ADDENDUM NO. 3

FOR

CONTRACT NO. 1 – WASTEWATER MAINTENANCE BUILDING

FOR

THE WATERWORKS, SEWER AND GAS BOARD OF THE TOWN OF SECTION

OCTOBER 3, 2024

TO: ALL PLAN HOLDERS AND INTERESTED PARTIES

SUBJECT: Plans, Specifications, and Contract Documents are hereby amended, modified, and changed as follows:

I. Reference Plan Sheet No. 1:

A. Change 8'-0" dimensions for ADA Restroom to 10'-0". Change 4'-6" dimension for water closet room to 6'-6". Water closet and grab bars are to be installed in accordance with ADA requirements and Section 15440. Bathroom sink shall also comply with ADA requirements.

B. Dimensions shown from edge of building are to the centerline of the bays and centerline of rollup doors. Building manufacturer may make minor adjustments to dimensions as required to accommodate structural framing. Any adjustment exceeding 3'-0" must be approved by Ladd Environmental Consultants, Inc.

II. Reference Plan Sheet No. 3:

A. Fuel Storage Tanks and Transfer Pumps shall comply with the following:

1. Fuel tanks shall have a capacity of 500 gallons and shall be horizontal orientation.

2. Fuel tanks shall comply with the requirements of API 650 (Welded Tanks for Oil Storage Tanks), UL-142 (Above ground Flammable Liquid Tanks) or UL-80 (Steel Tanks for Oil-Burner Fuels and other Combustible Liquids), as applicable.

3. Fuel tanks shall be single wall with tank stabilizers.

4. Fuel transfer pumps shall be capable of pumping 20 gpm and have a meter attached to the pump.

5. Fuel transfer pumps shall be powered by AC current (115V).

6. Acceptable fuel transfer pumps include Fill-Rite Fuel Transfer Pump with Meter Model No. FR701V, Great Plains Industries GPRO Model No. PR020-115AD/M30-L8N, or approved equal.

B. The dimension shown for the security fence around the Fuel Station as 6" is hereby changed to 6'. The fencing is to be 9-gauge chain link fencing.

III. Revise Plan Sheet No. 5 as follows:

A. 1'-6" overhang is NOT required on pre-engineered metal building.

IV. Revise Plan Sheet No. 6 as follows:

A. Sludge Dewatering Pad / Pump Truck Wash Down Foundation Plan (Detail E-6) – change dimensions to 30'-0" x 20'-0".

V. Revise Plan Sheet M-03 as follows:

A. Under Gas Unit Heater Schedule, the Model Number for each item is hereby changed from "UBZ" to "UBXC".

VI. Reference Part VI – Technical Specifications, Division No. 7 – Thermal and Moisture Protection, Section 07210 – Spray Polyurethane Foam Insulation

A, Delete Section 07210 – Spray Polyurethane Foam Insulation.

VII. Reference Part VI – Technical Specifications, Division No. 7 – Thermal and Moisture Protection, Section 07213 – Batt and Blanket Insulation

A. Revise Page 02713-2, Paragraph 3.03.B, as follows:

1. Roof Insulation (No Suspended Ceiling): R-19 + R-11, LS; white vinyl faced.

3. Wall Insulation: R-13 + R-6.5 CI; white vinyl faced.

VIII. Reference Part VI – Technical Specifications, Division No. 8 – Doors and Windows, Section 08332 – Overhead Coiling Doors (Steel)

A. Add the Following to Page 08332-1, Paragraph 1.05. Design Requirements.

B. Door assembly shall be insulated with a minimum R-Value of 12.5.

B. Add the following to Page 08332-2 to Paragraph 2.01.A. Manufacturers:

Overhead Door Corporation of Lewisville, TX; Cornell of Mountaintop, PA; Raynor of Dixon, IL.

IX. Reference Part VI – Technical Specifications, Division No. 8 – Doors and Windows, Section 08710 – Door Hardware

A. Replace Page 08710-6, Paragraph 3.06 Schedule with the attached Page 08710-6 (ADM3-6) marked Addendum No.3.

X. Reference Part VI – Technical Specifications, Division No. 13 – Special Construction, Section 13121 – Pre-Engineered Metal Buildings

A. Replace existing Section 13121 with attached Section 13121 (ADDENDUM NO. 3) on Page ADM3-7 – ADM3-18.

XI. Clarification

A. Secondary framing material gauges may be adjusted as approved by manufacturer's structural engineer. Other material gauges shall be as specified.

B. Liner panels and insulation are not required on the end walls of the 20' x 120' lean-to. No soffit panels are required for the lean-to roof.

C. No Geotechnical Reports are available.

D. Concrete Design is the responsibility of the Pre-Engineered Metal Building manufacturer as stated on Plan Sheet 1 Notes, or the General Contractor may engage a Structural Engineer.

E. Wood frame walls are to be constructed using standard architectural practices for wood framed walls.

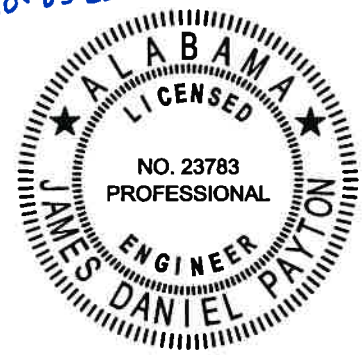
XII. Enclosed are Minutes from the September 26, 2024 Pre-Bid Meeting on Page ADM3-4 – ADM3-5.

THIS ADDENDUM ISSUED THIS 3RD OF OCTOBER 2024.

LADD ENVIRONMENTAL CONSULTANTS, INC.

James Payton 10.03.2024

James Payton, P.E.



PRE-BID CONFERENCE MINUTES

CONTRACT NO. 1- WASTEWATER MAINTENANCE BUILDING

CONTRACT NO. 2 – FYFFE COLLECTION SYSTEM REHAB

CONTRACT NO. 3 – WASTEWATER TREATMENT PLANT AND EDF EXPANSION AT GERALDINE AND SECTION

CONTRACT NO. 4 – GERALDINE PHASE 2 COLLECTION SYSTEM AND POWELL PUMP STATION AND FORCE MAIN

FOR

THE WATERWORKS SEWER AND GAS BOARD OF THE TOWN OF SECTION

87 CIRCLE DR NW, RAINSVILLE, AL 35986

SEPTEMBER 26, 2024

A Pre-Bid Conference for the above projects was held on Thursday, September 26, 2024, at the Board's Office at 10:00 P.M.

In Attendance were James Payton, Adam Lea, Alan Boydston, Darrell Sears, and Dani Pannell for Ladd Environmental Consultants Inc.; Eddie Tigue, Gerald Shankles, and Jerry Hammon for the Waterworks Sewer and Gas Board for the Town of Section; Mike Tramel and Nathan Smith from Vantage Construction; Wyatt Swifflett and Trent Langley for Jones Contracting; Mark Patton and Justin Johnson for Benchmark Construction; Scott McCollum and Mike Sams for Orenco; Andrew Palmer and Ty Elkins for Lambert Inc.: Kevin Sawyer for Lambert Contracting; Nick Sapp for Jimmy Traylor Construction; Robert Calhoun for Adman Electric and Rich Oden for White Electrical

James Payton and Adam Lea, the Consulting Engineers for the projects introduced everyone present and described the projects.

Contract 1

Questions were received from those in attendance.

A question was asked about the insulation for the pre-engineered metal building. This will be addressed in Addendum No. 3 for Contract 1.

A question was asked about the roof pitch for the pre-engineered metal building. This will be addressed in Addendum No. 3 for Contract 1.

A question was asked about the geotechnical report for the site. There is not a geotechnical report for the site. Contact the owner for on-site visits.

Contract 2

A question was asked about the testing on the point repairs. Testing is not required. This will be addressed in Addendum No. 2 on Contract 2

A question was asked whether the point repairs would be TV inspected after the point repairs were made. No, the point repairs will not need to be TV inspected after the repairs.

Contract 3

A question was asked about a stated allowance issued in Addendum No. 2 and what the scope of work includes. This will be clarified in Addendum No. 3.

A question was asked about what equipment would be provided by the electrical contractor. This will be clarified in Addendum No.3.

Contract 4

A question was asked whether an HDPE bore could be installed instead of a steel-cased bore. An answer will be provided in Addendum No. 3.

A question was asked about the pump station bypass pumping requirements including capacity. Capacities must match the specified pumps. Additional clarification will be provided in Addendum No. 3.

A question was asked about the stated trenching on the bid items. This was to distinguish between open cut and boring. Contractor may utilize either trenching or other open cut methods.

A question was asked about driveway bores listed as uncased bores only. This is not a separate bid item but is incidental to the open cut bid item. Refer to the bid item description on page III-9 in the specifications.

A question was asked about the distance from the house to the tanks. The standard pump lead is 60 ft. If controller has to be located more than 50 feet from the tank, a longer pump lead shall be ordered.

A question was asked if the house electrical would not support the additional pump how would this need to be addressed? The provision is to notify the engineer and handle it on a case-by-case basis. If there is no room in the breaker box the provision is listed in Explanation of Bid Item 18 for Bid Item No. 29.

A statement was made that the tanks would come preassembled.

A question was asked about the price of the tanks these are locked in after a purchase order has been placed. Currently, it is locked for 60-90 days. Mike Sams Updated this to 120 days as of 10/01/2024.

A statement was made about the construction timeline Contract 4 shall not be in service until Contract 3 is in place.

A question was asked whether the tanks would be inspected by the manufacturer after installation. A manufacturer representative will inspect the tanks.

3.06 Schedule

MARK	B	C	D	E	*F	NO. REQ'D EA. DOOR
Hinges	Hager BB1199SS 4.5 x 4.5 (NRP) 630	Hager BB1199SS 4.5 x 4.5 (NRP) 630	Hager 1191SS 4.5 x 4.5 (NRP) 630	Hager 1191 4.5 x 4.5 (NRP) 630	Hager 1191 4.5 x 4.5 (NRP) 630	3
Rim Panic	Von Duprin 98L x 06 x 630	N/A	N/A	N/A	N/A	1
Rim Cylinder	626	N/A	N/A	N/A	N/A	1
Kickplate	Rockwood 12" x 2" LDW x 630	Rockwood 12" x 2" LDW x 630	Rockwood 8" x 2" LDW x 630	N/A	N/A	1
Closer	LCN 4041 x Cust x HO x 589	LCN 4041 x Cust x HO x 689	LCN 4040 x Cust x HO x 689	N/A	N/A	1
Deadlock	N/A	Schlage B663P x 626	N/A	Schlage B663P x 626	N/A	1
Mortise Lock	Schlage L9080A x 06A x626	N/A	Schlage L9080A x 06A x626	N/A	N/A	1
Push Plate	N/A	Rockwood 70 x 8" x 16" x 630	Rockwood 70 x 8 x 16" x 630	N/A	N/A	1
Pull Plate	N/A	Rockwood 106 x 70C x 630	N/A	N/A	N/A	1

*Double doors shall have astragal, Hager Model 242F or 234W, door stop and commercial duty SS passage lever.

[2276.3]
[10/04]

END OF SECTION

SECTION 13121

PRE-ENGINEERED METAL BUILDINGS

PART 1 GENERAL

1.01 Section Includes

A. Designed, pre-engineered and shop fabricated structural steel building frame.

B. Insulated metal wall and sloped roof system including all structural steel framing, purlins, girts, struts, connector bracings, rails, tracks, flashings, panel coverings, fasteners and all related items.

C. Exterior doors, windows, louvers, skylights and all related items.

D. All related items as specified and shown on Drawings for complete and weathertight structure.

1.02 Related Sections

A. Applicable to Work of this Section are the Drawings and General Provisions of the Contract, including: Part IV, General and Supplementary Conditions; Part V, Special Conditions; Part VI, Technical Specifications; Division No. 1, General Requirements.

1.03 References

A. AISC - Specification for the Design, Fabrication and Erection of Structural Steel for Buildings.

B. ASTM A36 - Structural Steel.

C. ASTM A153 - Zinc Coating (Hot Dip) on Iron and Steel Hardware.

D. ASTM A307 - Carbon Steel Externally Threaded Standard Fasteners.

E. ASTM A325 - High Strength Bolts for Structural Steel Joints.

F. ASTM A446 - Steel Sheet, Zinc-Coated (Galvanized) by the Hot-Dip Process, Structural (Physical) Quality.

G. ASTM A500 - Cold-Formed Welded and Seamless Carbon Steel Structural Tubing in Rounds and Shapes.

H. ASTM A501 - Hot Formed Welded and Seamless Carbon Steel Structural Tubing.

I. ASTM A525 - Steel Sheet, Zinc-Coated (Galvanized) by the Hot-Dip Process, General Requirements.

J. ASTM A529 - Structural Steel with 42,000 psi Minimum Yield Point.

K. ASTM A572 - High Strength Low Alloy Columbium-Vanadium Steel of Structural Quality.

L. ASTM C665 - Mineral Fiber Blanket Thermal Insulation for Light Frame Construction and Manufactured Housing.

M. Standard Code for Welding in Building Construction by the American Welding Society.

N. IBC - International Building Code.

O. SSPC (Steel Structures Painting Council).

1.04 System Description

A. Clear span rigid frame.

B. Bay spacing of 40 feet maximum.

C. Primary Framing: Rigid frame of rafter beams and columns, canopy beams, intermediate columns, braced end frames, end wall columns and wind bracing.

D. Secondary Framing: Purlins, girts, eaves struts, flange bracing, sill supports, clips and other items detailed.

E. Wall and Roof System: Preformed metal panels of vertical profile, with sub-girt framing/anchorage assembly, insulation, liner sheets and accessory components.

F. Roof Slope: One inch in 12 inches.

1.05 Design Requirements

A. Thermal Resistance of Wall System: R value of 19 nominal.

B. Thermal Resistance of Roof System: R value of 30 nominal.

C. Members to withstand 20 psf roof load and 18 psf design loads due to pressure and suction of wind based on 80 mph wind velocity, in accordance with IBC – International Building Code.

D. Exterior Wall and Roof System to Withstand Imposed Loads With Maximum Allowable Deflection of Span: 1/180 as required by IBC - International Building Code.

E. Provide drainage to exterior for water entering or condensation occurring within wall or roof system.

F. Assembly to permit movement of components without buckling, failure of joint seals, undue stress on fasteners or other detrimental effects, when subject to temperature range of 110 degrees F.

G. Size and fabricate wall and roof systems free of distortion or defects detrimental to appearance or performance.

1.06 Submittals

A. Submit under provisions of Section 01300.

B. Shop Drawings: Indicate assembly dimensions, locations of structural members, connections, attachments, openings, cambers and loads.

C. Indicate wall and roof system dimensions, panel layout, general construction details, anchorages and method of anchorage and method of installation.

D. Indicate framing anchor bolt settings, sizes and locations from datum and foundation loads.

E. Indicate welded connections with AWS A2.0 welding symbols. Indicate net weld lengths.

F. Provide structural drawings for foundation and concrete slab stamped by Engineer registered in Alabama.

G. Product Data: Provide data on profiles, component dimensions and fasteners.

H. Manufacturer's Installation Instructions: Indicate preparation requirements and assembly sequence.

1.07 Project Record Documents

A. Submit under provisions of Section 01700.

B. Accurately record actual locations of concealed utilities.

1.08 Quality Assurance

A. Fabricate structural steel members in accordance with AISC - Specification for the Design, Fabrication and Erection of Structural Steel for Buildings.

1.09 Qualifications

A. Manufacturer: Company specializing in manufacturing the Products specified in this Section with minimum five years documented experience.

B. Design Work, including structural components, under direct supervision of a Professional Structural Engineer experienced in design of this Work and licensed in the State of Alabama. (Engineer's seal is to be on Drawings.)

1.10 Regulatory Requirements

A. All components and the completed total installation shall comply with all OSHA Requirements, NEC – National Electrical Code, IBC – International Building Code, IPC – International Plumbing Code, IFC – International Fire Code and all other applicable codes, regulations and guidelines.

1.11 Field Measurements

A. Verify that field measurements are as shown on Drawings and as instructed by the manufacturer.

1.12 Warranty: One year warranty beginning at date of Owner's acceptance in accordance with Section 01700.

PART 2 PRODUCTS

2.01 Manufacturers - Building System

A. Varco-Pruden Buildings, AMCA International Corporation.

B. Ceco Building Division, Ceco Corporation.

C. Butler Manufacturing Company.

D. Bigbee Metal Buildings.

E. Overhead Door Company.

F. ACI Building Systems.

G. American Building/Nucor.

H. Schulte Building Systems.

I. Whirlwind Steel Buildings.

J. Universal Steel America.

K. Kirby Building Systems.

L. Substitutions: Under provisions of Section 01600.

2.02 Materials

A. Structural Plate: All structural plate and bar stock shall have a minimum yield strength of 50,000 psi ASTM A529.

B. Structural Steel Members: ASTM A529.

C. Structural Tubing: ASTM A500, Grade B.

D. Cold Formed: All cold formed structural material shall have a minimum yield strength of 55,000 psi.

E. Hot Rolled Section: All hot rolled sections shall have a minimum yield strength of 42,000 psi.

F. Pipe: All pipe structural columns shall have a minimum yield strength of 36,000 psi.

G. Rod: All rods used as structural bracing shall have a minimum yield strength of 50,000 psi.

H. Cable: All cable bracing shall be extra high strength galvanized steel (left-hand lay).

I. Covering: All cold form panel material shall have a minimum yield strength of 50,000 psi.

J. Anchor Bolts: All anchor bolts shall conform to ASTM A307. Anchor bolts are to be furnished by the metal building manufacturer and installed by the concrete footing contractor.

K. High Tensile Bolts: All bolts used in primary structural connection shall be galvanized high tensile (ASTM A325) bolts with a yellow Di-Chromate dip.

L. Standard Bolts: All bolts used in secondary structural connections shall be standard galvanized machine bolts (ASTM Grade 5).

M. Welding Materials: All welding materials to conform to AWS D1.1; type required for materials being welded.

N. Primer: Primer for structural members to be SSPC 15, Type 1, green or red oxide.

O. Grout: Non-shrink type, premixed compound consisting of non-metallic aggregate, cement, water reducing and plasticizing agents, capable of developing minimum compressive strength of 2400 psi in two days and 7000 psi in 28 days.

P. Fasteners: All fasteners to be manufacturer's standard type, 1.25 ounce/square foot galvanized finish to match adjacent surfaces when exterior exposed.

Q. Bituminous Paint: Bituminous paint to be asphaltic type (See Section 09900).

R. Sealant: Sealants are to be manufacturer's standard type as specified in Section 07920, non-staining, elastomeric.

S. Metal Mesh: Metal mesh to be galvanized woven steel wire type.

ADDENDUM NO. 3

2.03 Metal Covering

A. General: All panels shall be roll formed to provide 36 inch wide net coverage. Finished panels shall match siding on existing buildings as close as possible in color and configuration. The underlapped rib shall contain a return to steel line for bearing strength and stability.

B. Panel Finish

1. All panels shall be roll formed from minimum 26 gage galvanized steel with 1.25 ounce ordered zinc coating. Galvanized steel which is to receive factory color finish shall be given a pretreatment consisting of the following five stages:

   a. Detergent and alkali wash.

   b. Rinse.

   c. Bonderizing.

   d. Additional rinse.

   e. Acid rinse.

2. After pretreatment, the metal shall be coated with a film of modified silicone acrylic. The material then shall pass through a multi-stage baking oven.

3. After cooling, the material shall receive a uniform coating of wax for finish protection during shipment and roll forming.

4. The exterior paint dry film thickness shall be 1 mil with an interior off-white wash coat of 0.5 mil.

5. Outside color to be selected by the Engineer.

C. Roof Panels

1. Roof panels shall be minimum 1-1/4 inch x 26 gage steel with a zinc-aluminum coating (Galvalume) per ASTM A792 and having a 36 inch wide net coverage. All panels shall be continuous from eaves to ridge. End laps shall be 7 inches and shall occur adjacent to and up slope of a supporting member.

2. Panels are to be fastened with stainless steel screws of proper size.

D. Wall Panels

1. Roof panels shall be minimum 1-1/4 inch x 26 gage steel with a zinc-aluminum coating (Galvalume) per ASTM A792 and having a 36 inch wide net coverage. All panels shall be one piece from base to building eaves or rake. All endlaps shall be a minimum of 4 inches and shall occur at a supporting member. Wall panels shall be sidelapped one major rib.

2. End wall panels for 1/12 slope buildings shall be square cut.

3. All exterior wall panels shall be painted steel as described in Panel Finish above.

E. Partitions: All interior walls and partition walls shall be minimum 26 gage Galvalume as described in Roof Panels above.

F. Panel Connectors

1. All connections of wall panels shall be made with zinc-coated or factory color steel self-tapping screws or cadmium plated self-drilling screws.

2. Each screw shall be complete with a steel washer and neoprene weather seal.

3. The location of all fasteners shall be as shown on the metal building manufacturer's Drawings.

4. The connections shall be sized as directed by the manufacturer.

2.04 Building Trim

A. General: Preformed 26 gage minimum galvanized steel with factory baked-on paint flashing shall be provided at corners, gable end and eaves to assure a neat, watertight structure.

B. Ridge Panels: Ridge panels shall be a die formed one piece panel to match the configuration of the roof panel and formed to the roof slope. Ridge panels shall be minimum 26 gage Galvalume to conform to roof panel specification.

C. Eaves Flashing and Gutters

1. The junction of roof panels and sidewall panels will be adequately flashed with preformed 26 gage (minimum) galvanized steel with baked-on paint.

2. Eave gutters with downspouts and concrete splash blocks shall be furnished for all building eaves.

D. Trim Connectors: Building trim shall be attached with the following fasteners, located and sized as directed by the manufacturer.

1. Zinc-plated or factory color steel self-tapping screws with heavy plated steel washer and bonded weather seal.

2. Cadmium plated steel self-drilling screws with cadmium plated steel washer and bonded neoprene weather seal.

3. Dome head cadmium plated or factory color pop rivet with steel mandrel. Pop rivets shall be used as flashing lap fasteners.

E. Secondary Structural Members - Purlins and Girts

1. Purlins and girts shall be minimum 8 x 3 inch "Z" sections, precision roll formed from cold formed U. S. Standard or 12 gage steel. Secondary framing material gages may be adjusted as approved by manufacturer's Structural Engineer's stamped drawings.

2. Exterior mounted, simple span purlins and girts shall have a 6 inch nominal end lap for alignment purposes and continuous span sections shall have a 3'-0" nominal end lap.

3. All girts on flush sidewall buildings shall be simple span.

4. Purlins and girts shall be attached to the primary framing by means of machine bolts (ASTM Grade 5) at each end. Continuous purlins shall have machine bolts (ASTM Grade 5) in the web to interlock the sections for continuity. Number, location and size of the machine bolts to be as indicated by the manufacturer.

5. Girts for interior partition walls shall be minimum 4 inch "Z" sections as described above.

6. Insulation shall be installed prior to roof panel installation.

F. Struts

1. Eaves struts shall be minimum 8 inch C sections precision cold formed from U. S. Standard 12 (minimum) gage steel. The upper flange shall slope with the nominal roof slope and the web shall be vertical and free to receive the sidewall covering.

2. The eaves strut shall be connected to the primary framing by means of machine bolts (ASTM Grade 5) bolts at each end; number, location and size of machine bolts as indicated by manufacturer.

G. Wind Bracing: Wind bracing shall be as shown on the building manufacturer's erection drawings and shall be accomplished by diagonal cable bracing, rod bracing or other means necessary to satisfy roof and wall wind loads. All diagonal wind bracing shall include necessary beveled washers and adjustment nuts at each end.

H. Flange Bracing

1. Flange braces shall be steel angles attached to purlin and/or girt and primary framing. The quantity and location of all brace angles shall be as dictated by design and shall be erected as shown and noted on the metal building manufacturer's erection drawings.

2. Flange braces shall be connected to primary and secondary framing with machine bolts (ASTM Grade 5); number, size and location as indicated by the manufacturer.

I. End Frames: Built-up end frames shall be hot-rolled sections. Column to rafter connections shall be simple span condition bolted with high tensile bolts and nuts (ASTM A325); number, size and location as indicated by manufacturer.

J. Anchor Bolts

1. Anchor bolts shall meet the requirements of ASTM A307, and shall be unprimed and unpainted.

2. The anchor bolts shall be sized to resist all shears and uplifts induced by the structure as directed by the building manufacturer.

3. The anchor bolts shall be furnished by the building manufacturer along with an anchor bolt plan (see 2.08), and shall be installed by the concrete footing contractor in accordance with the building manufacturer's recommendation and instructions.

2.05 Shop Fabrication

A. Scope: All fabricated members shall be sheared, formed, punched, welded, rolled, cold formed and painted in the plant of the manufacturer. All holes and clips required to facilitate the attachment of the secondary framing shall be provided by the metal building manufacturer.

B. Welding: All shop welding shall be in accordance with standard practices of the American Welding Society and shall be done by certified welders. Structural members fabricated of plate or bar stock shall have the flanges and webs joined by a continuous automatic submerged arc welding process. The web shall be joined to the flange by a minimum of 50 percent web penetration.

C. Cleaning and Painting: All fabricated members shall be cleaned of oil, dirt, loose scale and foreign matter prior to painting. All members shall receive one shop coat of green or red oxide primer in accordance with SSPC.

D. Identification: All fabricated or purchased items shall have an identifying number corresponding to marking shown on the erection drawings. The marking shall be stamped, stenciled or printed on these items.

E. Fabricate all exposed support members and miscellaneous accessories of same material and color of main building.

2.06 Building Geometry

A. Building Width: The building width shall be the distance between the outside flanges of the sidewall girts, as shown on the Drawings.

B. Building Height: The building height shall be the distance from the base of a sidewall column to the outside top corner of the eaves strut, as shown on the Drawings.

C. Building Length: The building length shall be the distance between the outside flanges of the endwall girts and shall be a multiple of the bay spacing. The building length shall be as shown on the Drawings.

D. Door Clearances: Contractor shall verify the minimum clearances for door openings shown on Drawings (both vertically and horizontally). Buildings which do not provide these clearances will not be accepted.

E. Bay Spacing: The bay spacing shall be the distance between the interior transverse frames. See Drawings for number of bays.

2.07 Building Type

A. The design of this 3/12 rigid frame building shall be clear span gabled rigid frame with tapered column and straight, pinched or tapered rafter section of shop welded steel plate. The building shall be standard with built-up endwalls.

B. The building shall be standard with exterior mounted sidewall and endwall girts. The roof slope shall be 3 inch rise in 12 inch run along the entire horizontal projection of the roof.

2.08 Drawings

A. Concrete Plans: The building manufacturer shall furnish five sets of concrete and reinforcing steel drawings showing the rebar size, spacing, and direction of reinforcing steel and concrete depth and width for installation by the Concrete Contractor. Floor slab shall be designed to accommodate a 400 – 500 PSF live load, 6" minimum thickness.

B. Anchor Bolt Plans: The building manufacturer shall furnish five sets of anchor bolt setting drawings showing the size and location of the building anchor bolts. All anchor bolts shall be furnished by the metal building manufacturer and installed by the concrete footing contractor.

C. Erection Plans: The building manufacturer shall furnish five sets of erection drawings for each building or roof unit which shall include elevations and details necessary to erect that portion of the building or roof system supplied by the manufacturer.

D. Erection: Contractor shall furnish and erect metal building on concrete foundation (See Division No. 3).

2.09 Certification

A. Letter Certification: As part of the shop drawing review, the building manufacturer shall submit a letter certifying that the proposed building conforms to the specified design loads.

B. Design Calculations: As part of the shop drawing review, the building manufacturer shall submit design calculations. Calculations and drawings to bear Professional Engineer's Seal of Engineer Registered in the State of Alabama.

2.10 Metal Doors, Frames and Hardware

A. 3 x 7 foot exterior doors, frames and hardware to be in accordance with Section 08111, 08112, and 08710. All exterior door units shall be complete with thresholds and weatherstripping (Section 08113).

B. Overhead doors specified in Section 08332.

C. Frames for overhead doors to be formed steel sections braced to building frame. Frames to be as specified in Section 08112.

2.11 Windows

A. 4 x 4 foot metal frame (unless otherwise shown on Plans), reinforced glass, fixed pane as specified in Section 08520.

2.12 Plastic Skylight (Unless Otherwise Shown on Plans).

A. Plastic skylights to be manufacturer's standard. Number and location of skylights as shown on Drawings.

2.13 Continuous Ridge Ventilators

A. Continuous ventilators with galvanized bird screens and dampers shall be fabricated from 24 gage (minimum) galvanized steel with factory baked-on white paint.

B. Ventilators shall be designed with a smooth transitional entrance to throat (9 inch nominal throat opening) to assure maximum discharge and air transmission efficiency.

C. Ventilators shall be fabricated and may be used in 10'-0" lengths. Necessary splice joints shall be furnished to use ventilators continuous to any length up to building length.

D. Each 10 foot section of continuous ridge ventilator shall be equipped with a galvanized damper, damper pulley, pull chain and clip bar.

E. Continuous ventilators shall be factory mounted in a flat sheet base bent to match the roof slope. Continuous roof ventilators shall be furnished complete with rubber filler strips, caulking, fasteners and all related items to provide a watertight, neat appearance.

2.14 Roof Jacks

A. Roof jacks shall be 26 gage (minimum) galvanized or painted steel cone mounted in a standard roof shadow panel.

B. Roof jacks shall be furnished for field locations and field modifications. Roof jacks shall be used to flash the roof where the stack pipes penetrate the roof sheeting.

C. The roof jack shall be furnished complete with a 26 gage top and 20 gage straps.

D. The roof jack shall accommodate vent pipe sizes up to 4 inches in diameter.

2.15 Eaves Gutter and Downspouts

A. Eaves gutter shall be suspended box section formed to match the configuration of the endwall rake flashing. Eaves gutters shall have a minimum cross sectional area of 18 square inches and shall be formed from 26 gage (minimum) galvanized steel with factory baked-on paint.

B. Eave gutters shall be supported at 3 feet on center (maximum) by a clip connecting directly to the eave strut and gutter.

C. A secondary gutter strap shall be connected to the gutter and roof panels at 3 feet on center to align the face of the gutter.

D. Standard pop rivets and sealant shall be used to secure and seal endlaps.

2.16 Insulation

A. FS HH-I-52, ASTM C665, batt or roll glass fiber type, faced with white vinyl, R-30 nominal for the roof and R-19 nominal for the walls, designed for installation in walls and roof of pre-engineered metal building (See Section 07213).

2.17 Stainless Steel Service Sink

A. Provide and install in accordance with Section 15440.

2.18 Propeller Fans

A. Provide and install in accordance with Section 15850.

2.19 Building Liner Panels

A. The building shall have liner panels on all exterior walls. Panels shall be 26 gauge metal.

B. Liner panels shall extend to a height of 10 feet above the floor.

C. Liner panels shall extend 3 feet beyond the floor space of mezzanines and 10 feet above mezzanine.

D. Liner panel color shall be selected by Engineer.

2.20 Interior Wood Framed Walls and Ceilings

A. Interior wood framed walls and ceilings shall be covered with 1/2" gypsum board installed with screws.

B. Gypsum board shall be smooth finished and painted. See Section 09900 for paint specifications.

C. Wood framed walls shall be constructed using standard architectural practices.

D. Color shall be selected by Engineer.

2.21 Exterior Door Awnings / Canopies

A. Each exterior personnel doorway (3 x 7) shall have an awning/canopy.

B. Awning/Canopy shall be approximately 5' x 5' (4" x 4' – 6" minimum).

C. Awning/Canopy shall be securely attached to building to withstand a minimum of 50 mph wind gusts.

PART 3 EXECUTION

3.01 Verification

A. Verify site conditions under provisions of Section 01039.

B. Verify that foundation, floor slab, mechanical and electrical utilities and anchor bolts are correct size and in correct location.

C. Verify all dimensions and elevations.

3.02 Erection - Framing

A. Erect framing in accordance with AISC Specification and in accordance with manufacturer's instructions.

B. Provide for erection and wind loads. Provide temporary bracing to maintain structure plumb and in alignment until completion of erection and installation of permanent bracing. Locate braced bays as indicated.

C. Set column base plates with non-shrink grout to full plate bearing.

D. Do not field cut or alter structural members without approval of Engineer.

E. After erection prime welds, abrasions and surfaces not shop primed.

3.03 Erection - Wall and Roofing Systems

A. Install in accordance with manufacturer's instructions.

B. Exercise care when cutting prefinished material to ensure cuttings do not remain on finish surface.

C. Fasten cladding system to structural supports, aligned level and plumb.

D. Locate end laps over support member. End laps minimum 7 inches on roof and 4 inches on wall.

E. Provide expansion joints where indicated.

F. Install wall and roof insulation as directed by manufacturer. Place metal mesh under vinyl for support between framing membranes.

G. Install sealant and gaskets to prevent weather penetration.

H. System shall be free of rattles, noise due to thermal movement and wind whistles.

3.04 Erection - Gutter and Downspout

A. Rigidly support and secure components. Joint lengths with formed seams sealed watertight. Flash and seal gutters to downspouts.

B. Apply bituminous paint on surfaces in contact with cementitious materials.

C. Slope gutters for complete drainage without sags or water traps.

D. Install concrete splash blocks at each downspout.

3.05 Erection - Skylight

A. Install in accordance with manufacturer's instructions.

B. Coordinate with installation of roofing system and related flashings.

C. Apply bituminous paint on aluminum surfaces of units in contact with dissimilar metals.

D. Provide weathertight installation.

3.06 Installation – Accessories

A. Install door frame, door, overhead coiling door, window and glass and propeller fans in accordance with manufacturer's instructions.

B. Seal wall and roof accessories watertight and weathertight with sealant.

C. Install stainless steel sink in accordance with Section 15440.

3.07 Tolerances

A. Framing Members: 1/4 inch from level; 1/8 inch from plumb.

B. Siding and Roofing: 1/8 inch from true position.

3.08 Painting

A. All shop primed steel shall be field painted. See Section 09900.

B. Baked-on finishes DO NOT require field painting other than field touch-up, as required.

3.09 Schedule

A. As indicated on Drawings.

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END OF SECTION