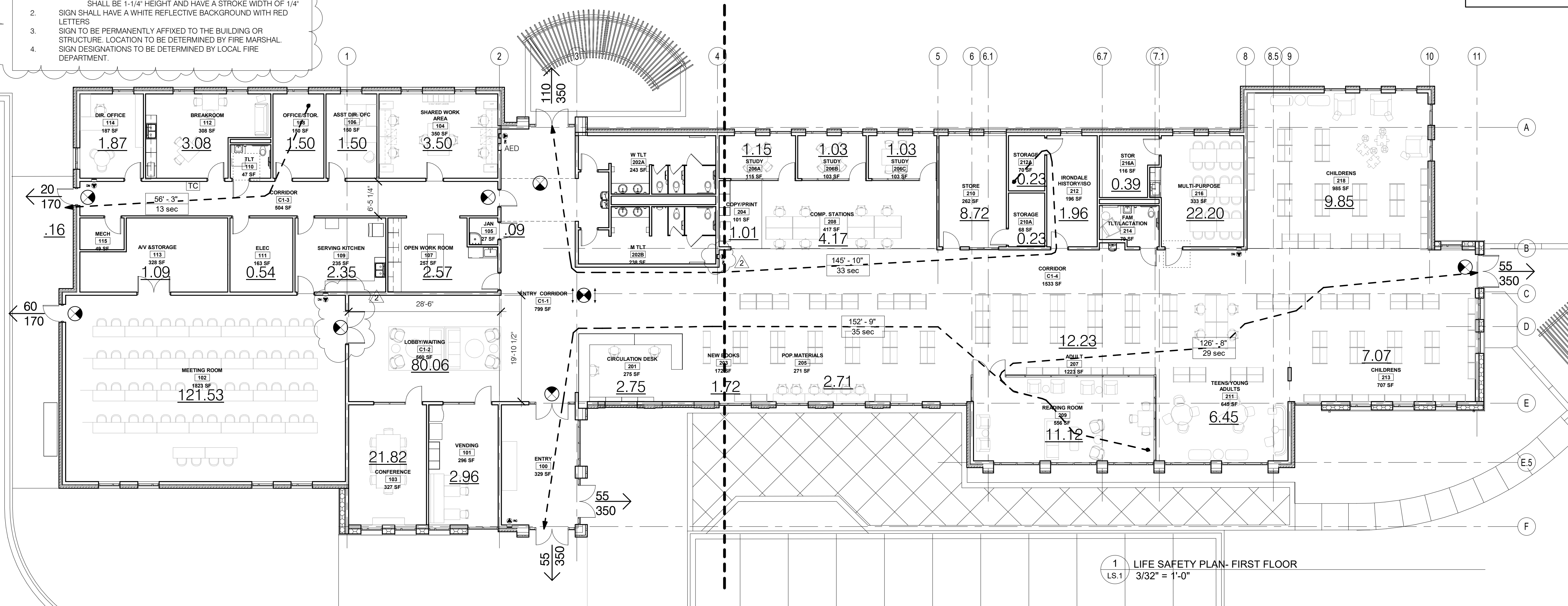
BUILDING TYPE	EGRESS WIDTH REQUIRED (PAR 1005.3.2)	EGRESS WIDTH PROVIDED	CORRIDOR WIDTH REQUIRED (1020.3)	CORRIDOR WIDTH PROVIDED	DOOR CLEAR REQUIRED	DOOR CLEAR PROVIDED
A-3	97.6 INCHES	1740 IN.	44 INCHES	77 INCHES (min)	32 INCHES	34 INCHES (min)
- EMERGENCY ESCAPE AND RESCUE (IBC 1007.3 EXCEPTION 3): NOT REQUIRED FOR BUILDINGS WITH AN AUTOMATIC SPRINKLER SYSTEM.
- ACCESSIBILITY REQUIREMENTS:
A. PARKING:
1) PARKING WILL MEET ALL ACCESSIBILITY REQUIREMENTS
B. PUBLIC BUILDING ENTRIES ARE ACCESSIBLE.



- BUILDING INFORMATION SIGN PER IFC 2021
- SIGN SIZE AND LETTERING REQUIREMENTS:
 - THE WIDTH AND HEIGHT SHALL BE 6 INCHES BY 6 INCHES
 - THE HEIGHT OR WIDTH OF EACH MALTESE CROSS WING SHALL BE 1-3/8" AND HAVE A STROKE OF 1/2"
 - THE CENTER OF THE MALTESE CROSS, A CIRCLE OR OVAL, SHALL BE 3" IN DIAMETER AND HAVE A STROKE OF 1/2"
 - ALL ROMAN NUMERALS AND ALPHABETIC DESIGNATIONS, SHALL BE 1-1/4" HEIGHT AND HAVE A STROKE WIDTH OF 1/4"
 - SIGN SHALL HAVE A WHITE REFLECTIVE BACKGROUND WITH RED LETTERS
 - SIGN TO BE PERMANENTLY AFFIXED TO THE BUILDING OR STRUCTURE. LOCATION TO BE DETERMINED BY FIRE MARSHAL.
 - SIGN DESIGNATIONS TO BE DETERMINED BY LOCAL FIRE DEPARTMENT.

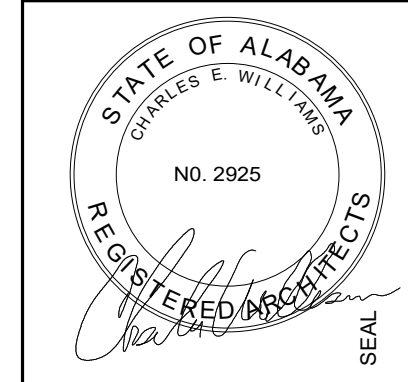
LEGEND

- EXIT LIGHT
- TRAVEL DISTANCE
- EXIT DISCHARGE: DESIGN CAPACITY/ MAX. CAPACITY
- OCCUPANT LOAD
- 1-HOUR FIRE RATED
- RECESSED (RC) OR SEMI-RECESSED (SRC) FIRE EXTINGUISHER CABINETS



1 LIFE SAFETY PLAN- FIRST FLOOR
LS.1 3/32" = 1'-0"

Revisions		
No	Date	Description
2	1.26.24	ADDENDUM 1



100% CD'S

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CITY OF IRONDALE

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SHEET TITLE:	
LIFE SAFETY PLAN	
PROJECT NUMBER:	
2022-08	
DATE:	
NOVEMBER 16, 2023	
DRAWN BY:	CHECKED BY:
CS	CSV

SHEET NUMBER

LS.1